
Section 5:
Learning Strategies, Supports, and
Interventions

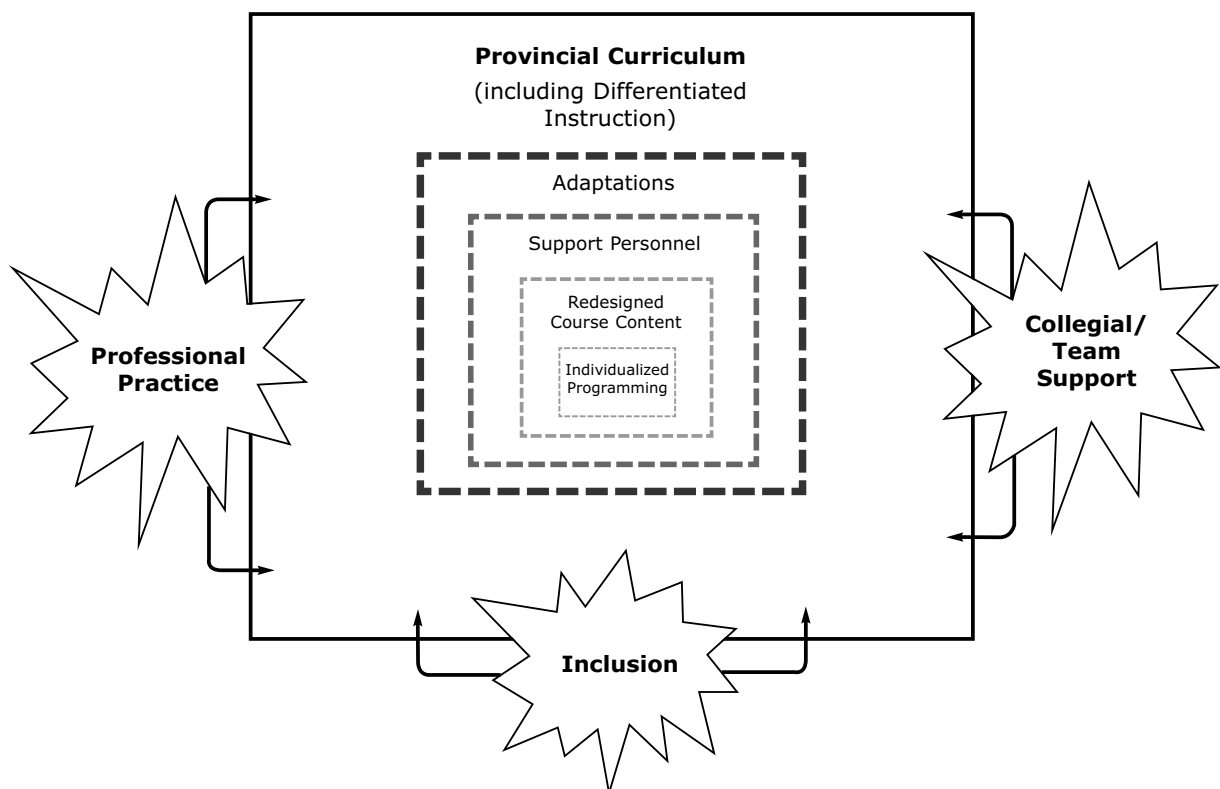
5. LEARNING STRATEGIES, SUPPORTS, AND INTERVENTIONS

This section of the document addresses interventions for students needing learning supports (Category 1). Learning supports are usually developed by the core team with assistance from in-school supports as necessary.

Today's classroom reflects the diversity of our communities and includes a mix of student interests, needs, learning styles, and cultural backgrounds. Manitoba Education, Training and Youth has described instructional supports that address this diversity. They can be visualized as a nested continuum that is consistent with the concepts of inclusion, effective professional practice, and collegial support.

The instructional supports illustrated in the diagram and chart below will be used to support students who have academic/discipline challenges in the regular classroom.

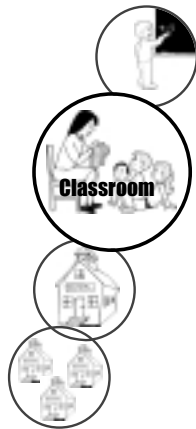
Continuum of Instructional Supports for Addressing Student Diversity



The principles of inclusion encourage creating classroom environments where all students can be taught effectively together. No educator is alone in this effort. When educators use effective professional practices, such as differentiated instruction, and support each other collegially, they have a foundation for helping most students to succeed relative to the learning outcomes in the provincial curriculum. However, there will always be students who require additional supports.

The continuum indicates the various supports that can be considered. The first support levels are those that help the student to succeed in provincial curricular content by personalizing the methods of instruction. The common supports of this type are the use of adaptations and the formally involving support personnel* with the student. When changes to instructional methods do not foster student success, instructional content can be redesigned through modifying or enriching learning outcomes or by individualizing programming.

The use of dashed lines symbolize the ease of movement that should exist among the levels of the continuum, especially when moving towards lesser levels of support.



Teacher Planning in the Classroom

At the beginning of the school year, a teacher needs to take the time to clearly establish the needs of the students within the classroom. In almost every classroom, there will be some students who will require special consideration. The classroom teacher of today is faced with the challenge of addressing a wide variety of student abilities. To effectively manage the wide variety of needs, a teacher is not expected to provide totally different programs.

Based on an initial review of the students in the classroom, the teacher will have to decide on the best way to address the needs of the students. In a typical classroom, there might be:

- Several students who require differentiated instruction (All students will benefit from differentiated instruction, but for a few students it will be essential)
- Some students who will require adaptations to instruction and assessment
- Some students who will require additional supports
- A few students who will require curriculum modifications outlined in their Individual Education Plans
- Occasionally, one or more students who will require individualized programming outlined in his or her Individual Education Plan

The teacher can then begin to examine ways to meet the learning needs within the unit or lesson being taught. The Unit Planning Form is a way of planning for a variety of needs.

* “Support personnel” includes resource teachers, school counsellors, paraprofessionals, clinicians, therapists, nurses, and other staff who support the classroom teacher and instruction

Unit Planning Form

Pyramid	
What some students will learn.	Date _____ Class period _____
What most students will learn.	Unit title _____
What ALL students should learn.	Learning materials/resources _____ _____ _____
	Instructional strategies/adaptations _____ _____ _____
	Assessment/products _____ _____ _____

Adapted from Joint Committee on Teacher Planning for Students with Disabilities. *Planning for Academic Diversity in America's Classrooms: Windows on Reality, Research, Change, and Practice*. Lawrence, KS: The University of Kansas Center for Research on Learning, 1995. Used by permission of the publisher.

An example of a *Senior 2 Consumer Mathematics* unit developed in this manner is illustrated below.

Senior 2 Consumer Mathematics (25S) Half Course II

Personal Banking

General Outcome:
Describe consumer banking services, including types of accounts and their uses.

Specific Outcomes:

- Name and describe various types of consumer bank accounts.
- Complete various banking forms.
- Describe the use of a bank card for automated teller machines (ATMs) and debit payments.
- Identify different types of bank service charges and their relative costs.
- Update a chequebook record and bank statement to reconcile an account.

Differentiated instruction for all students: (Differentiated instruction is the component of standard classroom instruction that specifically acknowledges and responds to learner diversity.)

- Use overheads and videos.
- Provide access to computers — CDs and Internet where possible.

- Role playing — have the class go through the process of opening bank accounts.
- Use “The Real Game.”

Possible adaptations for identified students: (Adaptations are planned student-specific alterations in teaching and assessment methods that assist students to achieve the expected learning outcomes of the curriculum.)

Examples of adaptations made for the specific outcome:

- Name and describe the main types of consumer bank accounts.

Presentation Format	Response Format	Environment/ Setting	Time	Materials/ Support	Organization
Break tasks down (e.g., learn names in isolation, matching name with definition; provide example of savings account)	Oral reporting and testing	None required	Additional instructional time Modules	Visual aids (passbook, manipulatives, diagrams of savings account) Word bank Computer program	Colour coding of bank accounts (savings, chequing)

NOTE: It is important you record adaptations made for each student.

Possible modifications for identified students: (Decisions to designate courses as modified are determined for individual students on a course-by-course basis before the course begins. The modified outcomes were agreed upon by the team.)

When examining the specific outcomes for this general outcome, the following was determined.

Specific outcomes to be deleted:

- Complete various banking forms.
- Identify different types of bank service charges and their relative costs.

Specific outcomes would be changed/modified:

- Describe the use of a bank card for automated teller machines (ATMs) and debit payments. Instruction would be provided in the area of automated teller machines (ATMs).
- Update a chequebook record and bank statement to reconcile an account. Provide instruction on how to record and balance a cheque book using a calculator.

Note: It is important that modifications are recorded as part of the student’s Individualized Education Plan.

More information regarding differentiated instruction, adaptations, modifications, and individualization follow in the sections below.

Differentiated Instruction

There are four educational programs in Manitoba: English, French Immersion, Français, and Senior Years Technology Education. The first three are used from Kindergarten to Senior 4 while Technology Education is in effect only at the Senior Years.

Differentiated instruction refers to a wide range of instructional and classroom organization strategies that teachers use to help each student achieve learning outcomes. It is the component of standard classroom instruction that specifically acknowledges and responds to learner diversity. Using differentiated instruction establishes a supportive learning environment for all students.

Differentiated instruction helps teachers provide provincial curricula by accommodating students with a wide range of abilities, interests, and learning styles. Teachers can differentiate curriculum in three broad areas: content, process, and product.

Differentiated instruction helps students meet provincial curricular outcomes because varied instructional approaches are used, thus matching their varied learning styles.

Teachers should be cognizant of learning differences in their students and be aware of research that can assist in classroom instruction. For example:

- Attach meaning to what will be taught.
- Attach emotion to newly introduced pieces of information.
- Demonstrate an awareness of physiological factors influencing the attention of a student, i.e., sleep, nutrition, home environment.
- Demonstrate an awareness of learning preferences, i.e., a multi-modal approach.
- Demonstrate an awareness of group dynamic issues.
- Remember that the student's attention span varies with developmental level, i.e., Kindergarten to Grade 2, 5–7 minutes, Grades 3 to 7, 8–12 minutes.



For further information, see the following resource:

Healey, Jane. *A Practical Guide to Brain Development and Learning from Birth to Adolescence*, 1994.



For a full description, educators are referred to:

Manitoba Education and Training. *Success for All Learners: A Handbook on Differentiating Instruction*, 1996.

There are many differentiated instruction techniques that can be used with students. The strategies below are especially useful in working with students who have behavioural challenges.

a. Providing different ways of learning (learning styles)

Of the four basic learning styles identified in students today — auditory, visual, tactile and kinesthetic — individuals who have behavioural difficulties may favour the kinesthetic and visual styles.

Therefore, teachers should consider using:

- visual supports that include all types of visual presentations, including graphics, videos, overheads, slides, et cetera. As well, visuals should be used during class presentations to reinforce the verbal and written information that is presented.
- relevant, high-interest examples and activities whenever possible. As well, these students are often physically active and can benefit from a short break or a physical activity during long classes. They learn best by moving and doing.
- lessons that recognize multiple intelligences and value the learning strengths of each student.

b. Assisting the student with organizational skills

The student with behavioural difficulties often experiences difficulties with organization of his or her books and materials. One of the best ways to avoid organizational problems is to ask the student and parent to assist.

- A student's notebooks, texts, and file folders for assignments can be colour coded. For example, all books for mathematics are covered in red. The mathematics teacher can place a red card on the door of the room to ensure the students enter with the correct materials.
- The teacher can arrange for the student to have an agenda book to keep track of homework, school events, tests, and assignments. The teacher and parent will need to work together to ensure the agenda book goes back and forth between home and school.
- The parent can be asked to label items that will be kept in the school locker, e.g., physical education equipment. Small containers for pens, pencils, and other small school supplies can be utilized.
- In Middle or Senior Years schools, the school may wish to provide additional shelving for lockers or individual lockers for each student. Without this assistance, lockers can be extremely difficult to manage.

c. Providing flexible grouping opportunities.

There are several ways that students can be grouped for appropriate instruction. One of the ways is to use cooperative learning, because it can help the students to develop the skills necessary to get along with others. The student can learn a variety of skills from cooperative learning, including interpersonal skills, communication, individual accountability, teamwork, decision-making, and trust.



Additional information on cooperative learning is available from the Cooperative Learning Center at the University of Minnesota (Roger and David Johnson) at the following website:
<http://www.clcrc.com>

d. Teaching and learning strategies

Several teaching and learning strategies have been documented in Chapter 6 of *Success for All Learners* (Manitoba Education and Training, 1996). Based on the characteristics of a student with behavioural difficulties, five examples of strategies were selected as having an impact on these learners, including:

- **Learning strategies:** Learning strategies are instructional strategies that have been developed to assist learners experiencing learning difficulties.

Learning strategy instruction focuses on making students more active learners by teaching them how to learn and how to effectively use what has been learned. Research has demonstrated that consistent, intensive, and explicit instruction and support are key ingredients for instructional success. A variety of strategies can be used, including teaching study skills, editing assignments, reading strategies, teaming strategies, and thinking strategies.



Additional information on the effective use of learning strategies is available from the University of Kansas — Institute for Research in Learning Disabilities. This institute features the Learning Strategies Curriculum developed by Donald Deschler and Associates. Please visit the Internet site at:
www.ku-crl.org/htmlfiles/sim.html

- **Graphic organizers:** Graphic organizers are visual diagrams that help students understand and think. They represent abstract ideas and concepts in a concrete form. Mind maps, webs, clusters, think sheets, and forms are other terms used for graphic organizers. This type of instruction can assist the learner by making the ideas more concrete and visual.
- **Lesson frames:** Lesson frames are used to present an overview of a lesson unit or concept. Lesson frames are provided in writing, but can also include pictures or graphics. Lesson frames can be placed on overheads, photocopies, blackboards, or posters. The lesson frame helps students organize their thoughts around the lesson. A lesson frame typically includes course, topic, date, lesson outline, lesson outcomes, assignment, and notes.



- **Note-taking:** Students with behavioural challenges often experience difficulties with note-taking. This problem can be resolved by copying the notes of a classroom peer or by providing a copy of the teacher's notes or overheads. Some teachers remove key words from the overhead notes so that the students will be required to pay attention to the presentation in order to fill in the missing words. Students often require assistance in organizing notebooks.
- **Scaffolding:** Students with academic or behavioural challenges can become frustrated when presented with large assignments or research projects. It is possible to avoid this frustration by assisting the students with scaffolding. Scaffolding means providing clear structure and precisely stated expectations, and breaking the task down into manageable pieces. There are several key characteristics of scaffolding:
 - Provides clear directions
 - Clarifies purpose
 - Keeps students on task
 - Points students to worthy sources
 - Reduces uncertainty, surprise, and disappointment
 - Helps students organize
 - Breaks the work into manageable pieces
 - Provides a structure for completing the project



For additional information on scaffolding and examples of projects that have been designed using scaffolding and technology, visit the following Internet sites:

- **From Now On – The Education Technology Journal:**
[//fno.org/dec99/scaffold.html](http://fno.org/dec99/scaffold.html)
- **Webquest:**
[//edweb.sdsu.edu/webquest/webquest.html](http://edweb.sdsu.edu/webquest/webquest.html)


Adaptations

Adaptations are planned, personalized alterations in the way teachers provide instruction, the way a student demonstrates learning, and in the assessment of progress. Adaptations help students to achieve and to demonstrate the achievement of the expected learning outcomes of the curriculum. Adaptations are developed for individual students through planning by the teacher, student, parent/guardian, and possibly other support personnel. Students are assessed using the standards for the provincial curriculum and receive full credit for their work.



There are a variety of ways that educators can provide adaptations for an individual student. These include adaptations to:

- The physical and/or social environment
- Materials and resources, including introduction of supportive equipment
- Presentations
- Testing and assessment procedures (prior permission required for provincial standards tests)
- Assignments and projects
- Organizational supports
- Time required to achieve curriculum outcomes



For additional information on the adaptations allowed during provincial standards tests, see Manitoba Education and Training. *Policies and Procedures for Standards Tests, 2000–2001.*

There are many ways that educators can provide adaptations for students who have academic/discipline challenges. Many of these adaptations are included on the chart below.

Presentation Format	Response Format	Environment/ Setting	Time	Materials/ Support	Organization
Break tasks down into small steps	Scribe	Alternate space in room	Reducing number of questions or extending length of time to complete	Manipulatives	"Crib" note
Books on tape	Word processor/ typewriter	Alternate setting		Visual Aids	Chapter summaries
Large print	Oral reporting/ testing	Carrels		Computer programs (picture graphics)	Coles notes
Underline key concepts	Picture, diagrams, drawing, poetry, etc.	Reduce stimuli in surrounding area	Frequent breaks	Timers/minute glasses	Duplicate notes
Video/movie of the novel	Dictaphones	Move and sit cushions	Additional instructional time	Electronic speller	Colour coding of binders and tests
Advanced organizers		Adapted desks or seating	Instructional modules	Word bank	Daily schedules
Manipulatives		Acoustical treatments (carpet)	Spread learning over longer time period	Calculator	Small boxes/ organizers for support
				Raised line paper	Agenda books
				Erasable markers for highlighting	Home-school communication book
				Large clocks	Extra set of books for home use
				Programmable watches	
				Peer tutors	
				Headsets	

As teachers work through the process of using adaptations, it is suggested that the adaptation be documented. A form such as the adaptations worksheet (following page) can be used and filed for future reference. Parents should be informed when adaptations are used. Adaptations may also be recorded in an individual education plan.

Adaptations Worksheet

Presenting Problem(s)

Curricular Concern

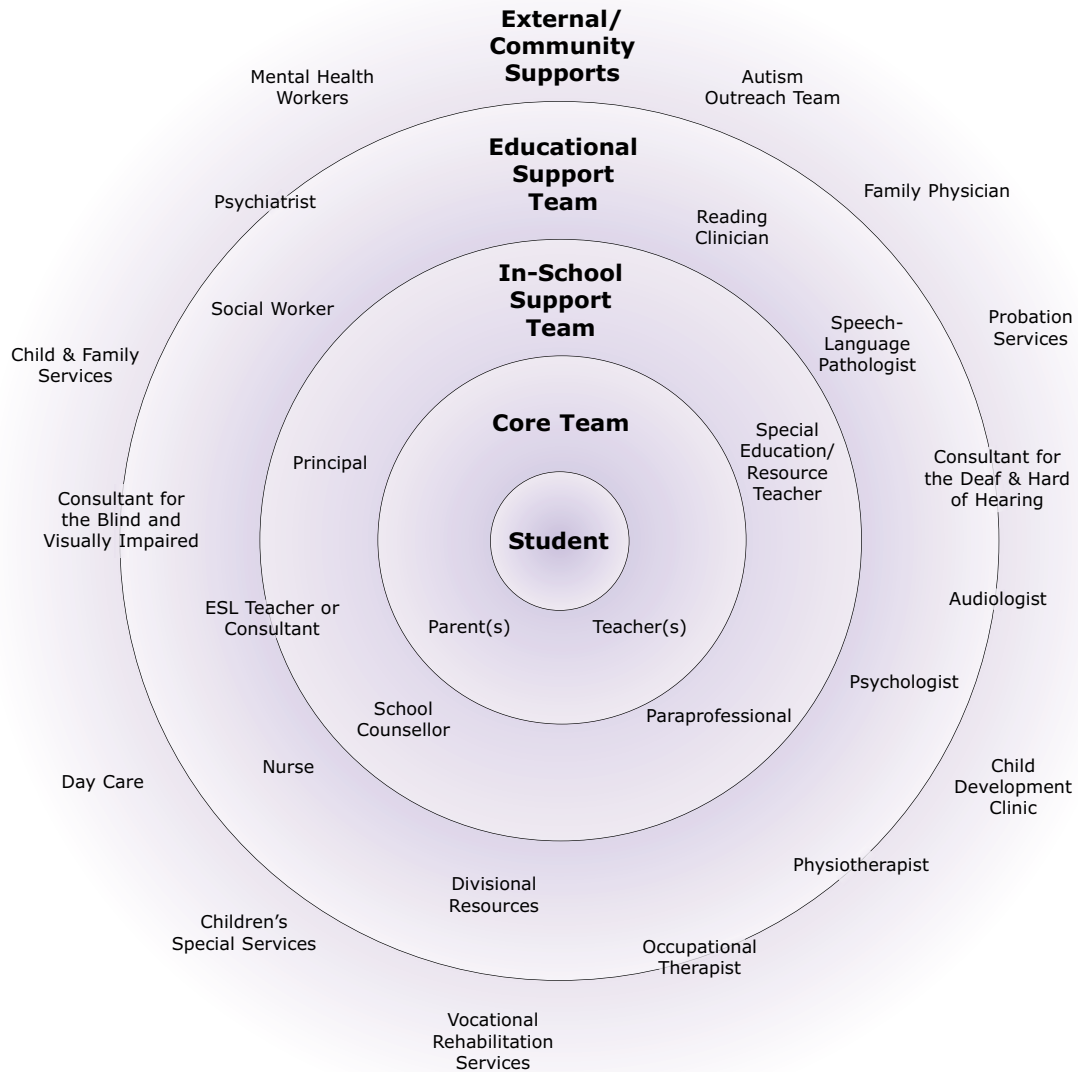
Outcomes

Strategies (Differentiated Instruction/Adaptations)

Suggestions for Assessment

Materials Needed

The Student Support Team



Note: This diagram may not be inclusive of all possible members.

Involving additional support personnel with students can be pictured as in the above diagram. At the hub is the student with Core Team supports coming from the teacher and parent/guardian. If students are not successful with the assistance of only the core team members, they can formally request assistance from personnel with more specialized expertise. At one level are those staff who are frequently based within a school (the In-School Support Team). The next circle consists of specialized educational personnel (the Educational Support Team) who are usually based externally to the school but have a defined

relationship to the school. The External/Community Supports circle includes a variety of external or community personnel who might be recruited to provide specialized supports to the student. The classroom teacher can often obtain informal, consultative support from other support team members. This is certainly the case in schools that emphasize professional sharing and collegiality. However, formal involvement with the student requires parental approval and a referral process. Of course, some students enter a school or classroom with various support team members already involved. Once formally involved, support personnel become part of the student's support team and might work directly with the student or through consulting with or training other personnel such as teacher(s) or paraprofessional(s).

Redesigning Course Content

If altering the methods of instruction is not sufficient to ensure student success, thought should be given to altering the instructional content. Under certain circumstances, the student's support team can redesign the course to fit the student's need for a more attainable (modified) or challenging (enriched) content. Decisions to redesign course content are determined for individual students on a course-by-course (subject-by-subject) basis before a term begins. Redesigning course content involves changing the number, essence, or content of provincial learning outcomes. The student can be included in the instruction of the provincial curriculum but focuses on content that is individually appropriate.

Modifying outcomes for a course or instructional unit is a strategy where there has been a decision to reduce the number, essence, or content of the curricular outcomes. Modification can be an effective strategy for students who are unable to meet the learning outcomes of the provincial curriculum due to their special needs. At the Senior Years level, if a student has such significant cognitive disabilities that more than 50 percent of the outcomes of a provincially designed or approved course must be modified, the student's support team, in consideration of the student's needs, develops an Individual Education Plan (IEP) and the report card shows an M-designation (e.g., 10M) for the modified course. The support team should always consider all consequences of modifying the learning outcomes of the curriculum. For instance, M-designated courses are not usually accepted by colleges and universities as meeting their entry criteria. Some students taking modified courses might require community supports as adults and should have a transition plan developed.



For additional information on the modified course designation, see Manitoba Education and Training. *Towards Inclusion: A Handbook for Modified Course Designation, Senior 1-4, 1995.*

At all grades, course design can be **enriched** for the student who can work beyond the learning outcomes of the provincial curriculum. Typically, this is a consideration for students who (a) are academically gifted or (b) are talented in a particular curriculum area or (c) have high task commitment. Enriched courses provide additional challenges for the student. At the Senior Years level, there are additional strategies for providing enriched programming:

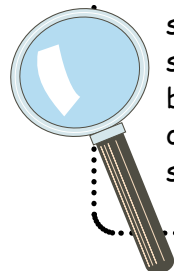
- Developing an enriched Student-Initiated Project (SIP) or a School-Initiated Course (SIC)
- Enrolling in post-secondary courses and receiving dual-credit at the post-secondary and Senior Years levels

Choosing one of these options, except the Student-Initiated Project which is a credit initiated by the student, should be a team decision, often involving a school counsellor.

Close-up of Craig

A closer look at addressing behavioural difficulties through an academic intervention examining differentiated instruction, adaptations, and modifications.

Close Up



Craig is a student in Senior 1 who has a history of learning and behavioural problems. He has struggled through the Middle Years with supports from his classroom teacher, resource teacher, and guidance counsellor. During Grade 6, an academic and psychological assessment was completed. The results indicated that Craig has Attention Deficit Hyperactivity Disorder (ADHD) with a significant cognitive disability. The academic profile showed significant learning difficulties in both English language arts (ELA) and mathematics. Strengths were identified in classes with hands-on activities such as industrial arts, computer applications, and physical education. During ELA and math classes, Craig often bothered others and ended up in trouble when he was not on-task. At times, he became belligerent with his teachers and, as a result, was suspended on several occasions. He received some support from the resource teacher with other students in a small group for mathematics. In language arts, he was supported by his classroom teacher who spent extra time with him working on writing assignments. Videos of several novels were used to support his understanding of the content.

Craig's program in ELA and mathematics was based on the general learning outcomes of the curriculum. At the beginning of his Senior 1 year, it became apparent that Craig needed significant changes in his program if he was to be successful in school. The resource teacher established a planning team to develop a more suitable program for Craig. The team included Craig, his parents, the resource teacher, counsellor, and vice-principal. Based on the planning meetings, his past evaluations, and a goal-setting process, the school developed the following plan for Craig.

Craig and his parents wanted him to complete the Senior Years program. However, due to his academic limitations, it was decided to spread his program over five years instead of four. This would allow extra time for academic support and a part-time job. His program was developed with a focus on technology education. Craig had an interest in technology and wanted to enter the Computer Support Training program offered in the school. This program was offered in Senior 3 and 4 with a work experience component.

The team determined the modified course designation in ELA and mathematics was the best way to meet Craig's needs. The school had a mathematics program jointly planned by the resource teacher and a mathematics teacher. Learning outcomes were identified to be included in the program in order to meet Craig's needs. The goal was to prepare Craig for the consumer math program in Senior 2. Activities that focused on life skills were also used, e.g., *The Real Game*. These modifications and adaptations were identified in Craig's IEP.

In language arts, he was placed with a teacher who used several adaptations to assist students having difficulties and was regarded by the students as being supportive. Using a number of adaptations and modifications, the teacher believed he could function successfully in the Senior 1 language arts. The teacher arranged for Craig to receive copies of notes that were presented in class. As well, the teacher arranged for Craig to view videotapes of novels being studied in class.

For the remainder of his timetable, Craig was scheduled for a computer applications course and the Senior 1 physical education course.





Craig agreed to see the counsellor to address some of his anger and control problems. As well, Craig was placed on an academic and behavioural self-monitoring system. He reviewed these forms with the counsellor at the end of each day. Craig's parents agreed to provide him with a reward if the reports over a two-week period were positive.

To involve Craig in the school and to try to make him feel he belonged, he was invited to participate in a robotics club run by his computer instructor. Over time, Craig's behaviour improved due to the changes made in his program.

Individualized Programming

Individualized programming recognizes the needs of the very few students whose cognitive disabilities are so significant that they will not benefit from participating in provincial curricula. The student's support team develops an IEP with instructional content that is student specific. It should be functionally or developmentally appropriate with curricular domains that might include academics, communication, social, vocational, self-management, community, recreation/leisure, and motor. Often, the instructional methods, materials, and environments must also be personalized to that student. It must be noted that individualized programming is not a placement description, as programming may take place in a variety of settings within the school and the community. Some students may benefit from an individualized program in which the instruction occurs in the context of the regular classroom.

At the Senior Years level, students participating in the individualized (I) programming designation receive one credit for each year of participation up to a maximum of seven credits. These students will usually require community supports as adults.



For additional information on the individualized course designation, see Manitoba Education and Training. *Towards Inclusion: A Handbook for Individualized Programming Designation, Senior Years, 1995.*

The chart that follows summarizes many of the key characteristics of the levels in the continuum of instructional supports.

Continuum of Instructional Supports for Addressing Student Diversity Chart

Type of Instruction	Students	Planners*	Plan	Instructional Content	Instructional Methods
Provincial Curriculum	Most	<ul style="list-style-type: none"> Core team 	Regular instruction plans and reports	Provincial curricula	<ul style="list-style-type: none"> Regular methods (including differentiated instruction)
Adaptations	Some (including ESL)	<ul style="list-style-type: none"> Core Team 	Record adaptations and results in cumulative file (report card) or IEP	Provincial curricula	<ul style="list-style-type: none"> Regular methods (including differentiated instruction) Adaptations for instruction and/or assessment
Support Personnel	Few	<ul style="list-style-type: none"> Core Team Formally involved support staff 	Record supports in instruction plans and reports	Provincial curricula	<ul style="list-style-type: none"> Regular methods (including differentiated instruction) Adaptations if necessary Specialist support personnel
Redesigned Course Content Modified (M) course designation	Few (with significant cognitive disabilities)	<ul style="list-style-type: none"> Core Team Formally involved support staff 	As above plus IEP (in cumulative file)	Modifications to course outcomes decided per subject/course	<ul style="list-style-type: none"> All of above as needed
Enriched Course Design	Few (with significant gifts, talent, or high task commitment)	<ul style="list-style-type: none"> Core Team Formally involved support staff 	Record supports in instruction plans and reports	Enriched course outcomes decided per subject/course	<ul style="list-style-type: none"> All of above as needed
Individualized (I) programming	Very few (with very significant cognitive disabilities)	<ul style="list-style-type: none"> Core Team Formally involved support staff 	As above plus IEP (in cumulative file)	Student-specific programming outcomes (functional or developmental domains)	<ul style="list-style-type: none"> Student-specific methods and environments appropriate to IEP

*See "The Student Support Team" graphic

This chapter has discussed strategies and techniques that can assist teachers in meeting the needs of students who exhibit behavioural difficulties due to learning problems. The teacher can utilize a variety of strategies and interventions related to differentiated instruction, adaptations, modifications, and individualized programs. Additional supports, including a variety of specialists, can assist teachers in meeting individual needs.