



Teaching Aboriginal Students with Learning Disabilities: Recognizing gifts and strengths

This chapter will help teachers to:

- refine, or perhaps redefine, their understanding of learning disabilities to enable them to see Aboriginal students with learning disabilities as having unique gifts, strengths and needs
- recognize the importance of positive parent involvement in all aspects of the individualized program planning process
- build a repertoire of strategies that will encourage Aboriginal students with learning disabilities to develop the study skills that will help them succeed
- identify and use a wide variety of accommodations to support the success of Aboriginal students with learning disabilities.

Traditional and contemporary Aboriginal cultures are diverse and unique, yet they share the perspective that each individual has the ability to become a fully contributing member of the community. This perspective focuses on the gifts each child possesses and offers a number of frameworks for understanding, guiding, learning from and teaching students with disabilities.

Disabilities as Gifts

Aboriginal worldviews recognize that each student has a unique pattern of learning. Traditionally, each individual was seen as having a gift. The whole community helped individual young people determine how to use their strengths and gifts to serve the community.

The concept of learning disabilities is at odds with the holistic framework of Aboriginal education. Even the term identifies only a part of the child, the part that does not function well as a learner within the education system.

Because of this, it is not uncommon for Aboriginal parents to be reluctant to have their children assessed or labelled as having learning disabilities. Parents may regard psychologists with distrust, wondering if they are working in the best interests of their child. Some Aboriginal families who follow a more traditional way of life may

prefer to seek the advice and support of healers or traditional teachers, feeling that psychologists have a limited scope of practice and understanding.

Teacher story

Disabilities as gifts

“I have come to learn that some students with learning disabilities can successfully process their thoughts through art. Despite first appearances, they often know their topic well. A student who had never successfully written an essay before was struggling to write one about Canadian history. As I was walking around the room, I saw that she was drawing instead of writing. I knew this student liked to draw, so I asked her to create a picture about the topic first. I told her then we’d see if she could write about it. She drew a beautiful picture about British Loyalists coming to Canada. The setting, the people, the action and the reaction—they were all a part of her picture. I suggested that she write a paragraph or two about each part. Then we combined it into an essay. She now knows that by drawing something first, she creates a unique mind map from which to write.”

Is It Really a Learning Disability?

Several challenges that students may face in the classroom could appear at first glance to be learning disabilities. These challenges could include sensory or physical disabilities, problems at home, absenteeism, discomfort in school settings, reserved personalities and giftedness.

Sensory or physical disabilities

Learning disabilities are not caused by visual, hearing, speech or mobility impairments. However, if these problems go undiagnosed and without intervention, they will present barriers to learning. Students with these impairments may also have learning disabilities.

Problems at home

Difficult home situations and poverty issues raise many barriers to learning. Students who have not slept or eaten properly may have trouble focusing at school. Many Aboriginal children live in poverty and/or may face multiple incidents of trauma in their lives. For many of these children, daily survival takes priority over daily schoolwork.

Absenteeism

Students may have missed a number of days of school for a variety of reasons. Their commitment to community and to other family members may be stronger than their commitment to their education. Other students may not feel connected or comfortable in school and may develop a pattern of poor attendance. They may be behind in their learning because their exposure to educational concepts has been interrupted. This is different from having a difficulty with learning.

Discomfort in school settings

Some Aboriginal students may not feel safe writing or speaking their thoughts—both public acts in the classroom. They may have been laughed at in the past or they may be worried about appearing unknowing or ignorant, believing they should never make a statement unless they know it to be true. Other students may be unsure of how to ask for help or be uncomfortable asking questions.

Reserved personalities

A quiet student who may seem unresponsive may simply be expressing a cultural comfort with silence. In many traditional cultures, learning to observe is highly valued. Students may need to watch others first before beginning to act themselves.

Giftedness

Students who are very bright may have difficulty organizing their thoughts, focusing on tasks and managing boredom. Their performance in the classroom may not accurately reflect their true potential.

Teacher story

Time to learn about the printed word

“Many of our students are obviously bright but they start school behind others in terms of literacy skills. It’s not so surprising—many of them come from homes where stories, songs and teachings are considered more important than reading a newspaper or a novel. Sometimes teachers will want to test them, thinking that they have a learning disability. I suggest they wait and see—and often these kids adjust. They have strong oral literacy skills. They just need to learn about the printed word.”

Identifying Students with Learning Disabilities

When an Aboriginal student is having difficulty learning, a classroom teacher's first step is to use a number of informal methods to assess the student's learning needs, such as talking with the student, observing the student, analyzing the student's work, doing an informal math or reading inventory and/or using screening tests. The teacher can also talk with the parents about their observations and concerns and any out-of-school factors that may be affecting the student's ability to learn. It is important to consider how cultural differences might be affecting the student's performance.

The next step is for the teacher to consult with a school-based team which could include special education teachers, counsellors, Elders, Aboriginal liaison staff, administrators and regular classroom teachers who are knowledgeable about cultural differences, learning difficulties and appropriate strategies. The teacher can try the team's suggestions to see if they make a positive difference in the student's learning.

Formal assessment

If school-based strategies and approaches do not effectively support the student's learning needs, the teacher, in consultation with the parents and with their informed consent, can refer the student for a specialized assessment.

A formal assessment of the student's learning strengths and needs will enable the school to provide the programming the student needs. Aboriginal parents who are wary of assessment need to be reassured that it is an important step in identifying appropriate learning and teaching strategies, and providing the support needed to help their children learn successfully. The Aboriginal liaison worker may be helpful in discussing parents' misgivings and assuring them that the assessment results will be used to create a more effective and responsive educational program for the student.

It is important for teachers to provide Aboriginal parents with detailed information about assessment and to encourage them to discuss any concerns they may have with teachers and other professional staff. Written informed parental consent is required before formal specialized assessment can begin. Informed consent means that parents:

- have a clear understanding of what is involved in the formal assessment of their child
- agree in writing to the carrying out of the formal assessment
- understand that their consent is voluntary and that they may withdraw it at any time.

The language and presentation of consent forms may cause concern among parents. When possible, meet with the parents in person to explain the forms and the purpose of assessment. If the student and parents have built a relationship with an Aboriginal liaison in the school, involve him or her in the process. The role of the liaison is to ensure that parents have the opportunities they need to ask questions, express concerns and gather information.

When talking with parents, use plain language to explain unfamiliar terms. Describe identification and assessment processes. Discuss how there is no single assessment to identify a learning disability. A diagnosis is based on many sources of information, both informal and formal, from the classroom, school staff, consultants, parents and the student. The risks to students in labelling the problem, such as stereotyping, negative self-image or misdiagnosis, must be balanced by the benefits of individualized program planning for them. Labels can direct parents and educators to a body of knowledge that may provide a greater understanding of a student's needs and of beneficial instructional practices. It is important to remember that labels describe typical characteristics, not individual people. Instructional practice must go beyond the label to consideration of the individual's strengths, needs and context of learning.

Once the assessment has been completed, it is important that the teacher and the person who did the assessment meet with the parents and discuss the results of the assessment and the implications for the student's learning. Along with assessment and identification comes the sacred responsibility to see and support the gifts Aboriginal children bring to the classroom. Use the meeting with the parents as an opportunity to begin the collaborative process of describing the child's individual patterns of learning, how their child's learning needs will be addressed in the classroom, and what they, as parents, can do to support their child at home. Parents may need extra time to reflect on this new information and formulate questions. They may benefit from a follow-up meeting at a later date.

From an Aboriginal worldview, it is essential to be nonjudgemental about such things as learning disabilities. All people are accepted, regardless of how they appear to others. This is because a person's spirit is considered to be the most important part of his or her being.

Characteristics of learning disabilities

Learning disabilities are complex and come in many forms and degrees. Often, they may be invisible or misunderstood until they are uncovered by careful observation. Some students may be able to mask their difficulties for a long time by using their strengths or by misbehaving to avoid challenging learning.

Students may come to the classroom with a learning disability already identified. Or a teacher may begin to suspect that a student has a learning disability as the teacher develops a relationship with the student. Observing the student, gathering information from assignments and tests, and talking with the student and the family may help to confirm what the teacher suspects.

Students with learning disabilities are generally described as individuals of at least average intelligence who have difficulties processing information and who experience unexpected difficulties in academic areas. These difficulties cannot be explained on the basis of other disabilities or environmental influences.

Learning disabilities are lifelong. They are not something students outgrow. Students can, however, develop strategies to minimize their impact.

Learning disabilities may be affected by the demands of the environment, so their impact may vary across the lifespan. For example, a student who hears normally but finds that conflicting noise makes it difficult to attend to primary sound may have difficulty in a noisy classroom, but in adult life may function quite well when working in a quiet studio or office space.

Aboriginal students with a learning disability also have learning strengths in one or more areas. The purpose of identifying a student as having a learning disability is to ensure that individualized programming will support their learning needs.

Individual students with learning disabilities will differ in how they learn, the pace at which they learn and the confidence with which they learn. Effective teaching, from elementary through senior high school, requires taking the time to learn about individual students and selecting instructional strategies that best meet each student's special learning needs.

The sooner interventions for learning disabilities are put in place, the more likely students will be to adjust to school and to succeed. Since most students with learning disabilities have difficulty learning to read and write, it is important to pay special attention to early literacy instruction.

Individualized Program Plans (IPPs)

When a student has been identified as having special needs, an Individualized Program Plan (IPP) must be developed.

An IPP is a written commitment of intent, created by a collaborative learning circle that includes the student, teachers and parents, and may also include school administrators and other resource people. The purpose of the IPP is to ensure appropriate planning and instruction for individual students with special needs. An IPP is both a working document and a record of student progress.

An IPP is:

- based on the learning strengths and needs of the student
- created through collaboration
- focused on student success
- an instructional guide for teachers
- a reflective process that encourages students, parents and teachers to continually monitor and assess student progress and program effectiveness
- an accountability tool that helps monitor and evaluate students' programming and progress
- a guide for planning for transition.

Creating a Learning Circle

An IPP for an Aboriginal student is created collaboratively by a Learning Circle whose members sit in the circle as equals. The parents, the student and the classroom teacher form the core of the Learning Circle that supports the student. Elders, Aboriginal liaison staff, resource personnel, teacher assistants and administrators may also be invited to become members of the student's Learning Circle.

Parents and family play a central role in the student's success, beginning with the process of identifying a student's special learning needs and continuing throughout the IPP process.

Parents need, and have a right, to be informed about their child's educational programming and progress. Parents are also valuable sources of information about students and their learning strengths and needs, as well as information about family and cultural contexts. They can provide information and insight that is not available from anyone else.

Parents as partners

Parents are important partners. Start building a positive relationship with parents as soon as the student joins the class. Get to know the parents. Find out where they are from and what their interests and concerns are. Invite them to meet informally at school, or if they prefer, in their home or at a restaurant.

Develop strategies *with* parents, not for parents. Ask parents how they want to be involved and how to best keep them informed about their child's ongoing progress. Encourage them to be actively involved in all stages of creating, implementing and revising the IPP.

Schedule meetings around parents' availability. Ensure that they are kept informed through regular meetings, phone calls and/or informal chats when they come to pick up their child or visit the school for a parent or community event. Communicate in informal ways by:

- talking with parents informally, frequently and regularly
- being positive and proactive.

Draw from the community by using protocol to gather support from the community and to find out what procedures and processes will gain support. Ask Elders, Aboriginal liaisons and/or community leaders to participate in parent meetings and be part of a Learning Circle and the IPP process.

Consider the following strategies for supporting parents throughout the IPP process.

- Help parents understand what an IPP is and the role the process plays in their child's learning. Show them a generic, sample IPP and explain its contents.
- Gather as much information from them as possible about their child's preferences, interests, strengths, experiences, challenges and attitudes. Encourage them to think about their hopes and dreams for their child and share these with the Learning Circle.
- Share information about their role and responsibilities. See *Appendix 22: Parents' Rights and Opportunities to Participate in Educational Decision Making*.
- Help them prepare for IPP conferences. Offer a checklist of questions they might want to consider. Share and explain possible learning strategies and goals.
- Ensure that parents feel welcome at meetings, that they are included in all discussions and that they understand everything that is being discussed.
- Develop the IPP based on input from the Learning Circle, including input from parents.
- Give parents a copy of the IPP to use at home for reference and for writing down observations about their child and any ideas they may have.

- Ensure that parents understand what informed consent is when they are asked to sign IPPs and permissions for specialized assessments. The *Standards for Special Education, Amended June 2004* defines consent as meaning “that parents:
 - have been provided with all information relevant to the activity for which consent is sought
 - understand and agree, in writing, to the carrying out of the activity for which their consent is sought
 - understand that the granting of consent is voluntary and may be withdrawn at any time” (Alberta Learning 2004, p. 4).

Students in the Learning Circle

Build a positive relationship with the students from the first day of class. Observe their approaches to learning, interactions with other students and how they respond to feedback. Talk to them about their learning. Encourage older students to become aware of how they learn.

Building this relationship will help teachers. Gather student input for the IPP about such things as learning preferences and challenges. Encourage them to think about their goals, both short- and long-term.

Include students in the Learning Circle and IPP process. Students who are contributing members of the Learning Circle and actively involved in the IPP process are more likely to take ownership of their learning and become motivated learners.

Teachers and resource personnel in the Learning Circle

Everyone who instructs an Aboriginal student with learning disabilities can be part of the student’s Learning Circle and involved in the IPP process. It is especially important to schedule the first few meetings to include as many members of the Learning Circle as possible. If meetings are difficult to schedule, consider meeting informally with other teachers and resource people before or after regular staff meetings to keep them informed of the student’s progress and any revisions to the IPP.

The IPP is an ongoing process. Encourage the student’s Learning Circle to commit to regular communication, collaboration with outside resources, and ongoing assessment and review of the student’s successes and needs.

The IPP Process

The student's Learning Circle participates in all stages of the IPP process, including:

1. Identifying needs
2. Setting the direction
3. Creating a plan
4. Implementing the plan
5. Reviewing and revising the plan
6. Planning for transition.

1. Identifying needs

Effective IPPs begin with the Learning Circle's understanding of the student. The more the Circle learns about the student's strengths and needs, the more likely they are to create an IPP based on the student's individual learning profile rather than on categorical labels.

Encourage both the student and the parents to provide information about:

- the student's interests, talents and desires
- the student's relevant medical history and health care needs
- the student's hopes and dreams
- what the family can do at home to support the goals of the IPP
- the student's community involvement, after school or caregiver situations that could affect learning.

Consider the student's learning strengths. How can these strengths be used to support learning needs?

Look at the whole student. What are the student's social and behavioural strengths and needs? How could cultural continuity and the classroom community support the student's development?

Essential information

Alberta Education requires that the following essential information be included in the IPP:

- assessment data
- current level of performance and achievement
- identification of strengths and areas of need
- measurable goals and objectives
- procedures for evaluating student progress

- identification of coordinated support services required, including health-related services
- relevant medical information
- required classroom accommodations, such as changes to instructional strategies, assessment procedures, materials, resources, facilities or equipment
- transition plans
- formal review of progress at regularly scheduled reporting periods
- year-end summary
- parent signature, to indicate agreement with the IPP.

2. Setting the direction

In this stage, the Learning Circle reviews all the information it has gathered as well as the resources available. They use this information to develop a list of new skills related to the identified learning needs.

To decide which of the student's learning needs should be the focus of the IPP, the Circle considers each skill and chooses a select few as priorities by exploring questions such as the following.

- How does this skill relate to the student's and parents' hopes and dreams for the future?
- Is this skill age-appropriate?
- Are there opportunities to use this new skill across subjects and settings?
- How will this new skill relate and build on the student's areas of strengths?
- How will the mastery of this skill affect overall learning and achievement?
- Will this skill contribute to the student's independence?
- How long will it take the student to master this skill?

3. Creating a plan

The IPP identifies goals for the student, describing what the student might accomplish in a specific area in one school year. It is important for the plan to describe goals that are realistic and achievable.

To create these goals, consider the following.

- State the goals in plain language.
- Aim to create academic goals around skills that will transfer across content areas.
- Include any appropriate social skill goals that address such needs as attending classes regularly or working independently.

The plan also includes:

- a description of how the student’s progress will be reviewed and measured
- a description of which accommodations will be available to support the student’s learning needs.

Accommodations, including assistive technology, are described on pages 137–141.

4. Implementing the plan

In this stage of the process:

- teachers put instructional and assessment strategies into practice, making adjustments to short-term goals as needed
- parents and students find ways to support the goals of the IPP at home.

The IPP is a guideline describing a process—it is a working document, subject to change. For successful implementation, consider the following guidelines.

- An IPP is most effective when it is used by everyone responsible for the student’s progress.
- Use a variety of assessment strategies to continuously monitor student progress. Attach the assessment information to the IPP. For more information about assessment, see Chapter 6.
- Use the feedback from interim reviews to revise IPP instructional guidelines and student goals.
- Some teachers keep IPPs in binders in their desks where they are accessible for noting observations and revising plans.
- All teachers responsible for the student need to have access to the IPP so they can use it to plan instruction, monitor progress and contribute to evaluating and changing goals and objectives.

5. Reviewing and revising the plan

Review meetings provide an opportunity for the Learning Circle, including the student, to discuss progress. At the year-end review, the Circle reviews the IPP and adds recommendations for the next year.

For a variety of reasons, Aboriginal students may be more likely to change schools during the school year than many non-Aboriginal students. As a result, it is especially important to schedule regular reviews of the IPPs, to ensure that communication with the receiving school is as current as possible and to address transition issues.

To review the effectiveness of a student’s IPP, consider the following questions.

- How does the IPP build on the student's individual strengths?
- How does the IPP reflect the student's individual needs?
- How appropriate and effective are the key long- and short-term goals?
- Are the accommodations described currently being used? Are they effective? Do they need to be revised?
- Is the student's participation in the regular curriculum appropriate and successful?
- Does the IPP include provision for multiple-source assessments that effectively address the student's social and behavioural needs and strengths?
- Does the planning for transition reflect cultural concerns and provide a level of support that will help to ensure student success?
- Do all members of the Learning Circle, including the parents and student, have access to the IPP and a way to effectively contribute to assessment and evaluation of the plan?
- What strategies does the IPP use to measure and communicate student progress?
- Is progress monitored frequently? When objectives are met, are new goals set? If the student is not demonstrating progress, does the team review the situation and make changes?

6. Planning for transition

Planning for transition involves:

- identifying the kinds of skills and attitudes that need to be in place for students to be successful in future educational settings
- developing a plan of action to ensure that students acquire these skills and attitudes.

Effective transitions are *planned* with future needs in mind. The planning incorporates an understanding of the learning strengths and needs of the individual student.

Effective transitions are *collaborative* and parents play a key role. As students move through the grades and develop self-advocacy and problem-solving skills, they need to become more involved in planning their transitions.

Effective planning for transition is *comprehensive*. It focuses on social, vocational and interpersonal skills and needs as well as academic skills.

For students with learning disabilities, planning for transition should include specific plans for moving between classrooms, schools and programs as well as from senior high to post-secondary studies or employment.

Supporting students through transitions

Whenever possible, arrange face-to-face meetings with the receiving teacher, the student and the parents. This will help ease the transition for everyone. A well-documented, up-to-date IPP will also provide support and direction for the family and the receiving teacher.

Teacher story

Supporting transition to senior high

“In our district, when students with learning disabilities are half-way through Grade 9, we arrange for them to take part in activities at the high schools they’re interested in—they may join in an art or physical education class, or go on a field trip. We want them to have both social and academic experiences in the new environment. The schools and teachers work together to communicate all the details about the students’ IPPs and so on. And we make sure the parents are introduced to the new teachers.”

Because some Aboriginal students may move mid-year, there may not always be adequate planning time to help make these transitions more successful. Ongoing work with the student on advocacy and metacognitive skills and strategies is a proactive way to prepare students to communicate effectively with new teachers about their learning strengths and needs.

Financial support for post-secondary education

Help students who are planning a transition to post-secondary settings by making links to Aboriginal student support services in the institutions where they are applying and connecting the students to sources for financial support.

Financial support for post-secondary studies is available to Inuit and Status Indian students living on or off reserve in Canada through the department of Indian and Northern Affairs Canada (INAC). To qualify for this support, students must be identified as Status Indians under the federal *Indian Act*. Most individual First Nations bands establish their own criteria for selection. Students who are Status Indians and on a band list can contact their own band administrative office for more information. Policies and programs vary across the country and across the province. Additional information on specific benefits available is also available from regional and district offices of INAC, Health Canada, First Nations band offices and tribal councils.

The Métis Nation of Alberta provides funding for Métis students entering or returning to post-secondary studies. For more information, contact the Métis Nation of Alberta at 780-423-3237.

In addition, Indian and Northern Affairs Canada provides an online directory, *Scholarships, Bursaries and Awards Guide for Aboriginal Students*, which lists sources of funding available to Aboriginal students entering or returning to post-secondary studies. To access this directory, go to <http://sdiprod1.inac.gc.ca/abs/main.asp?lang=E>.

See *Appendix 23: Transition Checklist* for a list of types of information that students with special needs should gather to make their transitions to post-secondary studies more successful.

Accommodations and Supports

Some of the challenges faced by students with learning disabilities can be addressed by providing appropriate accommodations. An accommodation is a change or alteration to the regular way a student is expected to learn, complete assignments or participate in the classroom. Accommodations lessen or remove the impact of a student's learning disability, leading to more equal opportunities for success. Accommodations are the school community's way of showing that a student's learning disabilities are accepted and honoured.

Students, teachers and parents sometimes think that accommodations given to students with learning disabilities such as extra time, adaptive devices or special materials, give these students an unfair advantage over other students. In fact, accommodations remove, or at least lessen, the impact of a student's learning disability. As a result, they give the student the same opportunity to succeed as other students.

The three basic types of accommodations are:

- classroom and physical accommodations, e.g., alternative seating, adaptive devices
- instructional accommodations, e.g., providing copies of notes, alternative reading material
- evaluation and testing accommodations, e.g., extra time, oral tests.

To ensure the effective use of accommodations, consider the following strategies.

- Individualize accommodations to match the strengths and needs of individual students.
- Involve students and parents in the process of choosing accommodations. This will increase the likelihood that students will use them.

- Select accommodations that are the least intrusive. Avoid using accommodations that isolate students from peers or draw unnecessary attention.
- Specify accommodations in students' IPPs. Only accommodations specified in IPPs and used by students during the course of their regular studies are permitted on provincial achievement tests and diploma examinations.

For more information on accommodations for provincial achievement tests and diploma examinations, visit www.education.gov.ab.ca/k_12/testing.

- Ensure that students are able to use accommodations consistently. For example, if a student uses a laptop for written work, is there access to an electrical outlet in the student's classrooms? Does the student have access to computers at home?
- Provide time and support for the student to learn how to use an accommodation.
- Monitor the effectiveness of accommodations. Record this information on IPPs so that accommodations will be provided in new settings that students may move to.

Sample accommodations for reading and writing difficulties¹⁵

- Use less difficult or alternative reading materials within a subject area.
- Reduce the amount of reading required.
- Allow alternative methods of data collection, such as tape recorders, dictation, interviews or graphic organizers.
- Extend time for completing tests and assignments.
- Read directions aloud to students.
- Read test items aloud to students.
- Record directions on audiotapes or CDs.
- Provide written directions for exams ahead of time.
- Use assistive technology, such as books on tape and CD, screen readers, and scan-and-read software.

Sample accommodations for attention difficulties¹⁵

- Provide alternative seating, e.g., near teacher, facing teacher, at front of class, between students who are good role models, away from distractions.
- Provide personal workspaces, e.g., quiet area for study, extra seat or table, timeout spots, study carrels.
- Permit movement during class activities and testing sessions.

15. From Calgary Learning Centre (Calgary, AB). Used with permission.

- Provide directions in written form.
- Extend time to complete tests and assignments.
- Allow students to complete longer tests in two or three shorter sessions.
- Allow students to take breaks during tests.
- Use place markers, special paper, graph paper or writing templates to encourage students to focus attention.
- Provide visual cues such as arrows and stop signs, on student worksheets.
- Provide quiet, distraction-free areas for completing special assignments and tests.
- Provide earplugs or headphones to screen out distracting sounds.
- Provide checklists for complex assignments.
- Provide specific procedures or processes for turning in completed assignments.

Sample accommodations for memory difficulties¹⁵

- Provide written outlines.
- Provide directions in written form.
- Provide specific procedures or processes for turning in completed assignments.
- Provide checklists for long, detailed assignments.
- Read standard directions several times at the start of tests.
- Provide visual cues such as arrows and stop signs, on student worksheets.
- Encourage students to refer to references such as personal dictionaries, word lists and arithmetic tables.
- Provide assistive technology for learning, e.g., arithmetic tables, dictionaries, talking calculators, word processors and spell-check devices.

Sample accommodations for fine and gross motor difficulties¹⁵

- Use assistive and adaptive devices, e.g., slantboards or desktop easels for written work, pencils or pens adapted in size or grip diameter, portable word processors.
- Set realistic and mutually agreed-upon expectations for neatness.
- Reduce or eliminate the need to copy from texts or boards, e.g., provide copies of notes, arrange for students to photocopy peers' notes, provide carbon paper to create duplicate copies of notes.
- Extend time to complete tests and assignments.
- Alter the sizes, shapes or locations of spaces provided for answers.
- Accept keyword responses in place of complete sentences.
- Provide opportunities for students to type answers or answer orally instead of in writing.

Assistive technology for learning

Assistive technology for learning, sometimes called adaptive technology, helps reduce barriers to learning by allowing students with learning disabilities to perform tasks that would otherwise be difficult or impossible for them to do independently. The term refers to items, pieces of equipment or products that are used to help individuals improve their ability to perform specific tasks.

Computers are the most well-known form of assistive technology for learning and there are a variety of computer-related assistive products available, including scan-and-read software, screen readers and voice recognition systems. Not all students with learning disabilities need assistive technology for learning. The decision to try assistive technology for learning should be made on an individual basis, in consultation with the student and parents, after considering the student's strengths, needs and motivation. Some students may benefit from access to technology at both home and school, and may need extra support to do this.

Although assistive technology for learning may be aimed at the needs of a particular student, it is also possible to use assistive technology to benefit a wide range of students. For example, groups of students (with and without special needs) can listen to taped books at a listening centre. This helps create an opportunity for students to participate equally as well as a sense of community and belonging in the classroom.

Examples of Assistive Technology for Learning¹⁶

	Adaptations	Description
<i>Reading</i>	<ul style="list-style-type: none"> • Tape-recorded material • Semantic mapping software • Electronic word recognition and definition • Screen reader software • Scan-and-read software 	<ul style="list-style-type: none"> • Audio recordings of textbook material and answers to chapter or workbook questions • Software that enables readers to explore and comprehend narrative story or expository writing elements through graphic depictions • Presents definitions of words • Computerized voice reads material on computer screen • Text is scanned into computer and software computerizes text so it can be read by speech synthesis
<i>Writing</i>	<ul style="list-style-type: none"> • Pencil grip • Tape recorder • Semantic mapping software • Word prediction software • Speech recognition software • Electronic spelling devices • Word processing spell-check option • Speech synthesizer/talking software 	<ul style="list-style-type: none"> • Piece of plastic that is attached where the pencil is grasped • Standard tape recorder for dictation of written products • Software for outlining and organizing writing • Software that assists with sentence structure and syntax • Voice recognition software that allows student's voice to be converted into written content • Devices that speak and display, or only display, words and definitions • Standard spell-check option • Word processing programs with synthesized voice reading text
<i>Mathematics</i>	<ul style="list-style-type: none"> • Graph paper • Calculators (including talking calculators and calculators with large keys) • Talking clocks 	<ul style="list-style-type: none"> • Centimetre squares for aligning numbers • Devices for checking answers • Specially designed clocks with synthesized voice that reads time aloud

16. Adapted from "Using Assistive Technology Adaptations to Include Students with Learning Disabilities in Cooperative Learning Activities" by D. P. Bryant and B. R. Bryant, 1998, *Journal of Learning Disabilities*, 31, 1, p. 48. Copyright 1998 by PRO-ED, Inc. Adapted with permission.

Sample Strategies for Supporting Aboriginal Students with Learning Disabilities

Aboriginal students with learning disabilities may need support in acquiring and practising basic organizational skills, such as time management, note-taking and study skills. They may also need to develop self-advocacy skills.

Time management

Aboriginal students with learning disabilities may have an awareness of time and an understanding of time management that is different from mainstream culture. Time-management skills will help students succeed in time-based classroom processes by developing their ability to decide what is most important for them to do, judge how long it will take, and decide when and how to do it.

Like many students with learning disabilities, Aboriginal students may be disorganized learners. Classroom routines and structures that emphasize organizational strategies will help them succeed and provide them with transferable skills. Consider the following strategies.

- Post a list of materials that students need for class.
- Make sure that expectations, due dates and so on, are explicit and clear, and that they are posted in the classroom.
- Encourage students to write due dates in their daily agendas or homework books.
- Provide students with a model showing how to organize their notebooks. Consider colour-coding notebooks for various subjects. Do periodic notebook checks.
- Schedule weekly or monthly locker and/or desk clean-ups to help students stay organized.

Schedules

Demonstrate how to use daily and weekly schedules. Have students fill in a detailed account of their time for one week to help them develop an awareness of how much of their time they use for daily activities. This will also help them determine their own best times for homework and studying.

Student daily agenda books

Many schools provide students with daily agenda books. They are also widely available at book and office supply stores. Encourage students to use them daily by using the following strategies.

- Set up check systems to ensure that students bring their agenda books to class daily.
- Remind students, when announcing all assignments, tests, due dates and so on, to make note of these in their agendas.
- Have students record all of their out-of-school activities and commitments, including significant FNMI dates, in their agendas.
- Encourage students to use their agendas to plan time for homework and studying.
- Develop positive and creative strategies to help students remember to use and bring their agendas back and forth between home and school. Managing an agenda can be a challenge for those students struggling with organizational skills.

Back planning

Back planning is working backwards from the due date of an assignment or major test to figure out which tasks should be completed by what date in order to meet the deadline.

Students can use a blank calendar page and follow these steps.

- Start with the due date and count the total number of days available to complete the project.
- Break the project down into smaller tasks, and estimate how much time each task will take.
- Work backwards from the due date and record each task in pencil.
- Be prepared to change timelines if something unexpected happens.
- Think of ways to speed up the process for some tasks. For example, get an audio version of a novel if you cannot read it within the deadline.

Back planning calendar for a book report

October

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 <i>Choose book</i>	3 <i>Read 20 pages</i>	4 <i>Read 20 pages</i>
5 <i>Read 20 pages</i>	6 <i>Read 20 pages</i>	7 <i>Read 20 pages</i>	8 <i>Read 20 pages</i>	9 <i>Read 20 pages</i>	10 <i>Read 20 pages</i>	11 <i>Read 20 pages</i>
12 <i>Read 20 pages</i>	13 <i>Finish book</i>	14 <i>Write draft</i>	15 <i>Write draft</i>	16 <i>Revise draft</i>	17 <i>Revise draft</i>	18 <i>Expert check</i>
19 <i>Expert check</i>	20 <i>Final copy</i>	21	22 <i>Book report DUE</i>	23	24	25
26	27	28	29	30	31	

Note-taking strategies

Taking notes from class discussion, teacher's lectures or reading a textbook may be a difficult task for many students with learning disabilities.

Effective note taking in class will help students to:

- reinforce and remember what they hear
- become more active listeners
- create a document from which to study.

The following strategies can help students become more effective note takers.

- Introduce students to a variety of different note-taking formats so they can find the one that works best for them.
- Teach the BROIL method.¹⁷ Use the acronym to remind students what kinds of information they need to include in class notes.
 - B** – on the **B**oard
 - R** – **R**epeated throughout class, or for many classes
 - O** – that you say is **O**n the test
 - I** – that they think is **I**mportant
 - L** – in a **L**ist.
- When giving a lecture, provide students with organizers outlining key points so they can fill in the details. Examples include web organizer, linear topic list, main points in one column with room for details or cloze-style sentences.

17. From Foothills Academy (Calgary, Alberta). Used with permission.

- If students are copying notes from the board or overhead, encourage them to personalize the information by creating related mind maps, charts or questions and answers.

For more ideas about note taking, see *Teaching Students with Learning Disabilities* (Alberta Education, 1996), Book 6 of the *Programming for Students with Special Needs* series, pp. 117–121, 196–197 and *Make School Work for You* (Alberta Learning, 2001), pp. 30–34.

Study skills

Aboriginal students with learning disabilities may have a good knowledge of the material but may not have effective study skills. Consider the following suggestions for helping students do better on tests.

- Give students plenty of advance notice about upcoming tests; aim for at least one week. Complete a study guide with students so they have clear guidelines for test content and format.
- Encourage students to use their time-management skills to create a study schedule, by back planning study tasks up to the day of the test.
- Teach students strategies for studying for tests, including:
 - highlighting keywords
 - creating webs for individual topics
 - using flash cards
 - making up questions
 - making up *Jeopardy*-style questions
 - reviewing activity sheets and class notes
 - making up cloze statements
 - practising drawings from the unit
 - teaching someone else the information
 - making up a practice test.

For more ideas about study and test-taking skills, see *Make School Work for You* (Alberta Learning, 2001), pp. 35–48.

Decision-making and Problem-solving Strategies

Learning and practising decision-making and problem-solving strategies will help Aboriginal students with learning disabilities begin to take charge of their own success in the classroom and beyond. Decision making can be a linear, logical process—and it can also be an intuitive process, based on what “feels right.” Both approaches are valid. Offer students opportunities to make decisions using both of the approaches below.

When working with students on decision-making skills, remind them that there is often not a single “right” decision—every choice has up sides and down sides. Some decisions may evolve over time—students will often have opportunities to re-examine their choices and change their minds.

Step-by-step decision making

- *Define the decision.* For example, “Since I only have time for one extracurricular activity this term, what should it be?”
- *Decide what the choices are.* For example, “I could fit basketball or jazz band into my schedule. Which should I choose?”
- *Gather information.* For example, find out when practices and rehearsals are scheduled, when games and performances happen, skill levels required for each activity, time commitment required for each, whether friends are taking part, and any other relevant information.
- *Process the information.* For example, make a “Plus and Minus” list for both alternatives.
- *Choose the option.* Identify which choice has the most positives and fewest negatives.

See *Appendix 24: Decision-making Tree* for a graphic organizer to help students organize and record information for decision making.

“Feels right” decision making

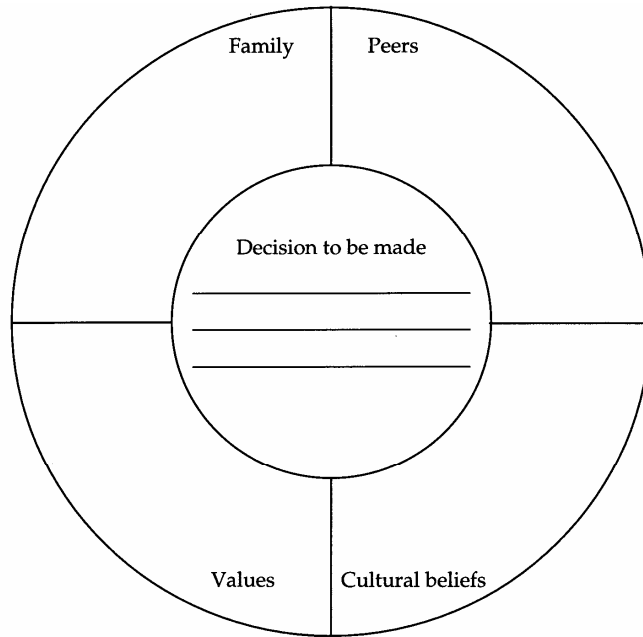
This approach helps students tune into their intuition—their gut feelings about a decision. It just “feels right.”

- Encourage students to take time with this process. Intuition cannot be rushed.
- Have them research the decision and find out all they can about the options.
- Suggest they try the step-by-step decision-making process and then pay attention to how they feel about the “logical” choice.
- Encourage them to stay open and use the process to discover how they feel.
- Suggest they go through each option, imagining as clearly as they can how they would feel actually taking that option.
- Encourage students to “sleep on it!”

For a blackline master to support the decision-making process, see *Appendix 24: Decision-making Tree*.

Influences on decision-making circle

Students need to understand what factors influence their decision making. Use a graphic organizer such as Appendix 25 to help students become more aware of how they make decisions, and where they can get additional advice and support to make good decisions.



Questions you need to ask to help you make this decision

Adapted from Alberta Learning, *Kindergarten to Grade 9 Health and Life Skills Guide to Implementation* (Edmonton, AB: Alberta Learning, 2002), p. C.39.

For a blackline master to support identifying influences, see *Appendix 25: Influences on Decision Making*.

Students and self-advocacy

For many Aboriginal students, the ability to self-advocate is an important factor to their success at school. Self-advocacy means speaking out and taking positive action to make your situation better. Students learn to self-advocate from observing their teachers and parents advocate on their behalf. They develop self-advocacy skills through modelling, role-play, practice and evaluation.

- Maintain an ongoing dialogue with students about their learning strengths and needs. Encourage them to help plan their program, make decisions, set goals and reflect on their progress.

- Encourage students to monitor their own progress through self-assessment. Help them recognize and talk about their learning strengths and needs.
- Self-advocates need to be informed and organized. Model strategies for these skills and encourage students to use them.
- An important part of self-advocacy is the ability to positively influence others. Encourage students to show their appreciation to others who contribute to their learning and success at school.
- Recognize how challenging self-advocacy may be for Aboriginal students and support their efforts.

Other Alberta Education Resources

For more information and sample strategies for supporting students with learning disabilities, see the following Alberta Education resources:

- *Teaching Students with Learning Disabilities* (1996), Book 6 of the *Programming for Students with Special Needs* series
- *Unlocking Potential: Key Components of Programming for Students with Learning Disabilities* (2003)*
- *The Parent Advantage: Helping Children Become More Successful Learners at Home and School, Grades 1–9* (1998)
- *Make School Work for You: A Resource for Junior and Senior High Students Who Want to be More Successful Learners* (2001)
- *A Handbook for Aboriginal Parents of Children with Special Needs* (2000)* and accompanying video *Our Treasured Children* (2000)
- *The Learning Team: A Handbook for Parents of Children with Special Needs* (2003)*
- *Individualized Program Planning* (2005)
- *Building on Success: Helping Students Make Transitions from Year to Year* (2005).

There are also a number of other Alberta Education resources to help teachers program for students with special needs:

- *Teaching Students who are Gifted and Talented* (2000), Book 7 of the *Programming for Students with Special Needs* series
- *Teaching Students with Emotional Disorders and/or Mental Illnesses* (2000), Book 8 of the *Programming for Students with Special Needs* series
- *Teaching Students with Autism Spectrum Disorders* (2003)*, Book 9 of the *Programming for Students with Special Needs* series

- *Teaching Students with Fetal Alcohol Spectrum Disorder: Building Strengths, Creating Hope* (2004)*, Book 10 of the *Programming for Students with Special Needs* series
- *The Journey: A Handbook for Parents of Children who are Gifted and Talented* (2004)*.

Resource titles marked with an asterisk (*) can be downloaded free-of-charge from the Alberta Education Web site at www.education.gov.ab.ca/k_12/specialneeds/.

Print copies of all of the resources listed on pages 148–149 can be purchased from the Learning Resources Centre. Order online at www.lrc.education.gov.ab.ca/ or telephone 780–427–2767.

