

Module 2



Addressing the Needs of Students with Learning Disabilities

● Introduction

Programming for students with learning disabilities is a dynamic, interactive process that requires problem solving and teamwork among educators, students and parents. Programming requires an organizational structure and school culture that supports the ongoing implementation of a student-specific planning process. It also requires consistency across settings and grade levels.

The guiding principles of programming for students with learning disabilities are as follows:

- Programming must be based on a student's strengths and needs.
- Programming is an active process, which is continuously adjusted to meet a student's needs.
- Students with learning disabilities need to participate in the regular curriculum to the fullest extent possible.
- Many practices used to support students with learning disabilities will benefit all students.

● Key Ideas in this Module

- Students with learning disabilities have average to above average intelligence although they have difficulty with processes related to learning.
- Brain research shows that all students can learn, but may learn in different ways.
- Learning disabilities can range from mild to severe and express themselves in a variety of ways, which can make them difficult to identify.
- Learning disabilities can also be present with other conditions.
- Programming for students with learning disabilities, as well as the assessment of learning needs, is a collaborative process that begins with the student, parent(s), and classroom teacher.
- Students who continue to struggle with learning may require student-specific, school-division-based, or specialized assessment, which may or may not result in the diagnosis of a learning disability.
- Educators can use approaches such as universal design and differentiated instruction to address the learning needs of all students in the classroom.

- If some students continue to have difficulty meeting their learning outcomes, adaptations (including assistive technology) may be used to support their learning.
- Research shows that the most effective programming intervention for students with learning disabilities involves a combination of direct instruction, strategy instruction, and rehearsal and practice.
- Although there are many models of direct instruction of strategies, the one that is most strongly supported in current research is the Self-Regulated Strategy Development model (SRSD).

● What Does a Learning Disability Look Like in the Classroom?

- Students with learning disabilities have average to above average intelligence but fail to learn as easily as their peers. Learning disabilities occur when one or more of the neurological processes people use to learn and develop oral language, reading, writing, mathematics, social skills, executive functions, memory, and motor skills is/are not working properly. Learning disabilities can affect any or all aspects of a student's academic growth.
- There are some common behaviours that students with learning disabilities often display. These can easily be recognized by the classroom teacher as signs that a learning disability may exist. Some of these are outlined in the following table. The more of these behaviours a student displays, the higher the probability that one or more of the neurological processes required to acquire, organize, retain, and understand both verbal and non-verbal information is not functioning typically.
- In the Early Years, more of the signs indicating the possibility of a learning disability are related to oral language and motor skills while in the Senior Years, the greatest number of signs are related to executive functioning. This correlates with the major cognitive developmental stages of children and adolescents. In the Early Years, children's primary task is to develop language skills. In adolescence, the primary task is to develop the ability to plan, self-monitor, and execute actions (executive functioning abilities).

EARLY YEARS: "The student may have difficulty with . . ."

Oral Language	Reading	Written Language	Math	Social Skills	Executive Functions	Memory	Motor Skills
Producing speech sounds and pronouncing words	Connecting spoken sounds with letters	Drawing or tracing	Counting and learning numbers	Socialization, interaction with peers	Recalling routines	Learning the names of colours, days of week, etc.	Using pencils, scissors, crayons
Communication delays	Learning the alphabet				Learning time concepts		Dressing self without assistance
Small vocabulary							Walking up and down stairs
Rhyming words							Coordination
Speaking in full sentences							Uneven motor skill development
Sound sequencing in words							
Responding to oral task demands							

MIDDLE YEARS: "The student may have difficulty with . . ."

Oral Language	Reading	Written Language	Math	Social Skills	Executive Functions	Memory	Motor Skills
Automaticity in decoding	Basic reading skills	Writing letters and numbers	Computing math problems	Detecting and interpreting social cues	Monitoring and evaluating performance	Recalling newly learned information	Tight grip on pen or pencil
Learning new vocabulary	Learning the alphabet				Learning time concepts		Dressing self without assistance
Small vocabulary	Reading comprehension	Written expression	Calculation	Playing age-appropriate games	Organizing assignments	Lengthy instructions	Drawing or copying shapes
Retelling stories	Slow reading rate	Poor spelling		Peer rejection	Sequential planning	Slow recall of information	Team sports
Speaking in full sentences							Uneven motor skill development
Oral expression	Reading accurately			The rules of conversation	Self-regulation	Retrieving vocabulary	
Listening comprehension	Identifying main ideas in text				Following directions		

SENIOR YEARS: “The student may have difficulty with . . .”

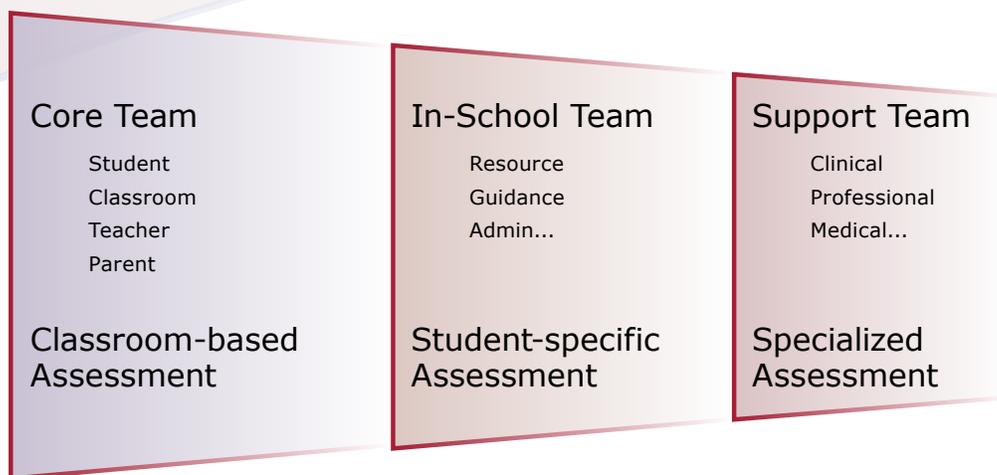
Oral Language	Reading	Written Language	Math	Social Skills	Executive Functions	Memory	Motor Skills
Expressing thoughts verbally	Reading comprehension	Expressing thoughts in writing	Abstract math concepts	Getting along with peers	Staying organized	Recalling newly learned information	
Using proper grammar when speaking		Writing with fluency	Math reasoning	Jokes that are subtle or sarcastic	Keeping track of time—self monitoring	Working memory	
		Grammar when writing		Making inappropriate remarks	Getting work done on time	Following directions	
				Reading social situations	Analyzing ideas		
					Multi-tasking		
					Problem solving		

The information included in the tables was taken from the following sources:

1. Learning Disabilities Association of Canada. www.ldac-acta.ca/learn-more/research/ldac-research.
2. Academic Resource Center Duke University Learning Disabilities. http://arc.duke.edu/faculty_staff/ld_adhd_info/faculty_ld.php.
3. Teaching LD: Information & Resources for Teaching Students with Learning Disabilities. <http://teachingld.org/pages/basics>.
4. LD Online. [www.ldonline.org/article/How Do You Know If Your Child Might Have a Learning Disability%3F](http://www.ldonline.org/article/How_Do_You_Know_If_Your_Child_Might_Have_a_Learning_Disability%3F).
5. Morin, Amanda. Understanding executive functioning issues. <https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/understanding-executive-functioning-issues>.
6. Learning Disabilities Association of America. <http://ldaamerica.org/types-of-learning-disabilities/>.

● What Should I Do if I Suspect a Student in My Classroom Has a Learning Disability?

The diagnosis of a learning disability can only be made by a qualified mental health practitioner with education and experience in diagnosing learning disabilities; however, classroom supports and interventions can begin as soon as educators observe that a student is struggling with learning tasks.



The identification of a learning disability can be a complex process given the unique nature of each individual’s learning strengths and challenges. The process of diagnosis can be further complicated if a student’s learning has been affected by environmental factors (e.g., poverty, lack of school experience, etc.), or if the student struggles with one or more other diagnosis (e.g., attention disorders, sensory impairments). See Module 1: [Definition of a Learning Disability](#).

The classroom teacher plays a critical role in the identification of learning needs. It begins with gathering assessment data through classroom-based assessment processes. According to the *Appropriate Educational Programming in Manitoba: Standards for Student Services*, teachers use assessment to determine how students are progressing and to guide and improve instruction for all students. Student assessment may take the form of teacher observation, portfolios, outcome rubrics, classroom testing, and provincial assessments. See [Appendix 2-A](#) and [Appendix 2-B](#).

In accordance with *The Amendment to the Public Schools Act*, Manitoba school divisions have an obligation to conduct regular assessments of student learning and to report to parents at the regular reporting periods.

Teachers use assessment to determine how students are progressing and to guide and improve instruction for all students. Student assessment may take from the teacher observation, portfolios, outcome rubrics, classroom testing, and provincial assessments. For some students, where indicated, specialized assessments may be needed. Assessment methods should be appropriate for and compatible with the purpose and context of the assessment.

Source: Manitoba Education, Citizenship and Youth. 2006. p.13.

When used in the context of a collaborative tool for planning, assessment is a powerful way to enhance student learning. Formative assessment practices that include task analysis and error analysis provide valuable information for instructional planning and support.

Assessment should not be an end in itself, but part of a process which teachers can use to identify and address learning gaps, as well as to continually support student learning. If a student is having difficulty achieving learning outcomes, teachers should not only try new instructional approaches, they should give the student additional opportunities to succeed.

It is important to keep in mind that there are various types of assessments and each should be used according to its intended purpose.

- **Assessment for learning**, or formative assessment, is used to make visible the knowledge and understanding of each student. Assessment for learning is ongoing and helps educators decide how to help students progress. Educators use this style of assessment as an investigative tool to discover what their students know and are able to do, and whether there are any preconceptions, confusions, or gaps in their knowledge. Examples of formative assessment tools include observations, checklists, writing samples, and running records.
- **Assessment of learning**, or summative assessment, is used to confirm what students know and to demonstrate whether students have met curricular outcomes or student-specific outcomes, or to certify proficiency. Summative assessment includes anything for which students receive a grade or mark, such as projects, tests, exams, final drafts of written work, and so forth. It is generally used for reporting purposes.
- **Assessment as learning** is used by students to develop their skills of metacognition (i.e., their ability to understand their own thought processes). Assessment as learning comes from the idea that learning is not just a matter of transferring ideas from someone who is knowledgeable to someone who is not. Rather, learning is an active process of cognitive restructuring that occurs when individuals interact with new ideas.

For additional information on assessment, see *Rethinking Classroom Assessment with Purpose in Mind* at www.edu.gov.mb.ca/k12/assess/wncp/.

There are many ways to look at the consequences of a learning disability, but the best way for educators to support learning needs is to look for ways to help students succeed.

If a student struggles with a learning task but has average to above average cognitive abilities, a teacher can ask: "How can I enable this student to show what he/she truly understands?"

If a student has processing difficulties, a teacher can ask: "How can I reduce the negative impact of this student's processing difficulties in instructional and assessment contexts?"

If a student has below average academic achievement, a teacher can ask: "How can I continue to develop this student's basic academic skills?" or "How can I accommodate this student's academic skills to ensure his or her fullest access to the curriculum?"

If a student has unexpected academic underachievement, a teacher can ask: "How can I make adjustments to instruction and assessment to help this student achieve the intended learning outcomes without excessive effort on the part of the student, or excessive support from adults?"

Adapted from: Ministry of Education. 2009. p.7.

● Supporting Student Learning through Collaboration

No single individual can gather all of the information necessary to identify, understand, and plan for a student with a learning disability. Planning for a student with specific learning needs is a collaborative effort that involves a core team: parent(s), educators, and student. If learning difficulties persist, the team may be expanded to include other members of the school staff as well as clinicians and/or consultants.

Each member of the core team (parent(s), educators, and student) contributes information to the student profile, based on their interactions with and knowledge of the student. These multiple perspectives provide insight into the unique learning needs of the student. The team determines how much they know about the student's specific learning needs, what they still need to know, and how to fill in gaps that exist in their knowledge. Once they have gathered enough information, they are ready to begin selecting strategies, interventions, and adaptations that best support the student's learning.

● Supporting Student Learning

Based on Manitoba's Philosophy of Inclusion at www.edu.gov.mb.ca/k12/specedu/aep/inclusion.html, students with special learning needs, such as those with learning disabilities, should experience school as much as possible like their peers.

To make inclusion applicable in Manitoba schools, educators:

- Foster school and classroom communities where all students, including those with diverse needs and abilities, have a sense of personal belonging and achievement.
- Engage in practices that allow students with a wide range of learning needs to be taught together effectively.
- Enhance students' abilities to deal with diversity.

Universal design, differentiated instruction and the use of adaptations are some of the concepts that teachers use to achieve these ends.

● Universal Design

Universal design is the process of creating systems, environments, materials, and devices that are directly and repeatedly usable by people with the widest range of abilities operating within the largest variety of situations.

Source: Manitoba Education, Citizenship and Youth. 2006. p.13.

Planning from a universal design perspective begins with getting to know students in the classroom through the development of a class profile. A class profile is based on information gathered about students' learning styles, multiple intelligences, interests,

strengths, and needs. The class profile can help educators strive to eliminate learning barriers and build flexibility into course plans so that classroom instruction is usable by all students. When educators use universal design as a starting point for planning, there is less ongoing need to adjust lessons for individual students; this saves time for teachers and helps them meet the needs of all students in the classroom.

The democratic principles of non-discrimination and equal opportunity make universal design fundamentally inclusive. Universal design promotes accessibility to curricular content that gives all students equal opportunities to learn. Instructional planning based on universal design principles gives diverse learners multiple options for

- acquiring information and knowledge (multiple means of representation)
- demonstrating what they know (multiple means of action and expression)
- being motivated, challenged, and interested (multiple means of engagement)

Source: Manitoba Education, Citizenship and Youth. 2006. p.13.

For more information on universal design, see

- <http://cast.org/index.html>
- <http://universaldesign.ie/What-is-Universal-Design/The-7-Principles/>

For information on creating class profiles, see

- Manitoba Education and Advanced Learning. *Supporting Inclusive Schools: A Handbook for Resource Teachers in Manitoba Schools*. Winnipeg, Manitoba: Manitoba Education and Advanced Learning, 2014. pp. 15-16, 81. www.edu.gov.mb.ca/k12/specedu/res_teacher/.
- **Class Profile of Listening and Speaking Competencies** (Manitoba Education, Citizenship and Youth. *Listening and Speaking: First Steps into Literacy*. Winnipeg, Manitoba: Manitoba Education, Citizenship and Youth, 2008. 87. www.edu.gov.mb.ca/k12/cur/ela/list_speak/listening_speaking.pdf).
- **Class Learning Profile** (Rose et al. *Teaching Every Student in the Digital Age: Universal Design for Learning. Class Learning Profile*. 2002. www.cast.org/learningtools/index.html).

● Differentiated Instruction

Differentiated instruction is a method of instruction and assessment that alters the presentation of the curriculum for the purpose of responding to learner diversity, as well as interests and strengths of students.

Source: Manitoba Education, Citizenship and Youth. 2006.

Differentiated instruction:

- is instruction that acknowledges and responds to diversity among learners;
- refers to the wide range of instructional strategies, techniques, and approaches that can be used to support student learning and to help each student achieve high expectations;
- offers students multiple options at each stage of the learning process;
- recognizes that there are many avenues to reach student learning outcomes and that each student requires a complex and unique mix of basic instruction and practice to reach his or her potential;
- is concerned with establishing a supportive learning environment for all students and with meeting each student's learning requirements.

Success for All Learners, pp. 1.5, 12.4

Compatible with the principles of universal design, differentiated instruction takes into account each student's learning preferences, learning styles, and multiple intelligences. Educators can use information gathered in the class profile to differentiate instruction in the following five areas:

1. **Content:** What is taught and how access to relevant information and ideas is provided.
2. **Process:** How a teacher selects activities and processes that help students understand and "own" the knowledge, skills, and understanding essential to a topic/outcome.
3. **Product:** How a student demonstrates what he or she has come to know, understand, and do.
4. **Affect:** How a student links thought and feeling in the classroom. (The way in which a student attaches emotional significance to information can have a strong impact on learning.)
5. **Learning Environment:** How the classroom "feels" and functions.

Sources:

Tomlinson, Carol A. and Cindy A. Strickland. [Differentiation in practice : \[book\] a resource guide for differentiating curriculum, grades 9-12](#). Alexandria, VA: Association for Supervision and Curriculum Development. 2005.

Tomlinson, Carol A. and Cindy A. Strickland. [Differentiation in practice : \[book\] a resource guide for differentiating curriculum, grades 5-9](#). Alexandria, VA: Association for Supervision and Curriculum Development. 2003.

Tomlinson, Carol A. and Cindy A. Strickland. [Differentiation in practice : \[book\] a resource guide for differentiating curriculum, grades K-5](#). Alexandria, VA: Association for Supervision and Curriculum Development. 2003.

Baynes, K. Eliassen, J.C., Lutstep, H.L., & Gazzinga, M.S. *Modular organization of cognitive systems masked by interhemispheric integration*. *Science*, 280 (5365), 902-905.

For more information, see

- Manitoba Education and Training. *Success for All Learners: A Handbook on Differentiating Instruction: A Resource for Kindergarten to Senior 4 Schools*. Winnipeg, MB: Manitoba Education and Training, 1996.

- Manitoba Education. *Towards Inclusion: Supporting Positive Behaviour in Manitoba Classrooms*. Winnipeg, Manitoba: Manitoba Education, 2011. www.edu.gov.mb.ca/k12/specedu/behaviour/index.html.
- Center for Applied Special Technology (CAST) website, *Teaching Every Student has a Universal Design for Learning (UDL) Class Profile Maker*, which includes a tutorial. www.cast.org/learningtools/index.html.
- *Learning in Safe Schools: Creating classrooms where all students belong*. (Brownlie and King, 2009): Pembroke Publishers.
- For more information on the connection between emotion and learning see the online interview with neuroscientist Joseph Ledoux at www.edge.org/3rd_culture/ledoux/ledoux_pl.html.

● Adaptations

An adaptation is a change in the teaching process, materials, assignments, or student products to assist a pupil in achieving the expected learning outcomes. (*The Public Schools Act Amendment (Appropriate Educational Programming) Regulation 155/2005*)

The use of adaptations is compatible with the inclusive philosophy of universal design and the principles of differentiated instruction. In many cases, the use of adaptations involves good teaching practices that benefit and can be available to all students.

The Manitoba Human Rights Code requires reasonable accommodation for students to meet their curricular outcomes. Adaptations are fair and, as such, they do not give students an unfair advantage over students who are not using adaptations. Adaptations help students achieve expected learning outcomes. A student can use adaptations throughout their school years, from elementary school through post-secondary education.

Adaptations are most effective when educators

- **Understand the purpose:** Adaptations do not give students with learning difficulties an unfair advantage over other students, nor do adaptations replace the need for developing basic skills. Adaptations compensate for students' learning challenges and give them the same opportunities to learn as other students.
- **Select appropriate adaptations:** It is important to select adaptations based on the unique needs of the student that have been identified in the student profile, rather than rely on the most obvious or commonly used adaptations.
- **Use adaptations consistently:** Students need time to adjust to adaptations and learn to use them effectively. Students need to use the adaptation regularly in order for a teacher to know if it is benefitting the student.

- **Involve students:** Research shows that when students are involved in selecting adaptations they are less self-conscious about using them. Even if an adaptation seems ideal for a student it may not be successful if the student is resistant.

Many examples of adaptations that support students with learning disabilities are included in Modules 2 through 5. For examples of common adaptations, see the Maple site at www.mapleforem.ca/pg/resource/20373/download%20. It includes SJASD/RETSD adaptations spreadsheets. Further examples are available at: Ministry of Education. *Teachers Make the Difference: Teaching Students with Learning Disabilities at Middle and Secondary Levels*. Saskatchewan, Canada: Ministry of Education, 2009. pp 41-66. www.education.gov.sk.ca/Teachers-Make-the-Difference.

Adaptations are permitted for Provincial Tests

3.3 Adaptations to provincial tests.

Manitoba Education and Advanced Learning is committed to equity of opportunity and fairness to students. Every reasonable effort is made to enable students to demonstrate learning in relation to the learning outcomes set out in the curriculum documents in the subject area that is being assessed.

Adaptations requested should parallel, as much as possible, any school adaptations that are used on an ongoing basis to assist the student during instruction and assessment activities provided that such adaptations do not jeopardize the validity of the test or create inequities in test administration procedures. Requests are treated confidentially. More than one adaptation may be requested for a student.

All adaptation requests made on behalf of a student must be made with the full knowledge of parents/legal guardians or the student if he/she has reached the age of majority.

Further information is available at: www.edu.gov.mb.ca/k12/assess/docs/pol_proc/.

● Compensation versus Skill Development

One of the challenges in supporting students with a diagnosed learning disability is finding the right balance between providing direct instruction to improve areas of weakness and providing adaptations to compensate for the identified learning difficulties. It is important that members of the school support team recognize the difference between these two kinds of support.

When students are in the early years, the focus is on continuing to provide direct instruction in order to help children acquire the skills and strategies they are missing. This is appropriate since all children in the early years are working to acquire basic literacy and math skills.

As students approach the middle years, the balance begins to shift such that direct instruction continues to be provided, but to a lesser degree, while the student is offered appropriate adaptations in order to compensate for their skill deficits so that they can keep up with the content learning, along with their peers.

As students approach their high school years, the balance shifts even further toward adaptations and away from specific skill development as students depend on adaptations to keep pace with the learning requirements of the curriculum content at that level.

For example, if a student in Grade 6 is reading independently at an early years' level but has good auditory comprehension, educators may support the student by:

- continuing to teach phonics and other reading strategies to improve independent reading skills;
- instructing the student in the use of assistive technology (AT) to compensate for the reading difficulties and help the student maintain a reasonable learning pace in all subject areas.

By Grade 10, the same student will need to focus almost all of his/her energy on mastering the use of adaptations, including AT, in order to obtain course credits toward graduation. At this stage, consideration would also be given to planning for transition to adulthood, and identifying the adaptations and AT the student will need when they leave high school.

Members of the student-support team, including the student and parent(s), need a good understanding of the reasons behind the decisions they make regarding how to support a student effectively at various points in his/her school career.

It is important that any adaptations or specific skill instruction deemed essential for student success are documented in an IEP that can follow the student to other classes and grade levels.

For more information

Manitoba Education. "Appendix J: IEP Framework for Documenting Adaptations (Sample Form)." *Manitoba Education Document: Student Specific Planning: A Handbook for Developing and Implementing Individual Education Plans (IEPs)*. Winnipeg, Manitoba: Manitoba Education, 2010. 76. www.edu.gov.mb.ca/k12/specedu/programming/iep.html.

Assistive Technology

Assistive Technology (AT) is a term that refers to any piece of equipment or software that can be used to increase a student's efficiency with learning, to maintain function or to improve capability. AT is one of many possible adaptations that can be used to support student learning.

The selection of appropriate AT should be based on a student's individual strengths and needs, and the implementation of AT should be accompanied by quality instruction. Depending on a student's learning needs AT can be as simple as a sticky note or as complex as a talking word processor. Some examples of AT solutions that range from low to high tech include the following:

Low-technology solutions include:

- raised line paper;
- alternative writing surfaces;

- alternative writing instruments (e.g., magnetic letters, alphabet stamps, etc.);
- materials to support memory, focus, and organization (e.g., sticky notes, highlighters, graphic organizers such as mind maps/webs or concept frames).

Mid-technology solutions include:

- digital recorders;
- calculators;
- talking spell-checkers;
- audio books;
- word processors;
- simple voice playback devices.

High-technology solutions include:

- specialized software such as:
 - Talking word processors;
 - Word prediction software;
 - Screen reading software;
 - Scan and read software.
- communication devices;
- specialized computer access such as:
 - Touch screens;
 - Alternative keyboards;
 - Switch adapted mice;
 - Braille display.

For more information about the use of AT to support specific learning disabilities, see Modules 2 through 5.

Alternative format materials (e.g., audio books, Braille, large print, electronic text) are available through Alternate Format Services (AFS) of the Manitoba Education Library. Materials must be ordered in connection with a specific student, but can be used universally (by any student in any way appropriate). Students with visual impairments must be assessed by a Manitoba Education and Advanced Learning Consultant for the Blind and Visually Impaired in order to access these resources. Students with other print disabilities (e.g., a learning disability) may access these resources through a resource teacher or classroom teacher.

Instructional Resources Unit
Main Floor, 1181 Portage Avenue
Winnipeg MB R3G 0T3

Website:

www.edu.gov.mb.ca/k12/mel/index.html (Select the Alternate Format Services icon.)

Reference Assistance: 1-800-282-7830

Alternative Formats Collection (AFC): 1-800-282-7835

Email: iruafc@gov.mb.ca

Student Services

Assistive Technology and Support

www.edu.gov.mb.ca/k12/specedu/programming/technology.html

Program and Student Services

Telephone: 204-945-7907

Toll Free in Manitoba: 1-800-282-8069, ext. 7907

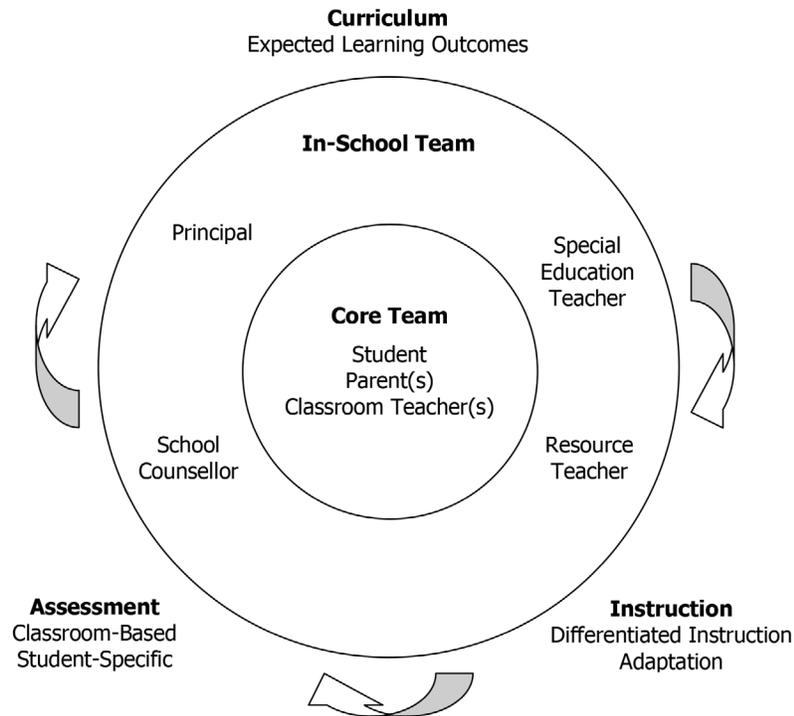
Email: pssbinfo@gov.mb.ca

● Student-Specific Assessment

When teachers plan from a universal design perspective their goal is to address the learning styles and needs of all students. In some cases though, a student will continue to experience learning difficulties despite the teacher's efforts. The teacher then uses classroom based assessment to identify this student's learning needs and work with the student and their parent(s) to address these needs through differentiated instruction and the use of adaptations. The useful adaptations would be documented in an IEP. This process is known as student-specific planning. If the student continues to experience learning difficulties, the teacher then moves on to the next stage of student-specific planning; this involves expanding the team to include school personnel, such as a resource teacher, for further support and assessment.

Figure 1

The In-School Team



Source: Manitoba Education. 2010. p.11.

Student-specific assessment is a process in which the resource teacher, or another appropriate member of the in-school team, works with the classroom teacher to:

- review classroom/curriculum based illustrative work samples;
- review the student support file;
- review any additional data collected by the classroom teacher;
- observe the student in the classroom environment in order to collect further information about the student's learning strengths and needs;
- make decisions about further assessment.

The resource teacher and classroom teacher may decide that further assessments are required to determine the next steps in the planning process. The resource teacher may administer those assessments.

If no further assessments are required the resource teacher may assist with the selection and implementation of further programming supports and interventions. At this stage in the process, the in-school team may decide to use the student-specific planning process to create or add to an individual education plan (IEP) for the student, in order to document further adaptations or remediation strategies.

For more information see

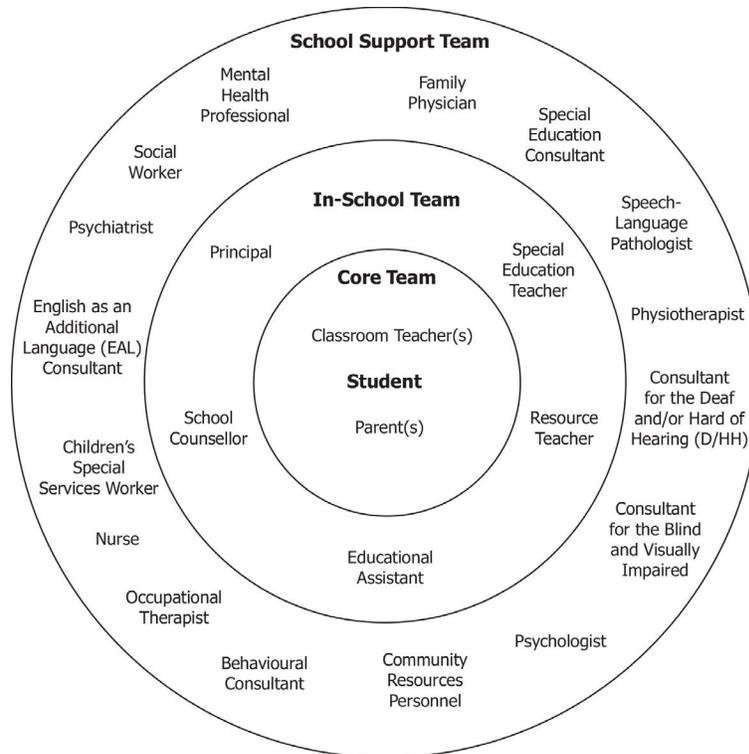
Manitoba Education. *Student-Specific Planning: A Handbook for Developing and Implementing Individual Education Plans (IEPs)*. Winnipeg, Manitoba: Manitoba Education, 2010. www.edu.gov.mb.ca/k12/specedu/iep/pdf/planning/student_specific_planning.pdf.

● Expanding the School-based Team and Specialized Assessment

If a student continues to have difficulty meeting learning outcomes, the classroom teacher, resource teacher, parent(s) and student may determine that expanding the team to include one or more school division clinicians or consultants would benefit the student. This may involve a pre-referral consultation with a clinician or consultant who may provide additional suggestions for programming supports and interventions. This consultation may or may not result in a referral or a specialized assessment. If the expanded team determines a need to access further expertise outside the school and school division, a process for this will be determined during a team meeting.

Figure 2

Personnel on a Student Support Team (Sample)



Source: Manitoba Education. 2010. p.33.

Specialized assessment is a formal process of referral initiated by the school team that requires parental consent if the student is under 18 years of age or the consent of the student if 18 and over. When the in-school team has made a decision that a specialized assessment is necessary, it is the responsibility of the school principal to ensure that the assessment takes place.

According to the *Standards for Student Services*, specialized assessments are conducted by qualified professionals on an individual basis to determine what factors are affecting a student's learning and what approaches could assist the student in meeting learning outcomes in the classroom.

Specialized assessment is a process in which appropriate professional(s) work with the school team to:

- review data collected by the classroom teacher and resource teacher;
- review the student support file(s);
- collect further information about student strengths and needs;
- recommend possible further assessments and/or a possible diagnosis.

A very small percentage of students with learning difficulties will require a specialized assessment and a small percentage of these assessments will result in the diagnosis of a learning disability.

For some students, where indicated, specialized assessments may be needed. Assessment methods should be appropriate for and compatible with the purpose and context of the assessment.

Specialized assessments are conducted by qualified professionals on an individual basis to determine what factors are affecting the student's learning and what approaches would assist the student to meet the learning outcomes in the classroom.

A. School divisions shall:

1. use the information gathered by the classroom teacher as the first source of information regarding student learning (MR 155/05)
2. use assessment results to guide programming decisions for the student (MR 155/05)
3. ensure qualified professionals who are designated by the school board or the principal conduct specialized assessments, interpret results, follow principles of fair assessment practices and provide parents and classroom teachers with programming recommendations (MR 155/05)
4. use qualified professionals and other service providers and involve parents to complete specialized assessments when appropriate (MR 155/05)
5. ensure that school teams, including parents when possible, are responsible for developing student-specific outcomes where indicated by the assessment process (MR 155/05)

Source: Manitoba Education, Citizenship and Youth. 2006. p.13.

Advantages to the diagnosis of a learning disability may include the following:

- explaining the reason for the student's underachievement and clarifying that it is not because the student is "lazy" or "just not trying";
- building the student's self-esteem as teachers, students, and parents begin to understand that the student has average or above average thinking and reasoning skills and is not "stupid";
- reinforcing teachers' and student's efforts towards advocacy for appropriate supports;
- providing information for programming that builds on the student's strengths while supporting his or her challenges with adaptations;
- supporting the transition to post-secondary opportunities (see Module 8 for further information).

● Supporting Learning Disabilities through Research-Based Instructional Practise

Research shows that the most effective programming intervention for all students, including students with learning disabilities, involves a combination of direct instruction, scaffolded instruction, strategy instruction, and rehearsal and practise. This section contains specific information about how these research-based instructional strategies can be applied to specific learning disabilities, including reading, written expression, mathematics, and nonverbal learning disabilities.

● Direct Instruction

Direct (or explicit) instruction involves modelling both the overt processes and the covert processes (or mental processes) that are necessary to successfully complete a task. Often covert processes are not adequately explained and students are left to infer the mental processes that take place. Many students with learning disabilities are not able to learn cognitive strategies without direct (explicit) instruction. (Larkin and Ellis, 1998) For example, if students are given the task of writing an essay they are required to apply a problem-solving process to complete a number of covert and overt steps. The process involved in selecting a topic may seem simple to a student when the teacher writes down a phrase or a sentence to describe the topic. This is overt or observable behaviour. The covert or cognitive process that the student does not see (unless the teacher demonstrates it) is the thought and self-talk involved with the process of selecting and rejecting possible topics until one is identified.

Some examples of cognitive strategies that involve covert processes include the following:

- creating visual imagery;
- paraphrasing;

- prioritizing ideas;
- generating hypotheses;
- relating new information to prior information.

Some examples of metacognitive strategies, which are required in order to understand the task, include the following:

- analyzing the task;
- making decisions about topic selection;
- setting goals;
- self-monitoring.

Source: Ministry of Education. 2009. p.16.

● Scaffolded Instruction

Scaffolded instruction is an instructional approach that enables teachers to provide highly explicit and organized instruction to individual students while supporting the transition from current skill or knowledge levels to more advanced levels. Scaffolded instruction, much like the scaffold of a building under construction, is a way of providing learning support until a skill has been solidly “built”.

Scaffolded instruction should be used as a temporary support when students are unable to complete a task on their own. The teacher assists students by modeling task completion, explicitly describing the covert thinking processes involved and providing verbal prompts when and if the student needs guidance. The teacher provides ongoing feedback as the student works at completing the task, constantly tailoring support to match the student’s ever-changing skill level. When the student can complete the task independently, the teacher’s support is removed.

Refer to [Gradual Release of Responsibility](#) section for further information.

● Strategy Instruction

Strategy instruction is a method of instruction that supports learning by teaching students how to organize information, make meaning of new information, and connect new information with what they already know. Strategies are not “add-ons” for engaging student interest: They are the tools students use to process ideas and information.

Strategies are especially important for students with learning disabilities, as they can help students reduce cognitive load in working memory. In other words, strategies can “free up” space in students’ brains for learning.

Strategies are best taught through direct instruction. Successful learning of these strategies requires a sufficient amount of support or scaffolding as well as student

engagement in the process. Many researchers believe that the active participation of students in the process of strategy instruction makes more difference in learning than the strategy itself.

Strategy instruction can help students develop the skills, behaviour, and attitudes they need for independent, lifelong learning. Strategy instruction is beneficial for students because it:

- teaches the behaviours of skilled learners;
- enhances metacognition (the ability to think about one's own thinking);
- increases responsibility for learning;
- promotes engagement in learning.

It is not possible to say that one strategy is more effective than another but research has shown that three particularly powerful strategies include the following:

- asking and answering questions;
- summarizing ideas;
- using graphic organizers.

Other examples of strategies that students can use to support and promote learning include the following:

- active listening;
- active thinking;
- writing to learn;
- paraphrasing;
- drawing inferences based on new information and prior knowledge;
- thinking about the types of questions they are being asked to answer.

Although there are many models of direct instruction of strategies, the one that is most strongly supported through evidence obtained through meta-analysis of current research is the Self-Regulated Strategy Development model (SRSD).

● Supporting Student Self-regulation through Metacognition

- Students with learning disabilities need to develop an awareness of what strategies are effective for them to use when learning.
- Students with learning disabilities have to believe they can learn using the skill sets that work for them.

Self-Regulated Strategy Development (SRSD) has been shown to have an especially strong impact (Graham & Harris 2005).

● The Self-Regulated Strategy Development Model

All students must receive direct instruction and practice to understand how a strategy works and why each step in the strategy is performed. Students with learning disabilities need extensive direct/explicit instruction, strategy instruction, and rehearsal and practice to build automaticity in their neuro-pathways. This allows the student quick and efficient access to the strategy in any subject area. Although there are many models, the one that is most strongly supported through evidence obtained through meta-analysis of current research is the Self-Regulated Strategy Development model (SRSD).

SRSD stresses the need to provide students with essential metacognitive knowledge of the strategies that are being taught. The SRSD model enables all students to understand the process of the strategy being taught in all content areas. It allows the student with learning disabilities the additional time and consistent process needed to strengthen the use of the strategy.

● The Six Stages of Self-regulated Strategy Development

The stages in SRSD are intended to be recursive and should be revisited to ensure mastery. The stages of implementation are set up to ensure that all necessary areas are fully addressed; however, because of the flexibility of this model, the stages may be reordered or combined as deemed appropriate or necessary by the teacher. Stages can and should be revisited as part of the instructional process. Revisiting stages will not only help with mastery, it will also allow students to rethink and develop metacognitive skills.

Stage 1: Develop and Activate the Background Knowledge

Students with a learning disability may not have the background knowledge or prerequisite skills surrounding the use of a strategy. It is therefore essential to teach each step of the strategy. By the time the student with a learning disability enters middle years or high school, their knowledge may be fragmented.

Students must have mastered prerequisite skills to effectively use a strategy. The best way to identify the basic terms and skills necessary for the strategy is to do a task analysis. The task analysis will help teachers to determine whether or not students possess the prerequisite skills necessary to perform the strategy or where the gaps in the learning occur.

After the task analysis is complete there are many ways that teachers can assess students' skills. These include observing student performance, using curriculum-based measures, or simply asking students. Often, instructors will already possess knowledge of student pre-skills through formative assessment. Skill deficits should be addressed prior to introducing the new strategy.

"Task analysis for instructional design is a process of analyzing and articulating the kind of learning that you expect the learners to know how to perform" (Jonassen, Tessmer, & Hannum, 1999, p.3).

Video of task analysis
<http://silo.hunter.cuny.edu/e8jdJbht>

Stage 2: Discuss the Strategy

The students need to believe that the strategy that they are learning will allow them to be more successful as a learner. It will enable them to be more actively involved, which is the first step in self-regulation. Teachers need to be excited, committed, and energized to motivate the students on the use of the strategy because if a student does not understand the purpose and benefit of the strategy to them, it is fair to assume that they will not use the strategy.

During this stage it is appropriate for teachers to explain to students the benefits of using the strategy; discussing and even providing examples of current performance. Teachers should ask students questions and ask them how confident they feel in the particular subject or skill being discussed. Teachers should then explain how learning the strategy can improve their performance.

The final part of this stage is introducing students to the steps of the strategy. Strategy steps should be explained one-by-one. A student with a learning disability requires the steps in the strategy to be explicitly taught with time to process and time to practice each step independently until mastered.

Throughout this process, teachers should be monitoring their students' understanding. Part of this process is to work in cooperation with the students to ensure that students are keeping up with and understanding what is being explained, and are able to apply the strategy in more than one context.

Stage 3: Model the Strategy

The purpose of modeling is to expose students to the thought processes of a skilled learner. Good modeling goes well beyond merely presenting the steps in a strategy. It provides students with the “why” and “how” of various strategy steps. It exposes students with a learning disability to all of the thought processes that are behind the why and how that other students intuitively recognize. Students with learning disabilities often do not know how to access or articulate their thinking and so believe that other students are smarter when the truth is that they are just as smart.

By modeling, a teacher can show not only what to do, but what to think as well. This process is called a ‘think-aloud’. A think-aloud goes beyond just listing the steps in a strategy. While listing is useful, it is insufficient. Students need to see the metacognitive (thinking) process involved in understanding and using the strategy. With the teacher expressing their thought processes while using the strategy, the student is able to see how a successful learner uses the strategy and thinks through it.

Think-alouds have been described as “eavesdropping on someone’s thinking.”

With this strategy, teachers verbalize aloud their thinking for any purpose. Their verbalizations include describing things they’re doing as they read to monitor their comprehension or write in any of the stages of the writing process; solve a math problem, etc.

The purpose of the think-aloud strategy is to model for students how skilled learners think. <http://libguides.rtc.edu/content.php?pid=104653&sid=787642>

The process of a think-aloud is much more complex than it may initially seem. For expert learners, making the covert overt is extremely difficult and requires a significant amount of practice and preparation.

Stage 4: Memorize the Strategy

It is critical that students commit the strategy steps to memory so that they become automatic. Automaticity is essential because we want all students to be able to focus on the task and not on remembering the steps of the strategy. Students with learning disabilities may have a limited amount of cognitive processing capacity, and if that capacity is consumed with remembering the steps of the strategy it will be difficult or impossible to focus on the task itself.

Memorizing the strategy steps is something that we should not just work on once or twice; we need to be constantly reinforcing the memorization of the strategy steps in various contexts/content areas so that it becomes second nature to students. There are many ways to help students memorize the steps of a strategy; the key is repetition and variation. The more practice they get in a variety of settings and situations the more successful they will be at memorizing the strategy. Students need to know and understand what is involved with each step in the process. They should not just be parroting back the steps involved in the strategy. Using mnemonic memory devices often helps students recall the steps and memorize the strategy.

Scaffolding is an instructional technique whereby the teacher models the desired learning strategy or task, then gradually shifts responsibility to the students.

www.ijhssnet.com/journals/Vol_1_No_18_Special_Issue/18.pdf

Stage 5: Support the Strategy

Teachers need to support the learning of the strategy. Supporting the strategy can be done using a process called scaffolding. Scaffolding involves teachers initially performing all or most of a task, while increasingly shifting responsibility of performance to the student. With scaffolding, it is possible for a gradual release of responsibility from teacher to student. (For further information refer to the [Gradual Release of Responsibility](#) section. Students need adequate time for rehearsal and practice to master the strategy.

Collaboration between teachers and students is extremely important in the SRSD process. Collaboration provides the teacher with an opportunity to verify student understanding and fill in any necessary information the student may be lacking. It also provides another opportunity to ensure that students possess the skills necessary to complete the task successfully. In some cases, teachers may need to go back and teach some prerequisite skills. This is part of the flexibility of the SRSD model.

Supporting the strategy may include the following:

- Working collaboratively on tasks while gradually fading help;
- Putting students into small groups;

- Modelling the strategy repeatedly;
- Re-teaching some prerequisite skills;
- Prompting the particular use of a step;
- Providing corrective feedback;
- Supervising when the student is using the strategy independently.

Stage 6: Independent Performance

It is important to remember that the goal of strategy instruction is not for the student to use the strategy explicitly as taught, **but for improved learner outcomes and for students with learning disabilities to see themselves as successful learners**. It may be necessary for students to adapt the strategy to meet their needs. This is an acceptable part of the model as long as the teacher is confident the strategy is still successful in completing the tasks and is working for the student.

Independent performance does not mean that a teacher’s job is done. Teachers must still monitor students’ use of the strategy to ensure they are using the strategy properly.

The information on SRSD was adapted with permission from the following article:

University of Nebraska—Lincoln. *Special Education and Communication Disorders*. “Teaching Strategies”. Lincoln, Nebraska: University of Nebraska—Lincoln, 2009. <http://cehs.unl.edu/csi/>. Used with permission. All rights reserved.

Students with learning disabilities have the same capacity to learn as their peers. Some students with learning disabilities see learning as an overwhelming task to be avoided, delayed, and embarked upon with little persistence. When given the skill sets to access strategies that enable them to be successful in their learning, they become actively involved in the education process and have better retention, motivation, and overall attitudes towards learning.

For more information on strategies, see

Manitoba Education and Training. *Success for All Learners: A Handbook on Differentiating Instruction: A Resource for Kindergarten to Senior 4 Schools*. Winnipeg, MB: Manitoba Education and Training, 1996. (Available at the Manitoba Learning Resource Centre.)

See Modules 2 through 5 for practical examples of strategies.

● Rehearsal and Practice

There are a variety of programming interventions, strategies, and adaptations available to support student success in learning; however, research has revealed that the most effective intervention involves a combination of direct instruction, strategy instruction, and rehearsal and practice. Rehearsal and repetition—the practise of new information—

strengthens neural pathways in the brain and creates new ones, which is necessary for the retention of new information and essential to the process of learning.

Practise positively affects performance in all academic subject areas. There are many benefits of practise for all students, including an increased ability to:

- retain new information;
- achieve automaticity (the ability to apply knowledge automatically, without reflection) which frees up students' cognitive resources;
- transfer practised problem-solving skills to new and more complex problems and acquire expertise in subject matter, which helps students distinguish novices from experts;
- continue learning; cognitive gains from practise can create motivation for more learning.

Practise involves the repetition of specific skills or the review of smaller pieces of information to increase accuracy, speed and recall, and to make learning immediately accessible for cognitive use (Dean et al., p. 101). Practise should not be seen as rote repetition, but deliberate, goal-directed rehearsal combined with reflection on the process of problem-solving. For example, if students are practising the identification of phonemes, the ultimate goal is reading fluency and comprehension.

Practise is most effective for students when teachers:

- plan practise tasks with students' existing knowledge in mind (Success maximizes the benefits of practise while failure at a task can create frustration and inhibit motivation.);
- provide timely and descriptive feedback;
- provide repeated opportunities for practise by planning practise tasks that are similar to other practise tasks;
- provide opportunities for students to practise more than one skill at a time (e.g., rather than practise finding the radius of a circle given the circumference, students can practise finding the radius of the circle given the circumference as well as finding the circumference given the radius, and finding measurements of other shapes as well);
- provide frequent practise sessions (at least 2 to 3 times during the period between acquisition and final assessment) that actively involve student recall through quizzes, rehearsal, or self-assessment (e.g., flash cards, practise quizzes).

Adapted from: Brabeck, Mary, Jill Jeffrey, and Sara Fry.
Practice for Knowledge Acquisition (Not Drill and Kill).
American Psychological Association. www.apa.org/education/k12/practice-acquisition.aspx.

Practise doesn't always make perfect. If students practise a skill incorrectly they will ultimately have difficulty learning the correct way to perform that skill.

● Module Summary

Students with learning disabilities have average to above average intelligence but have difficulty with processes related to learning. Assessment and programming for students with learning disabilities is a collaborative process that begins with the student, parent(s), and classroom teacher. Educators can use approaches such as universal design and differentiated instruction to address the learning needs of all students in the classroom, and can support students through the use of adaptations including assistive technology. Students who continue to struggle with learning may require further assessment and support. The most effective programming intervention for students with learning disabilities involves a combination of direct instruction, strategy instruction, and rehearsal and practice. Although there are many models of direct instruction of strategies, the one that is most strongly supported through evidence is the Self-Regulated Strategy Development model (SRSD).

● References

- Alberta Education. *Unlocking Potential: Key Components of Programming for Students with Learning Disabilities*, Edmonton, AB: Alberta Education, 2002. <http://education.alberta.ca/admin/special/resources/unlocking.aspx>.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders: Fifth edition*. Arlington, VA: American Psychiatric Association, 2013.
- Brabeck, Mary, Jill Jeffrey, and Sara Fry. *Practice for Knowledge Acquisition (Not Drill and Kill)*. American Psychological Association. www.apa.org/education/k12/practice-acquisition.aspx#.
- Dean, C.B., E.R. Hubbell, H. Pitler, and B. Stone. "Monitoring the Student-Specific Planning Process" *Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement*, 2nd Edition. Denver, CO: Mid-continent Research for Education and Learning, 2012.
- Graham, S., and K. Harris. *Writing Better: Effective Strategies for Teaching Students with Learning Difficulties*, 1st Edition, Baltimore, MD: Paul H Brookes Publishing Co., Inc., 2005.
- Larkin, M. J., and E. S. Ellis. "Strategic instruction for adolescents with learning disabilities". In B. Y. L. Wong (Ed.), *Learning about learning disabilities* (2nd ed., pp. 585-656). San Diego, CA: Academic Press, 1998.
- Manitoba Education. *Student-Specific Planning: A Handbook for Developing and Implementing Individual Education Plans (IEPs)*. Winnipeg, MB: Manitoba Education, 2010. www.edu.gov.mb.ca/k12/specedu/programming/iep.html.

Manitoba Education and Advanced Learning. *Policies and Procedures for Provincial Tests*. Winnipeg, MB: Manitoba Education and Advanced Learning, 2015. www.edu.gov.mb.ca/k12/assess/docs/pol_proc/.

Manitoba Education, Citizenship and Youth. *Appropriate educational programming in Manitoba: Standards for Student Services*. Winnipeg, MB: Manitoba Education, Citizenship and Youth, 2006. www.edu.gov.mb.ca/k12/specedu/documents.html.

Manitoba Education and Training. *Success for All Learners: A Handbook in Differentiating Instruction: A Resource for Kindergarten to Senior 4 Students*. Winnipeg, MB: Manitoba Education and Training, 1996.

Ministry of Education. *Teachers Make the Difference: Teaching Students with Learning Disabilities at Middle and Secondary Levels*. Saskatchewan, Canada: Ministry of Education, 2009. www.gov.sk.ca/Teachers-Make-the-Difference.

Saskatchewan Learning. *Teaching Students with Reading Difficulties and Disabilities: A Guide for Educators*. Regina, SK: Saskatchewan Learning, 2004.

University of Nebraska-Lincoln. "Cognitive Strategy Instruction". *Special Education and Communication Disorders*. Lincoln, NE: University of Nebraska-Lincoln, 2009. <http://cchs.unl.edu/>.

Appendix 2-A

Classroom Observation

Classroom teachers know their students and are able to observe them in their daily environment. They are in the best position to recognize the strengths and needs of their students. They are also in the best position to address those needs through appropriate educational programming. Classroom teachers are often the first to recognize that a student is struggling to learn.

Classroom teachers often first recognize learning needs through classroom observation. A teacher who is concerned about a student may watch for, record, and interpret behaviours linked to the following:

- What are the learning tasks and activities the student finds manageable/challenging?
- Are certain subjects or areas of skill easier or more difficult for the student?
- How does the student practice skills and apply new concepts?
- To what extent is the student able to follow oral/written directions in a variety of situations?
- How often and in what context does the student participate?
- Does the student remain focused on a topic?
- What types of questions does the student prefer to answer?
- Are the student's responses to questions organized and complete?
- How does the student get the teacher's attention?
- Does the student ask for clarification and/or help when they are having difficulty?
- How does the student get help?
- Are there consistent error patterns in work and test samples that inform aspects of academic performance?
- What is the quality of student interaction with peers and adults (e.g., turn-taking, initiating conversation, responding to others, making inappropriate comments)?
- How does the student behave in structured and unstructured settings?
- How does the student perform academically in structured and unstructured settings?
- How much and what type of teacher feedback does the student receive?
- To what extent is the student aware of classroom and school routines?
- What time of day does the student find manageable/challenging?
- Are the student's areas of strength, talent, or interest being utilized?

Appendix 2-B

This appendix includes links to tools that can be used to collect observational data.

- ABC Chart

This chart is used to collect data on a student's behaviours.

Manitoba Education. *Towards Inclusion: Supporting Positive Behaviour in Manitoba Classrooms*. Winnipeg, Manitoba: Manitoba Education, 83.

www.edu.gov.mb.ca/k12/specedu/behaviour/behaviour_document.pdf.

- Focused Observation Template

This chart is used to collect observations for formative assessment using curricular outcomes or developmental continuum behaviours.

Manitoba Education, Citizenship and Youth. *Listening and Speaking: First Steps into Literacy: A Support Document for Kindergarten Teachers and Speech-Language Pathologists*. Winnipeg, Manitoba: Manitoba Education, Citizenship and Youth, 2008. 81.

www.edu.gov.mb.ca/k12/cur/ela/list_speak/index.html.

- Ecological Inventory

An ecological inventory is one method of determining the instructional needs of students with significant special learning needs.

Manitoba Education and Advanced Learning. *Supporting Inclusive Schools: A Handbook for Resource Teachers in Manitoba Schools*. Winnipeg, Manitoba: Manitoba Education and Advanced Learning, 2014. 70-71.

www.edu.gov.mb.ca/k12/specedu/res_teacher/index.html.

- Functional Behavioral Assessment (FBA)

Functional behavioural assessment (FBA) is a systematic process of gathering data by various methods (reviewing records, interviewing, observing, etc.), examining the student's environment, and determining relationships.

Manitoba Education and Advanced Learning. *Supporting Inclusive Schools: A Handbook for Resource Teachers in Manitoba Schools*. Winnipeg, Manitoba: Manitoba Education and Advanced Learning, 2014. 73.

www.edu.gov.mb.ca/k12/specedu/res_teacher/index.html.