Referential:
Special Needs Guide

FOR TEACHERS IN THE ENGLISH SECTOR

A Special Needs Reference Guide for Teachers: Teaching At-Risk Students, Students with Handicaps, Social Maladjustments or Learning Difficulties

This document was adapted and translated according to a document produced by the FSE-CSQ. This document has been adapted to reflect QPAT's Provincial Collective Agreement.

Table of Contents

Appendices

List of Tables

List of Figures

Acknowledgements

On behalf of the Quebec Provincial Association of Teachers (QPAT) and the Fédération des syndicats de l'enseignement (FSE-CSQ), we would like to thank Sylvie Lanctôt, Patricia Ferlatte, Éric Vézina, Louise Nadeau, Lorraine Salvas, Thérèse Cyr, Annie Lepage, Denis St-Hilaire, Martin Dubé, Sylvie Théberge, Annie Ménard and Éric Thibodeau for their valuable contributions throughout the process of preparing this Referential, from early planning to the most recent edition.

Introduction

The *Fédération des syndicats de l'enseignement* (FSE-CSQ) has prepared this Referential as a support tool for teachers. The *Fédération du personnel de soutien scolaire* (FPSS-CSQ) and the *Fédération des professionnelles et professionnels du Québec* (FPPE-CSQ) have helped to enrich its content.

The purpose of the Referential

In a field survey conducted in 2007 by the *Fédération des syndicats de l'enseignement* (FSE-CSQ) on the integration of students with handicaps and social maladjustments or learning difficulties (generally referred to in this document as students with special needs) (Ladouceur, 2012), a number of teachers said they would like information on the different categories of difficulties and handicaps in order to adjust their interventions in the classroom. They also asked for assistance when working with special needs students in regular classes, as well as support for their students. The FSE-CSQ originally created this Referential to address those needs. The *Fédération du personnel de soutien scolaire* (FPSS-CSQ) and the *Fédération des professionnelles et professionnels de l'éducation du Québec* (FPPE CSQ) helped to enrich its content.

Two versions of the Referential have since been published, and the FSE-CSQ decided to proceed with a new revision in the wake of observations about the document's content. In this third edition, the terminology for integration has been clarified, and the definitions of certain difficulties and handicaps have been expanded. Interventions are also proposed with a view to promoting academic and educational success for as many students as possible. In addition to education research, the Education Act and ministerial instructions, the new version has also been adjusted to reflect the Provincial Collective Agreement (2015-2020) and the June 2011 letter of agreement, extended to June 2016 (2016-2020).

A Referential based on education research

Most of the data for the Referential are taken from meta-analyses such as those produced by the National Reading Panel (2000) and the National Early Literacy Panel (National Institute for Literacy, 2008), and from the work of Wang, Haertel and Walberg (1990), entitled *What influences learning?* The authors also consulted other major sources, including research done by the Observatoire National de la Lecture (1998) and the Canadian Language and Literacy Research Network (2009), as well as studies by researchers from Belgium, Canada, the United States, France and Québec.

However, meta-analyses are not available for every subject. Some sections are therefore based on a single study. Not all research is of equal value, but in the absence of meta-analyses, other studies must be used.[1]

---

1   Appendix I – Classification of Educational Research by Reliability Level.

The principles underlying integration

It is important to understand the different principles underlying integration, since there appears to be some confusion between the following terms in schools: **evaluation of skills and needs, Individualized Education Plan**, and **recognition and identification** of students as being in difficulty or handicapped. These concepts are explained in detail in sections F, G, H and I.

Category and non-category approaches

Until 2005, the Provincial Collective Agreement for Teachers proposed a category approach to services for students with handicaps and social maladjustments or learning difficulties. In 2005, however, a non-category approach was introduced for these students. What is the difference between the two approaches?

The category approach

The category approach was favoured in education for many years and is still used today for handicapped students and students with severe behavioural difficulties. Under this approach, services are structured according to the category to which handicapped students and students in difficulty are assigned, and school boards receive funding from the Ministry of Education based on this.

In other words, to obtain services, students first have to be assigned to a specific category. For example, for a student with learning difficulties to receive services, he or she must have fallen two years behind at school, and must then be evaluated by a professional. However, Torgesen (2004) clearly shows that a student who still has reading difficulties at the end of the third year of elementary school will almost never achieve average reading skills by the end of elementary school.

The non-category approach

The non-category approach now applies to at-risk students and students with social maladjustments or learning difficulties: in other words, students who have behavioural difficulties or attention deficit disorder with or without hyperactivity, and those with learning difficulties. Under this approach, it is no longer necessary for students to undergo a diagnostic evaluation in order to receive services. Educational services are structured on the basis of needs, rather than according to the category to which the student belongs. It is a more logical approach, in that it allows for early action and prevention. In addition, at-risk students and students with learning difficulties have problems with reading, writing or mathematics and these disciplines are of the expertise of the pedagogical services. This means that pedagogical and remedial interventions and evaluations are required.

Unfortunately, teachers are still often told that students cannot receive services if they have not undergone a diagnosis. This is incorrect. It is no longer necessary for students with social maladjustments or learning difficulties to obtain a diagnosis or ministerial code in order to receive support services. The Education Act (s. 234) requires school boards to adapt their educational services according to the student's needs and in keeping with the student's abilities as evaluated by the school board. This obligation has also been mentioned in the Provincial Collective Agreement since 2005.

The contribution of professional and support staff

It would be impossible for teachers to work with special needs students in the classroom without assistance from school and school board support staff. These people play a key role in fulfilling the goal of helping special needs students to achieve their full potential and attain academic and educational success. Professional and support staff members work with teachers on an everyday basis,[2] as part of a team, ensuring that actions taken in the classroom are both effective and relevant.

The Referential

The core content of the Referential – Sections A to D – is subdivided under four headings: Definition, Manifestations of difficulties in the classroom, Support required from personnel members, and Main authors consulted. However, it is important to note that the lists of support interventions are by no means exhaustive, nor is it necessary to implement all the interventions in order for the student to progress. Teachers must make the best possible choices for each individual student, from the resources available at school and in the Québec Education Program, with due regard for the composition of the class into which the student has been integrated.

The appendices that make up the second part of the Referential present additional information on some of the concepts relevant to at-risk students and students with handicaps and social maladjustments or learning difficulties, and integration of special needs students into regular classes. They are tools to which teachers can refer for more details, using practices from their own teaching to develop a shared language. They are intended as reference materials only, and their use is not mandatory.

---

2   Appendix II – Student Services.

PART

A
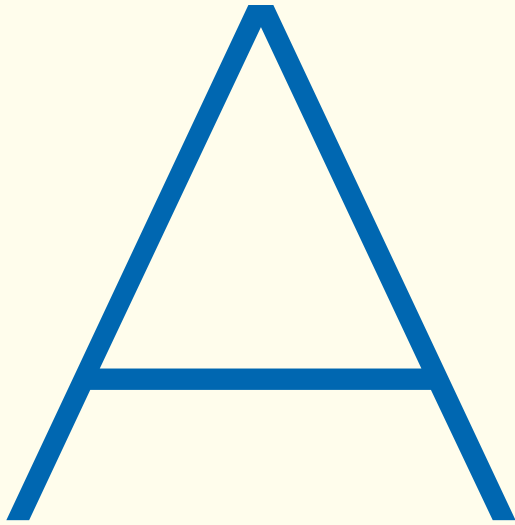
At-risk Students

Note: At-risk students are not included in the definition of special needs students.

The importance of screening and early intervention

For at-risk students, prevention and early intervention must be a priority for the Ministry of Education and should be the responsibility of everyone concerned. This may seem like common sense, but in fact these two types of actions are rarely seen in schools, despite the fact that they are identified as being important in the Policy on Special Education (Québec, 1999) and in the 2015-2020 Provincial Collective Agreement.

At-risk students are likely to develop severe difficulties if preventive action is not taken quickly. Screening can be used preventively, to guide the interventions needed to address the students' difficulties. It is important to note that an at-risk student cannot remain at risk throughout his or her time at school. Difficulties must be addressed quickly, through interventions tailored to students' needs. If nothing is done, the situation is likely to worsen, and students will develop severe difficulties.

Vaughn, Bos and Schumm (2007) studied the Response to Intervention (RTI) model and found that one student in every five (20 %) was at risk. Similarly, the Québec Survey of Child Development in Kindergarten (QSCDK) (Institut de la statistique du Québec, 2012) found that one child in every four (26 %) in kindergarten was considered to be vulnerable in at least one area of development.

Therefore, the earlier students are screened and identified as being at risk, and the quicker the response, the better their chances of success will be (Leclerc, Potvin and Masse, 2016). Screening for difficulties and early intervention from kindergarten onwards are the first steps in an ongoing support approach.

26%

In kindergarten, one child in every four was considered to be vulnerable in at least one area of development.

Definition from the Teachers' Collective Agreement[3]

At-risk students are preschool, elementary or secondary school students who display characteristics likely to affect their learning or behaviour that will place them in a vulnerable situation, particularly with respect to academic failure or their socialization, without immediate intervention.

It is important to be vigilant in order to identify students who may be at risk:

1. In terms of overall development in kindergarten
2. In terms of learning
3. For dropping out of school

Immigrant students may also be considered to be at risk, especially if English is not their first (or everyday) language, or if they already have developmental or academic delays when they start school. They must be monitored and given proper support in order to determine whether their difficulties are temporary or permanent. In addition to instructional services at the preschool, elementary and secondary levels, these students are entitled to reception and special support services,[4] for which qualified personnel and tools are required to evaluate their abilities and identify their needs. They are also entitled to complementary education services if their difficulties persist in spite of assistance from their teachers, and to English language reception and support services (in reception classes or during direct integration to regular classes[5]).

The professional judgment of teachers

Many of the researchers cited in Leclerc, Potvin and Masse (2016) underscore the utility of teachers' professional judgment when screening for at-risk students. Teachers are acknowledged to have the expertise needed to make quality judgments regarding their students' academic path, based on manifestations of difficulties in the classroom and their personal knowledge of the students.

---

3   Appendix 31 of the 2015-2020 Teachers' Collective Agreement.
4   Under the Education Act, s. 1.
5   Cadre de référence – Accueil et intégration des élèves issus de l'immigration au Québec – Organisation des services (in French only).

Students at risk for global development problems in preschool

1

Students do not all develop at the same pace, among other things because of varying levels of maturity and prior experience. It is for this reason that preschool education can start at four years of age for some students and at five years of age for others, and still provide equitable learning opportunities.

Abilities, strategies and knowledge can emerge when students are allowed to play freely or with adult support, and also when they are explicitly taught through play, as part of a balanced approach. As noted in Québec's Preschool Education Program for 4-Year-Olds (Québec, 2017: 8):

> An in-depth understanding of child development and of the advantages of various pedagogical approaches enables teachers to plan rich and diversified learning contexts. […] Because of their professional judgment and expertise, teachers are able to tailor their practices, approaches and interventions to the children's needs.

At preschool, if students exhibit problems with their global development in spite of support from their teacher, they are considered to be at risk and early action is needed.

Students may exhibit difficulties in:

- physical and motor development (psychomotility)
- social and emotional development (social skills, emotional maturity)
- cognitive and language development (mathematics, language, reading and writing)
- the development of their executive functions (coordination of thoughts, actions and behaviours)

1.1 Physical and motor development

Research has shown that physical and motor development, as prerequisites for and facilitators of subsequent learning, play a role in success at school. Based on data from the Québec Longitudinal Study of Child Development (QLSCD), Pagani et al. (2011) found a positive association between:

- fine motor skills, reading/writing success and overall success
- movement skills, reading success and classroom involvement

Physical and motor development encompasses the child's physical development and his or her psychomotility, or the connection between physical and motor action and the child's reasoning and learning. April and Charron (2012) **identified seven elements of psychomotility** that form part of physical and motor development:

- **Gross motor skills**, which are the bodily movements that allow a person to move around (running, kicking a ball, doing a somersault, sliding, throwing a ball, climbing, jumping). They include coordination, dissociation, balance and inhibition.
- **Fine motor skills**, which are smaller movements that require control over smaller muscles (writing, tying knots, peeling an orange, getting dressed, cutting and sticking, sculpting).
- **Body schema**, which is a person's awareness and knowledge of his or her body and spatial occupation.
- **Laterality**, which is awareness of body symmetry and discovery of lateral dominance.
- **Spatial organization**, or knowledge of spatial notions (behind, under, to the left, to the right).
- **Temporal organization**, which involves the perception and use of the notion of time (duration, order, pace).
- **Sensorimotor perception**, or the stimulators that allow a person to perceive sensation (feeling, touching, being tired, being out of breath).

It is important to note that students may develop physical and motor skills at different paces, depending on their physiological maturity, but they all go through the same growth and development stages.

Possible manifestations of difficulties in the classroom

Students may:

- not meet their physical needs independently (toilet training, eating).
- have trouble going downstairs using alternate feet.
- have trouble walking on tiptoe.
- have trouble throwing or catching a ball.
- not have the coordination they need to perform different types of movements (imitating an animal, running, jumping in different ways).
- often trip or bump into things when moving from one place to another.
- have trouble holding a pencil or using tools (scissors, paintbrush, ball).
- have trouble sculpting using different materials.
- have trouble drawing, doing crafts or handling small objects (buttons, building blocks).
- have trouble performing certain actions in response to instructions (sit under the table, touch your toes).
- refuse to touch or handle certain things (textures, smells, flavours).
- be unable to identify danger in their environment.

To support the physical and motor development of students experiencing difficulties, teachers may choose from the following interventions:

- Provide additional individual support through natural or structured psychomotor activities.
- Provide more explicit instruction on various motor skills (observational learning, guided practice).
- Ask other students to model certain physical skills, and use role play.
- Request specialized services for the student (e.g. occupational therapy).

It is important to note that a variety of materials may be needed to develop certain psychomotor skills, and these materials should be available in all schools (Harms, Clifford and Cryer, 2011):

- small construction games
- visual arts materials
- manipulatives (beads, different kinds of blocks)
- fixed equipment (railings, ladders)
- portable equipment (balls of different sizes)

1.2 Social and emotional development (social skills, emotional maturity)

According to Capuano (2014), socioemotional skills are also associated with academic and social success. These skills are necessary for children to become involved in their learning and forge good relationships with others. The socioemotional skills can be grouped under five main headings:

- Self-awareness (knowing one's own needs, talents, strengths and challenges)
- Self-regulation (ability to control one's emotions, thoughts and behaviours)
- Social awareness (respect for others, empathy)
- Interpersonal relations (communication skills, ability to commit, positive relationships with others)
- Responsible decision-making (responsible behaviours, absence of aggressive behaviour)

According to the QLSCD (Institut de la statistique du Québec, 2012), 9 % of children in Québec are vulnerable in the area of social skills and 9.7 % are vulnerable in the area of emotional maturity.

Possible manifestations of socioemotional difficulties in the classroom

Students may:

- exhibit a high frequency of negative affects (anger, crying).
- have trouble recognizing their own emotions and decoding other people's emotions.
- have trouble managing their emotions.
- exhibit aggressive behaviours (pushing, hitting).
- object to rules and instructions or are unable to follow them.
- lack self-confidence and self-esteem. They are not proud of their successes.
- need constant support to perform tasks.
- exhibit fear or anxiety that hinders their learning and integration into peer groups.
- be solitary, passive or closed off.
- have trouble adapting their emotions, behaviours and attention to particular situations.
- be unable to become involved in interactions with others.
- not be open to approaches by others (other students or adults).
- not be fully accepted by other students, or are rejected.
- have trouble forging close relationships with adults.

To support the social and emotional development of students with socioemotional difficulties, teachers may choose from the following interventions:

- Provide individual support in natural situations that occur in the classroom and during structured activities.
- Model social and emotional skills and promote regular guided practice and feedback.

- Reinforce appropriate behaviour.
- Involve other students to model specific behaviours or use role play.
- Use a proven program to develop social and emotional skills, prosocial skills, self-regulation and attention management.[6]

- Request specialized services for the student (e.g. special education, psychoeducation, psychology).

1.3 Cognitive and language development (language, mathematics, reading and writing)

A study by Duncan et al. (2007) found that mathematics and reading skills, along with the ability to concentrate, are the best predictors of academic success in grade three. Similarly, a study by Lemelin and Boivin (2007) also found that cognitive and language development is, along with socio-economic environment, the best predictor of academic performance in grade one. It is therefore important to identify children in difficulty and act quickly to encourage the development of the associated skills.

1.3.1 Language

Language skills are correlated significantly with future academic performance in all subjects. Students need these skills to learn to read in grade one, and to understand texts and solve mathematical or scientific problems (Pagani et al., 2011).

Some students are more likely to be at risk in the area of language development. Their delays may be due to environmental conditions (lack of stimulation, second language) or neurological language disorders.[7]

Based on data from the QLSCD, Desrosiers and Ducharme (2006) found that roughly 16% of children in kindergarten lagged behind the other children of their age in terms of vocabulary. Other studies have shown that children diagnosed with a specific language disorder at age four run a high risk of failing at school (Johnston, 2010).

Between four and six years of age, most children develop a broad vocabulary and are able to formulate intelligible, complete and grammatically correct sentences. Although there are clearly some individual differences between children, language development follows a predictable sequence.

Oral language includes an expressive dimension (speech) and a receptive dimension (understanding). The four main components are:

- **Phonology** (structure of language sounds, words and phrases)
- **Semantics** (words and their meaning, ideas expressed, lexicon)
- **Syntax** (structure of sentences)
- **Pragmatics** (communication intention, speech, two-way conversation)

Possible manifestations of oral language difficulties in the classroom

Students may:

- have trouble understanding other people and expressing themselves.
- use incomplete or grammatically incorrect sentences and it may be difficult to understand what they say.
- continually use short sentences.

- make many pronunciation mistakes.
- have a limited vocabulary and not use the correct words.
- have trouble asking questions or making requests.

- have trouble understanding what people say unless it is repeated, and have difficulty reformulating instructions.
- not be able to maintain a short conversation.
- not ask questions.
- simplify, invert or change words.

---

6   Appendix III – Suggestions for Material Mentioned in Research.

7   A speech therapist's assessment may be needed to decide whether the problem is a language delay or a language disorder.

To support the language development of students with oral language difficulties, teachers may choose from the following interventions:

- Provide additional individual support by:
  - offering natural opportunities for communication
  - reading story books or books relating to classroom activities or subjects
  - asking open questions that encourage longer, more complex answers
  - making connections between the students' oral language and written language
  - initiating discussions about the students' experience during play (e.g. how to balance the structures they build using blocks).
- Introduce structured activities or use materials recommended by researchers, including explicit instruction and immediate feedback on the use of grammar or vocabulary.[8]
- Request specialized services for the student (e.g. remedial instruction, speech therapy).

1.3.2   Mathematics

Research has shown the importance of mathematical knowledge and skills development for young children, since these elements are strongly correlated with subsequent educational success and academic performance in all elementary school subjects (Pagani et al., 2011).

The Conseil supérieur de l'éducation, in its opinion on early childhood (2012), noted that, according to research, children who experience difficulty with mathematics in kindergarten are much more likely than other students to experience difficulties in subsequent years.

Numeracy is composed of five elements (National Council of Teachers of Mathematics, 2000):

- **Numbers and operations** (understanding numbers, words referring to numbers, relationships between numbers, graphic representation, ability to count, concept of quantity)
- **Algebra** (recognizing repetitive and increasing patterns, creating and completing patterns)
- **Geometry** (exploring and transforming shapes, spatial location)
- **Measurement** (measuring and comparing objects, developing the concept of conservation)
- **Data analysis and probability** (formulating questions, collection and organization of data, representing data in a drawing)

Possible manifestations of difficulties in mathematics in the classroom

Students may:

- be unable to understand the notion of numbers, the words referring to numbers or graphic representations of numbers.
- be unable to count.
- not understand the notion of cardinality (the last number evoked is the total number of objects).
- not be able to divide a group of objects into several portions.
- be unable to say which number is higher or lower.
- not understand basic operations (add to, take away).
- not understand or create repetitive patterns (sequences or series).
- be unable to compare objects (length, size, weight).

To support the cognitive (mathematical) development of students with difficulties in mathematics, teachers may choose from the following interventions:

- Provide additional individual support by:
  - using games to explore mathematics
  - asking questions that require students to think before answering
  - offering structured activities that support the development of mathematical skills and providing problems to be solved
- A broad range of materials should also be available to support mathematical thinking and highlight numerical relations (e.g. cubes, shapes and jigsaws, board games) (Harms, Clifford and Cryer, 2011).

If problems persist after these initial interventions, at-risk students in mathematics may need additional support from the teacher or remedial teacher to, for example:

- teach the students how to count a small collection of elements correctly.
- teach the connection between addition and the successor function (if an element is added to a collection of five elements, the cardinality is the successor of five, i.e. six. Therefore, there is no need to re-count all the elements. However, the teacher should hide the collection, otherwise the student may look at it and re-count the elements.)

---

8   Appendix III – Suggestions for Material Mentioned in Research.

1.3.3   Reading and writing

Pre-reading skills in kindergarten are the second most important factor in a child's educational success in grades one and three of elementary school (Duncan et al., 2007). Numerous researchers have noted the particular influence of preschool decoding skills on subsequent reading success in elementary school. Writing skills are also correlated with successful learning of reading and writing in the early years of elementary school (Morin and Montésinos-Gelet, 2007).

In the meta-analysis by the National Early Literacy Panel (National Institute for Literacy, 2008), the following five indicators serve as predictors for subsequent reading skills:

- Knowledge of the names and phonemes of letters to develop an understanding of the alphabetic principle.
- Writing of letters or writing of the student's first name.
- Phonological awareness, including phonemic awareness.
- Ability to name letters or numbers quickly.
- Phonological working memory.

Understanding of the alphabetic principle (including phonemic awareness) is strongly correlated with successful **early reading**. Any delay in or difficulty with the development of this understanding that persists in spite of established pedagogical interventions is an indicator that the student may be at risk.

For writing (Giasson, 2011), indicators relating to the following six elements can help predict **early writing** success:

- Writing as a communication tool.
- The connection between oral and written language (knowing that words are written in the same order that they are heard, and that they are all written).
- The concepts of letters, words and phrases.
- Understanding that words are written from left to right and from top to bottom.
- Understanding of the sound aspect of language (use of phonemes).
- Gradual learning of the writing system.

Possible manifestations of early reading/writing difficulties in the classroom

Students may:

- be unable to recognize their own first name or the letters in it.
- not demonstrate an awareness of rhyme/syllables.
- be unable to identify a letter when it is named, or name a letter that is written for them.
- have trouble identifying the letter associated with a phoneme, or producing the phoneme of a letter that is written for them.
- not understand the meaning of writing.

To support the cognitive early reading/writing development of students experiencing difficulties beyond kindergarten, teachers may choose from the following interventions:

- Explicit teaching of the names and sounds of the letters of the alphabet and phonemic awareness skills, including segmenting and blending.[9]
- Activities to help the students make connections between letters, their form and the sound they produce.[10]

- Different exercises to practise writing, e.g. writing inspired by an image that evokes one or more words.
- Activities in which the student is asked to try and write words based on their own ideas, using what they know of the alphabetic system (first names, the sentence of the day, classroom rules).

- A pretest on the student's knowledge of the names and sounds of the letters of the alphabet.[11]

If problems persist after these initial interventions, students at-risk in early reading and writing skills may need additional support from the teacher or remedial teacher[11] such as:

- Teaching the names and sounds of letters of the alphabet more explicitly.

- Adding three or four meetings per week, over and above those with the classroom teacher.
- Being systematic (30 minutes per day).

- Dividing the students into groups of five.
- Tracking progress every two weeks.

---

9   Appendix IV – Kindergarten for 5-year-olds: Example of reading-writing screening and intervention for at-risk students based on the Response to Intervention (RTI) model, with a standardized three-stage protocol.
10 Appendix III – Suggestions for Material Mentioned in Research.
11 Appendix VII – The Traditional Model and the Response to Intervention (RTI) Model

1.4   Development of executive functioning skills

Several researchers have found a connection between executive functions, success at school and social adjustment (Blair, 2013). The *Conseil supérieur de l'éducation*, in its opinion on preschool education (2012), noted among other things that executive functions are especially important to success at school. Blair (2013) also noted that they may constitute a sensitive indicator of the risk of learning disorders or child psychopathology.

The term "executive functions" refers to the student's ability to cope with frustration, be motivated, concentrate, remember and use information, adjust to different types of requests, work cooperatively, make friends, and so on. Executive functions usually include the following four components:

- Working memory (converting information from the short-term memory and using it in a different context

- Behavioural inhibition (self-control)

- Cognitive flexibility (moving from one cognitive action or series of rules to another, changing activities or strategies)

- Planning (predicting the actions required to achieve a goal)

Possible manifestations of executive functioning difficulties in the classroom

Students may:

- have trouble changing a routine.
- have trouble diverting their attention from one thing to another, or going back to an uncompleted task.

- not be able to prevent themselves from acting inappropriately or using gestures that are inappropriate in a given context.
- have trouble changing their opinions.

- have trouble adjusting to changes (e.g. a new instruction).
- have difficulty resisting temptation or predicting the consequences of an action.
- have trouble concentrating on a task.

To support the development of student executive functioning skills, teachers may choose from the following interventions:

- Structured activities and games that help the students to develop specific planning and decision-making skills.
- Activities focused on self-control.

- Structured activities that require sustained attention (e.g. certain types of yoga or meditation).
- Structured activities that require direction, attention and impulsivity (e.g. physical activities or certain types of martial arts).

- Games requiring students to wait their turn, pay attention and use their memory.
- Specialized services for the student (e.g. psychology, speech therapy, orthopedagogical teaching).

Students at risk for learning difficulties

2

2.1 Teachers

2.1.1 Reading and writing

In Elementary Cycle One, if students encounter the following problems in reading and writing despite support from the teacher, they are at-risk and early intervention is required:

Students who:

- have trouble identifying words composed of known grapheme-phoneme correspondences or do not spell them correctly. They may substitute, move, omit or add certain phonemes or graphemes.
- over-use contextual anticipation (guessing a word based on its initial phonemes) [e.g. news - newspaper].
- decode well, but do not understand the meaning of the message conveyed by the text (weak understanding).

In Elementary Cycles Two and Three, and in Secondary Cycle One, if students encounter the following problems in reading and writing, despite support from the classroom teacher, they are at-risk and early intervention is required:

Students who:

- cannot find explicit information in a text.
- have trouble finding the word that refers to a substitute word.

- do not ascribe meaning to new words.
- do not identify the main idea.
- are unable to draw an inference from clues in a text.
- are unable to make logical connections between information in a text.
- write in short bursts and do not take the time to structure their ideas when producing an essay, do not re-read what they have written, and do not identify their mistakes.
- have a limited repertory of cognitive and meta-cognitive strategies,[12] and therefore compensate by over-using those with which they are familiar.

2.1.2 Mathematics (Elementary and Secondary)

If students encounter the following problems in mathematics, they are at risk and early intervention is required:

- They perform the requested calculations but do not understand the concepts.
- They do not know how to solve a problem.
- They try to find an answer but are unable to justify their process.

To support students experiencing difficulties in mathematics, teachers may choose from the following interventions:

- Using a model that has been tested by research and systematic teaching[13] of basic knowledge in reading, writing or mathematics, depending on the grade level.
- Explicit teaching of cognitive and metacognitive strategies[14] to help the students to ask questions when they are in difficulty.

- Explicit teaching of procedural knowledge (e.g. how to use a revision grid for writing, or a problem-solving method).
- Using pedagogical interventions relating to the material taught, to motivate students.

- Using pedagogical materials that students can touch and manipulate to help them understand abstract concepts, and visual support for the procedures they must follow.

---

12 Appendix V – Cognitive and metacognitive strategies.
13 It is preferable to teach an element for 30 minutes per day, four days per week, rather than for two hours per day, once a week.
14 Appendix V – Cognitive and Metacognitive Strategies.

2.2   Teachers and remedial teachers

To support students experiencing difficulties, teachers and remedial teachers may choose from the remedial interventions described below.

2.2.1   Reading and writing

- Teach the same knowledge or strategies shown in class by the teacher, but more explicitly.
- Add three to four remedial meetings per week, in addition to those with the classroom teacher.
- Be systematic (30 minutes per day).
- Divide the students into groups of five.
- Track progress every two weeks.

2.2.2   Mathematics

Cycle One

- Teach counting strategies.
- Develop a more detailed concept of the numerical sequence (e.g. show 5 on one hand and 3 on the other, and the student counts them all together).

Cycle Two

- Teach multiplication structures if the student is unable to organize the problem data by creating subsets, or if the student always answers with an additive structure (e.g. there are six fish in *A*'s aquarium, and there are three times that number in *B*'s aquarium. How many fish are there in *B*'s aquarium? The student answers using addition [6 + 3 = 9] instead of multiplication).

Cycle Three and Secondary Cycle One

- Plan for remedial interventions if the student is unable to perform basic elementary tasks using fractions (e.g. the student is given two counters and is told that these two counters make up one quarter of a set of counters. The student is asked to build the full set [i.e. 2 repeated 4 times, since ¼ goes 4 times into the whole]).

Students at risk for dropping out of school

3

According to data published by the Ministry of Education in 2011-2012, more than 16% of all students leave school without a qualification. Dropping out is a process that begins early, perhaps even in preschool or elementary school.

Potvin et al. (2007) note that the decision to drop out of school is never a spontaneous one, but generally results from an accumulation of frustrations caused by recurrent failures, along with problems forming relationships with other students, teachers and parents (p. 36).

A number of researchers have identified risk factors that increase the likelihood of dropping out of school. The risk factors include:

- Being a boy
- Belonging to a dysfunctional family
- Having parents with a low level of education
- Lagging behind or failing at school
- Being taught in a special class
- Repeating a year
- Having immigrated[15]

The transition from elementary to secondary school is often a difficult one. Students move from a small structure with a single classroom teacher to a much larger institution, with a less cohesive physical environment and several different teachers. This can have detrimental impacts on their success at school (Janosz, 2000), and can exacerbate already existing difficulties.

For teenagers, the drop-out risk often depends on the immediate context in which they are placed. Many come from economically disadvantaged communities.

It is important to be vigilant and to act quickly when necessary. The main predictors for dropping out are listed below, and can be used by teachers to identify students who are at-risk.

Students may:

- be dealing with family problems.
- not be interested in school.
- exhibit behavioural problems (they may misbehave in class and in their relationships with other students).
- not perform well in English or in mathematics.
- lack commitment and perseverance.
- be often absent from school.
- have repeated a year.

The most important drop-out predictors are disengagement from school in Elementary Cycle Two, and behavioural problems in Elementary Cycle Three.

Research suggests that 27 % of students with behavioural problems ultimately drop out of school, many of which are boys. There is also evidence to suggest that many drop-outs have learning disabilities.

---

15   According to the Québec Government's statistics on education (2015), immigrant students, especially first-generation immigrants, have higher annual drop-out rates than Québecers in general.

To support students who are at-risk for dropping out, teachers may choose from the following preventive interventions:

- Provide more individualized support.
- Help the students with their homework.
- Provide more pedagogical support, through catch-up time or individualized workshops.
- Introduce student-assisted learning.
- Give meaning to learning.
- Give positive reinforcement.

- Establish a positive relationship.
- Model good behaviour.
- Help students to feel more competent by giving them choices and asking them to set goals for their school work.
- Create a climate that is conducive to learning (a well-established routine and good time management in the classroom).

- Identify each student's category to decide on the preventive measures needed to help them. The authors have developed kits[16] to help teachers target and intervene with students at risk of dropping out.

Assistance from support and professional staff members

Early identification and intervention are the responsibility of all stakeholders concerned. At-risk students can also obtain additional help from support and professional staff members who may, among other things, provide special assistance, perform assessments and carry out specialized interventions.[17]

---

16   Appendix III – Suggestions for Material Mentioned in Research.
17   Appendix VI – Types of Evaluations to Analyze Students' Abilities and Needs.

The Main Authors Consulted for Part A – At-Risk Students

4

Leclerc, Potvin and Massé (2016); Vaughn, Bos and Schumm (2007).

Global develoment in preschool

April and Charron (2012); Blair (2013); Capuano (2014); Conseil supérieur de l'éducation (2012); Desrosiers and Ducharme (2006); Duncan et al. (2007); Giasson (2011); Harms, Clifford and Cryer (2011); Institut de la statistique du Québec (2012); Johnston (2010); Lemelin and Boivin (2007); Morin and Montésinos-Gelet (2007); National Council of Teachers of Mathematics (2000); National Institute for Literacy (2008); Pagani et al., (2011); Québec (2017).

Learning

Goupil (2007); Institut national de la santé et de la recherche médicale (2007); Laplante et al. (2016); Torgesen (1999); Viau (1999).

Dropping out of school

Fortin and Potvin (2011); Janosz (2000); Janosz et al. (2007); Lessard et al. (2013); Potvin et al. (2007).

PART

B

Special Needs Students: Students with Social Maladjustments

1. **Attention deficit disorder (ADD) with or without hyperactivity**

2. **Behavioural difficulties (code 12)**

3. **Severe behavioural difficulties (code 14)**

Note: Students with ADD (attention deficit disorder) or ADHD (attention deficit /hyperactivity disorder) do not have codes. However, this does not prevent teachers from obtaining services for them according to clause 8-9.06. To obtain assistance, teachers must request services using the form agreed upon by the local union and the school board. It is important to keep an eye on the students and monitor their progress, so that the appropriate requests can be made as needed.

Requirement to prepare an Individualized Education Plan (IEP) for all students with social maladjustments

The Education Act states that these students must have Individualized Education Plans. In addition, the ad hoc committee, where needed, can request specific evaluations[18] from qualified personnel (clause 8-9.08a) par. 2)) in order to identify the students' abilities and needs and then make the necessary recommendations.

Distinction between discipline problems and behavioural difficulties

It is important to distinguish between discipline problems and behavioural difficulties. Table 1 (below) presents these distinctions. Students who are fairly well-controlled by proper supervision should not be identified as having behavioural difficulties. However, once the identification has been made, the students in question need special education services.

TABLE I – DISTINCTION BETWEEN DISCIPLINE PROBLEMS AND BEHAVIOURAL DIFFICULTIES

	Discipline Problems	Behavioural Difficulties
Duration	• A passing or episodic crisis • Isolated incident	• Persists for months (from three to six months)*
Occurrence	• Occurs in a single context (e.g. the schoolyard)	• Occurs in a variety of school and social circumstances
Frequency	• In the normal range for the student's age • From time to time	• Three to four major incidents per week • Several times a day
Seriousness	• Little harm to self or others	• Serious consequences for self and those around
Complexity	• Isolated behaviour	• Several inappropriate behaviours

* Teachers can start the process of having a student **identified** after 40 days of observation (see Part H).
Source: IMBEAULT, P. and G. DALLAIRE (1997). *Trousse intervention TAC TIC: trousse d'analyse et d'intervention comportementales*, Jonquière, Commission scolaire De La Jonquière, 440 p.

Kauffman (2006, cited in Goupil, 2007) has provided a classification model of behavioural difficulties that has become a reference in the field.[19] The criteria shown below are used to identify various behavioural difficulties ranging from ADHD to delinquency:

- Disorders related to attention, hyperactivity and impulsivity that the student cannot control (disruptive behaviours, inattention characterized by frequency, duration and intensity)
- Behavioural disorders (aggression)
- Hidden behavioural disorders (hidden antisocial behaviour)

- Anxiety and related disorders (such as eating disorders)
- Depression and suicidal behaviours
- Delinquency, substance abuse and promiscuous sexual activity

---

18   Appendix VI – Types of Evaluation to Analyze Students' Abilities and Needs.
19   The first three criteria are those of most interest to teachers.

Students with attention deficit disorder, with or without hyperactivity

1

According to the Ministry of Education (Québec, 2003: 191-192), "intervention with students exhibiting ADHD involves far greater effort as a result of the consistent and frequent interventions required." Also, "Teachers have to protect themselves: otherwise, they risk exhaustion, and their students rely on their strength to grow."

The Ministry of Education also suggests that teachers "avoid isolation by speaking with someone familiar about the problem, seeking out the support of parents and others involved, knowing their limits and **not being afraid to ask for help when they need it**."

It is also important to bear in mind that students with ADHD often experience learning difficulties as well. Massé (2006) presented a paper at the conference of the *Association québécoise pour les troubles d'apprentissage* (AQETA)[20], proposing a number of approaches to help students with ADHD become successful at school.[21]

Definition

Attention deficit/hyperactivity disorder is a neurological condition. It involves persistent patterns of inattention or hyperactivity-impulsivity that are both more frequent and more severe than is customarily observed in other young people at similar levels of development (American Psychiatric Association, 2000, cited in Québec, 2000).

Massé, Verreault and Verret (2011) identified three aspects of the disorder: inattention, impulsivity and hyperactivity.

---

20   Now known as the Institut des troubles d'apprentissage (ITA).

21   Further information can be found on Ms. Massé's website (https://oraprdnt.uqtr.uquebec.ca/pls/public/gscw031?owa_no_site=644&owa_no_fiche=29) in the Communications section (Documents liés aux conférences, Conférences AQETA et Conférence du CQJDC).

Possible manifestations of difficulties in the classroom

"It is the accumulation of trivial behaviours that are difficult to tolerate which disturbs teachers and other students in the classroom."[22] (Conseil supérieur de l'éducation, 2001; Goupil, 2007). However, it is important to remember that the problems are not caused by a lack of willpower or by spitefulness; the students simply have trouble controlling themselves.

Medication **may** have a positive impact in some cases, but it cannot be used as the only form of treatment for ADHD.

Early intervention is required with students who exhibit the following problems.

Inattention

Students may:

- be easily distracted by environmental stimuli.
- frequently daydream (internal distractibility).
- live in the present and often forget instructions that have just been given.

- have trouble working hard, sticking to a task and sustaining their attention.
- have trouble with planning (e.g. managing their timetable, bringing the right books to class) and often lose things.
- have trouble controlling their own actions.

- have trouble using the metacognitive strategies required for the task at hand.
- have trouble focusing on the teacher's explanations.
- often be unable to take notes while listening to explanations.

Impulsivity

Students may:

- make inappropriate remarks.
- interrupt other people and do not wait their turn to speak.
- work fast, at the expense of quality.

- have trouble with change and transitions.
- tend not to follow rules or instructions.

- react quickly to frustration.
- start working before the assignment has been explained properly.

Hyperactivity

Students may:

- squirm in their seat, stand up when they should be sitting, run about, climb up on things, and often speak too much (excessive agitation).

- be unable to complete their schoolwork even if they are interested in it.

- not follow rules, but not because they are defiant or unable to understand instructions.

Many students with ADHD have motor skill deficits, meaning that they have trouble with handwriting, erasing, transcribing information without making mistakes, and handing in clean copies. They may also have significant difficulties with social skills, which can sometimes lead to conflicts with other students or school staff members.

Support required from classroom teachers and other staff members

The staff members who work with these students collaborate to prepare an Individualized Education Plan (IEP) and make necessary recommendations. The plan may include educational strategies to compensate for the student's deficits, as well as techniques to help with self-control, problem-solving, attention management and social skills.

---

22   According to the Conseil supérieur de l'éducation (2001), the percentage of students with behavioural difficulties has tripled in the last fifteen years.

To support students with ADHD, teachers may choose from the following preventive interventions:

- Clear and concise instructions, repeated after five minutes (since many students have little or no sense of time).
- A system of points to reinforce each individual step in an activity, since verbal reinforcement by itself is rarely effective.
- Constant, positive interventions before resorting to clear and established consequences for the student's actions (ideally two to five positive interventions before a negative intervention).
- Daily evaluation of the positive aspects of the students' behaviour, since students may require frequent feedback to sustain their motivation.

- Consequences associated with breaking the rules (avoid discussion and negotiation, since students can quickly forget the subject of discussion. Consequences must be enforced.)
- A highly structured behaviour management system with consequences that are logical and clearly established (post rules of conduct: no more than five) at a time.
- A plan for transitions between class periods.

- Use of computer-based activities that offer immediate correction to sustain the students' motivation and attention (this should be a priority).
- Use of visual aids, such as the daily schedule, since students may have trouble situating themselves in time.
- Alternating periods of concentrated work with activities that allow students to have a break.
- Tutoring help from another student: 30 minutes, once or twice a week.
- Structured materials and specific objectives.

Other staff members may help support students with ADHD in the following ways:

- Special education staff and professional staff can provide social skills training.

- Special education staff can provide immediate help in crisis situations, and can identify a place where the student can be isolated and kept under supervision.

- Professional staff can support the student, teachers and parents, by proposing and structuring collaborative interventions with physicians and pediatric physicians. This can be done by providing information and observations on the student's behaviour in the classroom and at school in general.

All the staff members concerned must work with the student's parents to ensure that the intervention is as effective as possible.

Students with Behavioural Difficulties[23] (Code 12)

2

The obligation to create an Individualized Education Plan

For all students who are considered to have special needs, the Education Act (s. 96.14) requires the school's management, with the help of the parents, the people providing services to the students, and the students themselves (unless they are unable to do so) to create an Individualized Education Plan (IEP) adapted to their needs.

Management supervises the implementation and periodic evaluation of the Individualized Education Plan and reports regularly to the parents.

Definition from the Teachers' Collective Agreement

Students with behavioural difficulties are those for whom a psychosocial evaluation[24] reveals an important deficit in the ability to adapt, manifested by significant difficulties in interacting with one or more elements of the school, social or family environment.

Massé et al. (2006) divides students with behavioural difficulties into two groups.

Over-reactive students

Can be:

- students with a conduct disturbance (recurrent aggression)
- students with oppositional defiant disorders (defiance and aggression towards authority figures)

Under-reactive students

Can be:

- fearful students (students who hold back, do not take initiative, are excessively fearful of people and social contact, or are inclined to cling to an adult)
- depressed students (students who lack energy and motivation, for whom every challenge seems insurmountable)
- withdrawn students (students who are indifferent to their surroundings and actively avoid social situations)

---

23   See Part H for recognition of students with behavioural difficulties.

24   Evaluation performed by qualified staff using systematic observation or analysis techniques in collaboration with the people concerned.

Possible manifestations of difficulties in the classroom

Over-reactive students

These students may experience difficulties as a result of one-time causes (personal incident, family problems, substance abuse, etc.). Their difficulties may be exhibited in different ways.

Students with behavioural difficulties may:

- persist in inappropriate behaviours despite the consequences set out in the school's rules of conduct.
- refuse any reasonable supervision or norm.
- assert themselves by creating a disturbance.
- destroy material possessions.
- have serious difficulty relating to their peers.
- resort to aggressive, intimidating or destructive words and actions.
- be frequently absent from school.
- may have learning difficulties as a result of their reduced attention span.
- behave disruptively or refuse to comply with known rules.

Students with oppositional defiant disorders may:

- be easily provoked or angered.
- challenge adults.
- refuse to obey rules.
- blame others for their mistakes.
- violate other students' rights.
- be vindictive and unpleasant.
- lack many social skills.

Under-reactive students

These students may be shy, introverted or isolated. It is important to identify under-reactive students, because they can be easily overlooked.

Support required from classroom teachers and other staff members

The staff members working with these students must work together to draw up an Individualized Education Plan and make the necessary recommendations to ensure that the plan is clear. The family and school principal should also be involved in the process. Collaboration between staff members and parents is essential, to ensure that interventions are effective.

According to the *Ordre des psychologues du Québec* and the *Collège des médecins du Québec* (2001, cited in Goupil, 2007), a multidisciplinary approach should be used to monitor these students.

To support students with behavioural difficulties, teachers may choose from the following preventive interventions:

- Tasks that require the students to participate (avoid individual exercises or assignments the students may find boring).
- Learning activities that involve working with others (avoid competitive activities).
- Targeted interventions designed to foster motivation (explain how the learning is useful to them).
- Additional support with learning.
- Supervision during teaching periods (with breaks).
- Well-established classroom routines so students feel secure.
- Clear instructions for transitions between periods, to prevent students from becoming disorganized.

- Encourage a positive self-image.
- Reinforcement of learning and acceptable behaviours (do not use a scale from 1 to 3 [☺ ☺ ☹]) to evaluate behaviour, since this will automatically condemn the students to fail; instead, use a scale from 1 to 10, to give them a chance to improve their behaviour).
- Positive consequences for actions (unsystematic punishments or unwarranted punishments will become a source of conflict).
- Coaching in social skills and positive feedback when they behave appropriately.

- Classroom management consisting of clearly-established rules (no more than five or six rules).
- Observational learning (explicitly demonstrate the behaviours or procedures to be learned, and practice them with students).
- Verbal cues to analyze and resolve conflicts.
- Activities that require students to solve problems.
- A relationship of trust with students (students may resist initially, because they have often been let down by others).

To support students with behavioural difficulties, special educators, psycho-educators and psychologists may contribute in the following ways:

- Analyze risk factors that might affect the students' behaviour, and the protection factors that might have a positive impact.
- Model good behaviour.
- Give preference to systematic coaching of behavioural strategies (encourage social interactions by giving examples of non-aggressive responses).
- Implement supervision and support measures.

- Teach strategies to help students control their impulsiveness and solve problems.
- Provide occasional coaching to help develop social skills.
- Have a behaviour management system that is highly structured and involves consequences that are clear and logical.

- Offer immediate help in the event of a crisis. Royer (cited in Goupil 2007) is clear on this: "Teachers must have a safety net. There should always be someone able to intervene." (p. 195)
- Evaluate and intervene according to fields of expertise. Support teachers and students by helping students to develop appropriate behaviours that will allow them to adapt to life at school.

In the case of students with behavioural difficulties in **secondary schools, supporting teachers**[25] are also available. To help students who are having difficulties, supporting teachers may, for example, follow up with students to make sure schoolwork is complete.

Research has shown that, when integrating these students into regular classes, classes with fewer students are the best choice.

All staff members must work closely with parents and teachers to ensure that the students are able to achieve success at school.

25   Section 8.11.0 of the Provincial Collective Agreement 2015-2020 – Supporting Teachers.

Students with Severe Behavioural Difficulties[26] (Code 14)

3

Under the provisions of the Education Act (art. 235), handicapped students and students with social maladjustments or learning disabilities should not be integrated into regular classes unless the evaluation of their specific needs suggests that integration would allow for better socialization or learning and would not undermine the rights of the other students or impose excessive constraints.

This is particularly true for students with severe behavioural difficulties, since most are placed into special classes.

Despite the presence of constant support measures, these students may demonstrate intensive and frequent aggressive or destructive antisocial behaviours.

Definition from the Teachers' Collective Agreement[27]

Students whose overall functioning, through an evaluation carried out by a multidisciplinary team, including a specialist from student services, using systematic observation techniques and standardized tests, shows that the student displays:

- aggressive or destructive behaviour of an antisocial nature that has manifested itself frequently over several years;
- repetitive and persistent behaviour that significantly violates other students' rights or the social rules appropriate for an age group and which takes the form of verbal or physical aggression, irresponsible behaviour and the constant challenging of authority.

Possible manifestations of difficulties in the classroom

Students may:

- manifest numerous negative, provocative and antisocial behaviours.
- show little sense of guilt for their actions.
- not respect established rules.
- exhibit sudden mood swings.
- be often angry and resentful.
- be easily frustrated.
- not like to be told what to do.

- challenge adults and, without guidance or structure, may defy authority (frequent, persistent and obstinate refusal to follow rules).
- deliberately disturb other students.
- blame others for their mistakes.
- fight frequently.

- may act irresponsibly without guidance or structure (vandalism, substance abuse, endangering the safety of others by throwing objects).
- experience significant learning delays.
- become less and less motivated in school because of their serious difficulties.
- have an extremely low tolerance threshold for frustration.
- be often extremely impulsive.

26 See Part H for identification of students with severe behavioural difficulties.
27 Appendix XXXI - Provincial Collective Agreement 2015-2020

Support required from classroom teachers and other staff members

The staff members working with these students must work together to draw up an Individualized Education Plan and make appropriate recommendations. The family should also be involved, and it is often necessary to call upon resources from the health and social services network.

The students must receive sustained support services for several hours per day (Québec, 2007: 11).

To support students with severe behavioural difficulties, teachers may choose from the following interventions:

Careful classroom organization:

- Location of students' desks should take into account other students sitting next to them, physical distractions and space needed to move around.
- Circulation in class should be easy (nothing to step over, etc.).
- A designated space should be available to meet their emotional needs (quiet area).
- Desks may be arranged in rows or in other formations, as required.

Timetable organization and teaching strategies:

- Well-established routines and clear expectations.
- Advance notice of transitions.
- Planning or short, frequent teaching segments separated by a variety of tasks.
- Careful attention to small things that could provoke negative behaviours (hunger, fatigue, immobility, etc.).
- Highly structured activities.
- Individualization of certain objectives with frequent evaluation of progress.
- Particular attention to motivation[28], in terms of both the type of activities offered and the way the students are enabled to accomplish them.

A welcoming classroom:

- A friendly, secure and welcoming environment.
- A positive tone of voice and precise observations (avoid sarcasm).
- Attentive listening.
- A positive self-image through praise for successes in both schoolwork and behaviour.

Well-established classroom rules and expectations:

- Clearly expressed expectations.
- Student involvement in creating the classroom rules.
- Consequences (in class) for minor inappropriate behaviours.
- Consequences (outside class) for major inappropriate behaviours (shouting insults, constant defiance, aggressive or dangerous behaviour).

---

28   Authors Roch Chouinard (class management), Lyne Martin and Rolland Viau (teaching of French) can be consulted for information on motivation.

To support students with severe behavioural difficulties, psychologists, psycho-educators, social workers and special education technicians may choose from the following measures:

- Apply the same interventions as those proposed for students with behavioural difficulties.

- Ensure that a staff member is available at all times in school to take action in unexpected situations (Québec, 2007: 11). Royer (cited in Goupil 2007) is clear on this: "Teachers must have a safety net. There should always be someone able to intervene." (p. 195);

- Provide systematic supervision with methods to help students to develop relationships with peers and staff members. Staff members must evaluate and take action based on their field of expertise, to help the students develop appropriate behaviours. They must also recommend interventions and strategies to be included in the Individualized Education Plan.

It is often both appropriate and useful to involve community partner resources from the integrated health and social service centres (CISSS), if school staff members feel this is necessary. These resources may be invited to take part in the process of preparing the Individualized Education Plan, where relevant.

It is important for everyone concerned to work closely with the parents and teachers to establish and apply a crisis intervention protocol.

Special education technicians should emphasize the need to involve a psychologist, for the purpose of following-up with students.

The Main Authors Consulted for Part B – Special Needs Students: Students with Social Maladjustments

4

For ADD and ADHD

Alberta Education (2008); Goupil (2007); Massé and Verret (2015); Massé, Verreault and Verret (2011); Québec (1999, 2003 and 2007); Saint-Laurent et al. (1995); Poliquin-Verville and Royer (1992).

For behavioural difficulties

Conseil supérieur de l'éducation (2001); Goupil (2007); Massé et al. (2006); Poliquin-Verville and Royer (1992); Saint-Laurent et al. (1995).

For severe behavioural difficulties

Alberta Education (2005); Massé et al. (2006); Goupil (2007); Québec (2007); Poliquin Verville and Royer (1992).

PART

C
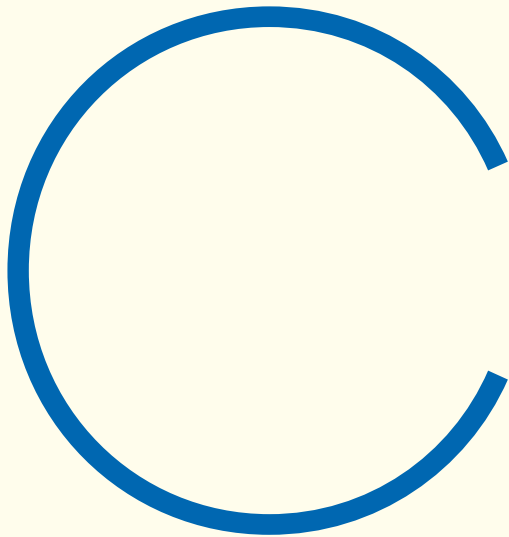
Special Needs Students: Students with Learning Difficulties

1.   Learning difficulties

2.   Learning disabilities (non-specific and specific)

3.   Mild intellectual handicaps

4.   Mild to moderate language disabilities (dysphasia)

A problem often encountered in schools

For students with learning difficulties, the Ministry of Education (Québec, 2007) originally specified that services had to be based on an analysis of the students' abilities and needs. However, it has become clear that these students are among those who receive the fewest services, on the grounds that they are not subject to formal identification. **We therefore reiterate that it is not necessary for students with learning difficulties to be diagnosed by a specialist in order to obtain services.**

Requirement to create an Individualized Education Plan for students with learning difficulties

The Education Act states that these students must have an Individualized Education Plan. In addition, the ad hoc committee may request the relevant evaluations[29] from qualified staff members (clause 8 9.09 D) 2)) if they feel it is necessary, to understand the students' abilities and needs and be in a position to make appropriate recommendations.

The difference between learning difficulties and learning disabilities

In Québec, the Ministry of Education does not specifically recognize learning disabilities; it includes them under the heading of "learning difficulties". However, these disabilities exist and should be recognized separately.

Learning difficulties result from environmental factors such as low socio-economic status, family factors such as inadequate reading habits, personal factors such as lack of motivation, or school-related factors such as the use of less effective teaching methods, as shown in Figure 1.

Learning disabilities are permanent in nature and are due to neurological damage that affect the cognitive functions involved in oral language acquisition (reception and expression) or in the learning of reading, writing or mathematics.

Classification of learning difficulties

"In short, dyslexia is a subcategory of learning disabilities, which differ from learning difficulties due to their neurodevelopmental origins." (Laplante et al., cited in Desrochers et Berger, 2011, translation from the original French)
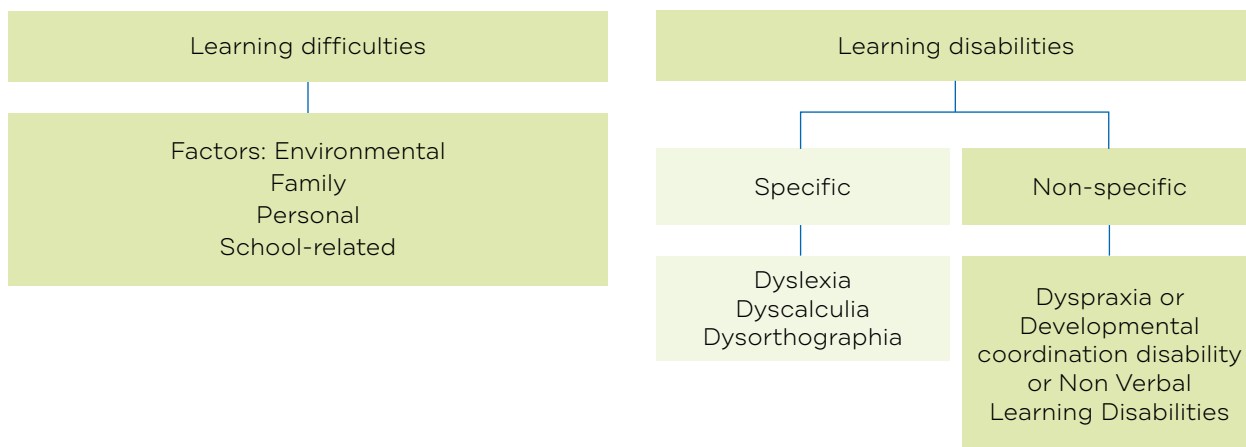
FIG. 1 – CLASSIFICATION OF LEARNING DIFFICULTIES.

---

29   Appendix VI – Types of Assessment to Analyze Students' Abilities and Needs.

Students with learning difficulties[30]

1

The standard three-tiered Response to Intervention (RTI) approach[31] is the most efficient way of identifying students with learning difficulties (Fuchs et al., 2010; Laplante et al., 2011; Desrochers and Berger, 2011).

The RTI model approach focuses on early intervention by first identifying at-risk students using a test of basic reading, writing or mathematical knowledge administered to all students (Tier 1 [T1]). Students who do not progress sufficiently well are then identified as students with learning difficulties and receive Tier 2 (T2) and Tier 3 (T3) interventions.

1.1 Definition from the Teachers' Collective Agreement[32]

Elementary level

A student is deemed to have learning difficulties when an analysis of his or her situation shows that the remedial measures, carried out by the teacher or by others involved in intervention efforts over a significant period of time, have not enabled the student to make sufficient progress in his or her learning to meet the minimum requirements for successful completion of the cycle with respect to the language of instruction or mathematics as provided for in the Québec Education program.

Since the 2011 Agreement, a student may also be identified as having learning difficulties during a cycle. Identification may take place at the end of the first year of the first cycle, if the analysis of the student's abilities and needs, carried out under the Individualized Education Plan, reveals **significant difficulties that have persisted** over time despite targeted re-educational interventions under the Québec Education Program, and it has become necessary to adapt the usual requirements for the student.[33]

Secondary level

A student is deemed to have learning difficulties when an analysis of his or her situation shows that the remedial measures, carried out by the teacher or by others involved in intervention efforts over a significant period of time, have not enabled the student to make sufficient progress in his or her learning to meet the minimum requirements for successful completion of the cycle with respect to the language of instruction **and** mathematics as provided for in the Québec Education Program.

---

30   See Part G for identification of students with learning difficulties.
31   Appendix VII – The Traditional Model and the Response to Intervention (RTI) Model.
32   These definitions are as shown in the letter of agreement of June 2011, extended in 2016.
33   Letter of Agreement of June 2011, extended in June 2016.

Possible manifestations of learning difficulties in the classroom

Students are considered to be in difficulty if they encounter the following problems in reading or writing despite support from the classroom teacher (T1) and the remedial teacher (T2).

Students may:

- experience significant problems when learning reading, writing or mathematics, despite remedial interventions (T2) during the year, in addition to interventions by the classroom teacher (T1).
- have trouble creating strategies for problem-solving, forecasting, organization of thinking, planning and self-regulation.
- not make links between prior and current learning if not explicitly taught to do so.
- have difficulty following the teacher's instructions

- (organizing materials, managing time, setting goals, using cognitive strategies and employing study techniques).
- perform assignments with difficulty because of weak comprehension skills.
- exhibit delays in learning compared to other students of their age.
- have difficulty solving problems in certain subjects.
- have trouble transferring learning to assignments.

- be poorly organized and have trouble managing tasks.
- have cognitive overload and attention problems when a large quantity of information has to be managed.
- have difficulty learning new material (organizing, analysing and summarizing it).
- have problems with motivation due to frequent failure.
- do not seem to want to cooperate or do their work properly (embarrassed due to frequent failure).

Support required from classroom teachers and other staff members

The staff members who work with these students work together to produce the Individualized Education Plan by making the necessary recommendations.

Teachers may choose from the following interventions to help support students with learning difficulties:

Reading and writing:

- Explicit instruction so that the students are able to learn the basics of reading and writing for their grade level.[34]
- Explicit instruction so that they are able to learn reading comprehension strategies.
- Explicit instruction so that they are able to learn metacognitive strategies.[35]

- Instruction on how to correct their own texts.
- Spelling taught via lists with the same rule, rather than lists on specific themes (e.g. give a series of words ending in "ent" rather than a list of Halloween-related words).

- Specific work on scholastic motivation[36] (sense of competency).
- A method to help them learn to plan and manage their timetable.
- Help with homework.

Mathematics:

- Explicit instruction to help them learn concepts.
- Materials that they can manipulate manually.

- Reviews skills before learning new concepts.
- A problem-solving process.

- Use of mathematics activities that the students find motivating.

---

34   Appendix VIII – What Can be Done for Grade One and Grade Two Students to Promote Success in Reading and Writing.
35   Appendix V – Cognitive and Metacognitive Strategies.
36   See Rolland Viau and Sylvie C. Cartier on scholastic motivation.

Remedial teachers may choose from the following interventions to help support students with learning difficulties:

- Remedial evaluation of specific (decoding) and non-specific (comprehension) reading processes to target any difficulties.

- Remedial interventions for the difficulties identified in reading and writing processes: 30 minutes per day, four days per week[37] in small groups of students, with progress tracked weekly.

- Remedial interventions in mathematics, on the concepts that have not been understood.

Other staff members may help support students with learning difficulties in the following ways:

- Special education technicians can repeat the teacher's instructions to ensure that students have understood. They may also help students to start working on a task or apply previously taught strategies to perform a task, and help students to use the tools provided (e.g. checklist, list of instructions, agenda, etc.).

- Speech therapists can assess students with oral language difficulties.

- Psychologists can perform standardized assessments to help understand the student's resources and work with the teacher to identify potential adaptations or strategies that will encourage the student to participate and learn in the classroom.

- Psychologists, working with psycho-educators or supporting teachers, can help to identify organization, metacognitive or cognitive remediation techniques that may help support the student's executive functions.

---

37   Appendix VII – The Taditional Model and the Response to Intervention (RTI) Model.

Students with learning disabilities

2

Learning disabilities are divided into two categories:

- Specific disabilities such as dyslexia, dysorthographia and dyscalculia
- Non-specific disabilities such as dyspraxia (Developmental coordination difficulty) or Nonverbal Learning Disorder (NVLD)

Requirement to obtain an Individualized Education Plan for students with learning difficulties

The Education Act states these students must have an Individualized Education Plan. In addition, the Ad Hoc Committee may request the relevant assessments[38] from qualified staff (clause 8 9.08 A) ii) if they feel this will help them understand the students' abilities and needs, and then make the necessary recommendations.

Identifying students with learning disabilities

According to Vaughn, Fuchs and Fletcher (cited in Institut national de la santé et de la recherche médicale, 2007), the term *learning disabilities* should not be assigned solely on the basis of test results, but should be reserved for students whose disabilities do not respond to pedagogical interventions.

The standard three-tiered Response to Intervention (RTI) approach[39] is the most efficient way of identifying students with learning disabilities (Fletcher, 2008; Fuchs, 2010; Laplante, 2011). Students are identified as having learning disabilities if they still have trouble learning in spite of pedagogical and remedial interventions, once difficulties due to environmental, family or personal factors have been eliminated.

If the students do not all exhibit the same difficulty profile, a multi-disciplinary evaluation is required for each individual student. Several evaluations may be requested: a remedial evaluation to identify reading and writing processes that require work, a psychological evaluation to see whether the student has problems with working memory, for example, a speech evaluation to identify language problems, and a neuropsychological evaluation of executive functions. The results of these evaluations can be used to build the pedagogical interventions required to address the student's needs.

---

38   Appendix VI – Types of Evaluation to Analyze Students' abilities and Needs.

39   Appendix VII – The Traditional Model and the Response to Intervention (RTI) Model.

Definition of learning disabilities according to the Learning Disabilities Association of Canada (2015)

Learning disabilities refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning […].

[They] result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing; phonological processing; visual spatial processing; processing speed; memory and attention; and executive functions (e.g. planning and decision-making).

Learning disabilities may interfere with (ACTA, 2015):

- acquisition and use of oral language (listening, speaking, understanding)
- learning to read: identifying and understanding words (decoding, instant word recognition)
- learning to write (e.g. spelling and written expression);
- learning mathematics (e.g. computation, logical reasoning and problem solving).

2.1 Specific learning disabilities

The fact that education can help change the brain activation pattern certainly provides fuel for the debate on the identification of dyslexia. Research has shown, more than ever before, the importance of considering the standardized three-tier Response to Intervention (RTI) approach when identifying the presence of learning disabilities (Institut national de la santé et de la recherche médicale, 2007; Royal Society, 2011; Laplante et al., 2011).

The fact that a student has problems with reading does not mean that he or she is dyslexic. Dyslexia is only identified in cases where there is a severe delay in reading, once other potential causes of failure have been identified (Sprenger Charolles and Colé, 2013). However, if the student exhibits the problems listed in section 2.1.1, he or she may be dyslexic, and the ad hoc committee must request a multi-disciplinary assessment.

2.1.1 Dyslexia-dysorthographia

Definition

Dyslexia dysorthographia is a specific learning disability of neurodevelopmental origin. It is characterized by problems with spelling and accurate, fluid identification of written words. These problems lead to a deficit in the phonological component of language that **is often unexpected** because of the student's other cognitive skills and the instruction he or she has received (Laplante et al., 2011; Sprenger Charolles and Colé, 2013).

Possible manifestations of dyslexia-dysorthographia difficulties in the classroom

Students may:

- only have problems in subjects that require reading or writing skills.
- have difficulty decoding text, read more slowly than normal, and exhibit paralexia (typical mistakes by dyslexic students: substitution, displacement, addition or omission of phonemes).
- have trouble learning the correspondences between graphemes and phonemes.
- have trouble reading certain types of words, even when they have studied them.
- have trouble understanding what they read and writing texts, due to specific processes.[40]
- have trouble with spelling, commit paragraphias (typical mistakes made by these students: substitution, displacement, addition or omission of graphemes).
- have trouble solving written problems, even though they understand the mathematical concepts concerned.
- understand better orally. A particular statement will be understood more clearly if it is expressed orally rather than in writing.
- learn well when the teachers use methods other than writing.

---

40   Everything relating to grapheme/phoneme or phoneme/grapheme correspondences (in writing).

Support required from classroom teachers, remedial teachers and other staff members

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

Students with dyslexia-dysorthographia difficulties will not all have the same difficulty profile. A multidisciplinary assessment is needed for each student to ascertain which reading and writing processes require attention (orthopedagogue) and any other difficulties the student may have (speech therapist or psychologist), to implement the necessary interventions.

Classroom teachers may choose from the following interventions to support students with Dyslexia-dysorthographia:

- Review prior knowledge of the strategies used to identify and spell words.
- Underline words that are difficult to read, and read the words to them.
- Limit the number of words that must be identified or spelled, especially for students with significant delays.
- Provide assistance when the student reads or spells certain words, using existing knowledge and learned strategies.
- If the student cannot succeed alone (independent practice), model all or part of the procedure.

- Allow more time for activities involving reading.
- For tests in subjects other than reading, provide the student with an auditory version of the test (recording, reading by a classmate, etc.).
- Allow the student to use an electronic dictionary.
- Encourage the student to produce plans in diagram form.
- Ask the student to underline words that are difficult to spell, and write them for him or her.
- Allow the student to write only parts of the text (teamwork, speech to text support).

- Have spelling expectations be considered during revision, so that the student can concentrate on the quality of the text first.
- Give priority to phonetic spelling, especially for words/sounds on which the student has worked with the remedial teacher.
- Use technology aids where necessary.

Note: Never ask a student to read out loud to other students, unless he or she explicitly asks to do so.

Remedial teachers may choose from the following interventions to help support students with Dyslexia-dysorthographia:

- Assess reading and writing skills to identify processes that are impaired.
- Build targeted, intensive remedial interventions to address these problems.

- Target words containing specific spelling regularities or rules when planning interventions.
- Limit the number of words studied, and gradually increase the requirements.

- Work with students to review strategies used to identify or spell certain words, to see how effective the strategies were and identify any adjustments that may be needed.
- Use technology aids where necessary.

Other staff members may help support students with Dyslexia-dysorthographia in the following ways:

Speech therapists can assess students' oral language to see if the difficulties have persisted. Psychologists can assess cognitive functions. Both can implement remedial measures.

2.1.2 Dyscalculia

Definition

Dyscalculia is a specific disability of neurodevelopmental origin, which emerges in the early years of a student's development. It is manifested through an inadequate understanding of the principles governing numbering and is distinguished by an inability to memorize and learn the multiplication and addition tables. In short, it is a disability that refers specifically to numbers and calculations (*Institut national de la santé et de la recherche médicale*, 2007).

Possible manifestations of Dyscalculia difficulties in the classroom

Students may:

- have trouble memorizing the multiplication and addition tables.
- have trouble counting even small numbers of objects.
- have trouble distinguishing and understanding the mathematical symbols (e.g. smaller than).
- have trouble reading and writing numbers.
- have difficulty completing simple additions.
- have difficulty completing oral mathematical exercises.
- have trouble solving problems with several steps.

Support needed from classroom teachers, remedial teachers and other staff members

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

Not all students present the same dyscalculia difficulty profile. A multidisciplinary evaluation is needed for each student to ascertain which mathematical processes require attention (orthopedagogue) and any other difficulties the student may have (speech therapist or psychologist), to implement the necessary interventions.

Note: Very little research has been done on the impacts of interventions to improve the arithmetic performance of dyscalculic students.

Remedial/resource teachers may choose from the following interventions to support students with Dyscalculia:

- Give individual help to solve mathematical problems.
- Explain the meaning of the mathematical symbols (+, ×, -, ÷).
- Show students how to learn the multiplication and addition tables using images, instead of memorizing them through repetition.[41]
- Use a colour code to differentiate between units, tens, hundreds and so on.
- Help the students understand the meaning and purpose of counting by making connections between symbols and quantities.
- Provide explicit instruction with lots of models and guided practice.

Remedial teachers may choose from the following interventions to help support students with Dyscalculia:

- Assess the students' reading, writing or mathematics skills to identify any defective processes.
- Build targeted, intensive remedial interventions to address these problems.
- Offer several sessions of more explicit instruction with models, and several sessions of directed practice.
- Provide a procedure or set of rules to be followed in calculations or problem solving.
- Explain the meaning and purpose of counting by making connections between number symbols and quantities.

Other staff members may help support students with Dyscalculia in the following ways:

- Special education technicians can also help students with specific aspects of the Individualized Education Plan, based on the evaluation of the students' abilities and needs.
- Psychologists and neuropsychologists can evaluate students attention functions, cognitive profile, working memory and visuospatial abilities.
- Speech therapists can evaluate oral language.

---

41 *Mémoriser comme un champion* (http://multimalin.com) appears to be an interesting way of learning multiplication and addition tables.

2.2   Non-specific learning disabilities

2.2.1   Dyspraxia or developmental coordination disorder

Students with developmental coordination disorder (dyspraxia) must invest a significant cognitive effort in order to write, meaning that they tire easily. In addition, these students do not learn by writing, so it is important not to ask them to learn words by copying them.

Definition

Dyspraxia, known since 2018 as developmental coordination disorder, is a learning disability of neurodevelopmental origin. It is characterized by poor performance in activities requiring motor coordination, compared to that expected of other students of the same age and intelligence level. Dyspraxia affects everyday life and performance at school (Institut national de la santé et de la recherche médicale, 2007).

Possible manifestations of problems in the classroom

In everyday activities

Students may:

- have problems at mealtimes (holding a glass of water without spilling it, cutting up meat).
- not control their own trajectory (bumping into students who walk in front of them).
- have trouble getting dressed (lacing shoes, buttoning a coat, closing a zip).
- learn how to do things later than other children of their age (e.g. cycling, swimming).
- not hear an instruction while doing an activity that requires motor coordination, since the activity takes up all their attention (if the teacher gives an instruction while the student is buttoning his or her coat, the student will not understand the instruction).

Writing

Students may:

- have trouble forming letters.
- inverse certain letters (*b / d*).
- not write within the lines.
- write very slowly.
- leave a lot of space between letters in words.
- make a lot of spelling mistakes because they focus on the act of writing, not because they have trouble with the spelling itself.

Reading

Students may:

- decode well, but not read fluidly because they tire quickly.
- skip lines when reading, because their eyes become tired.

Mathematics

Students may:

- not see geometric figures (e.g. a circle inside a square); they only see a series of lines.
- have trouble counting a set (scanning the elements one after the other, pointing at all the objects individually, without omitting any).
- have trouble handling measurement tools such as a ruler, compass or pencil.
- not carry numbers forward in calculations, even if they understand the notion of tens and hundreds, because they do not perceive the space.

Geography (Social Universe)

Students may have trouble with visuospatial processing, meaning that they are unable to read a geographical map.

Support needed from classroom teachers, remedial teachers and other staff members

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

Very little research has been done on the subject of dyspraxia. According to the Institut national de la santé et de la recherche médicale (2007), there appear to be roughly 16,000 studies of autism, but only 328 of dyspraxia. Obviously, the more research that is done, the better our knowledge of the subject will be.

Classroom teachers may choose from the following interventions to support students with Dyspraxia or developmental coordination disorder:

- Help students to get dressed during the early years of elementary school.
- Leave space between the lines of texts that students must read.
- Use semantic (oral) as opposed to visual learning methods subjects (e.g. tell them that Québec City is located east of Montreal, rather than showing them on a map, or tell them that the shape is a triangle, rather than asking them to draw it).
- Be willing to skip visuospatial steps that are unrealistic because of the handicap. For example, do not make students perform additions with carry-overs. Show them how to do line additions, or give them a table with different colours for ones, tens and hundreds.
- Use highlighters to help students count (highlight the elements that have already been counted).
- Play audio recordings of reading texts to compensate for cognitive fatigue.
- Sit next to students and help them organize their work.
- Ask them to work on a computer instead of writing by hand.

In Geometry: GeoGebra materials are easier for these students (see Figure 2). They can be used online: http://www.geogebra.org.
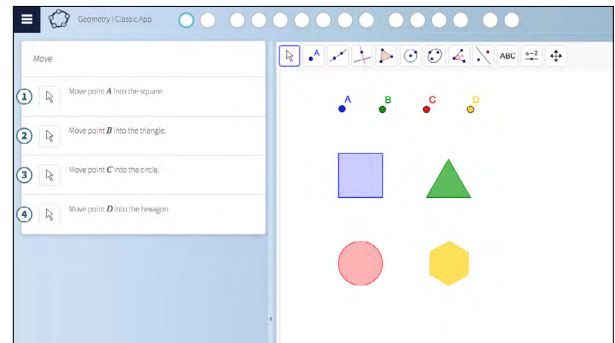
FIGURE 2 – AN EXAMPLE OF GEOGEBRA MATERIAL.

Remedial/resource teachers may choose from the following interventions to help support students with Dyspraxia or developmental coordination disorder:

- Explicit instructions for specific course content or procedural techniques.
- Orthopedagogical interventions focusing on oral as opposed to written methods.
- Mathematics interventions focusing on mental arithmetic instead of calculation.

Other staff members may help support students with Dyspraxia or developmental coordination disorder in the following ways:

- Special education technicians can adapt material by leaving space on the page to limit the amount of information shown, or by repeating the words of a dictation at a pace more suited to the students' abilities. They may also help the classroom teacher to dress students for physical education classes and outdoor recreation, or when it is time to go home.
- Occupational Therapist can evaluate the students' psychomotor abilities and work on their motor coordination to lessen the cognitive effort required.
- School psychologists can help establish the students' cognitive and attention-related profiles, and where necessary, refer them to a neuropsychologist for an evaluation of their executive functions.
- The neuropsychologist evaluates the students' executive functions.

2.2.2   Nonverbal Learning Disorder (NVLD)

Symptoms of this disability can be seen when students are in kindergarten, but it is not diagnosed until they start school.

Definition

Nonverbal Learning Disorder is a learning disability of neurodevelopmental origin, caused by anomalies of the white matter in the right hemisphere of the brain. It is characterized by neurocognitive disabilities affecting perception, analysis, memory, understanding, organization and use of verbal and non-verbal information (Poirier and Gaucher, 2009).

Possible manifestations of Nonverbal Learning Disorder in the classroom

In everyday activities

Students may:

- have trouble buttoning their coats and tying their shoes.
- have trouble learning to ride a bicycle or performing gymnastics.
- not seem to understand social conventions or codes of conduct.
- have trouble with social skills.

In communicating

Students may:

- have trouble understanding humour, sarcasm, shades of expression, metaphors, innuendos and verbal expressions.
- lack intonation when speaking.

In school activities

Students may:

- have trouble applying what they have learned to other situations.
- be very good at remembering things by rote, especially in response to auditory stimulation.
- need to ask a lot of questions in order to learn.
- need to talk to themselves when manipulating objects, because they learn more easily through language than by touching or observing.
- have less efficient visual memory than their auditory and verbal memory.
- have trouble seeing important details of an image, finding their way in a new place and following a road map.
- have trouble paying attention as they can be easily distracted by their environment, and this can cause them to miss vital information.
- be very interested in computers.

In English and Mathematics

Students may:

- have more trouble with mathematics than with English, especially when procedures are involved.
- understand more easily by decoding a text, rather than by reading it.

In handwriting

Students may:

- write slowly and with difficulty in the early years of school.
- have trouble copying things that are written on the board.
- have trouble using scissors and holding a pencil properly (they press too hard on their pencil when writing).
- have trouble laying out their text on the page.

Support needed from classroom teachers, remedial teachers and other staff members:

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

Classroom teachers may choose from the following interventions to support students with Nonverbal Learning Disorder:

- Use verbal as opposed to visual or manipulation strategies in learning.
- Use concrete terms, because students may not understand abstract concepts.

- Connect new learning to prior learning.
- Use explicit instruction to convey knowledge and teach learning strategies.
- Teach metacognitive strategies.

- Give frequent feedback.
- Establish routines, since some students may have trouble accepting change.
- Use tutoring to support learning.

Remedial/resource teachers may choose from the following interventions to help support students with Nonverbal Learning Disorder:

- Use explicit instruction to teach strategies, especially those required for reading comprehension.

- Number the steps of a process and divide tasks into several different parts.
- Teach self-control to help with lack of attention.

- Use explicit instruction to teach mathematics procedures.
- Use colour references and verbal methods to read numbers (258 ≠ 852).

Other staff members may help support students with Nonverbal Learning Disorder in the following ways:

- Special education technicians can help students to improve their relationships with others and develop social skills. They can show students how to interpret non-verbal indicators such as facial expressions and gestures.
- Psycho-educators can help students to maximize their adaptive abilities by using methods and strategies from their field of expertise.

- School psychologists can help to establish the cognitive and attention-related profiles of the students, and where necessary, refer them to the neuropsychologist for an assessment of their executive functions.
- Occupational therapists can evaluate and work on the students' psychomotor skills, and can offer sensory integration therapy to normalize sensory overload reactions.

- Neuropsychologists can evaluate the students' cognitive functions.

Students with
mild intellectual handicaps

<div style="text-align:right">

3

</div>

According to the Learning Disabilities Association of Canada,
a mild intellectual handicap differs from a learning disability
in that students with mild impairments do not have the intellectual
abilities required for thinking and reasoning.

However, we have chosen to include them in the category of "learning difficulties", since this is what the Ministry of Education does.

Definition[42]

Students with mild intellectual handicaps are those whose cognitive functions, evaluated using standardized tests administered by qualified personnel (in a school setting, this is usually a psychologist or, occasionally, a guidance counsellor), show a level of general functioning that is clearly below average, as well as impaired adaptive fonctionning appearing gradually during the period of development.

Possible manifestations of difficulties in the classroom

Students exhibit a level of cognitive functioning below that which is normal for their age.

Students may:

- have trouble establishing links between information, prior experience and the targeted learning objective.

- have problems with abstraction and conceptualization.

- have difficulty organizing information without help.

- have problems communicating and socializing in a way that is appropriate to their chronological age.

- have trouble understanding logical relationships (analysis).

- have difficulty seeing other peoples' points of view.

- have difficulty anticipating the future (planning).

- have difficulty dealing with more than one thing at a time.

- have difficulty understanding abstract dimensions (abstraction).

- have difficulty transferring and generalizing what they have learned.

---

42   Taken from Goupil (2007) and translated from the original French.

Support from the classroom teacher, remedial teacher and other staff members

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

They must work jointly with parents to help students achieve success at school.

Classroom teachers may choose from the following interventions to support students with mild intellectual handicaps:

- Modelling to show the different steps in order to understand how to acquire proper social skills (e.g. for teamwork).
- Modelling and lots of directed practice before students work independently.
- Accompaniment (verbal mediation, metacognitive questioning) to establish connections between the things that have been learned and to create categories.
- Frequent opportunities for practice and coaching, to solidify learning.
- Learning strategies for acquiring knowledge and concepts and for developing skills, attitudes and competencies.
- Explicit instruction of strategies, for both academic and social learning (because students may have limited strategies).
- Concrete materials to support the construction of meaning, to facilitate understanding, to establish connections, and to encourage the learning of new concepts.

- Help in the construction of meaning and understanding (consistent use of concrete reasoning).
- Choices for students, so that they can develop the ability to make decisions (choice of workshops, materials, assignments with the same objective).
- Use of hands-on materials for all subjects, combined with verbal mediation to support the construction of meaning.
- Assignment of tasks to be performed in stages (suggest a process to accomplish the task).
- Visual aids (objects, pictograms, illustrations, symbols, etc.), information technologies (IT), illustrated books.

Remedial/resource teachers may choose from the following interventions to help support students with mild intellectual handicaps:

- Explicit teaching of knowledge and strategies for reading and writing.
- Explicit teaching of procedures for English and Mathematics.

Other staff members may help support students with mild intellectual handicaps in the following ways:

- Psychologists can evaluate cognitive functions in order to understand the students' abilities and adaptive resources, and identify the skills that must be maintained. They may also assist the school team with the identification of support measures.
- Special education personnel can help students adapt to tasks by simplifying them or making them more complex, and by adapting the materials to be used.

Students with mild to moderate dysphasia

4

Students with mild to moderate dysphasia are included under this heading because they are considered to have learning difficulties in the Teachers' Collective Agreement and according to the Ministry of Education.

Like the Ministry of Education, the Learning Disabilities Association of Canada (2015) states that learning disabilities affect oral language acquisition and use (reception and expression). In addition, these students are often abandoned by the education system.

It is suggested that teachers refer to the comments on students with severe dysphasia (code 34) in Part D. While their condition is less severe, the manifestations and needs are similar, even though each student's situation is unique.

The Main Authors Consulted for Part C – Special Needs Students: Students with Learning Difficulties

5

Learning difficulties

Giasson (2011); Goupil (2007); Institut national de la santé et de la recherche médicale (2007).

Learning disabilities

Learning Disabilities Association of Canada (2005 and 2015).

Dyslexia-dysorthographia

Desrochers (2016); Desrochers and Berger (2011); Écalle and Magnan (2015); Fuchs et al. (2010); Fletcher (2008); Laplante et al. (2010, 2011, 2013 and 2016); Royal Society (2011); Sprenger-Charolles and Colé (2013).

Dyscalculia

Institut national de la santé et de la recherche médicale (2007 and 2014).

Dyspraxia

Institut national de la santé et de la recherche médicale (2012 and 2014).

Nonverbal Learning Disorder (NVLD)

Poirier and Gaucher (2009); Rourke (1989).

Mild intellectual handicaps

Dunberry and Dumas (2008); Goupil (2007).

PART

D
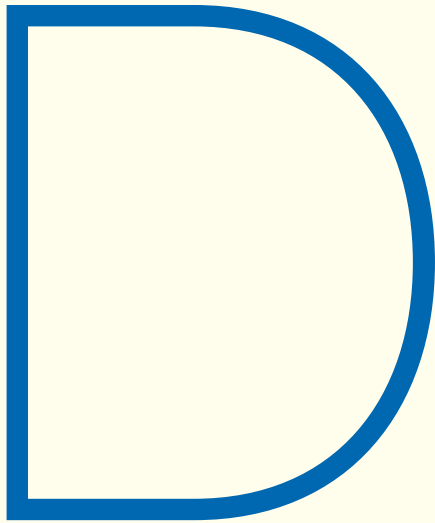
Special Needs Students: Students with Handicaps

1. **Language disorders (code 34)**

2. **Autism Spectrum Disorder (code 50)**

3. **Moderate to severe intellectual handicaps (code 24)**

4. **Psychopathological disorders (code 53)**

Requirement to establish an Individualized Education Plan for students with handicaps

The Education Act (s. 96.14) requires school administrations to create an Individualized Education Plan for students with special needs. Please refer to Part I of the Referential for information on how to request identification of students with handicaps.

Note: Although students with sensory and physical impairments have difficulty codes (33, 36, 42 and 44), they are not included in this Referential because it is easier to identify their needs. Students with profound intellectual impairments (code 23) are placed in special classes.
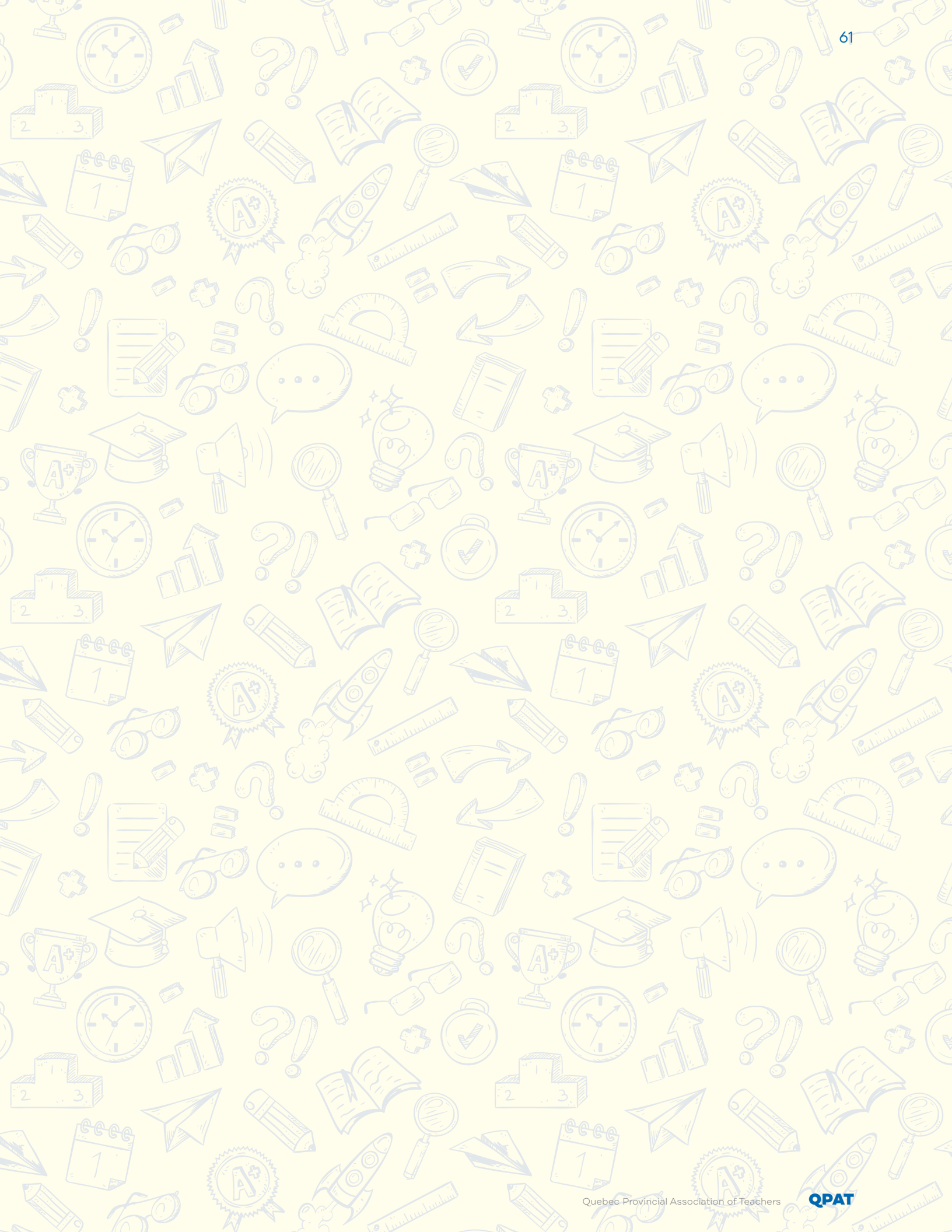
Students with language disorders (code 34)[43]

1

Problems with language arise when language does not develop in harmony with cognition (Godard, 2007). While these students have normal intelligence, language interferes with their ability to achieve their full potential. It is therefore important to ensure that they have a clear understanding of concepts and instructions.

Dysphasia (also known as language delay or primary language disorder) is the disorder most often mentioned in cases involving severe and persistent language development problems. It significantly limits verbal interactions. We chose Rapin and Allen (1996) to illustrate the five different syndromes, with the aim of understanding and better intervening with students with language disorders.

1.1 Classification of Dysphasia syndromes

Phonological-syntactic disorder (most common)

- Moderate comprehension difficulties
- Significant phonological difficulties
- Incorrect syntax
- Evocation difficulties (lack of words)

---

43   To be identified as having a language disability, a student must have been diagnosed with severe dysphasia.
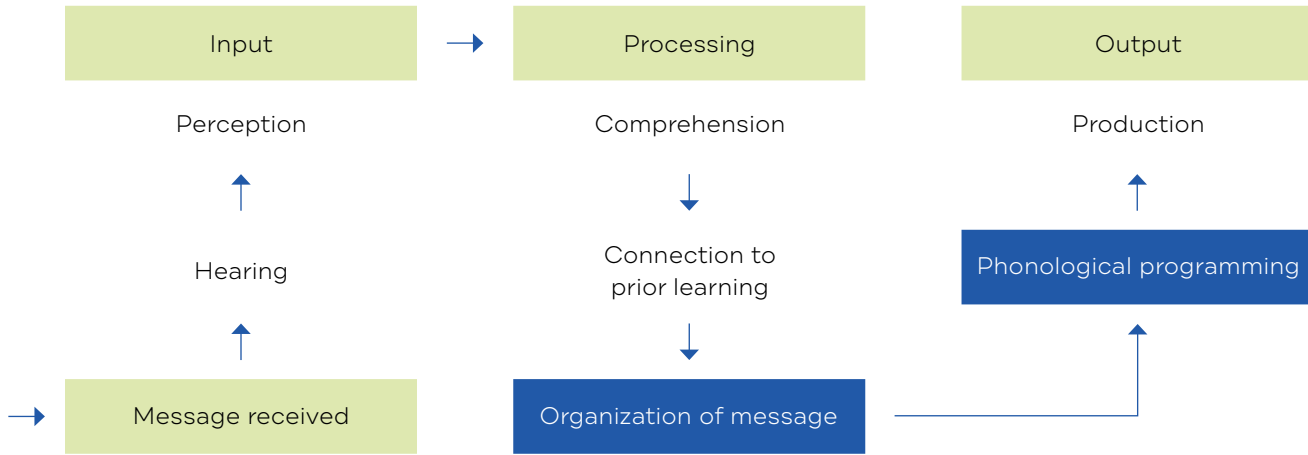
FIGURE 3 – VERBAL COMMUNICATION CHAIN – PHONOLOGICAL-SYNTACTIC DISORDER.

Based on Fortin (1992).
Note: The impairment is determined by the elements highlighted in **blue**.

Semantic-pragmatic disorder

Severe comprehension difficulties

- Attention deficit
- Very good memory
- Ignores speaking slots (pragmatic)
- Adequate phonology
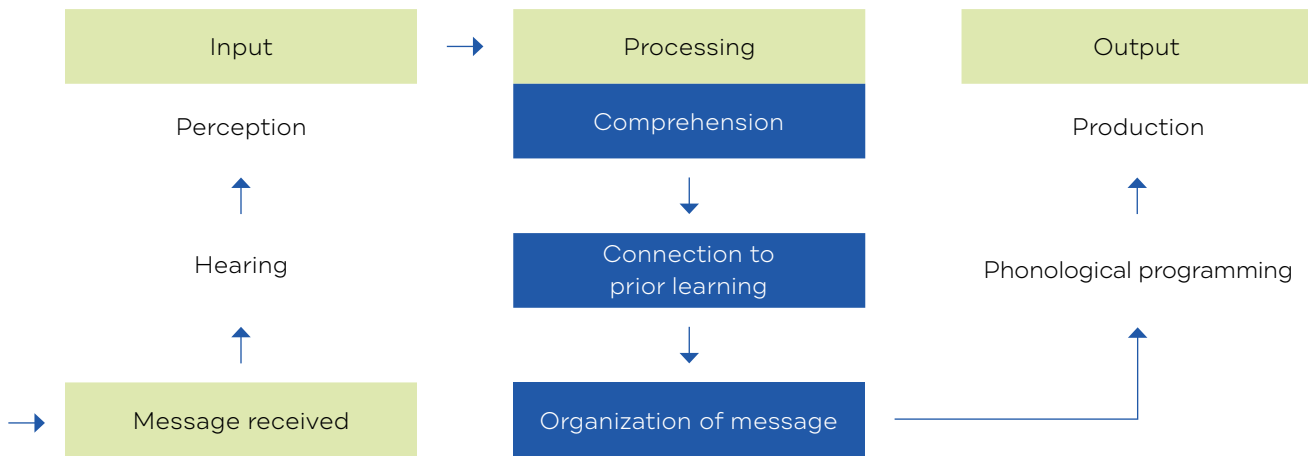
FIGURE 4 – VERBAL COMMUNICATION CHAIN – SEMANTIC-PRAGMATIC DISORDER.

Based on Fortin, 1992.
Note: The impairment is determined by the elements highlighted in **blue**.

Verbal Dyspraxia

- Reduced phrasing
- Normal comprehension (correct references)
- Poor auditory memory
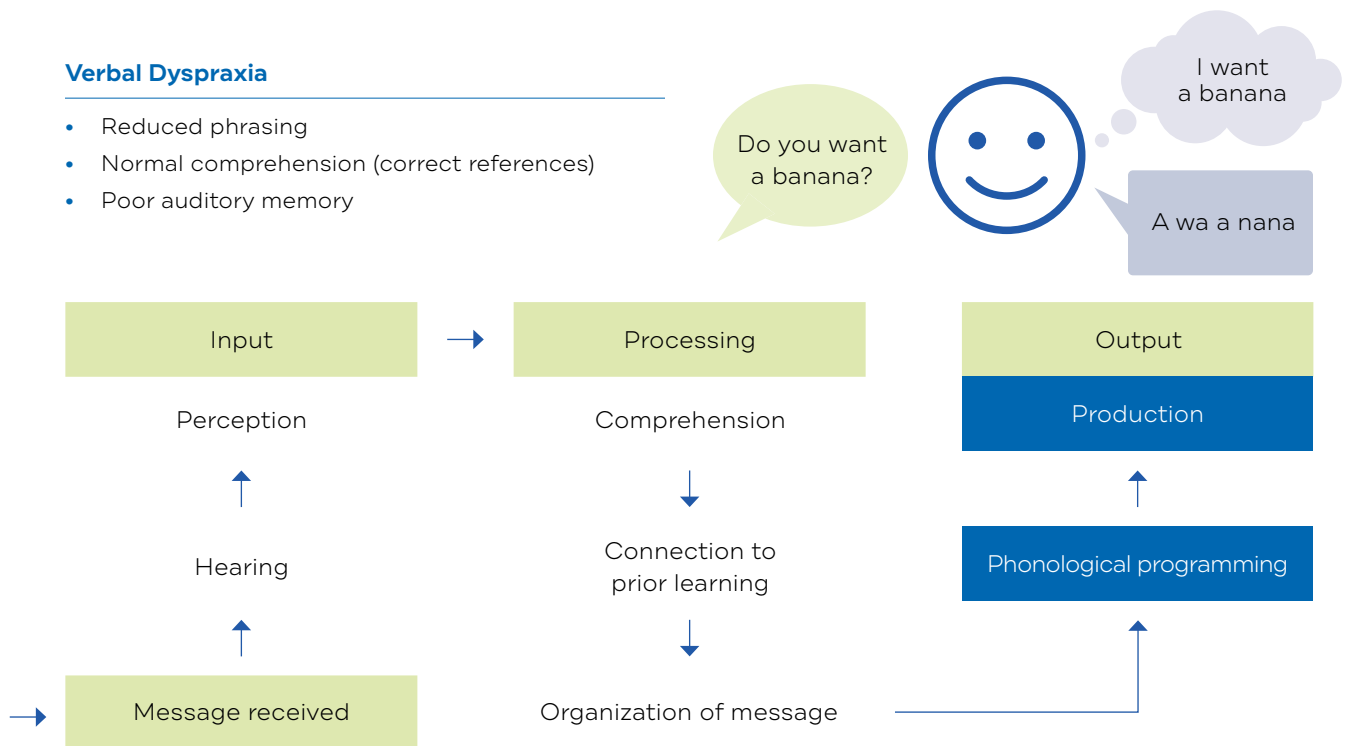
FIGURE 5 – VERBAL COMMUNICATION CHAIN – VERBAL DYSPRAXIA.

Based on Fortin, 1992.
Note: The impairment is determined by the elements highlighted in **blue**.

Lexical-syntactic disorder

- Good understanding of simple sentences
- Poor syntax
- Impoverished vocabulary
- Correct phonology
- Lack of words
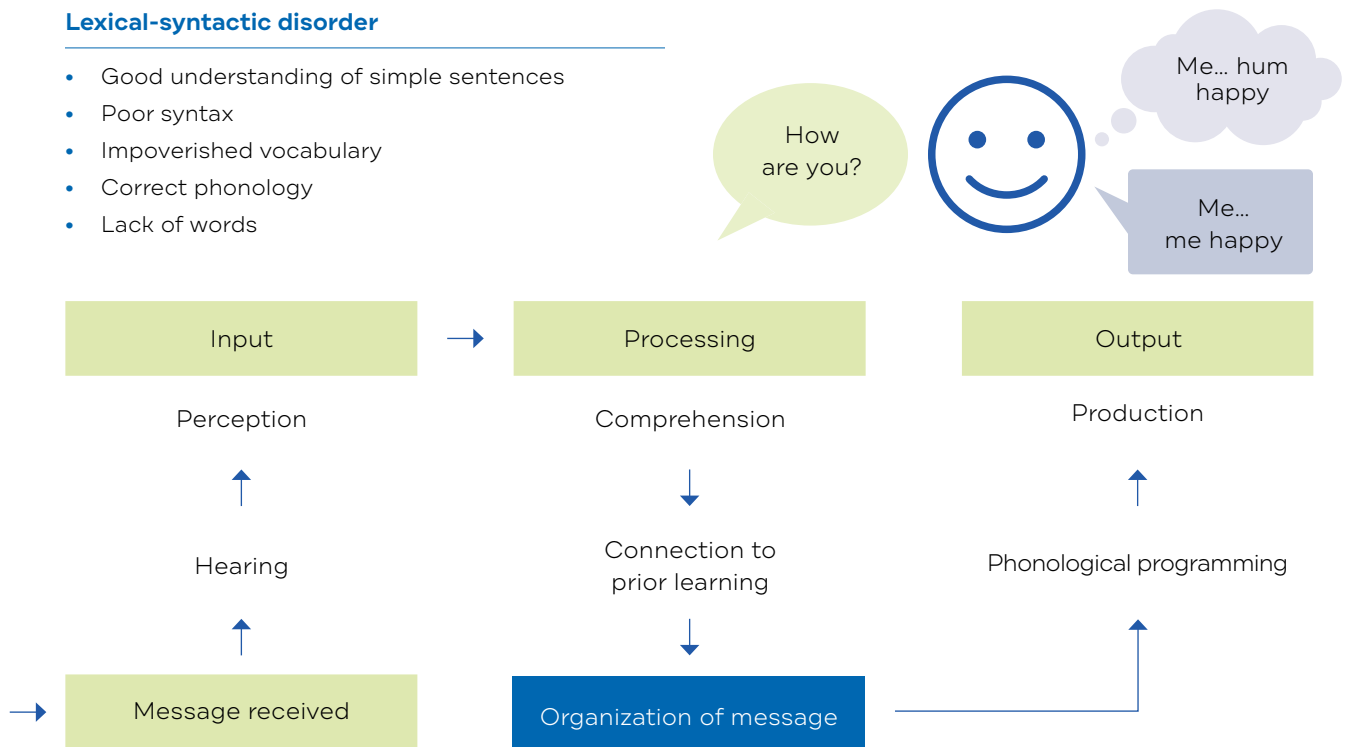
FIGURE 6 – VERBAL COMMUNICATION CHAIN – LEXICAL-SYNTACTIC DISORDER.

Based on Fortin, 1992.
Note: The impairment is determined by the elements highlighted in **blue**.

Verbal auditory agnosia

- Behaves like a hearing impaired child
- Unable to understand sounds
- Uses visual methods and gestures
- Behavioural difficulties
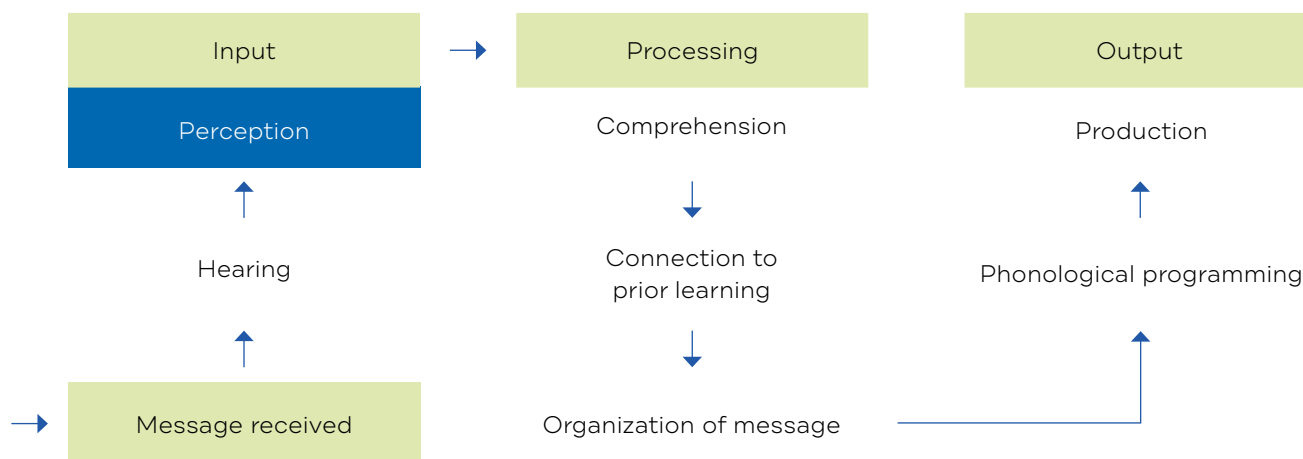
FIGURE 7 – VERBAL COMMUNICATION CHAIN – VERBAL AUDITORY AGNOSIA.

Based on Fortin, 1992.
Note: The impairment is determined by the elements highlighted in **blue**.

1.2   Definition from the Teachers' Collective Agreement[44]

Students with language disorders are students whose overall functioning, through an evaluation carried out by a multidisciplinary team of specialists using systematic observation techniques and appropriate tests, leads to a diagnosis of severe dysphasia.

Students receive a diagnosis of severe dysphasia if they have a serious and persistent language development disorder significantly limiting verbal interactions, socialization and learning at school.

Students are considered handicapped when an evaluation of their functioning indicates:

- major difficulties in the areas of language development, verbal expression and cognitive verbal functions
- moderate to severe difficulties in the area of verbal comprehension.

The persistence and severity of the disorder is such that it prevents the student from carrying out school tasks normally suggested to students of the same age. Therefore, the student requires complementary services and an adapted pedagogy.

However, students may, in the course of their development, acquire adequate language abilities or adaptation strategies. In this case, the students profile may no longer meet the criteria and they will lose their status and not be recognized as a student with a handicap, based on the conditions required by the Ministry of Education.

---

44   Appendix XXXI of the 2015-2020 Teachers' Collective Agreement.

Definition of the *Association québécoise des orthophonistes et audiologistes*[45]

Dysphasia is a fundamental language disorder relating to the expressive or both the expressive and receptive spheres, indicated by variable impairments affecting the development of more than one language component: phonology, morphology, syntax, semantics and pragmatics.

Dysphasia can be distinguished from language delay mainly by the specific and persistent nature of the disorder.

Possible manifestations of difficulties in the classroom

These students have noticeable difficulties in the expression and understanding of sentences, both spoken and written.

Phonological aspects

- They have trouble using normally acquired phonemes (e.g. "a ca ets mice" for "a cat eats mice").

- They have trouble decoding, read more slowly than normal, and commit paralexias (substitutions, displacements, additions or omissions of phonemes).

- They have trouble with spelling, commit paragraphias (e.g. substitutions, displacements, additions or omissions of graphemes) because of their language disability.

Morphosyntactical aspects

Students may:

- have trouble using verb tenses (using the infinitive for a conjugated verb) and understanding the temporal aspect of verb forms (past, present and future do not mean anything to them).

- have trouble understanding complex sentence structures.
- omit pronouns or use the wrong ones (e.g. my father likes her car).

- have trouble forming sentences composed of a subject, predicate and complement.
- omit words such as determinants, prepositions and conjunctions.

Semantic and lexical aspects

Students may:

- have limited and imprecise vocabulary that is not structured into semantic categories (e.g. "A cube is square, a ball is …" Answer: "Like this" and the student forms a circle with his or her hands. Or: "I say apple, pear. What do you say next?" Answer: "It's good.").

- have trouble with evocation (choosing the right word).
- have trouble making connections or differentiating between synonyms and antonyms.

- have trouble understanding concepts relating to space (around), quantities (half), time (soon) and duration (until).
- have trouble understanding questions such as Who? and When?
- have trouble understanding verbal explanations of a task.

Pragmatic aspects

Students may:

- have trouble waiting their turn to speak.
- have trouble remaining on subject.
- be unable to decode the non-verbal reactions of those they are communicating with.

- have trouble interacting with others.
- not react to requests for clarification from those they are communicating with.

- have trouble establishing causal links between the ideas and events of a narrative.
- have trouble understanding the structure and basic elements of a narrative.

---

45   http://aqoa.qc.ca.

Behavioural aspects

Students may:

- have trouble with behaviour and relationships as a result of not understanding and not being understood.
- not answer questions appropriately.

- have trouble understanding and following verbal instructions.
- display a certain behavioural rigidity.
- attempt to communicate despite their difficulties.

- be very independent once they understand what to do.
- not understand instructions given to the group.
- remember only the last instruction given.

General learning aspects

- All the difficulties listed above have an impact on reading comprehension (syntactical analysis, subordinators and coordinators, and even word identification).

- Students with language disorders have trouble with abstraction and generalization, meaning that they are unable to make connections with prior learning. It is important for teachers to be explicit when teaching and to verify the students' prior learning.

Support required from classroom teachers, remedial teachers and other staff members

The staff members working with students with language disorders produce the Individualized Education Plan together by making appropriate recommendations.

These students are entitled to regular support[46] in the form of frequent assistance several times per day or per week (Québec, 2007: 11). They are also entitled to adapted teaching. For the FSE-CSQ and QPAT, this is the minimum level of support.

Everyone concerned must work jointly with the parents to help ensure that students succeed at school.

Classroom teachers may choose from the following interventions to support students with language disorders:

- Explicit teaching of reading and writing strategies.
- Explicit teaching of vocabulary.
- Explicit teaching of grammar, since these students can have particular difficulty with the acquisition of grammatical skills.
- Explicit teaching of anaphora and dependent words (microprocesses).

- Explicit teaching of narrative structures (macroprocesses).
- Visual supports to help develop abstract concepts.
- Guidelines and routines, because these students tend to be rigid in terms of both cognition and behaviour.
- Additional time to complete their work.

- One instruction at a time.
- Clear explanation of any instructions provided in writing, since students may find language confusing.
- Explicit teaching of working procedures for reading, writing and mathematics.
- Technical learning aids (there are some useful software programs).

---

46   Only for students with severe dysphasia (code 34), since students with mild to moderate dysphasia are considered to be students with learning difficulties.

Remedial/resource teachers may choose from the following interventions to help support students with language disorders:

- A remedial evaluation to identify the students' difficulties.
- Explicit teaching of vocabulary.
- Explicit teaching of reading and writing strategies and of grapheme-phoneme correspondences.
- Explicit teaching of morphosyntactical elements (flexional and derivational morphology, word order in sentences).
- Explicit teaching of anaphora and dependent words (microprocesses).
- Explicit teaching of narrative structures (macroprocesses).
- Explicit teaching of mathematical concepts.
- Procedures to help the students with writing and problem-solving.
- Explicit teaching of metacognitive strategies.
- Repetition, which is very important for learning.

The following three principles must be remembered when planning remedial interventions:

- Repeat to remember.
- Vary to generalize.
- Spread over time to consolidate.

Other staff members may help support students with language disorders in the following ways:

- Speech therapists are qualified to provide help with oral language.
- Special education technicians can assist with individualized work strategies and the development of social skills. In some cases, they can also help students who work with computer learning materials. They can help by reading questions during tests, or by making sure students have understood the questions.
- Psycho-educators can help students develop self-esteem and a sense of personal competency, and can also help with social integration and adaptation during workplace training, and to resolve certain types of conflicts.
- Psychologists can help by evaluating the students' cognitive functions in order to understand their profile, identify their abilities and strengths, help students accept their handicap (functional limitations) and, if students are adolescents, support them as they seek to develop their identity.

Students with Autism Spectrum Disorders (ASD) (code 50), previously known as Pervasive Developmental Disorders (PDD)

2

According to the Ministry of Education, the number of students with Autism Spectrum Disorder increased by 663% between 2001-2002 and 2013-2014 (Étude des crédits, 2015-2016). These disorders affect four times as many boys as girls.

In recent years, research has made great strides in establishing what these disorders mean, and has helped refute some preconceived beliefs, the most important being that autism is not a disease that must be cured. People with Autism Spectrum Disorder:

- are sensitive and feel emotion and empathy.
- have their own sense of humour.
- have trouble processing information.
- have potential and can learn.
- have important qualities such as honesty, tenacity and loyalty.
- are sensitive to sensory factors in the environment, which often cause sensory overload.
- have an excellent memory for facts and figures.
- have a "perceptive"[47] brain that processes concrete information first.
- have very little space to decode the social aspect of the environment.

How the brain functions for students with ASD

The cognitive structure and process works differently in children with ASD. Briefly, the brain works differently from that of a student who is not autistic (neurotypical), and **it is important for teachers to understand this, in order to teach such students effectively**.

Harrisson (2004) uses a car metaphor to compare the functioning of the cognitive structure of people with autism with that of people who are not affected, noting that while most people use automatic transmission, people with autism use manual transmission. They register information consciously, one item at a time, meaning that their brain quickly becomes backed up with the large amount of information provided by their environment. This "manual" approach to information management requires an enormous amount of energy, and it is for this reason that students with ASD often feel as though the world is moving too quickly for them. It also explains why they become exhausted more quickly than neurotypical students, whose brains function automatically and unconsciously, and process information much more fluidly.

Harrisson and St-Charles (2017b) note that the following three characteristics are common to all autistic brains, regardless of the level of the disorder.

---

47   This term was taken from Harrisson and St-Charles (2010). *L'autisme: au-delà des apparences.*

First characteristic: Trouble taking initiative

The autistic brain needs a trigger or external indicator to start an action and move to a subsequent step. Students with ASD often have trouble making connections between elements of learning.

Second characteristic: Trouble with abstraction

The autistic brain is visual and concrete. Students with ASD are unable to process invisible elements such as social requirements, abstraction and interaction. Their brains are overly perceptive, making them "socially blind".

Third characteristic: Trouble processing information

Students with autism are unable to understand information about themselves in real time; there is a significant delay between reception and processing of the information. Students with ASD are unable to verbalize things that happen to them, even much later. If asked questions such as "What do you remember of our conversation?" or "How do you feel after running 5 kilometres?" they are likely to answer "I don't know". This type of answer often suggests (wrongly) that Students with autism do not have feelings.

Autistic manifestations

According to Harrisson and St-Charles (2017b), autistic manifestations are behaviours exhibited by students with ASD in certain situations, which are essential in restoring internal balance to their brains. These manifestations can take different forms: rocking on a chair, patting their head with their hand, tapping the desk or having a meltdown. Whatever the manifestation, **it should not be interrupted. Simply make sure the child is safe, and do not say anything**. The manifestation is a sign that the brain is working and the body is attempting to manage complex information. Teachers should look out for these manifestations and give help where required. The manifestations may change over time, depending on the child's age and the support received.

Students with ASD who flap their hands like a butterfly are expressing a positive emotion. This particular manifestation is an indicator of receptivity and interest.

Students with ASD do not like to be touched or caressed. It is even more difficult for them if someone touches them unexpectedly, or if they do not see the act of touching. When this happens, the brain's attempts to find an explanation are endless. It will focus on the event for hours, meaning that it is unavailable to process other information. In other words, it becomes "stuck". Teachers who attempt physical contact with these students should do so by placing their hand gently on the student, and not moving it. It is essential for the student to see the gesture.

In short, the more balanced the brain of a student with ASD is, the better able he or she will be to process information fluidly, and the less likely it is that he or she will have a meltdown. To balance their brains, these students must be very self-aware. This is achieved through an understanding of their environment, so that they can process environmental information more easily.

What are autism management objects?

According to Harrisson and St-Charles (2017b), **autism** management objects are objects that students with ASD can hold – a pencil, an eraser, a T-angle object or any other object of their choice – to give them a constant spatial point of reference, and allow them to channel their energy towards learning. If it is necessary to remove such an object from a student's hands, it is best to leave it on the desk so that the student does not lose sight of it.

Definition of Autism Spectrum Disorder

The DSM-5 (*Diagnostic and Statistical Manual of Mental Disorders*) has changed the definition of what is now known as Autism Spectrum Disorder. However, the Teachers' Collective Agreement has kept the same definition. FSE-CSQ and QPAT has also kept the same definition in this Referential, since it is the one used by the Ministry of Education to identify these students. However, we have also included the new DSM 5 definition in addition.

Definition from the Teachers' Collective Agreement

Students with Pervasive Developmental Disorders[48] are students whose overall functioning, through an evaluation carried out by a multidisciplinary team of specialists using systematic observation techniques and standardized tests in accordance with the diagnosis criteria of the DSM-IV, leads to one of the following diagnosis:

Autism Spectrum Disorder (ASD): a set of dysfunctions appearing at an early age and characterized by clearly abnormal or inadequate development of social interaction and communication and a markedly restricted, repetitive and stereotyped repertoire of activities, interests and behaviour.

Autism is demonstrated through several of the following specific limitations:

- an inability to make friends, significant problems integrating into a group;
- an inability to understand concepts and abstract ideas and a limited comprehension of words and gestures;
- special language and communication problems: some students have no language, while others engage in echolalia, invert pronouns, etc.;
- behavioural problems such as hyperactivity, abnormal passivity, fits, fearfulness in ordinary situations or a lack of fear in dangerous situations, etc.);
- mannerisms, stereotyped and repetitive gestures, etc.

Rett syndrome, childhood disintegrative disorder, Asperger syndrome or a non-specific Pervasive Developmental Disorder are also considered Pervasive Developmental Disorders. The severity of the disorders considered here is such that it prevents the students from carrying out tasks that would normally be appropriate for their age and school environment, without continuous support.

This wording no longer exists in the DSM-5, but is still in the FSE-CSQ and QPAT Teachers' Collective Agreement, because the Ministry of Education refused to change it during the last round of negotiations in 2015.

Definition from the DSM-5 (American Psychiatric Association, 2015)

These are children who have:

- Persistent deficits in social communication and social interaction across multiple contexts, currently or by history.
- Restricted, repetitive patterns of behaviour, interests or activities (at least two of the elements mentioned in the DSM-5).
- Symptoms that must be present in the early developmental period (early childhood) but which may not become fully manifest until social demands exceed limited capacities.
- Symptoms that cause clinically significant impairment in social, occupational, or other important areas of current functioning.

Autism: A neurodevelopmental disorder

Autism Spectrum Disorder is a neurodevelopmental disorder that affects roughly two percent of students in the youth sector[49] to varying degrees. According to Harrisson and St-Charles (2017b), children with autism must overcome mainly psychological challenges connected with emotions, perception and processing of information, all of which are related. These children see the world through different eyes, but they are not cut off from that world; they are cut off from the meaning of the information they receive.

The Saccade approach takes into account the neurodevelopmental aspect[50] of autism. It focuses on "solidifying" neuronal balance and synchronization to speed up cognitive structures, thereby reducing information processing delays and improving access to cognitive self-awareness, which is fundamental. A balanced brain, with all areas functioning at the same time, allows for development to take place.

According to Harrisson and St-Charles (2017b), the autistic structure of students with ASD must be taken into consideration first, even if they have additional disorders. Treating students with ASD as though they are not, will cause more harm than good; for these students, ASD is always present.

---

48   Now known as ASD.
49   Youth general education student body in the public system, 2015-2016, 13,821 autistic students identified by the Ministry of Education, out of a total population of 698,354 students. Information obtained under the *Access to information Act*.
50   According to Harrisson and St-Charles (2017b), a neurodevelopmental approach takes account of information processing, perception and the psychological aspect.

Students with autism need time and patience to develop their full potential. All students will plateau before starting the next stage of their development, and this is especially true of students with ASD.

Possible manifestations of difficulties in the classroom

According to Harrisson and St-Charles (2017b), autistic manifestations are physical and completely involuntary. They are the body's attempt to help the brain, which is unable to process information continuously because it is in a state of imbalance. Therefore, it is vital not to try to stop or suppress these manifestations. However, the more tools students with autism have to achieve a balanced brain, the less the manifestations will occur. Autism changes over time, and students will continue to develop. To have the best possible impact, it is important for teachers to meet the needs of students with autism and not only respond to the needs of the "neurotypical" students in the class.

Students with autism can express their difficulties in a variety of ways in the classroom. (Goupil, 2007; Alberta Education, 2005; Harrisson, 2004; Harrisson and St Charles, 2017a)

Behaviour

Students may:

- have meltdowns that may end quickly or last for a while.
- have stereotypical or limited interests (e.g. small cars, Ancient Egypt, lining up objects).
- appear refractive or resistant to change.
- fall asleep at their desk or seem very tired.
- be anxious.
- be hypersensitive to certain environmental stimuli (noise, light, touch, etc.).
- react strongly to unexpected incidents or visual changes to their body (e.g. a cut or burn).

Social interaction

Students may:

- not seem to want to socialize with the other students.
- not establish visual contact with an adult or other student.
- not understand figurative meaning or the underlying meaning of language.
- not understand humour.
- have different emotional triggers.
- not react much to the human voice.
- have trouble decoding social signals in their environment.
- be bullied, because they are different.
- have limited access to self-awareness and awareness of others.
- not understand what is expected of them.
- feel misunderstood.

Learning

Students may:

- be hyper-stimulated by visual input to the brain.
- love working with visual tools (books of images, tablets, etc.).
- appear to lack attention and concentration because of cognitive overload.
- have trouble with spatial and temporal organization.
- have trouble making connections that are not visual or concrete in nature.
- have trouble decoding inferences and indicators in a text.
- learn something by heart easily.
- have trouble processing information, and do so piece by piece. This is a long and demanding process.
- not process several types of information at once (visual auditory, physical, etc.).
- have specific language and communication problems, including echolaia, pronoun inversion, language gaps, etc.
- appear rigid in their learning, due to their more static brain.
- have trouble motivating themselves to work.
- be highly perfectionist and never have enough time to complete a task.
- sometimes seem to be "in a bubble" and unreachable.
- have trouble with transitions (seasons, places, activities, etc.).

Support required from classroom teachers and other staff members

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

According to Harrisson and St-Charles (2017a), staff members should use visual communication supports when communicating with students with autism.[51] To make sure the message is understood by students, they should also use precise terms, speak slowly with an even intonation, choose words that refer to concrete images, pause between sentences and give concise instructions.

According to the MEES (Québec, 2007: 11), these students should receive sustained support, with services provided for several hours every day. A staff member should also be available to intervene at all times, should an unexpected event occur.

A list of words to be used for instructions and classroom learning should also be drawn up, to ensure that all staff members use the same terms, and to support student comprehension.

All staff members concerned should work closely with parents to enable students to succeed in school.

Classroom teachers may choose from the following interventions to support students with ASD:

Behaviour

It is important to understand that students with ASD are unable to manipulate adults, and that emulation systems have little or no impact for them. According to Harrisson and St-Charles (2017a),[51] autistic meltdowns are beyond the student's control; on the contrary, they are a call for help, and a response is needed.

Classroom teachers can do a variety of things to support the behavior of students with ASD, such as:

- Create a calm environment in the classroom (soft colours, bare walls, windows closed to avoid outside distractions and strong light). It is important for students with ASD to be able to situate themselves within their environment. This makes them less anxious and leaves more room for learning. If it is necessary to change the classroom configuration for a special activity, or to add new items of furniture, it is best if these students can be present to observe, so that they do not lose their points of reference.

- Try to reduce the number of unstable distractions, such as neon lighting, construction on the school roof or in the street, and unseen or unexpected physical contact.

- Create a calm space in which the students can rest after meltdowns (which are extremely demanding from a physical and mental standpoint) and during breaks in the timetable. In the calm space, lighting should be filtered, and there should be a large reading cushion.

- Allow students to express their autistic manifestations freely (e.g. tapping on the desk or tapping their head with their hand). These manifestations are an indication that the student is working to process complex information.

- Provide time for physical activity every day, so that the students can channel their energy.

- Use visual aids to plan transitions.[52]

- Explain why it is necessary to move from one place to another, using a visual aid (see the Saccade model).

- Allow students to hold objects in their hands. This will help them stay calm in the classroom and when transitioning to a different place.

- Sit students near the teacher, along a wall and far from the door and window.

- Place their lockers at the end of a row, not in the middle.

- Give them time to get dressed and prepare their bags.

- Allow students to wear a baseball cap, headband, earphones or a hood in the classroom, since having something on their heads seems to calm them down and helps avoid meltdowns. Harrisson and St-Charles (2017b) suggest that headgear helps maintain stability by placing pressure on the top of the head, which is where autistic management appears to take place.

- Provide ear defenders for specific circumstances (e.g. fire alarm).

- Allow students to line objects up on their desks. This helps calm them down, organize their space and be aware that everything has a start, a middle and an end.

---

51   See the SACCADE website (http://saccade.ca). SACCADE is an autism help centre.
52   Warn the student that the activity will be ending shortly (e.g. that there will be a transition in two minutes) using a visual aid such as an egg timer or cards showing the number of remaining minutes.

- Use a visual sequence to present an activity, showing the start, middle and end; these students have no notion of time.
- Give the students a visual indicator that they can use to show that they need help.
- Teach students to recognize when they do not understand, so that they can ask questions.
- Make sure they understand instructions.

- Give students some independence by using a school agenda and daily or weekly routines.

The above steps are designed to help prevent or reduce meltdowns, and may be useful for classroom management. However, if a meltdown occurs, the behavior should be allowed to run its course. The teacher should be calm and simply make sure the student does not hurt himself or herself.

Socialization

It takes a lifetime to socialize a student with ASD. Socialization should therefore not be a priority for schools. The autistic brain works in a similar way to a hospital emergency room, by managing the environmental elements that strike the brain visually. Elements that are less visual in nature are set aside. This screening process takes place at the expense of socialization, which becomes more subtle and shaded. A student with ASD needs a lot of time to develop a screening process whereby socialization is not relegated to last place.

Classroom teachers can do a variety of things to help students with ASD to socialize.

- Highlight their strengths to reinforce their self-esteem and show the rest of the students something other than their difference.

- Allow them to look elsewhere when communicating with others. They need to see what they are hearing. Eye contact should not be forced.
- Allow them to choose their activities during free classroom time and during recess in the schoolyard, and give them the option to play alone if they wish.
- Allow them to have an object with them during recess, or to bring a toy from home. Another student could act as their sponsor in the schoolyard.
- Teach them the rules of reciprocal conversation (maintain the thread of the conversation, identify relevant information, not to be overwhelmed by details), so that they can be less socially maladroit.
- Encourage them to make friends (friendship is a complex concept for them).
- Teach them to ask for breaks when they feel anxious, angry or panicky, and give them the means to control these emotions.

Learning

Learning should be the cornerstone of their activities at school.

Children with ASD must always know exactly what is expected of them, since they cannot guess. Of all the teaching methods, explicit instruction[53] is the one that is most recommended. However, according to Harrisson and St-Charles (2017a), teachers should also use visual methods (images, diagrams, visual lists, graphic organizers) instead of verbal methods. Ideally, the visual elements should be hand-made by the classroom teacher or other staff members, with the student's help. Students should have a book of visual cards that they can use on a daily basis.

Classroom teachers can do a variety of things to help support learning for students ASD, such as:

- Divide teaching activities into short steps.
- Focus on quality of work, rather than quantity.

- Schedule new or more complex elements of learning in the mornings.
- Provide visual indicators (colour cards) that the student can use to ask for help or for a break, etc.
- Work with the student to start a task and check throughout the task to make sure the student understands what to do.
- Offer help throughout a task; students with ASD tend to keep their lack of understanding to themselves because they feel misunderstood.
- Alternate periods of difficult work with tasks that allow students to recuperate.
- Stay calm at all times and show empathy.
- Use a visual aid to connect elements of learning (reactivate prior learning and provide plenty of different practice contexts).
- Make sure the student is able to process information by asking him or her to organize new learning using a graphic organizer, diagram or table.[54]

---

53   Appendix IX – Teaching Models Respectful of Professional Autonomy.
54   The Saccade model offers communication tools in French that are adapted to the autistic structures of people with ASD and allow them to communicate with each other and with neurotypical people.

- Provide concrete activities to foster learning. According to Harrisson and St-Charles (2017a), this helps the brain to become internally balanced and allows students to understand abstract concepts. In mathematics, offer different hands-on activities using slide rules. In English, give syntax exercises. In science, use visual experiments or videos in the classroom. In geography, work with jigsaw pieces that can be put together to produce a photograph, so that students can understand the area being studied.

- Keep a logbook to review the day and identify events and learning that are more important, so that they can be given more meaning.[55]

- Be flexible when teaching, because students can be static.[56] Wherever possible, all the concepts of a specific element should be presented at the same time; otherwise it will be necessary to start over each time. For example, when teaching the alphabet, the teacher should present all the names and forms (upper case and lower case, printed and cursive forms) of all the letters at the same time. If only one form is taught, the student may refuse to accept that the other forms share the same name and sound. The same applies to vocabulary: where possible, present all the concepts at once (kidney beans and green beans, water melon and honeydew melon, train and metro, etc.).

- For the daily schedule, use a visual method to show that activities have ended (homeroom, recess, reading, break, etc.). In addition, the visual routine should include elements that can be moved around (using Velcro or adhesive putty). Students with autism have no notion of time, so they need to know what will happen next, so that they can understand the day's events and be more disposed to learn.

- Provide more break time for students during the day, and enter it on their visual timetable.

- Use i to denote unexpected events, when there is no pictogram that represents a future activity.

- Provide a checklist of materials to bring to class and work or assignments to be done, so that the student can check them off. This will help students be organized.

- Work in black and white. Avoid colour when presenting hand-made or printed material.

- Give all the work and assignments for the week, so that students can plan work at home.

- Organize classroom materials (use a colour code or a binder with separators to denote subjects).

- Adapt evaluations. Do not ask for speed, but use several smaller evaluations instead. In the case of a single, longer test, give students one question at a time. Hold evaluations in a very calm place, give students more time and allow them to use a checklist or other tool that has been put together with the student's help or by the various staff members concerned. Allow students to watch a video or documentary more than once.

---

55   The terms "give meaning to" and "give more meaning" are adapted from the Saccade model, which is available in French only.
56   The student being "static" as opposed to "rigid" is taken from Harrisson and St-Charles (2017b).

Examples of graphic organizers and comparative tables
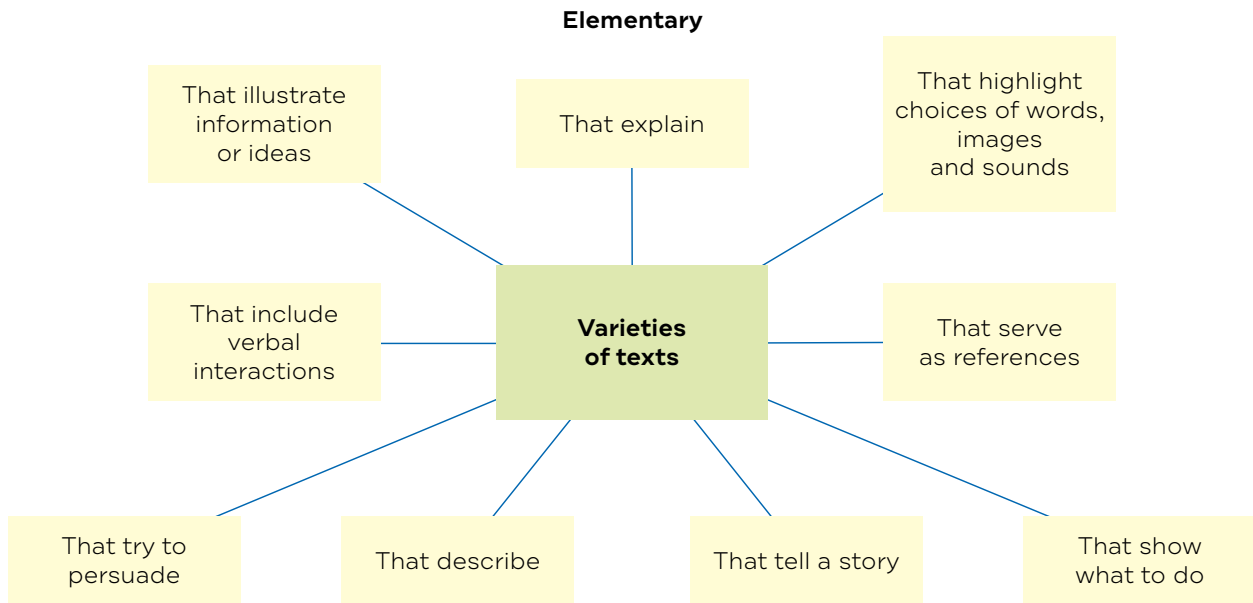
Elementary

FIGURE 8 - VARIETIES OF TEXTS – ELEMENTARY SCHOOL.
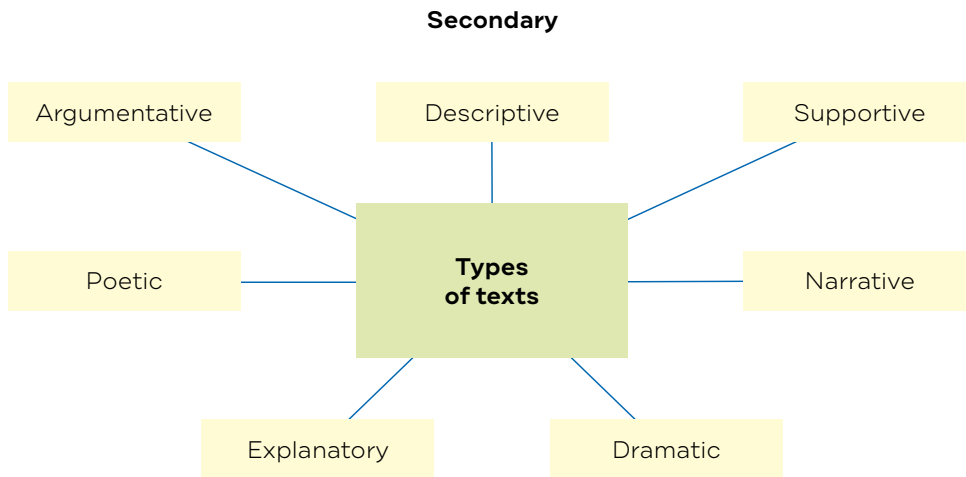
Secondary

FIGURE 9 – TYPES OF TEXTES – SECONDARY SCHOOL.

TABLE II – LEARNING PROGRESSION – GEOGRAPHY, FIRST CYCLE OF SECONDARY SCHOOL

Urban territory	Regional territory	Agricultural territory	Native territory	Protected territory
Fifty percent of the population lives here, causing social and environmental problems	Territory organized according to its economic activity	Associated with a vital need: food. Often sought-after for urban development	Occupied by citizens descended from a First nation	Natural space organized according to a plan to ensure the protection of: • the natural heritage • its ecosystems • its management • its economic development Some parks are listed on UNESCO's World Heritage List • Seeking a balance between use and protection Notion studied: Natural parks
Metropolis • Concentration of powers and services • People are drawn to it	**Tourist region** • Major attraction • Impacts of tourism	**Agricultural territory** • Composed of all farming regions • Must be protected • Exerts pressure on the environment and threatens the world food balance	They claim self-government	
City subject to natural hazards • Ensure the population's safety • Limit damage through specific measures (earthquakes, volcanic eruptions, cyclones, tidal waves, etc.)	**Forest region** • Exploitation and commercialization of the forest • Responsible management • Recreational tourism and vacationing	**Agricultural territory subject to natural hazards** • Fragility • Particular condi-tions taken into account to ensure development • Environments at risk may be made more fragile by farm activities	They may enter into agreements with the Government	
Heritage city • UNESCO (world cultural diversity) • Heritage conservation • Protection of heritage cities	**Energy-producing region** • Exploitation and commercialization of a natural re-source (hydraulic energy, hydrocar-bons, etc.) • Responsible management • Long-term develop-ment preferred		They may have jurisdictional powers in a number of domains	
	Industrial region • Organized around production, distri-bution or service companies • Contributes to economic devel-opment • Has impacts on the environment		They develop their territory in harmony with their way of life	

Important notes

The interventions listed above will help students with autism to be less anxious, thereby making them more disposed to learning. It is not necessary to apply all the interventions. On the contrary, it is up to the classroom teacher and other staff members to decide which are most appropriate to the individual student needs.

However, in some cases, students with ASD may be in their own bubble. They are aware, but are paralyzed by a situation, because something is preventing them from obtaining information:

• They may be unable to process the available information, or may not understand it.

• There may be too much information for them to process at once.

Both these situations may cause a shutdown. When this happens, students are simply unable to do what is expected of them, and it is important to identify the element or elements causing the problem. A student who has shut down will need the teacher to jump-start learning, by:

- giving the student a break.
- providing a visual aid showing what was seen or requested.

- simplifying the instructions.
- highlighting the essential information to be processed by removing superfluous information.

Technology aids are not recommended for students with autism. Their major challenge is socialization, and technology aids do not help with this and have the opposite effect. They can be used strictly for pedagogical purposes, but only for a few minutes each day.

Remedial/resource teachers may choose from the following interventions to help support students with ASD:

Reading and writing:

- Help them to make connections between elements of learning, using a step-by-step approach and a visual aid.
- Offer more explicit teaching of the lessons learned in the classroom, using visual methods.
- Offer more explicit teaching of basic reading and writing strategies, using visual methods.
- Explicitly teach grammatical syntax to help them understand the meaning of the sentence construct.
- Explicitly teach how to use a diagram to identify the main idea of a text.

- Explicitly teach narrative structures using graphic organizers.
- Explicitly teach a writing process.
- Explicitly teach a step-by-step method to correct written texts.
- Check to ensure that information is being processed by asking students to arrange new knowledge using a graphic organizer, diagram or table.
- Teach cognitive and metacognitive strategies.[57]

Mathematics:

- Teach mathematical operations using materials that help students understand what the operation means.

- Teach a step-by-step problem-solving approach using a visual aid.

To support students with ASD, other staff members can contribute in different ways.

Special education technicians and psycho-educators can:

- Work on social skills, but only if the student is advanced enough and has begun to decode the social environment. If not, it will cause undue anxiety. Students with autism are interested by social aspects, but are unable to decode them.
- Help students to anticipate anxiety and identify ways of addressing it, and also help them to anticipate strong emotions that may trigger a meltdown or aggressive reaction.

Psychologists can:

- Help older students understand the way they perceive life in society, the impacts of falling in love and independence, and assist them with the transition from school to workplace.
- Help students understand and comply with instructions in the classroom.
- With permission from students or their parents (if the student is under 14 years of age), explain ASD to other students in the class, to encourage tolerance and avoid social isolation.

---

57   Appendix V – Cognitive and Metacognitive Strategies.

Students with moderate to profound intellectual handicaps (code 24)

3

A student with Down's syndrome may have a mild, moderate or profound intellectual handicap. Please see Part C for information on mild intellectual handicaps.

Definition from the Teachers' Collective Agreement[58]

Students with moderate to profound intellectual handicaps are students whose cognitive functions (evaluated by a multidisciplinary team which must include a psychologist[59] or, if needed, a guidance counsellor, using standardized tests) show a level of general functioning that is clearly below average, as well as impaired adaptive behaviour appearing from the beginning of the development period.

Possible manifestations of difficulties in the classroom

Students with moderate to profound intellectual handicaps:

- are limited from a cognitive standpoint, which restricts their learning abilities and requires an adapted pedagogy or program.
- need help to organize themselves.
- need constant support and supervision to perform everyday schoolwork.

- have difficulty focusing their attention on important information.
- have trouble managing information quickly.
- lack strategies and process information inefficiently.

- do not know when to use strategies (do not recognize the context for applying a particular strategy).
- have trouble establishing connections between what they know and the learning objective (weak and poorly organized knowledge base).
- have trouble transferring and generalizing learning.

---

58   Appendix XXXI - Provincial Collective Agreement - 2015-2020..
59   This professional is not specified by name in the definition provided in the 2015-2020 Agreement.

Support required from the classroom teacher, specialists and other staff members[60]

- Contributions to the Individualized Education Plan by making appropriate recommendations.

- Sustained support with services provided for several hours every day (Québec, 2007: 11).

- A staff member available in the school at all times to intervene in the event of unexpected situations (preferably a person with authority (Québec, 2007: 11).

Everyone concerned must work jointly with parents in order to promote the students' success at school.

Classroom teachers may choose from the following interventions to support students with moderate to severe intellectual handicaps:

- Assistance with preparation for new activities.
- Basic instruction to help them function independently.
- Adapted instructional materials.
- Manipulation of concrete materials to assist in the formation of concepts.
- Supervision appropriate to their level of difficulty.
- Very clear objectives to encourage learning.

Remedial teachers may choose from the following interventions to help support students with moderate to severe intellectual handicaps:

- Step-by-step teaching of content, starting with simple notions and working towards more complex notions.
- Adapted strategies to teach them how to read, write and count.

Other staff members may help support students with moderate to severe intellectual handicaps in the following ways:

- Psychologists can help identify the students' abilities and preserve or prepare support measures. They can also encourage collaboration with external resources to help with school-to-work transitions.
- Speech therapists can help students who suffer from language difficulties.
- Special education technicians can help with social integration (special activities, recess, lunchtime, etc.).
- Integration aides or Attendants for the handicapped can help students with reduced functional autonomy or organic comorbidities that require care.

---

60   The needs are similar to those of students with mild intellectual handicaps, depending on the severity of their problems (Part C).

Students with psychopathological disorders (code 53)

4

Students suffering from difficulties arising from psychopathology are more liable to perform poorly in school, drop out or experience suicidal ideation. However, where diagnosis is timely and treatment is provided early, the performance of these students can improve considerably (Alberta Education, 2005: 1).

There are numerous problems that arise from psychopathology – too many, in fact, to list along with their possible manifestations in the classroom. In this Referential, we have chosen to present the general manifestations of psychopathological disorders, since there are many common elements even though each student is a unique case. It is important to know whether or not students have learning difficulties. If so, teachers should refer to Part C of the Referential. Part B also provides useful information for behavioural problems or attention deficits.

However, the Referential also includes a separate section on Tourette syndrome and emotional disorders (mood and anxiety), since schools have expressed a need for this information.

Beyond the mandate of the school

Psychopathological disorders are mental health problems of developmental origin. Some dysfunctions may require specialized services beyond the mandate of the school.

Definition from the Teachers' Collective Agreement[61]

Students with psychopathological disorders are students whose overall functioning, through an evaluation carried out by a team of multidisciplinary specialists, which must include a psychiatrist or a child psychiatrist,[62] using systematic observation techniques and standardized tests, leads to a diagnosis of a psychiatric disability that appears through a distortion in several areas of development, particularly in the area of cognitive development.

---

61   Appendix XXXI - Provincial Collective Agreement 2015-2020.
62   These professionals are not specified by name in the definition provided in the 2015-2020 Agreement.

Possible manifestations of difficulties in the classroom

Behaviour

Students may:

- exhibit disorganized behaviour or episodes of serious disturbance as a result of acute anxiety.
- experience extreme emotional distress or extreme confusion.
- experience auditory hallucinations (hearing voices).
- have delusions (feelings of being watched, spied on or persecuted).
- react in specific ways to events beyond their control.
- react negatively to being watched (fear of being judged or rejected).
- ask to go to the toilet because they need to calm down.
- exhibit repetitive behaviours.

Organization

- These students are too anxious to control their environment (e.g. instead of saying it is too noisy, they will say are tired).
- They sometimes have trouble analyzing requests from other people, accepting rules, adapting to frequent changes by the teacher, or forging relationships with certain adults.

Communication

Students may:

- experience distortions of reality (whatever the teacher does, they will say they are being picked on or put down, etc.).
- sometimes have trouble expressing their needs verbally.
- not be aware of the impacts of their difficulties on their learning, classroom integration, relations with other students, etc.

Learning

Students may:

- be extremely stressed about exams or other forms of evaluation.
- have trouble with school attendance.
- cling to parents or teachers because they need support to control their anxiety.

Support required from classroom teachers and other staff members

- Contributions to the Individualized Education Plan by making appropriate recommendations.
- **Sustained** support with services provided for several hours every day (Québec, 2007: 11).
- A staff member available in the school at all times to intervene in the event of unexpected situations (preferably a person with authority: Québec, 2007: 11).

Everyone concerned must work jointly with the parents in order to promote the students' success at school.

Classroom teachers may choose from the following interventions to support students with psychopathological disorders:

- Create a relationship of trust with students.
- Help them to verbalize their concerns.
- Give them additional time to complete assignments.
- Provide a quiet place apart from other students to write their exams.
- Allow them to listen to music when completing an assignment or writing an exam.
- Give them time to move around if they find an assignment too demanding.
- Speak in a calm and reassuring tone of voice.
- Give clear instructions regarding the steps for performing a task so that students can form a mental representation of the process.

- Teach problem-solving strategies.
- Check their classwork regularly.
- Provide a quiet place for them to work without pressure.
- Plan a predictable schedule and program.
- Use predictable classroom procedures accompanied by routines.
- Give clear and precise instructions for all activities.
- Display the classroom rules and refer to them regularly.
- Set limits on behaviour at school (establish and enforce them; consistency helps bring results).
- Help students to apply calming and adaptive strategies (relaxation breathing, a safe place to go, counting to ten, etc.).

- Organize a teacher folder that can be used to store:
    – notes on their level of involvement in activities or classroom work;
    – notes on strange comments or references to unreal experiences (conversations, voices, etc.);
    – outstanding drawings or artwork;
    – copies of all correspondence sent;
    – information on the disorder's likely impacts for the family;
    – information on signs of relapse (withdrawal from activities, poor personal hygiene, etc.).

Other staff members may help support students with psychopathological disorders in the following ways:

- Psychologists can provide psycho-social support and help students to develop a positive self-image.
- Psycho-educators can help students deal with their anxiety and can also raise awareness of the problem in the school.

- Special education technicians can also help prevent escalation and defuse situations resulting from high levels of anxiety. They can also help break down tasks into steps, since students are often unable to devote the necessary number of hours to regular school work.

- The support team members, classroom teacher and parents must support one another by sharing information on the student's difficulties and by establishing common practices so that expectations at home and at school are consistent.

4.4   Tourette syndrome

Definition

Tourette syndrome is a chronic neuropsychiatric disorder characterized by the presence of motor and vocal tics of varying complexity. According to the American Psychiatric Association (2000), the following four criteria must be met for the student to be identified as having Tourette syndrome:

- Multiple motor tics and one or more vocal tics have been present at some time during the illness.

- The tics occur frequently, almost every day or intermittently, and have persisted for more than one year without an interruption of more than three consecutive months.
- Onset was before 18 years of age.
- The tics are not attributable to the physiological effects of a substance or another medical condition (Leclerc, Forget and O'Connor, 2008).

What is a tic?

"A tic is a sudden, rapid, recurrent, non-rhythmic motor movement or vocalization." (American Psychiatric Association, 2000)

Possible manifestations of difficulties in the classroom

- The students have motor or vocal tics that disturb other people.
- They may have fine motor difficulties (writing, drawing).
- They are unable to organize themselves or their materials.
- They take more time than the other students to complete their tasks.

Manifestations relating to ADHD

- The students are agitated, move constantly, and are impulsive.
- They cannot concentrate if they become obsessed by something.

Manifestations relating to oppositional defiant disorder

- They throw temper tantrums in response to minor constraints.
- They provoke other students and defy the teacher and other staff members.
- They blame others and refuse to follow rules.

Note: Their lack of control is neurological in origin, and interventions must be adjusted to reflect their limitations.

Support required from the classroom teacher and other staff members

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

"Like the parents, school staff members play a predominant role in youth education. Multidisciplinary support is therefore vital to improve the scholarization and well-being of children and adolescents with Tourette syndrome." (Leclerc, Forget and O'Connor, 2008, free translation from the original French)

Everyone concerned must work jointly with the parents in order to promote the students' success at school.

Classroom teachers may choose from the following interventions to support students with Tourette Syndrome:[63]

Relationships:

- Explain the syndrome to the other children in the classroom, to encourage tolerance and avoid social isolation.
- Serve as a model for the students, showing them how to relate to and behave towards others.
- Promote team spirit, not competition.
- Create a true connection with students.
- Treat students with respect and show empathy for their condition.
- Create a safe environment in the classroom.

Behaviour:

- Plan short, positive, precise interventions.
- Create a quiet place for students to go when their tics are too intense.

Learning:

- Give students more time to complete their assignments and include breaks.
- Allow students to take tests in a different room, because stress can aggravate their tics and prevent them from concentrating on the tests.
- Divide tasks into smaller units and demonstrate the steps in the process.
- Allow students to sit in a separate room during exams, so that their tics do not disturb their classmates.

Organization:

- Structure the students' time (a calm environment and stable routine).
- Structure their materials (a single pencil case, duplicate materials at home).
- Use pictograms to avoid repetition and foster autonomy.
- Display the students schedule on the corner of the desk, so that they can refer to it.

---

63   The book by Julie Leclerc (2008) will be extremely useful: *Quand le corps fait à sa tête, le syndrome de Gilles de la Tourette.*

Other staff members may help support students with Tourette Syndrome in the following ways:

- Psycho-educators can help students manage their anger and show them strategies to develop social skills. They can also give students real strategies to change their behaviour.
- Special education technicians can help students with organization to meet teacher and classroom requirements. They can also help students calm down when they become withdrawn, and can, if necessary, go with them into another room to take tests.

- Leclerc, Forget and O'Connor (2008) suggest "maximizing cooperation between the family, school and special services, to ensure that interventions are coherent and discipline is consistent. It is preferable for interventions to be coordinated at school, at home and in leisure activities, so that they will have an overall, coherent, consistent impact."
- Collaboration from the Ministère de la Santé et des Services sociaux (MSSS), through the treating psychiatrist or child psychiatrist, may be important in providing proper follow-up.

4.5   Emotional disorders

Definition

An emotional disorder is defined as an inability to learn, that cannot be explained by intellectual, sensory or health factors. These characteristics must persist over time and be severe (Vaughn, Bos and Schumm, 2007).

Emotional disorders include anxiety disorders (obsessive-compulsive disorder (OCD), post-traumatic stress disorder, panic disorder) and mood disorders (depression and bipolar disorder).

Possible manifestations of difficulties in the classroom

Anxiety disorders

Students may

- tend to panic before a test or oral presentation.
- be distracted by environmental noise.
- be irritable or have bouts of crying.
- work slowly, because they do not feel they have the right answers.

- become agitated in situations that remind them of their past trauma.
- experience sudden physical sensations such as palpitations and stomach aches.
- be afraid of being judged.

- read situations in a way that always makes them anticipate the worst.
- tend to interpret physiological symptoms as warning signals for potentially dangerous conditions (e.g. palpitations – cardiac disease, heartburn – nausea and vomiting).

Mood disorders

Manifestations differ with age, and range from excessive fear to aggression and negative thoughts, and ultimately suicidal ideation. The following manifestations may be seen:

Students may:

- be excessively afraid.
- behave aggressively.
- have negative thoughts.
- engage in suicidal ideation.

- be depressed or irritable.
- have trouble concentrating.
- isolate themselves from others.

- change their eating habits regularly.
- be often tired (difficulty sleeping).
- have poor self-esteem.

Support required from the classroom teacher and other staff members:

The staff members working with these students produce the Individualized Education Plan together by making appropriate recommendations.

Everyone concerned must work jointly with the parents in order to promote the students' success at school.

Classroom teachers may choose from the following interventions to support students with emotional disorders:

Organization:

- Organize the classroom well (everything put away, with lots of space).
- Organize materials properly, so that they are accessible at all times.
- Make sure each student has a desk and that there is space between the desks.
- Establish a routine and post it.
- Post the classroom rules and consequences for breaking them.

Relationships:

- Establish a positive relationship with students.
- Reassure them if they are disturbed or uneasy.
- Show empathy towards their interests.
- Create a positive environment.
- Focus on recognizing effort and improvement.
- Do not comment out loud on their performance, absences or general behaviour.

Behaviour:

- Use consequences, not punishment, for inappropriate behaviour.
- Be flexible but consistent and coherent when applying the rules.
- Reinforce acceptable behaviour.
- Provide a place to which the students can withdraw if necessary.

Learning:

- Give students more time to perform tasks or do tests.
- Adapt their teaching and evaluation methods to suit the students' problems.
- Opt for strategic teaching method, among others, to explain why specific content is being taught and what the students must do.
- Make sure students experience success, so that they are less anxious.
- Give frequent feedback.
- Provide learning goals and monitor the students' progress regularly.
- Help students set their own personal goals.
- Help students develop social skills by organizing group work sessions.
- Organize coaching activities.
- Model appropriate behaviour.

Other staff members may help support students with emotional disorders in the following ways:

- Psychologists can develop specific therapies to address students' difficulties. They can talk to students, help them understand the nature of their difficulties and work with them on adaptive strategies to avoid consequences and repercussions in their school, social and professional lives. Psychologists can also refer students to community organizations where they can experience activities that will enhance their sense of personal worth or assist them with transitions throughout their time at school and afterwards.

- Special education technicians can assist students who take tests or write exams in separate rooms, and during classroom activities. They can also help students to develop social skills by showing them what to do.

Main authors consulted for Part D – Special Needs Students: Students with Handicaps

5

Language impairments

De Weck and Marro (2010); Godard (2007); Goupil (2007); Maillart (2017); Mazeau (1999); Vaughn, Bos and Schumm (2007).

Autism Spectrum Disorder

American Psychiatric Association (2015); Harrisson (2004); Harrisson and St-Charles (2010, 2017a and 2017b); Mottron (2016).

Moderate to profound intellectual handicaps

Goupil (2007).

Psychopathological disorders

Alberta Education (2005); Goupil (2007).

Tourette symdrome

Leclerc, Forget and O'Connor (2008).

Emotional disorders

Vaughn, Bos and Schumm (2007).

PART

E

Special Needs Students and Physical Education and Health
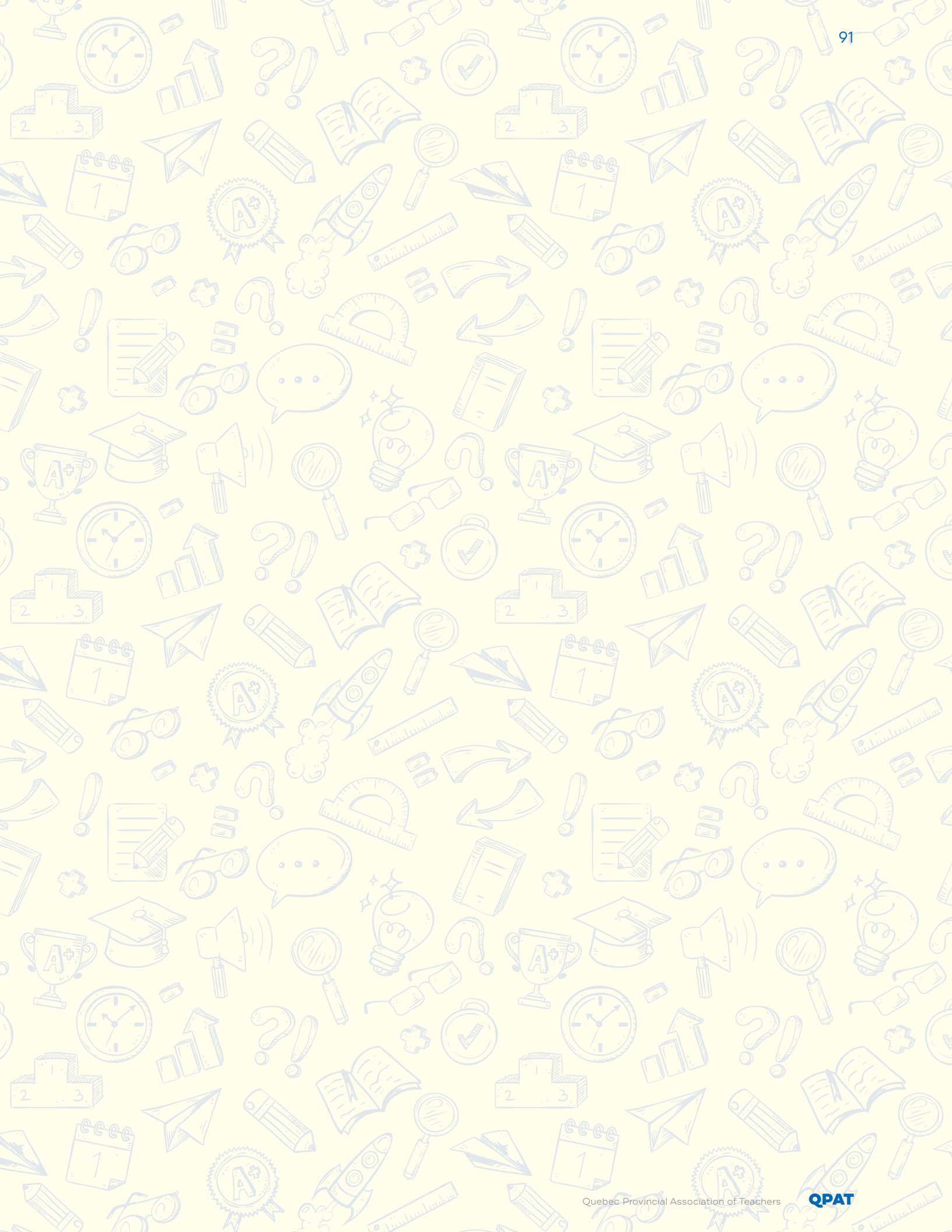
Youth sector

Special needs students take part in physical education and health classes. While some may have help in the classroom, they are often left to their own devices, and their difficulties are often underestimated, especially since the context of physical education and health is totally different for them. Teachers are often at a loss when trying to deal with the behaviour of some special needs students. Verret (2017) addressed this problem in her research and gave some advice for teachers in these types of situations.

According to UNESCO:

> Physical education and health is a discipline in which inclusion offers a way to achieve meaningful learning. Like other students, those with adaptive difficulties or handicaps must also develop motor skills and social skills in order to act and interact in a variety of physical activity settings and acquire learning that will allow them to adopt a healthy, active lifestyle. (Verret et al., 2017, translated from the original French)

Verret et al. (2017) note that almost one-fifth of students with learning difficulties also have motor difficulties that have a major impact in physical education and health classes:

- coordination
- response time
- static and dynamic balance
- locomotor skills
- object control skills

Very little research has been done specifically on physical education and health. However, Verret suggests a number of adjustments to promote learning by students with special needs.

1. Communication and instructions

- Use adapted language.
- Illustrate the information using concept cards.
- Identify the interim steps of each task.
- Use different communication channels (visual, auditory, kinesthetic).
- Use new technologies to help recover information (tablets, interactive whiteboards, etc.).

2. Learning environment

- Use adapted materials.
- Organize space in a creative way.
- Eliminate distractions so that students pay attention.
- Teach routines.
- Vary the types of student groups.

3. Learning tasks

- Plan the students' roles in the task.
- Adjust the time for which students will be involved in the task.
- Use substitution.
- Offer different levels, so that students have a chance to succeed.
- Adjust the rules (number of players, time, height, space, etc.).
- Organize activities in a way that allows for participation of students who do not perform as well as others (e.g. do not allow teams to be selected by captains).
- Form mixed groups, not gender-based groups.
- Model the learning and in an age appropriate manner.

PART

F

Evaluating Abilities, Identifying Needs and Preparing an Individualized Education Plan

Evaluation of abilities and needs

1

First, it is important to note that an evaluation of abilities and needs is a prerequisite for establishing an Individualized Education Plan. The ad hoc committee must first analyze the student's abilities and needs before making its recommendations.

The evaluation is mandatory under the Education Act (s. 234) and the school board is responsible for it: "Every school board shall […] adapt the educational services provided to a student with a handicap or a student with a social maladjustment or a learning disability according to the student's needs and in keeping with **the student's abilities as evaluated by the school board** […]."[64]

The Provincial Collective Agreement, clearly states that it may request pertinent evaluations from the competent personnel in order to obtain as exhaustive a profile of the student with special needs as possible, with a view to identifying his or her abilities and needs. It then analyzes those needs, based on the evaluation, in order to make recommendations on the support services required by the student and on the student's classification or, where necessary, his or her integration. Based on the evaluation, the principal (Education Act, s. 96.14), in collaboration with the ad hoc committee, draws up a plan that is adjusted to the student's needs and takes his or her abilities into account.

Most students with special needs will require an evaluation of their abilities and needs at some point during their time at school. It is for this reason that the ad hoc committee makes the request.

Definition of ability and need

Legendre (2005) defines these two terms as follows:

Ability is the power to perform a task. It refers to the extent of the person's knowledge and the ability to implement it.

Need is the difference between what is and what should be, in terms of learning for the student's age.[65]

When should an evaluation of abilities be requested?

For each student identified by the teacher as having a social maladjustment or learning difficulty in spite of the classroom interventions and support services to which the student has access, or a student with any sign of a handicap, the teacher asks the school principal to set up an ad hoc committee to make recommendations based on an analysis of the student's abilities and needs.

What does the phrase "the student's abilities" mean?

The student's abilities are evaluated in a variety of ways, but in particular from the standpoint of learning and behaviour. Is the student delayed, or does he or she have specific problems with reading, writing or mathematics? Does the student have trouble with social skills, or behavioural difficulties? Does the student have problems with language? Might the

---

64   Appendix X – The School Board's Obligations regarding Integration of Special Needs Students.
65   Letter of Agreement of June 2011, renewed in June 2016.

student have an intellectual impairment? To answer these and other questions, the ad hoc committee requests the necessary evaluations. There are several possible types of evaluations.[66]

Which students should be evaluated?

For students with learning difficulties: The teacher can request an evaluation of the student's abilities and needs when the remedial measures applied by the teachers (classroom teacher and remedial teacher) do not allow the student to progress sufficiently to overcome his or her delay.

For students with behavioural difficulties: The teacher can ask the school principal to set up an ad hoc committee if it is clear that the student has not improved after introducing measures to teach appropriate behaviour and observing the results over a period of at least 40 days. The ad hoc committee, in collaboration with the principal, prepares an Individualized Education Plan that takes the student's abilities and needs into account.

For students with handicaps or severe behavioural difficulties: The teacher asks for an ad hoc committee to be set up as soon as he or she identifies signs of any type of handicap or severe behavioural difficulty. The committee prepares an Individualized Education Plan that takes the student's abilities and needs into account.

Steps required for the evaluation of abilities and needs:

- The teacher completes the request form and submits it to the principal to set up an ad hoc committee within 15 days.

- If, after the evaluation of the student's abilities and needs, the committee believes the student has behavioural difficulties, it makes recommendations to the principal to recognize the student as a student with behavioural difficulties.

- The ad hoc committee, following the assessing of the student's abilities, gives recommendations on the support services (nature, level, frequency and duration) to provide to meet the student's needs. It also provides recommendations on the proper classification (integration in a regular classroom with support services or a resource/special class). In order to frame the difference, on one hand, between the assessment of capacity and determination of needs, and on the other hand, the development of the intervention plan, we present the case of Junior.

The case of Junior

Junior is 7 years old and has serious difficulties in reading and writing at the end of grade one, despite remedial interventions. The teacher has requested a meeting of the ad hoc committee to have Junior identified as a student with learning difficulties. The ad hoc committee would like information on Junior's abilities and has asked for evaluations by a speech therapist and a psychologist. The psychological evaluation report states that Junior has variable potential, with a level of intelligence ranging from superior to extremely low. It also states that, in terms of verbal comprehension, he has significant difficulty with long, complete sentences, but that in terms of fluid reasoning and short-term memory, his abilities are good. The speech therapist's evaluation suggests a primary language disorder, and notes a moderate morphosyntax impairment, illustrated by frequent morphological errors during verbal expression. It also states that Junior's vocabulary should be consolidated, and that his comprehension is moderate

The ad hoc committee members responsible for the Individualized Education Plan analyze the reports and understand that Junior has oral language difficulties that affect his learning. It is agreed that, to address his needs, he will receive speech therapy support to help him overcome his oral language difficulties, as well as remedial interventions to help him develop his morphological learning in reading and writing. The committee recommends that Junior should remain in a regular class, with the requested support.

---

66   Appendix VI – Types of Evaluations to Analyze Students' Abilities and Needs.

The Individualized Education Plan

2

The Individualized Education Plan is a tool used to plan the interventions and services needed by a student.

It is based on an analysis of the student's abilities and identification of his or her needs. The plan describes the student's abilities and lists priorities based on his or her needs. It specifies the support services required (nature, level, frequency and duration) and the people who will be responsible for them.

> The principal […] shall establish an Individualized Education Plan adapted to the needs of the student. The plan must be consistent with the school board's policy concerning the organization of services for handicapped students and students with social maladjustments or learning disabilities and in keeping with the ability and needs of the student as evaluated by the school board before the student's placement and enrollment at the school. […]

> The principal shall see to the implementation and periodical evaluation of the Individualized Education Plan and inform the student's parents on a regular basis (Education Act, s. 96.14).

The case of Junior

Junior has now started grade two in a regular class with remedial and speech therapy support. The committee responsible for the plan makes recommendations and the principal prepares the plan, which will contain:

- Priorities based on Junior's needs (realistic objectives, measurable over time), i.e. the learning that Junior, in view of his difficulties, must complete in the short term for oral language (e.g. be able to formulate sentences using correct verb tenses) and for reading and writing (e.g. be able to write words using the main suffixes learned in class).

- The people responsible for the services, i.e. with help from whom or what (e.g. the classroom teacher organizes a coaching program for 15 minutes per day, three days per week, the remedial teacher meets Junior for 30 minutes per day, four days per week, and the speech therapist meets him for 30 minutes per day, one day per week).

- The timeframe (duration) of the intervention to decide whether or not Junior has progressed (e.g. end of the first term).

The principal then ensures that the Individualized Education Plan is applied and evaluated periodically, and informs the parents on a regular basis (Education Act, s. 96.14). To do this, the principal calls a meeting to evaluate the progress made by the student and adjust the Individulized Education Plan objectives and services if necessary.

G

Recognition of a Student as Having Learning Difficulties

QPAT

Access to services

<div style="text-align: right">1</div>

Research has shown that, even though proven interventions have been implemented by the classroom teacher and remedial teacher, roughly 5% of students will still experience apparent learning difficulties (Haager, Klingner and Vaughn, 2007).

Differentiating between access to services and recognition

If a student has learning difficulties, the teacher must first apply remedial measures for a significant period of time (clause 8-9.06). If the student does not catch up, the teacher then asks for the student to have access to services (clause 8-9.06). Once the services have been obtained, if the teacher still believes the student fulfills the criteria for learning difficulties, based on the definition in the June 2011

Letter of Agreement, he or she can ask for the ad hoc committee, to be set up, and the principal is obliged to do this.

Students with learning difficulties may need services from an orthopedagogue or speech therapist. See Part C for further details.

Request for recognition of a student with learning difficulties

2

In a non-category approach, it is not necessary for the student to have been recognized in order for a decision to be made regarding the support services that may be needed by the teacher and by the student.

However, if the student does not have access to services, he or she may be recognized as a student with learning difficulties. The student is given a weighting, and the teacher receives **compensation if the maximum class size is exceeded as a result**.

The teacher may ask for a student to be recognized as having learning difficulties in the following two cases:

- At the end of the first year of elementary school, a student may be recognized as having learning difficulties when an analysis of his or her needs and abilities, identified in the Individualized Education Plan, shows that significant difficulties have persisted over time following specific re-educational measures in reading, writing or mathematics and **it is deemed necessary to make adaptations** to what is expected of the student.[67]

- **The student is not receiving services** in spite of his or her difficulties at school and the teacher is of the opinion that the student meets the definition[68] of a student with learning difficulties.

Where the student is recognized by the school board as having learning difficulties and does not receive services, he or she is weighted for compensation purposes if the maximum class size is exceeded (clause 8-9.09 d) par. 4).

A gain by the FSE-CSQ and QPAT

Recognition at the end of the first year is a gain by the FSE-CSQ and QPAT; in the past, it was necessary to wait until the end of Cycle One to recognize a student as having learning difficulties. The union based its claim on research by Torgesen (2004), which clearly showed that a student who still has reading difficulties at the end of grade three almost never achieves average reading abilities at the end of elementary school. Torgesen also showed that early intervention is needed, at the end of kindergarden or in grade one.

---

67   Letter of Agreement, June 2011, III-1.a, renewed in June 2016.
68   See Part C.

The steps required to recognize a student with learning difficulties:

- The teacher completes the form to ask the principal to set up an ad hoc committee within 15 days (clause 8 9.06).

- If, after the evaluation of the student's abilities and needs, the committee believes the student has learning difficulties, it asks the principal to recognize the student as a student with learning difficulties or disabilities.

In addition to analyzing the student's abilities and needs, the committee is also responsible for giving its opinion of the recognition of a student with learning difficulties.

PART

H
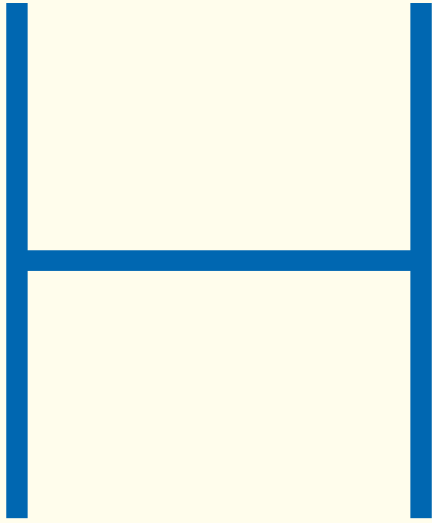
Recognition of a Student with Behavioural Difficulties
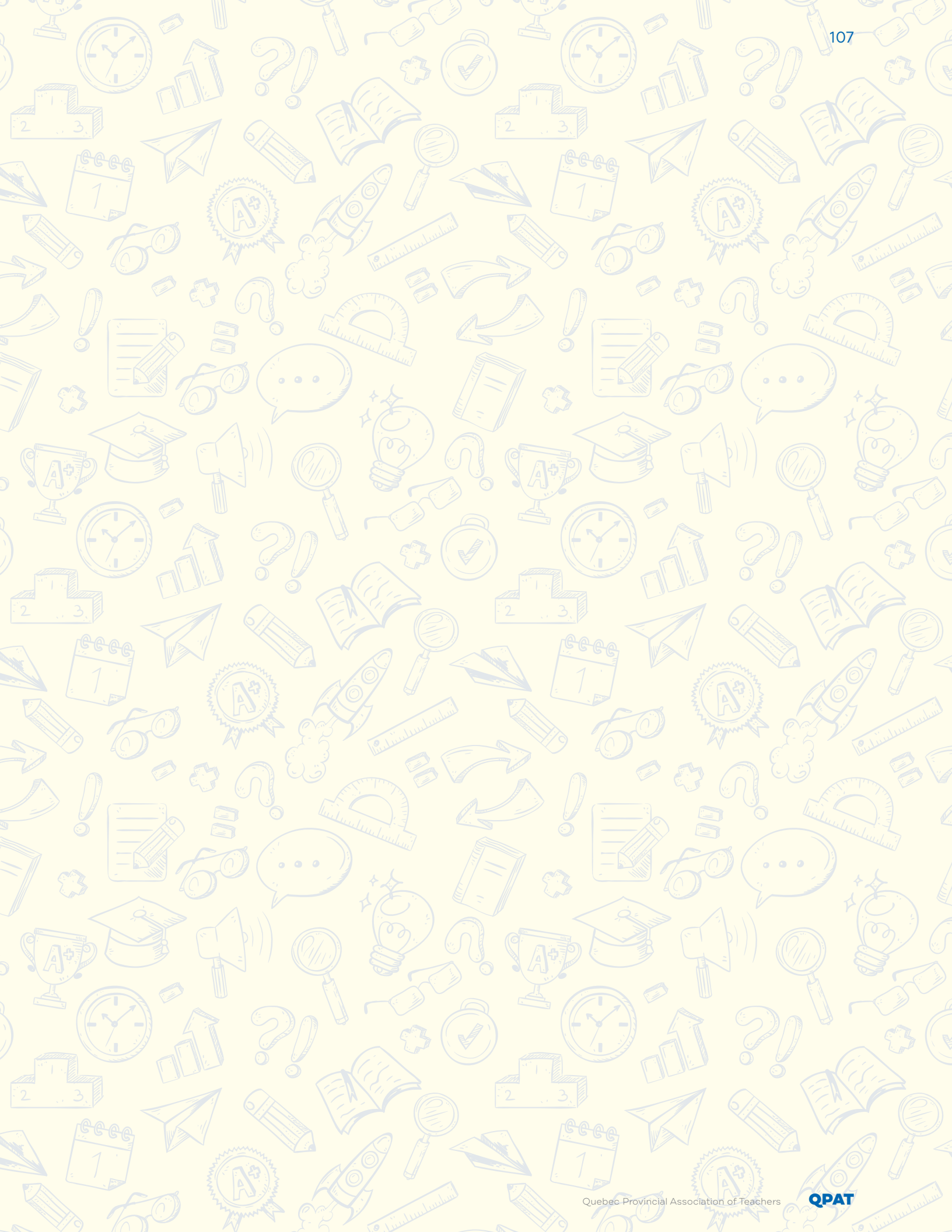
Request for recognition of a student with behavioural difficulties

If, despite the services provided to help the student with his or her behaviour, the teacher observes a lack of improvement over a period of 40 working days, and the student has regularly exhibited poor or inadequate behaviour, or has failed to behave in a specific way, the teacher completes the request form and submits it to the principal to set up an ad hoc committee within 15 days.

Steps required to obtain recognition of a student with behavioural difficulties:

- The teacher completes the request form and submits it to the principal to set up an ad hoc committee within 15 days.
- If, after the evaluation of the student's abilities and needs, the committee believes the student has behavioural difficulties, it makes recommendations to the principal to recognize the student as a student with behavioural difficulties.
- If the student is recognized by the school board as having a behavioural difficulty, he or she is weighted for compensation purposes if the maximum class size is exceeded.

PART

Identification of a Student as Handicapped or a Student with Severe Behavioural Difficulties
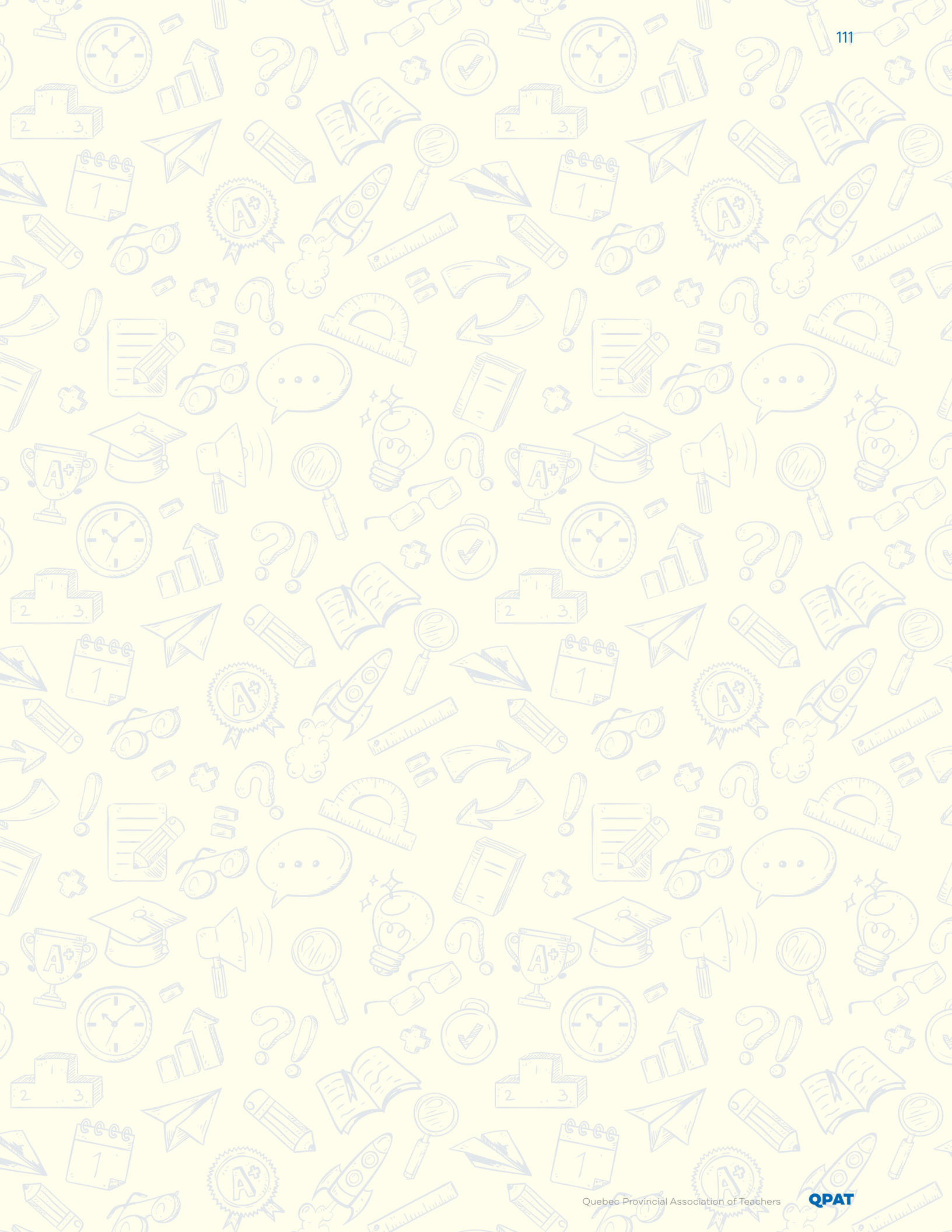
The purpose of identification is to obtain support measures for handicapped students and those with severe behavioural difficulties. In the case of identification, the school board, as part of the basic allocation, is also allocated additional sums of money to take into account the extent of the students' needs and the scope of the services that must be offered (Québec, 2007: 7).

Request for identification of a handicapped student or a student with severe behavioural difficulties

A teacher who feels that a student in his or her class is handicapped or has severe behavioural difficulties is required to notify the school principal so that a case study can be carried out by the ad hoc committee.

To be identified as handicapped or having severe behavioural difficulties, a student must:

- have been diagnosed by a qualified person as having a handicap; and
- have impairments that limit or prevent him or her from taking part in educational services; and
- need support to function in school.

Once a student has been identified as handicapped and it has been decided that he or she would be best served in a regular class, the school board must provide support for the teachers **or**, if not, weight the student for compensation purposes if the maximum class size is exceeded as a result.

When a student is **identified** as having severe behavioural difficulties, the school board must provide support for the teachers **and** the student is weighted for compensation purposes if the maximum class size is exceeded as a result.

A priori weighting

The 2010-2015 Teachers' Collective Agreement introduced a mechanism that could be used to balance group composition. Under the mechanism, three categories of students must be weighted to reflect their actual impact, in order to form a balanced group. This has the effect of reducing the number of students in the group to take into account the presence of students in these three categories, which are: psychopathological disorders (code 53), Autism Spectrum Disorder (code 50) and severe behavioural difficulties (code 14).

A priori weighting is carried out within the framework of the annual process for the formation of groups and applies until the first day of class.

Services for handicapped students and students with severe behavioural difficulties

In its document on the organization of educational services, the Ministry of Education provides two types of integration support for these students: (Québec, 2007: 11).

- Sustained support involves services provided for several hours each day. In addition, a staff member must be available at all times in the school, to intervene in unexpected situations. Sustained support must be provided to students with severe behavioural difficulties (code 14), moderate to severe intellectual impairments (code 24), profound intellectual impairments (code 23), severe motor impairments (code 36), Pervasive Developmental Disorders (code 50) or psychopathological disorders (code 53).
- Regular support involves frequent assistance for several hours per week. It is provided to students with mild motor impairments or organic impairments (code 33), language disorders (code 34), visual impairments (code 42) or hearing impairments (code 44).

The procedure for identifying students with severe behavioural difficulties is as follows:

- The teacher notifies the school principal, so that a case study can be carried out by the ad hoc committee.
- If, after analyzing the student's abilities and needs, the ad hoc committee believes he or she shows signs of having a handicap or having severe behavioural difficulties, the ad hoc committee recommends to the principal that the student be identified.

J
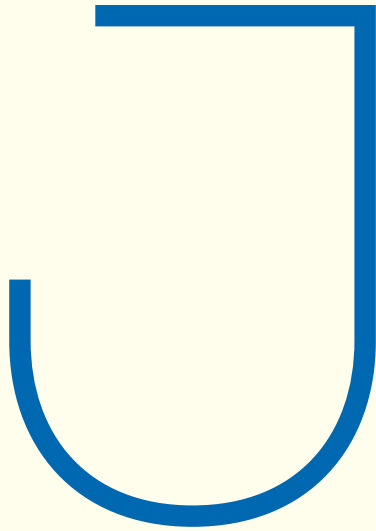
Special Needs Students in Vocational Training
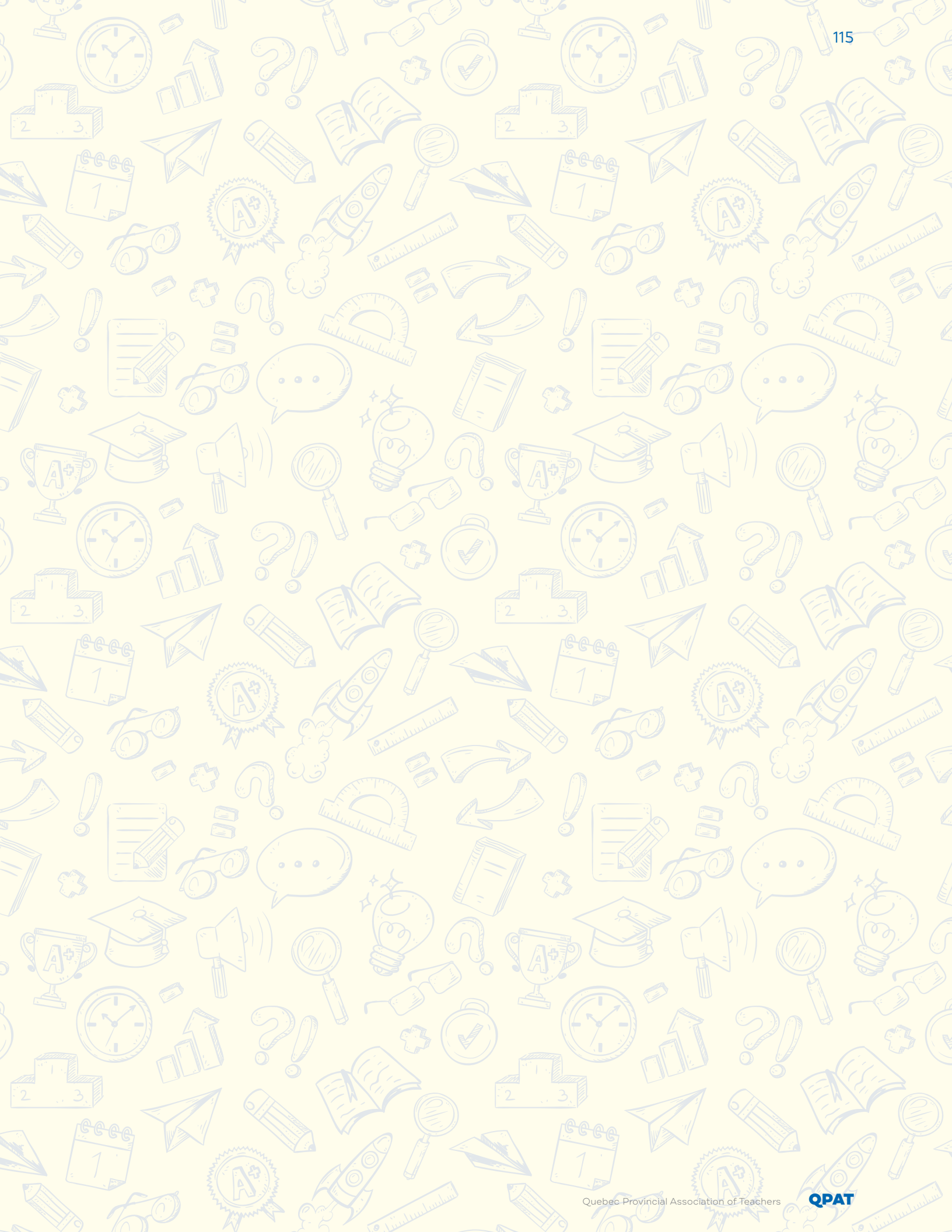
A number of students in vocational training have handicaps, social maladjustments or learning difficulties therefore, they are students with special needs. This section presents some of the individual steps that can be taken by teachers in vocational training.

Two categories of students by age, one objective: success

The Education Act (ss. 1 to 7), the Basic Vocational Training Regulation (s. 6) and the Teachers' Collective Agreement all make a distinction between vocational training students based on their age. Youth students are those aged 18 or under during the school year, or 21 and under in the case of a handicapped person.

Since youth and adult students can have special needs, we believe it is generally beneficial to provide local services for all students.

The main regulatory texts

- The Basic School Regulation for general youth education and adult education and the Basic Vocational Training Regulation
- The Teachers' Collective Agreement
- Adaptation measures for the evaluation of learning

The Basic Regulations

For youth students in vocational training, the Basic School Regulation for Preschool, Elementary and Secondary Education (ss. 3 to 5) states that the purpose of student services is to help students to progress in their various types of learning, among other things by providing them with conditions that are conducive to learning.

It provides for the following services among others:

- academic and career counselling and information
- psychological services
- psychoeducational services
- remedial support services
- speech therapy services
- orthopedagogical services

For students over 18 years of age, or over 21 years of age if they are handicapped, the Basic Vocational Training Regulation states that the student services available to them are those set out in the Basic Adult General Education Regulation (ss. 17 and 18). Their purpose is to provide adults in training programs with support in connection with their personal and social conditions, and they include services that provide information on community resources.

The Teachers' Collective Agreement

The Teachers' Collective Agreement applies to students aged 18 and under, or 21 and under in the case of handicapped students and addresses the following topics:

- Prevention and early intervention;
- The importance of identifying students with special needs as early as possible;
- Access to student records;
- Recording and sharing of information and observations on students;
- The principal's involvement when difficulties persist;
- The role of the parity committee (union and school board) that can make recommendations to the school board on the distribution of the resources available in centres.

The principles it proposes can serve as guidelines for a collective approach to the provision of support for all students, regardless of age, who have special needs.

Adapting and modifying evaluations and granting exemptions

In the evaluation for certification of vocational training, it is possible to implement adaptations and grant exemptions for students with special needs, but it is not possible to modify the content of the evaluation. The *Administrative Guide for the Certification of Studies and Management of Ministerial Examinations* published by the Ministry of Education sets out the rules for this.[69]

Individualized support

Individualized support is required for certain students. The current rules facilitate this process, especially in the youth sector.

Early intervention

Since the programs of study are relatively short, early intervention is required. The training centre or teacher can ask the students, upon confirmation of enrollment, if they would like to submit a copy of their Individualized Education Plan or other relevant documentation, so that appropriate services can be requested. It is also possible to request access to the students' records. In addition, it is important not to wait to inform the centre's management but to do so as soon as a student is found to have difficulties, regardless of his or her age.

---

69   The FSE-CSQ information sheet FP, on the evaluation of learning, provides an overview of this. It can be found at http://lafse.org/fp.

Obtain access to, studying and following up on the student's record

The request for access to a student's record should also, where possible, be used as an opportunity to discuss the student's situation and the services required with the centre's management.

First, however, the teacher should speak to colleagues who also teach the student in question, and pool their observations.

The Teachers' Collective Agreement does not specify whether the record in question is the student's academic record (results) or special support record (Individualized Education Plan, services obtained, etc.). There is nothing to prevent a teacher from requesting access to the information needed to decide, in conjunction with the centre's administration, on the services that may be offered to the student.

It is easier to access the record of a minor student who comes from a school or other centre in the same school board. If the student is from a different school board, permission to access the record must be obtained from the parents. In the case of an adult student, he or she can give permission to consult the admission record.

Meeting with management

After checking the student's record, the teacher can meet with the centre's management to request support. The teacher should have notes on how the student's difficulties are manifested in the classroom, the assistance that has already been provided and the support required for both the teacher and the student. Teachers should use this Referential to prepare for the meeting. At the meeting, teachers should agree with management on the services that will be offered and the timeframe for services.

After consulting the student's record, the teacher will also know whether an Individualized Education Plan was previously in place, and which services were provided. The centre's principal must establish an Individualized Education Plan for all students with special needs (Education Act, s. 110.11), and this automatically includes the obligation to provide services.

It is always useful for teachers to record their interventions with students in writing, along with any steps taken with the centre's management and other staff members.

What should teachers do if management does not take appropriate action for a youth sector student?

The situation can be addressed via the settlement mechanism provided for in the Teachers' Collective Agreement.

In addition, the student's parents, or the student if he or she is an adult, can lodge a complaint under the school board's own regulations, if the services offered are insufficient. If they are dissatisfied with the way their complaint is processed, they may also contact the student ombudsman (Education Act, s. 220.2).

Violence and other dangerous incidents

In the case of violent or other types of behaviour by a student that may compromise his or her own safety or that of other people, the centre's operating rules must be applied rigorously (code of conduct, guide for students, etc.). Teachers should act prudently at all times, and should not act alone.

In every case, the students concerned must be removed from the class or workshop, and an incident report must be completed and submitted as quickly as possible to the centre's management. A written description of the incident must be provided.

Conditions for the student's return to the class or workshop should be clearly established, in writing, along with the consequences of a second or subsequent incident.

In the case of assault or threats of assault, a complaint to the police should be considered. If the teacher is unable to go to work after the event, a claim must be made to the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST).[70]

Scope of responsibility

Because of the nature of their duties, teachers are the first to respond to their students, but they must not take sole responsibility for more difficult or complex cases. Instead, they should have no hesitation in asking student services and the centre's management for support, or in referring the student to other resources if necessary.

Collective action

There are several mechanisms available to teachers to make sure they are heard, and to challenge management with respect to the services required for students with special needs.[71]

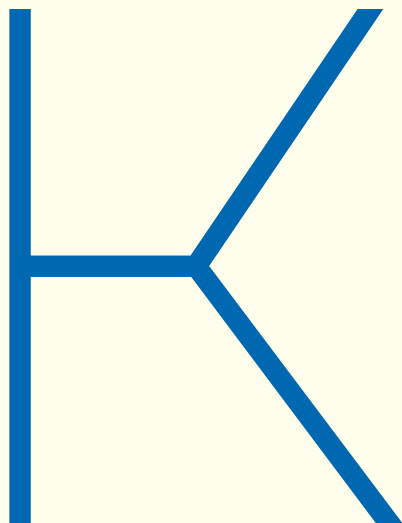70   For further information, see the *Guide de prévention et d'intervention contre la violence envers le personnel de l'éducation – La violence laisse des traces. Il faut s'en occuper!*, Montréal, Centrale des syndicats du Québec, 2012, 40 p.

71   Appendix XII – Collective Actions to Improve Services for Students At Risk and Students with Special Needs.

PART

K

Special Needs Students in Adult General Education
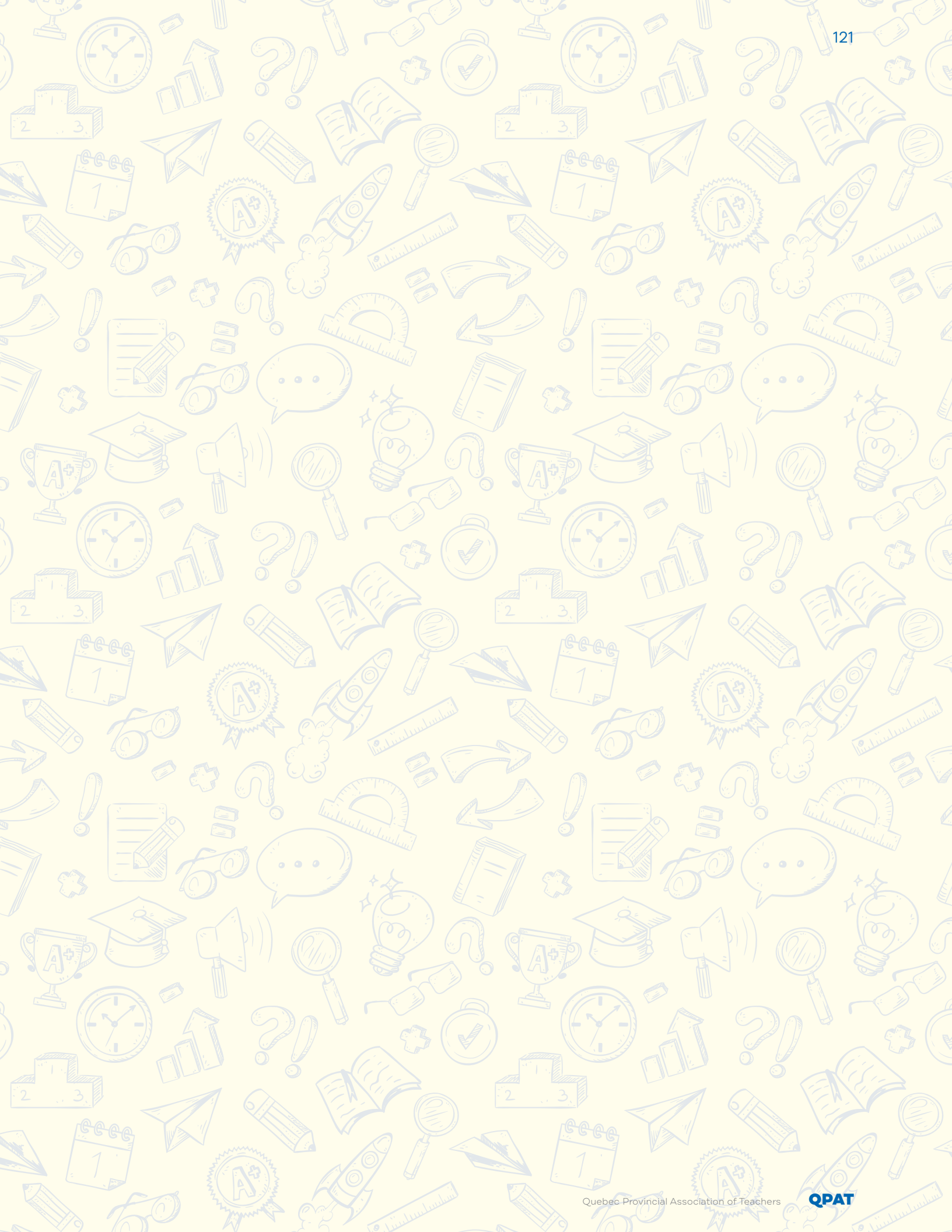
Adult general education receives a large number of students with learning or behavioural difficulties and psychosocial problems.

There are many types of learning difficulties: academic delays, language difficulties, dyslexia and so on. Behavioural difficulties can differ in terms of degree, ranging from attention deficit disorder to anxiety, aggression, lack of social skills and so on. Psychosocial problems encompass a variety of situations including work-family-school reconciliation, social maladjustments or problems arising from mental health issues, substance abuse, violent tendencies and so on.

Despite this, the financial resources available for student services in adult general education are extremely limited. The FSE-CSQ and QPAT consider this situation to be unacceptable.

This section attempts to answer some of the questions asked by teachers in adult general education. What can be done when a student is clearly in difficulty? How far does the teacher's responsibility extend? Is it possible to access the student's record? What can be done to improve the resources that are available at the centre? What role should management play?

The main regulatory texts

- Education Act
- Basic Adult General Education Regulation
- Teachers' Collective Agreement
- Adaptation measures for the evaluation of learning
- Reference framework for complementary educational services in adult general education

Education Act

Section 2 of the Education Act provides that every person no longer subject to compulsory school attendance is entitled to the educational services prescribed by the basic regulations.

Compulsory school attendance is defined as follows in section 14 of the Education Act:

> Every child resident in Québec shall attend school from the first day of the school calendar in the school year following that in which he attains 6 years of age until the last day of the school calendar in the school year in which he attains 16 years of age or at the end of which he obtains a diploma awarded by the Minister, whichever occurs first.

The second paragraph of section 3 of the Education Act states that:

> **Literacy services and other learning services** prescribed by the basic school regulation for adult education **shall be provided free** to residents of Québec contemplated in section 2, subject to the conditions prescribed by the said regulation.

Basic Adult General Education Regulation

The basic regulation contains a specific section on student services (ss. 17 and 18) that do not form part of the training and educational services provided free of charge (Education Act, s 3). This suggests that, although these services are in fact covered by the Basic Adult General Education Regulation, they are not necessarily free.

The sections in question state that:

" 17. Student services are designed to provide adults in training programs with support regarding their personal and social conditions.

18. Student services include services that provide information about community resources."

The Teachers' Collective Agreement

The Collective Agreement applies to students aged 18 or less, or to handicapped students aged 21 or less. On the other hand, the principles it contains can serve as guidelines for a collective approach to support all students with special needs, including adults. It covers the following topics:

- Prevention and early intervention
- The importance of detecting students with special needs as early as possible
- Access to the student's record
- Recording and sharing observations
- The services that may be provided
- Situations to be referred to the centre's management
- Referrals to various community organizations
- Involvement of management when difficulties persist
- The role of the parity committee (union and school board), which may make recommendations to the school board on the distribution of resources available in centres.

Adaptation measures for evaluation of learning

The following is taken from the *Administrative Guide for the Certification of Studies and Management of Ministerial Exams* (Québec, 2015: 110 à 111).

> The centre's administration is authorized to implement the measures below for adults with special needs. A report analyzing the adult's situation must be included in the adult's file. The relevance of the measure in terms of the adult's specific need, as recognized by school personnel, must be indicated in the adult's file. The adult must use this measure regularly and the adult must have been involved in the decision to use this measure. A tool must never perform the task for the adult. Translation software may therefore never be used for second language examinations. The adult must be continuously monitored so that it can be confirmed on his or her final copy that he or she has used the authorized measure.
>
> - Extending the time allotted for the examination by up to one third of the time normally allowed. The examination must, however, be administered in a single day and certain arrangements must be made to ensure that the time is extended without the adult coming into contact with other adult learners during lunchtime or breaks.

- Allowing the presence of an attendant (interpreter, invigilator, etc.) who provides the adult with the necessary assistance relative to the special needs identified in the adult's file. The attendant **must not** ask any leading questions, clarify questions by explaining them, make suggestions that might influence the adult's answers, correct spelling or grammar or make any changes whatsoever to the adult's answers. The **attendant may read an examination to the adult, except when the reading competency is being evaluated** in the language of instruction or second language.

- Allowing students to use a reading aid (e.g. voice synthesizer) and a writing aid (e.g. grammar and spelling software, word prediction software) for the ministerial examinations (including reading comprehension examinations in the language of instruction and second language). Any voice recognition function must be de-activated for the duration of the examination that evaluates the writing competency. **Translation software may not be used for second language examinations.**

- Allowing adults to use a computer, while respecting certain conditions: limiting Internet access (except for those examinations where such access is permitted), prohibiting communication between the different workstations on a network, providing technical assistance before and during the examination session, ensuring that documents are saved several times throughout and providing a final printed copy of the examination in 12-point font. This copy must include a footer indicating the adult's name and permanent code, the invigilator's name, the examination course code and the date of the examination.

- Allowing adults to use various writing tools.

- Allowing adults to give their answers using an audio recorder.

- Allowing adults to use a reading aid such as a monitor, magnifying glass or inclined reading stand).

- Allowing adults to take the examination in an isolated location, with supervision.

Support measures that require authorization from the Department of certification of studies

For any other support measures besides the ones indicated above, a request accompanied by the adult's complete file must be submitted to the coordinator for the certification of studies in general education in the adult sector at the Direction de la sanction des études. A complete file includes the adult's permanent code; the course code for which the request is being made; a copy of a report describing the adult's impairment or learning difficulty; the support measures implemented during the course to support the **adult's learning**; the adult's school record; and any other documents supporting the request.

Support measures for tests for recognizing experiential learning

Before implementing support measures for the Secondary School Equivalency Tests (SSET) and the GED® tests produced by the General Educational Development Testing Service (GEDTS), the centre's administration must submit a file that includes the adult's permanent code, a description of the impairment or learning difficulty, and the support measures proposed for administering the tests.

No support measures may be authorized for candidates taking the General Development Test (GDT).

Frame of Reference for Complementary Educational Services in Adult General Education

In 2009, the Department of Adult General Education at the Ministry of Education produced a Frame of Reference entitled *Complementary Educational Services in Adult General Education*. The document defines the guiding principles, the recommended approach and the elements required to ensure quality complementary services. Although originally published in 2009, it contains information that is still relevant, and teachers are invited to use it.

Individualized support

Some students require Individualized support, and the current rules facilitate this.

Early interventions

Because certain training profiles are so short, early intervention is required. It may be important for teachers to talk to colleagues who also teach the student, and pool their observations. It is important not to wait, and to inform the centre's management as soon as difficulties are observed (clause 11 14.07).

Obtaining access to, studying and following up on the student's record

The Teachers' Collective Agreement (clause 11-14.07 B) 2)) states that:

> In this context, the centre administration shall provide the teacher, upon request, with information on students with special needs, which information shall be obtained by allowing teachers access to student records. The information shall be provided if it is available and is in the student's interest, the foregoing subject to the respect of persons and the code of ethics.

The request for access to the student's record should also, where possible, be used as an opportunity to talk to the centre's management about the student's situation and the services required.

The above clause does not say whether the record in question is the student's academic record (results) or special support record (Individualized Education Plan, services obtained, etc.). There is nothing to prevent a teacher from requesting access to the information needed to decide, in conjunction with the centre's management, the services that may be offered to the student.

It is easier to access the record of a minor student who comes from a school or other centre in the same school board. If the student is from a different school board, permission to access the record must be obtained from the parents. In the case of an adult student, he or she can give permission to consult the admission record.

Meeting with management

After checking the student's record, the teacher can meet with the centre's management to obtain support. The teacher should have notes on how the student's difficulties are manifested in the classroom, the assistance that has already been provided and the support needed for both the teacher and the student. Teachers should use this Referential to prepare for the meeting. At the meeting, teachers should agree with management on the services that will be offered and the timeframe for services.

It is always useful for teachers to record their interventions with students in writing, along with the steps taken with the centre's management and other staff members.

What should teachers do if management does not take appropriate action in the case of a youth sector student?

The situation can be addressed via the settlement mechanism provided for in the Teachers' Collective Agreement (clause 11-14.07).

In addition, the student's parents, or the student if he or she is an adult, can lodge a complaint under the school board's own regulations, if the services offered are insufficient. If they are dissatisfied with the way their complaint is processed, they may also contact the student ombudsman (Education Act, s. 220.2).

Violence and other dangerous incidents

In the case of violent or other types of behaviour by a student that may compromise his or her own safety or that of other people, the centre's operating rules must be applied rigorously (code of conduct, guide for students, etc.). Teachers should act prudently at all times, and should not act alone.

In every case, the students concerned must be removed from the class or workshop, and an incident report must be submitted as quickly as possible to the centre's management. A written description of the incident must be provided.

Conditions for the student's return to the class or workshop should be clearly established, in writing, along with the consequences of a second or subsequent incident.

In the case of assault or threats of assault, a complaint to the police should be considered. If the teacher is unable to work after the event, a claim must be made to the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST).[72]

Scope of responsibility

Because of the nature of their duties, teachers are the first to respond to their students, but they must not take sole responsibility for more difficult or complex cases. They should have no hesitation asking student services and the centre's management for support, or in referring the student to other resources, where necessary.

---

72   For further information, see the *Guide de prévention et d'intervention contre la violence envers le personnel de l'éducation   La violence laisse des traces. Il faut s'en occuper!*, Montréal, Centrale des syndicats du Québec, 2012, 40 p.

Appendix

Appendix I
Classification of Education Research by Reliability Level

Even with all the new knowledge made available by education research, it is still important for teachers to be able to exercise their professional and critical judgment. For example, the utility of meta-analyses may be limited in a specific classroom context. Teachers are the "first intervenors" for students, and are excellent judges. Table AI-1 presents the types of research or studies, their level of validity and their characteristics.

Level of evidence and potential bias[73]	Types of research or studies	Characteristics
Level 1 (the strongest) **Level 1 A**	• Meta-analyses of randomized controlled trials • Systematic review • Single randomized, controlled trial (e.g. subjects not chosen)	• Well-designed • Control of potentially bias-causing factors • Examines many studies (large sample size) • Conclusions that are based on statistical analysis • Conclusions that are significant
Level 2 **Level 2 A**	• Controlled study without randomization (e.g. subjects chosen) • Quasi-experimental study	• Well-designed • Control of potentially bias-causing factors
Level 3	• Action research • Case studies • Survey research • Observational research • Archival research	• Well-designed • Non-experimental • Qualitative analysis (useful at early stages of investigation [Stanovich and Stanovich, 2003])
Level 4 (the weakest)	• Expert committee reports • Consensus statements • Experience of respected authorities	• Lacks comparative information • Fails to test an alternative • Rules nothing out (in some cases, expert opinion can be important)

Tableau AI-I – TYPES OF STUDIES BY LEVEL OF CONTROL

Source: Canadian Language and Literacy Research Network, 2009.

---

73   The greater the level to which research is based on protocols that control the influence of certain factors, the more reliable and generalizable its conclusions will be.

Appendix II
Student Services

At-risk students and students with special needs have a legal right (Education Act, s. 1) to receive support from complementary student service personnel, who, depending on their field of expertise, can provide assistance, evaluations and specialized interventions directly to students.[74]

Below are some examples of the support provided by complementary service personnel:[75]

- **Special education technicians** can apply special education techniques and methods, and assist the student with certain activities, for example by reformulating instructions to help with comprehension, or by helping to organize materials.

- **Handicapped student attendants** can help students with handicaps to take part in school activities and to move from one place to another. They can also monitor the students' well-being, hygiene and safety.

- **Social work technicians** can apply social work techniques, help prevent substance abuse, violence, absenteeism, dropping out and other problems, and assist individual students or groups of students who have behavioural difficulties as a result of these problems. They can also help students who need assistance with various personal, family, social or other problems that may affect their behaviour.

- **Interpreters** can help deaf students or students with hearing impairments to understand spoken messages from people with whom they must communicate during courses and other activities at school.

- **Braille technicians** can help teachers and professionals to design, produce, adapt and demonstrate teaching materials for visually impaired students.

---

74   Based on the classification plan for support and professional staff.

75   This list is not exhaustive.

Below are some examples of the support provided by professional staff members:[76]

- **Occupational therapists** can work with students on their motor skills. They can also evaluate the functional abilities of students with physical or psychomotor difficulties, and can implement occupational therapy interventions.

- **Speech therapists** can evaluate students who have or are likely to exhibit language, speech or vocal problems, and can implement the support measures needed to facilitate their school work.

- **Orthopedagogues** screen, evaluate and assist students who have or are likely to exhibit learning difficulties and disorders. They can also identify the students' abilities and needs, and design and produce re-education programs to correct learning difficulties and disorders affecting cognitive skills or competencies.

- **Psycho-educators** can work with students on their social and behavioural skills, in order to evaluate the adjustment difficulties and adaptive capacities of students who have or are likely to exhibit social maladjustments. They can also implement support measures aimed at creating conditions conducive to adjustment, which will also help to restore and develop the students' adaptive capacities and independence as they interact with their environment.

- **Psychologists** can assist and support students who have or are likely to exhibit adjustment difficulties or learning difficulties. They can evaluate the students' psychological and mental functions and carry out interventions to promote psychological health and restore the mental health of students as they interact with their environment. They can also help the students with their educational experience and help them to achieve fulfillment, both personally and socially.

- **Social workers** can help to prevent, promote, screen and evaluate the social functioning of individual students or groups of students who have or are likely to experience emotional, social, educational or family-related problems, in order to provide support and restore social functions, promote the students' development as they interact with their environment, and facilitate their educational experience.

---

76   This list is not exhaustive.

Appendix III
Suggestions for Materials Mentioned in Research

III

Under the terms of the Education Act, the principal is responsible for approving the choice of textbooks and instructional material, based on proposals by the teachers (s. 96.15). This approach, based on proposals made by teachers, is our strongest collective power, and we should use it. In addition, it is up to teachers to select the methods of instruction that correspond to the requirements and objectives fixed for each group or for each student entrusted to their care (s. 19). Teachers should therefore not hesitate to speak up about the choice of materials. Below are some suggestions to fuel your reflections.

1. Reading and writing

Preschool

La forêt de l'alphabet (in French only), based on the standard three-tier RTI model (**T1**), is a program of alphabetic principles and phonemic awareness designed to prevent early reading problems. It focuses on explicit teaching of the names and sounds of letters, and on games involving letters and phonemic awareness skills (Brodeur et al., 2008) [http://www.cpeq.net].

Le sentier de l'alphabet (in French only) based on the standard three-tier RTI model (**T2**), is a program of alphabetic principles and phonemic awareness for orthopedagogues working with at-risk students (Laplante et al., 2010) [http://www.cpeq.net].
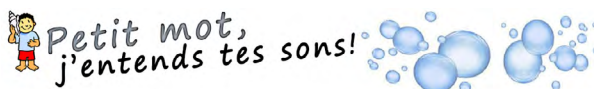
Petits mots, j'entends tes sons (in French only) is a program of phonological awareness and alphabetic principles (Crête et al., 2011). This material is not based on the standardized three-tier RTI model.

Preschool, Grade 1, Grade 2

ABRACADABRA is a free, online teaching resource (in French and English) designed to promote success in early literacy, from kindergarten to grade two, using a set of books and activities (Centre for the Study of Learning and Performance, Université du Québec à Montréal and Concordia University, 2015) [http://petitabra.concordia.ca].

Grade 1, Grade 2

Apprendre à lire à deux (in French only) is a program that teaches word recognition (T1). The activities (70) require peer-assisted learning. It is intended for grade one and grade two classes. The kit includes activities on the sounds and appearance of letters, decoding, globalization of word tools and reading of short stories (Dion et al., 2005) [http://www.labpe.uqam.ca].

Apprendre à comprendre (in French only) is specifically designed for orthopedagogues to help them teach reading comprehension. It is intended for students who exhibit at least one equivalent reading level at the end of grade one, but who still have difficulty understanding the meaning of texts. It has been tested successfully on 45 students with high-level pervasive developmental disorders (Dion et al., 2005) [http://www.labpe.uqam.ca].

À la rescousse des Syllab-o-sons! (in French only) contains reproducible game boards created specifically to allow professionals using the Syllab-o-sons box to use the syllable cards in game-related activities. [https://finoeduc.com/products/copy-of-a-la-rescousse-des-syllab-o-sons-activites-1].

L'itinéraire – Niveau 1 (in French only), based on the standardized three-tier RTI model, is an explicit teaching program for oral reading and spelling. The program comprises 50 lessons. Each lesson comes with a **Teacher's Guide** and a Student's Notebook.

L'itinéraire – Niveau 2 (in French only), based on the standardized three-tier RTI model, is an explicit teaching program for oral reading and spelling. The program comprises 50 lessons. Each lesson comes with a **Orthopedagogue's Guide** and a Student's Notebook.

Elementary – Second and Third Cycles

Histoire de famille (in French only) is a turnkey program designed to teach the development of **morphological awareness** (i.e. awareness of prefixes, suffices and roots). It contains 25 varied, game-based activity sequences (Fejzo, 2015) [http://www.finoeduc.com].

Elementary – Grade 4, Cycle Three and Secondary – Cycle One

8 stratégies pour comprendre les textes courants (in French only) is a tool to assist with evaluation and explicit teaching of reading comprehension strategies based on modern texts. It includes free material and video capsules [http://www.adel.uqam.ca].

Secondary – Cycle One

Suggestions de pratiques d'enseignement favorables au développement de la lecture chez les élèves du secondaire (in French only) is a guide that presents instructional activities based on effective teaching models, to teach cognitive and metacognitive reading strategies and sustain student motivation at school (Van Grunderbeeck, 2004) [http://www.education.gouv.qc.ca/fileadmin/site_web/documents/dpse/adaptation_serv_compl/guide.pdf].
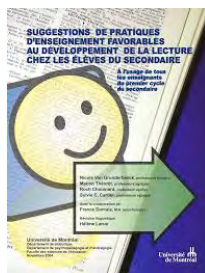
2. Vocabulary

Preschool

Les aventures de Mimi et ses amis (in French only) is a program to teach vocabulary to preschool students. It contains 30 stories. Each book introduces five or six target words, followed by exercises to help the children to remember, discriminate and use the new words in different contexts (Japel et al., 2010) [http://www.cpeq.net].

3. For Orthopedagogues

CHRONOLEXIE (in French only) is a re-education and evaluation software application used for re-education interventions with students who are dyslexic or who have reading difficulties [http://www.finoeduc.com].

4. Behaviour

Preschool and Elementary

Fluppy (in French only) is a social skills coaching program aimed at children in preschool and elementary school. It is designed to teach recognition and communication of emotions and social problem resolution techniques (Capuano, 2002) [http://www.cpeq.net].

From Preschool to Secondary School

Vers le pacifique (in French only) is a program designed to coach children in conflict resolution techniques and encourage them to use mediation as a conflict resolution method.

5. Dropping Out of School

Preschool and Elementary School

Agir dès les premiers signes (in French only) is a directory of good practice to prevent behavioural difficulties in preschool and elementary school students (Potvin et al., 2017) [http://www.ctreq.qc.ca/nouveau-repertoire-de-pratiques-efficaces].

Secondary School

The **Logiciel de dépistage du décrochage scolaire** (LDDS) (in French only) is used to screen and identify students aged 12 to 18 who are at risk of dropping out of school. It also contains guidelines for users (Fortin and Potvin, 2011) [http://www.ctreq.qc.ca].

The **Guide de prévention du décrochage scolaire : *Y a une place pour toi*** (in French only) compliments the LDDS. It offers strategies and programs of targeted interventions designed for the four types of at-risk students. It is available free of charge in PDF format (Potvin et al., 2007) [http://www.ctreq.qc.ca/realisation/ya-une-place-pour-toi-guide-de-prevention-du-decrochage-scolaire/].

The **Trousse d'évaluation des décrocheurs potentiels** (TEDP) (in French only) is a tool that can be used to screen students at risk of dropping out and draw up their school adaptation profile for differential interventions. It includes a questionnaire, a software application and a guide (Janosz et al., 2007) [http://www.gres-umontreal.ca].

Appendix IV
Kindergarten for Five-Year-Olds: Example of Screening and Intervention in Reading and Writing for At-Risk Students Based on the Response-to-Intervention (RTI) Model Standardized Three-Tier Protocol

IV

From the standpoint of overall development, no specific area of development or related aspect should take precedence over another. Data from the Québec Longitudinal Study of Child Development (QLSCD) confirm the fact that cognitive and language development is associated with subsequent educational success, and that social and emotional development, in particular executive functions and psychomotor development, also play a vital role in the development, learning and commitment of preschool-age children.

The purpose of this Appendix is not to assert the value of reading and writing, but to complete the content of the Preschool Education Program (5-year-olds) with respect to the competency "To communicate using the resources of language" which focuses solely on the emergence of writing.

What research suggests to prevent reading and writing difficulties for 5-year-olds and to identify at-risk students

Meta-analysis based research shows the importance of starting to learn the names and sounds of letters in kindergarten, and of developing phonemic awareness skills, including blending and segmentation, since these elements are predictors that are strongly associated with subsequent reading and writing success.

Predictors of success for reading and writing in kindergarten

In the meta-analysis by the National Early Literacy Panel (National Institute for Literacy, 2008), early screening in kindergarten requires indicators that can predict subsequent development of reading skills. Those indicators are:

- Knowledge of the names and phonemes of letters to develop **comprehension of the alphabetic principle**.
- Writing of letters from dictation, or writing of the student's first name.
- Phonological awareness, including **phonemic awareness**.
- The ability to name letters or numbers quickly.
- Phonological working memory.

The literature proposes mid-year screening of at-risk children in kindergarten for 5-year-olds, since "in the screening procedure, indicators are based on the teaching objectives set out in the Education Program, because their purpose is to evaluate the student's response to the teacher" (Desrochers, 2016, translated from the original French).

Example of screening and intervention

At the beginning of the year, teachers of kindergarten for 5-year-olds administer a test to each student on their knowledge of the names and sounds of the letters of the alphabet. The test verifies the students' knowledge (baseline monitoring 1). A student will be at risk if he or she has not achieved sufficient progress, based on the indicators, when the test is administered again mid-year.

Interventions for all students (T1)

The teacher presents one letter of the alphabet per week,[77] using explicit instruction.[78] He or she also explicitly teaches phonemic awareness skills. This is done for 30 minutes per day, four days per week, 26 weeks per year. During the day, the teacher reinvests the learning in daily activities such as the morning message, or when reading books (balanced approach).

Screening 1

In early February, the teacher administers the same test on the names and sounds of the letters of the alphabet (progress monitoring 2 used as screening 1). Students who have not progressed sufficiently are then identified as students at risk,[79] and receive T2 interventions dispensed by the orthopedagogue or remedial/resource teacher.

The orthopedagogue or remedial/resource teacher's T2 interventions

The orthopedagogue or remedial/resource teacher uses explicit instruction to teach the names and sounds of the letters, introducing two letters per week and following the order used in class. He or she also explicitly teaches phonemic awareness skills, mainly blending and segmentation. The students are seen by the orthopedagogue or the remedial/resource teacher in evenly-matched groups of no more than five, for 30 minutes per day, four days per week, over one term. The orthopedagogue or remedial/resource teacher tracks progress once per 2 weeks.

The children are still taught by their classroom teacher (T1). The orthopedagogue or remedial/resource teacher's interventions are in addition to this (T2 or T3).

Progress monitoring 3 and screening 2

At the end of the year, the classroom teacher monitors progress by administering the same test as at the beginning and middle of the year (progress monitoring 3). The orthopedagogue or remedial/resource teacher, working with the classroom teacher, identifies the students who have not progressed sufficiently. These students are no longer considered to be at risk, but are classified as having learning difficulties (screening 2) (see Figure AIV-1).
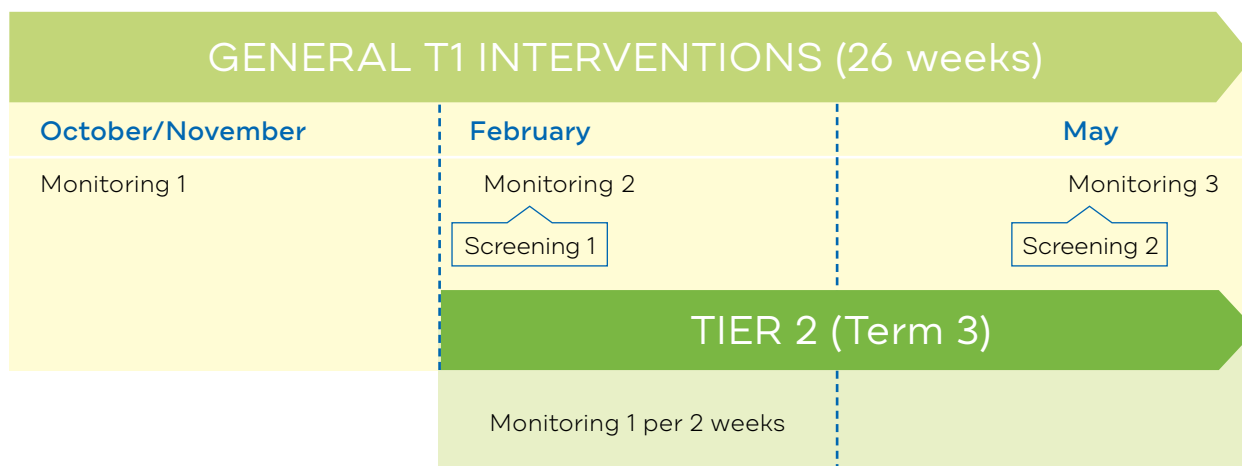
FIGURE AIV-1 – MONITORING AND SCREENING IN T1.

[77]   Starting with the vowels, followed by the letters with long sounds (e.g. m, l) and ending with the letters that have short sounds (e.g. d, t).
[78]   Appendix VII – The Traditional Model and the Response to Intervention (RTI) model.
[79]   Research suggests that at least 20% of all students are at risk.

Transition from kindergarten to grade one

There will probably still be some students who do not progress sufficiently despite the interventions in the classroom and by the orthopedagogue or the remedial/resource teacher (≈ 5%) and who will therefore start grade one with a learning delay.

Where this is the case, the grade one teacher teaches the content of the Québec Education Program, explicitly teaching grapheme-phoneme correspondences (T1) and implementing remedial measures.[80] The students who fell behind in kindergarten also meet with the orthopedagogue or the remedial/resource teacher (T2 or T3), who explicitly teaches the names and sounds of the letters that have not yet been acquired by the students, and reviews the grapheme-phoneme correspondences seen in class.

Example of a balanced approach to reading

Meta-analysis data also show that a balanced approach is vital in reading, especially for at-risk students. A balanced approach means, among other things, explicitly teaching basic reading knowledge and reinvesting the students' learning in context-driven situations, as shown in Figure AIV-2.

BALANCED APPROACH

1. Explicit instruction:

The students learn the names and phonemes of letters because they have a model and guided practice for each letter

(Explicit = no context)

2. Emergence of writing:

The students learn the names and phonemes of letters by making their own connections or by observing the teacher as he or she reads a book or engages in other activities

(Emergence = context)

National Reading Panel Report (2000)
Meta-analysis Ehri et al. (2001)

FIGURE AIV-2 – BALANCED APPROACH TO READING.

---

80   Appendix IX – Teaching Models that are Respectful of Professional Autonomy.

Appendix V
Cognitive and
Metacognitive Strategies

V

According to the meta-analysis by Wang, Haertel and Walberg (1990), teaching of cognitive and metacognitive strategies is one of the elements that has the greatest impact on learning. Students with learning difficulties tend to make little use of these strategies, so it may be interesting for teachers to work on this aspect.

Cognitive strategies

Cognitive strategies are the methods used by students to learn (see Table AV-I). They should be taught regularly, using explicit instruction. They should also be taught using pedagogical content, since the students will transfer them more easily when they can apply them to the content.

TABLE AV-I – COGNITIVE STRATEGIES[81]

Cognitive Strategies	
Repetition Helps with encoding	• Repeat learned notions several times • Use mnemotechnical methods • Reread/rewrite • Highlight • Make lists to be learned by heart
Elaboration Helps maintain information in the long-term memory by making connections between prior learning and new information	• Activate prior learning • Summarize • Paraphrase • Take notes • Explain what has been learned to someone else • Ask questions • Make an analogy • Invent examples • Create mental images • Write keywords
Organization Helps select information and build connections	• Make predictions • Build a graphic organizer • Complete a table • Draw up a plan • Classify information by writing a title and subtitles, etc. • Identify the main idea • List, classify, compare, summarize
Compilation Used to create a sequence of operations by applying a procedure	• Identify a model and follow it **step by step** • Make a list of the steps • Practice one step at once
Generalization Used to expand the number of situations	• Make assumptions • Compare by identifying similarities/differences • Give examples
Discrimination Used to identify cases where it does not apply	• Give counter-examples

---

81   The strategy classifications established by Weinstein and Meyer and McKeachie et al. were taken up by numerous other authors. Table AV-I is inspired by Langevin (1992), Viau (1999) and Cartier (2007), all of whom used the above authors as their basis.

Metacognitive strategies

Metacognitive strategies are used by students to manage, adjust and regulate cognitive actions during learning (see Table AV-II).

TABLE AV-II – METACOGNITIVE STRATEGIES

Metacognitive Strategies	
Planning	• Set goals • Make a plan • Select strategies • Draw up a work schedule
Monitor	• Check the steps of the task • Check learning • Check comprehension
Self-assessment	• Make sure everything has been read • Check to see if the objective has been achieved • Make sure the activity is complete • Make sure he/she has understood the task

Appendix VI
Types of Evaluations to Analyze Students' Abilities and Needs

VI

Evaluating a student's abilities and identifying his or her needs involves more than simply listing his or her strengths and weaknesses in two columns in the Individualized Education Plan. On the contrary, it is a much more complex process that requires time, expertise and professional judgment on the part of the people concerned. This type of evaluation is usually carried out by professional resources from inside or outside the school and falls under the responsibility of the school board (Education Act, ss. 96.14, 234 and 235).

1. Educational evaluation

An educational evaluation assesses the student's academic learning. The teacher makes a judgment on the acquisition of learning and competency development within the Education Program, using a variety of evaluation tools (both formative and summative), a portfolio or an end-of-cycle report.

2. Orthopedagogical evaluation

An orthopedagogical evaluation is carried out using standardized and non-standardized tests, to analyze the student's difficulties in reading, writing and mathematics. In reading and writing, the orthopedagogue identifies the deficient processes and decides whether or not the student exhibits manifestations of dyslexia-dysorthographia or another learning disability. In mathematics, the orthopedagogue evaluates the student's ability to solve problems and perform mathematical operations. The orthopedagogical evaluation requires an in-depth knowledge of learning processes.

3. Evaluation of social and emotional skills

An evaluation of social and emotional skills involves observing the student's behaviour inside the classroom and at school, and is carried out by the teacher or, where necessary, by professional resources.

4. Psychosocial evaluation

A psychosocial evaluation focuses on the student's behaviour towards his or her school, social and personal environment. It is carried out by psychologists, psycho-educators, social workers and trained professionals using observation or systematic analysis techniques (observation grids, behavioural scales, sociometric surveys, structured interviews, projective or other standardized psychometric tests, etc.).

5.   Intellectual evaluation

An evaluation of intellectual functions is performed by a psychologist or guidance counsellor using standardized psychometric tests, observation techniques or systematic analyses. An evaluation of adaptive behaviour can also be carried out by the same people to assess the student's personal and social autonomy.

6.   Evaluation of language, speech and communication skills

An evaluation of language, speech and communication skills is carried out by a speech therapist. It focuses on the receptive and expressive, oral and non-oral aspects of these skills. Its purpose is to identify any language-related or communication-related causes of the learning difficulties exhibited by the student, in order to analyze the nature and level of any skill impairments and related handicaps. The evaluation may be based on clinical observations, observation of spontaneous and structured situations, standardized and non-standardized measures, and interventions.

7.   Other evaluations

Other types of evaluations that are considered to be necessary by the ad hoc committee can be carried out by neurologists, neuropsychologists, child psychiatrists, audiologists or other resources.

Appendix VII
The Traditional Model and the
Response to Intervention (RTI) Model

VII

The Response to Intervention (RTI) model is an educational model proposed in 2004 in the *Individuals with Disabilities Education Act (IDEA)*, as a reaction to the limitations of the traditional "wait to fail" model.

This Appendix begins by presenting the traditional "wait to fail" model and the method it uses to screen students. It then presents the RTI model and its two approaches, which are often confused and misunderstood.

"Wait to fail" before intervening

In the "wait to fail" model, students must experience learning difficulties before support services are provided and they are referred to a health professional (psychologist, speech therapist, etc.) for evaluation (see Figure AVII-1).
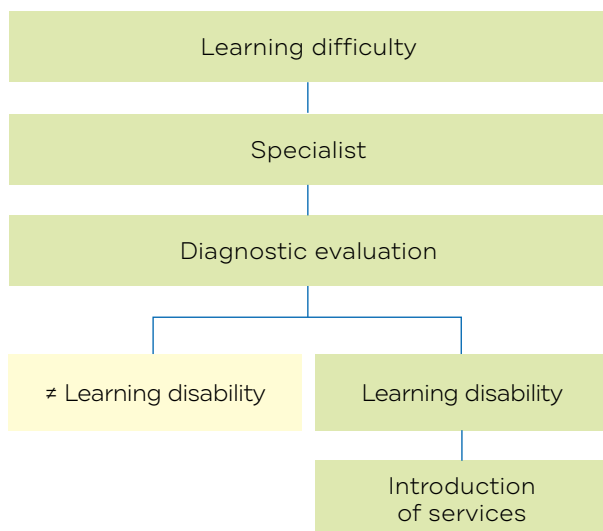
FIGURE AVII-1 – "WAIT TO FAIL" MODEL
Source: Laplante, 2013.

The limitations of the "wait to fail" model

The "wait to fail" model has two significant limitations: **lack of prevention** and **late identification** of students with learning difficulties or disabilities. In this model, the school must wait until students have accumulated a delay of two years in reading, writing or mathematics before identifying them as having learning difficulties. However, Torgesen (2004) has clearly shown that students who still have learning difficulties at the end of grade three will almost never achieve an average level of reading skill by the end of elementary school. It has also been observed that these are the students who tend to drop out of school.

Screening in the "wait to fail" model

To screen children with learning difficulties or disabilities, the model requires a diagnostic evaluation by a professional or health professional (psychologist, speech therapist, etc.), and all too often the standard deviations in standardized tests are used to decide whether or not the student has a learning difficulty or disabilities. This has often resulted in children being identified as having learning difficulties when in fact they do not (false positive), or vice-versa: children who do in fact have learning difficulties are not identified (false negative).

The Response to Intervention model

The RTI model offers an educational framework based on how children respond to interventions. In other words, the classroom teacher (T1) explicitly teaches specific learning content (supported by research) and if the student does not progress sufficiently (does not respond to the intervention), then the intervention is intensified (T2 – T3).

The model's guidelines are:

- Use practices that have been proven by scientific research to be effective.
- Aim for prevention and early screening of at-risk students.
- Recognize the crucial role of universal educational interventions (T1).
- Increase the intensity of the interventions at each tier (T2 – T3).
- Monitor progress and adjust the interventions accordingly.

The RTI model's two approaches

The education community has adopted the RTI model in recent years, but is not unanimous as to how it should be applied, and two separate approaches have emerged. These approaches differ in terms of their methods and their conception of adjustment (Fuchs, Fuchs and Stecker, 2010) (see Figure AVII-2).

The RTI model's two approaches

Standardized three-tier protocol
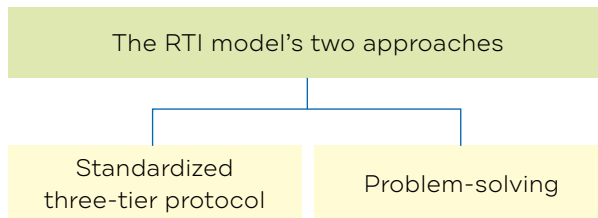
Problem-solving

FIGURE AVII-2 – THE RTI MODEL'S TWO APPROACHES.

Note: In Québec, the Problem-Solving approach is often confused with the Standardized Three-Tier Approach. The Ministère de l'Éducation et de l'Enseignement supérieur (MEES) has contributed to the confusion with its Reading Reference for 10-15 year-olds, which is based on the Problem-Solving approach but uses tiers (T1 – T2 – T3) and applies them outside the standardized protocol.

These two approaches are based on the same guidelines. The differences lie in how they are applied and include:

- the type of research used
- the teacher's role
- the nature of teaching-learning
- the instructional models

The Standardized Three-Tier Protocol is more effective than the Problem-Solving Protocol in speeding up the progress of students with learning difficulties (Fuchs, Fuchs and Stecker, 2010).

Implementing the Two RTI Model Approaches

The Problem-Solving approach

The Problem-Solving approach is based on an educational philosophy in which regular classes are the only option. Responsibility lies entirely with the classroom teacher (see Figure AVII-3).

Classroom teacher			
• differentiates his/her teaching (flexibility, adaptation, modification) • involves the parents	• asks other staff members for advice (teachers + principal) • adjusts his/her teaching accordingly	• asks professionals for advice • adjusts his/her teaching accordingly	• receives help in the classroom, for himself/herself and for the student
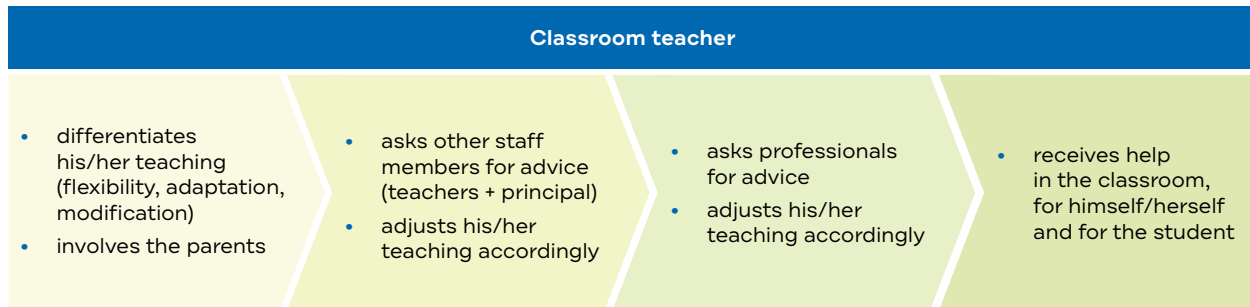
FIGURE AVII-3 – IMPLEMENTING THE PROBLEM-SOLVING APPROACH

Note: In this approach, the student only receives services after all the steps in the process have been completed. The classroom teacher therefore has full responsibility for at-risk students. The steps in the process may be spread over several months, and in some cases over more than one school year.

The Standardized Three-Tier Protocol

The Standardized Three-Tier protocol uses a service continuum. The first step involves universal interventions (T1), based on meta-analyses, for all the students in the class, to help prevent problems. Interventions are then intensified (T2 and T3) for students who have not progressed sufficiently after a certain period of time.

Vaughn's (2007) model is the only reading/writing model based on the Standardized Three-Tier RTI protocol. It focuses primarily on prevention of reading/writing problems. The classroom teacher uses the Tier 1 (T1) protocol to teach specific content to all the students. At this stage, roughly 20% of the students in the class will be identified as being at risk. Remedial interventions (T2) based on the protocol are then administered to the students, and the classroom teacher works closely with the remedial teacher to monitor progress. If a student has still not progressed sufficiently despite the T2 interventions, he or she will receive T3 interventions (see Figure AVII-4). If, at the end of the process, the student's progress is still insufficient, he or she will be evaluated by a health professional, who will carry out an in-depth investigation of his or her intellectual functions, executive functions, language skills and so on.[82]

---

82   Appendix VI – Types of Evaluation to Analyze Students' Abilities and Needs.

T3 – Re-educational interventions (5%)
• Administered by the orthopedagogue/remedial teacher to students who did not progress sufficiently at T2, in groups of 3
• 20-30 minutes per day, 4 days per week.
• For one term
• Monitor progress every week

T2 – Additional interventions (15%)
• Administered by the orthopedagogue/remedial teacher to students who did not progress sufficiently at T1, in groups of 5
• On one of the aspects covered in P1
• 20-30 minutes per day, 4 days per week.
• For one term
• Monitor progress twice a week

T1 – Universal interventions (80%)
• Given by the classroom teacher to all students using explicit, systematic instruction
• On one of the aspects of reading
• 20-30 minutes per day, 4 days per week. Throughout the year
• Monitor progress three times per year

FIGURE AVII-4 – IMPLEMENTING THE STANDARDIZED THREE-TIER PROTOCOL.

Note: Under this approach, students are identified as having learning difficulties at the end of the first year. This is consistent with the FSE-CSQ and QPAT June 11 agreement.

Note: Research into the RTI model is not clear with respect to T2. Sometimes it is assigned to the classroom teacher and sometimes to the orthopedagogue.[83] In Québec, the experimental research[84] by Laplante et al. (2016) assigned both T2 and T3 interventions to the orthopedagogue. This particular research was carried out on preschool children and students in Elementary Cycle One.

A hybrid model that reflects the situation in Québec

Laplante et al. (2016) carried out longitudinal research in Québec on the application of the RTI model's Standardized Three-Tier Protocol and subsequently used the work of Fletcher (2008) as a basis for a new model (see Figure AVII-5), described by the author as a "hybrid model" because it matches the time for monitoring student progress and the type of intervention for respondents and non-respondents with the associated services for students with special needs.

The hybrid/RTI Standardized Three-Tier Protocol model is interesting because it reflects the situation in Québec. Laplante's quasi-experimental[85] research revealed that, with T1 interventions, the number of at-risk students fell by nearly 50%. Laplante also assigned T2 and T3 interventions exclusively to orthopedagogues/remedial teachers. In her model, she also suggested that students who did not respond to T3 interventions could either continue in regular classes with support from the orthopedagogue/remedial teacher, or could obtain other services (T4).

---

83   Orthopedagogues only exist in Québec. Research into the RTI model refers to "special teachers".
84   Appendix I – Classification of Education Research by Reliability.
85   Appendix VI – Types of Evaluation to Analyze Students' Abilities and Needs.

Modèle hybride RTI / 3N en littératie et services associés pour les EHDAA (Laplante, 2011)

CLASSE RÉGULIÈRE

Non-Répondants

Identification

N3 – Intervention intensive et ciblée

Répondants — Pistage — Non-Répondants

Identification

N4 – Intervention intensive et ciblée

AUTRES MODÈLES DE SERVICES

Adapté de Fletcher et *al.* (2007)
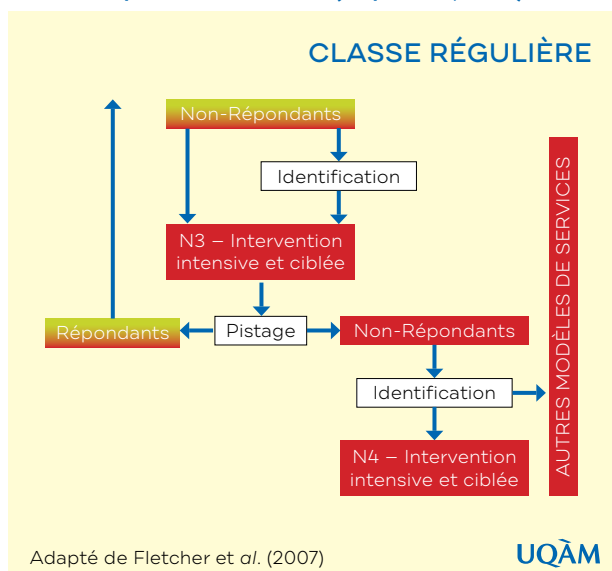
UQÀM

Proposition d'un modèle hybride RTI/3 niveaux d'intervention en littératie

Adapté aux particularités du système scolaire québécois

UQÀM

FIGURE AVII-5 – HYBRID RTI MODEL BASED ON THE STANDARDIZED THREE-TIER PROTOCOL, PROPOSED TO PREVENT LEARNING DIFFICULTIES IN READING AND IDENTIFY STUDENTS WITH LEARNING DISABILITIES.

Source: Laplante et autres, 2011.

What does "standardized protocol" mean?

People often claim that the standardized protocol hinders professional autonomy. Let us look at this in more detail.

A standardized protocol is based on proven data, and is used to guide interventions with a view to identifying students at risk and, subsequently, those with learning difficulties. The fact of using a standardized protocol in no way prevents teachers from being innovative. On the contrary, the protocol provides a guideline that helps teachers with their interventions and screening. The reading-writing protocol changes according to the grade level. In Elementary Cycle One, for example, the basic content used to teach reading is not the same as that used in Cycle Two and Cycle Three.

Proven data are those obtained from meta-analyses. In reading and writing, the meta-analysis by the National Reading Panel (2000) identified five pillars to promote the learning of reading and writing: phonemic awareness and the alphabetic principle, identification and production of words, fluidity, vocabulary and comprehension.

Standardized protocol

The protocol is based on data from solid research, to help teachers target students at risk and, subsequently, students with learning difficulties.

In reading:

- **Kindergarten:** Explicit teaching of the names and sounds of all the letters of the alphabet (alphabetic principle), phonemic awareness, especially isolation, blending and segmentation skills.
- **Grade 1:** Explicit teaching of the most common and regular grapheme-phoneme correspondences (e.g. an - oi - bl).
- **Grade 2:** Explicit teaching of less common, less regular grapheme-phoneme correspondences (e.g. ch = /k/ as in choir).
- **Cycles Two and Three:** It is important for cognitive knowledge, strategies and metacognitive strategies in reading and writing to be taught explicitly.

Screening in the RTI model

In this model, the term "screening" means collecting information and analyzing the students' progress towards learning specific content, in order to identify those who have not progressed sufficiently, compared to the majority who have progressed normally.

To screen for at-risk students at the beginning of the year, the teacher administers a pre-test, such as a reading test, which targets basic program content. The teacher grades the test but does not give the copies back to the students. At the beginning of the second term, the teacher re-administers the same test. The students who have not progressed, compared to the majority, are then **identified** as being at risk (see Figure AVII-6, screening 1).

To screen for students with learning difficulties, the teacher administers the same test to the at-risk students at the beginning of the third term, in cooperation with the orthopedagogue who has monitored their progress. Together, they identify the students who have not progressed sufficiently. These students are then identified as having learning difficulties (see Figure AVII-6, screening 2).

At the end of the third term, if the classroom teacher and the orthopedagogue/remedial teacher find that certain students have not progressed sufficiently despite the T1 and T3 interventions, they should request evaluations from professional resources such as psychologists, speech therapists or others (T4).

Monitoring in the RTI model

Teachers monitor progress once per term, so they know which students have not progressed sufficiently in their learning of the basic content for their grade level.

Orthopedagogues/remedial teachers working on T2 interventions monitor progress **every two weeks**. They record the students' progress in learning the basic content for their grade level.

Orthopedagogues/remedial teachers working on T3 interventions monitor progress **every week**. They record the students' progress in learning the basic content for their grade level.
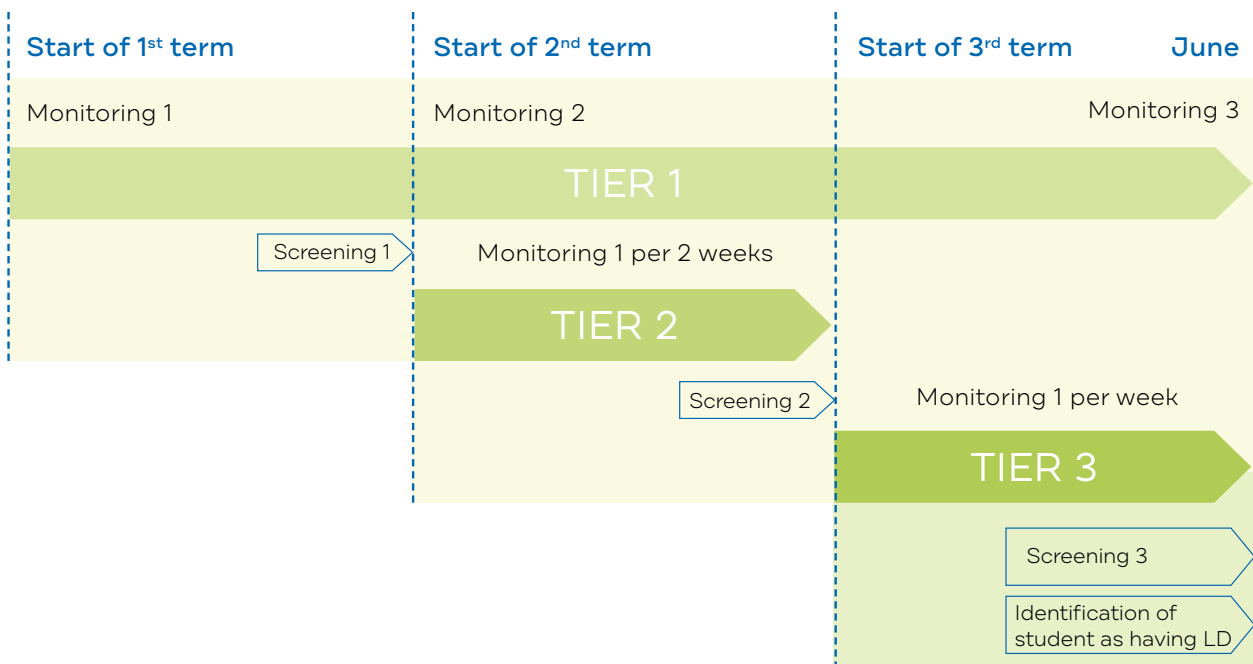
FIGURE AVII-6 – MONITORING AND SCREENING IN THE STANDARDIZED THREE-TIER PROTOCOL.

Conclusion

The two approaches – Problem-Solving and the Standardized Three-Tier Protocol – are fundamentally different, even though they are based on the same principles of the RTI model. The comparative table in Figure AVII-7 summarizes the differences.

Standardized Three-Tier Protocol	Problem-Solving
Used as a means of preventing difficulties and identifying students at risk and those with learning difficulties or disorders	Used as a means of preventing difficulties, but does not identify students at risk or those with learning difficulties or disorders
Includes three intervention tiers (T1 – T2 – T3)	Includes several intervention levels
Allows for interventions by both the classroom teacher and the orthopedagogue/remedial teacher	Allows for interventions by the classroom teacher only
Based mainly on data tested in meta-analyses	Based mainly on action research (see Figure AVII-8)
Acknowledges the important and separate role played by special education services for certain students, when regular classes do not meet their needs	Does not acknowledge the role of special education; relies solely on interventions by the classroom teacher, in a regular classroom setting

FIGURE AVII-7 – DIFFERENCES BETWEEN THE TWO RTI MODEL APPROACHES.

In Québec, the Ministry of Education recommends the RTI model Problem-Solving approach. It does this because, in its philosophy, the classroom teacher is the only person to intervene with the students; it does not fully recognize the role of remedial or special education (see Figure AVII-8). This is a noble standpoint, but one that is not very effective for teachers on an everyday basis. It also goes against the meta-analyses that have examined this subject.

In the case of the *Référentiel en lecture pour les 10-15 ans* (reading reference, in French only), it is clear, from reading the document, that it describes the Problem-Solving approach, but it does not draw a distinction between the two RTI approaches, nor does it specify why the Problem-Solving approach was chosen. And yet, it still uses the tiers from the Standardized Three-Tier Protocol, but associates them with information that has nothing to do with the standardized protocol. In doing this, it distorts the basis of the Standardized Three-Tier Protocol and creates confusion among teachers.

Pedagogical differentiation forms the foundation of the RTI model's Problem-Solving approach. The Ministry of Education regards differentiation as a priority, as does action research (e.g. Figure AVII-8) on the subject of pedagogical differentiation. The author used as a reference to support this is Carol Ann Tomlinson (2003), a practitioner who wrote a book on her own practice. While this is perfectly acceptable, it does not have the same value as experimental research,[86] and it cannot be generalized

---

Guay et autres (2006) Recherche-action sur la différenciation pédagogique. Coopérative de développement régional de la Montérégie.
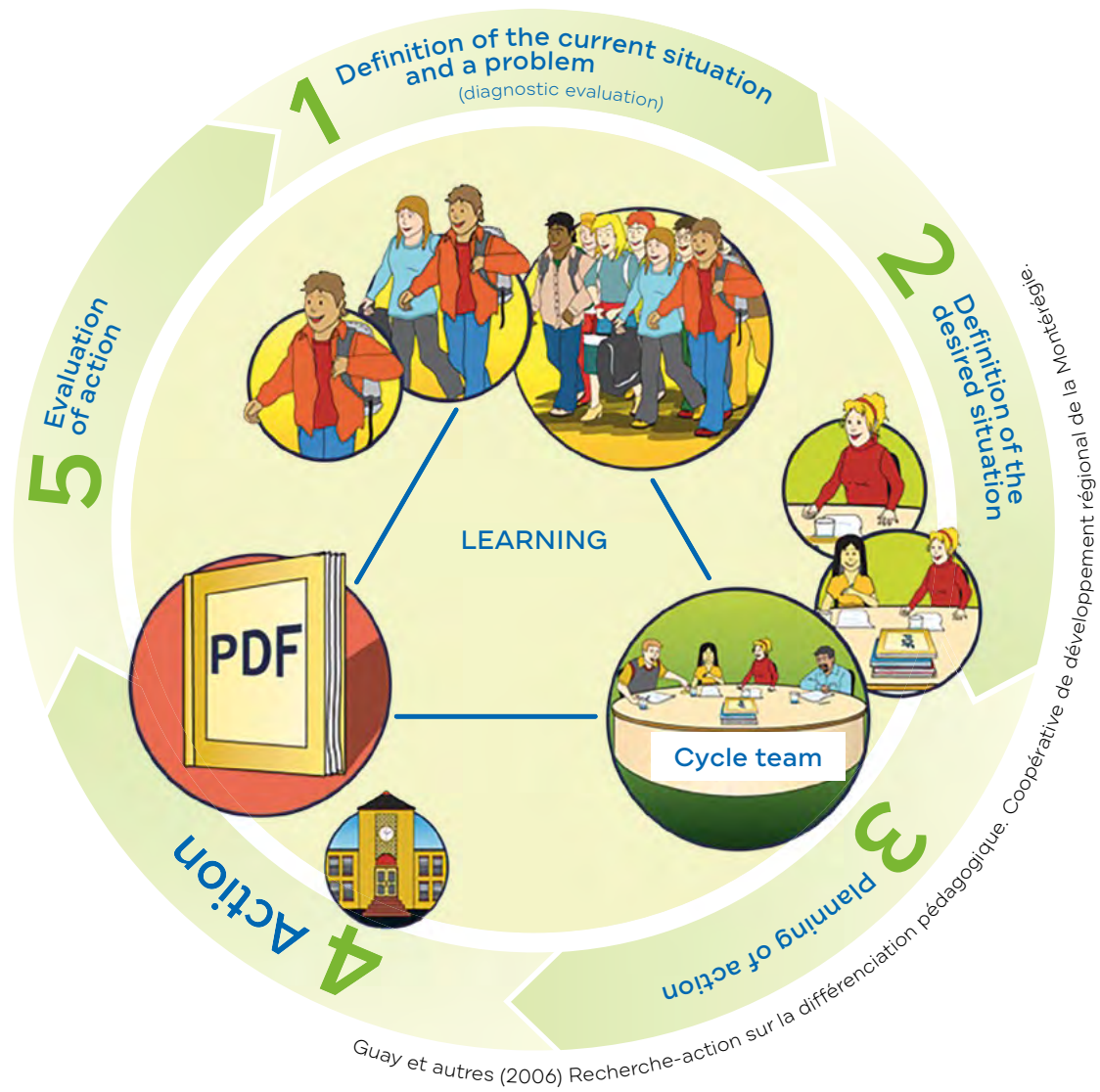
FIGURE AVII-8 – PEDAGOGICAL DIFFERENTIATION AND ACTION RESEARCH.

Source: COOPÉRATIVE RÉGIONALE DE DÉVELOPPEMENT DE LA MONTÉRÉGIE (2007). *Recherche-action sur la différenciation pédagogique en Montérégie*, [Online]. [http://www.differenciationpedagogique.com].

The main authors consulted for this Appendix

Desrochers (2016); Haager, Klingner and Vaughn (2007); Laplante (2013); Laplante et al. (2011).

Appendix VIII
What can be Done for Grade One and Grade Two Students to Promote Success in Reading and Writing

VIII

Québec's official reading program should include the essential basic components required to develop reading competency, but in reality it does not. Many teachers devise their own activities to help their students to learn to read, and yet, in spite of all their efforts, still do not obtain the results they hope for. Research offers a number of solutions that will allow students to progress to the best of their capabilities.

The weaknesses of the official reading program

The MEES (Québec, 2001) published the reading program based on the best available knowledge at the time. As a result, emphasis was placed on the **emergence of literacy** (contextual situation) and on the premise that **the more a student reads, the more he or she will learn to read and use strategies**.

However, meta-analysis data on the teaching of reading and writing have not been included in the program. The FSE-CSQ and the CSQ tried to have this information included in 2011, but the Ministry of Education refused. In this Appendix, we will therefore focus more on explicit instruction, to fill the pedagogical gap that currently exists in the program. To respect the expertise and professional judgment of teachers, it is vital for them to be familiar with both facets of the balanced approach, so that they can make choices based on their students' needs.

Meta-analysis data from the National Reading Panel

At the same time as the Québec Education Program was published, the National Reading Panel (2000) also published a meta-analysis[87] that reviewed the current state of scientific knowledge on reading instruction. This publication, and that of the National Early Literacy Panel (National Institute for Literacy, 2008), both highlighted the importance of early learning and the need to use explicit instruction to foster learning.

A balanced approach: Explicit instruction and the emergence of writing

The teaching of reading and writing should focus on situations that help students understand written messages. Students who know and use grapheme-phoneme correspondences can easily decode new words. It is for this reason that it is vital, in Cycle One, to teach this skill explicitly. **However, the Québec Education Program does not acknowledge the fact that the ability to identify written words plays a crucial role in reading comprehension.** The same problem exists in the progression of learning: teaching of grapheme-phoneme correspondences comes after instant word recognition and is presented as a strategy that students may or may not choose to use. The purpose of reading is to understand the author's message, but this cannot be achieved if readers are unable to identify written words properly. To do this, readers must first recognize the graphemes and produce their phonemes (sounds), then blend them and give meaning.
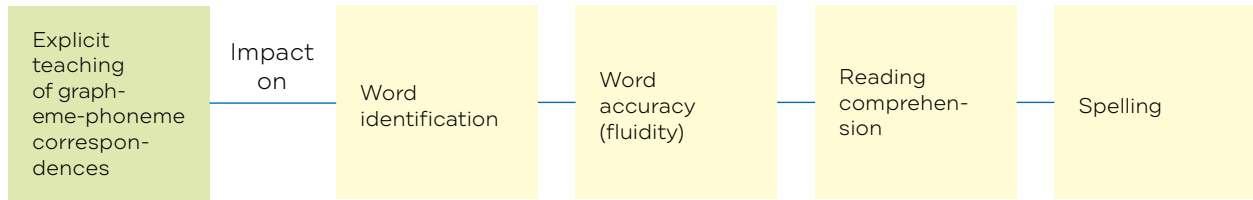
This does not mean that only grapheme-phoneme correspondences should be taught; it is equally important to develop the ability and desire to read, using children's literature and other activities.

---

87   Appendix I – Classification of Education Research by Reliability Level.

The essential components required to learn reading and writing

The first component is explicit teaching of grapheme-phoneme correspondences in Elementary Cycle One, in both reading and writing.

| Explicit teaching of graph-eme-phoneme correspon-dences | Impact on | Word identification | Word accuracy (fluidity) | Reading comprehen-sion | Spelling |

FIGURE AVIII-1 – THE IMPACT OF TEACHING GRAPHEME-PHONEME CORRESPONDENCES ON THE COMPONENTS OF READING.

Systematic, explicit teaching of grapheme-phoneme correspondences (Figure AVIII-1) has a significant positive impact on the ability to identify written words, which in turn affects word accuracy, reading comprehension and spelling.

- **The second component** is explicit teaching of the most common morphographic structures.
- **The third component** is explicit teaching of vocabulary.
- **The fourth component** is explicit teaching of reading and writing strategies.

Reading comprehension (Figure AVIII-2) improves as word identification becomes more effective (fluidity), vocabulary increases and the student applies the strategies he or she has learned for different reading contexts.

Reading comprehension		
Word identification and fluidity	Vocabulary	Strategies learned
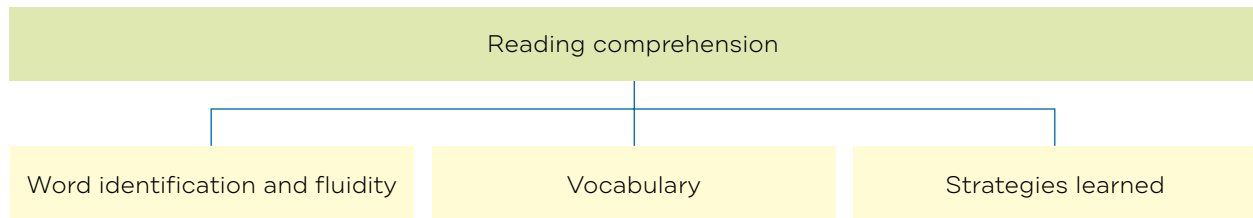
FIGURE AVIII-2 – COMPONENTS WITH AN IMPACT ON READING COMPREHENSION.

The research data explain the proposed changes

- Knowledge of grapheme-phoneme correspondences helps with the development of standard spelling (lexical spelling).
- Pedagogical interventions targeting learning of grapheme-phoneme correspondences have a significant impact on the development of word identification, fluidity, comprehension, writing and spelling.

- Explicit instruction is more effective for improving knowledge of grapheme-phoneme correspondences and reading skills of at-risk students and students from socioeconomically disadvantaged areas.
- Students who have not mastered grapheme-phoneme correspondences to identify written words cannot improve their fluidity through silent, independent reading.
- The students who obtain the worst results in fluidity also have the worst results in reading comprehension.

The main authors consulted for this Appendix

Écalle and Magnan (2015); Gombert (2003); National Institute for Literacy (2008); National Reading Panel (2000); Observatoire national de la lecture (1998); Sprenger-Charolles and Colé (2013); Torgesen et al. (1999).

Appendix IX
Teaching Models Respectful of Professional Autonomy

IX

Of all the instructional models available,[88] this Appendix presents those that are acknowledged to be the most effective for at-risk and special needs students. The others can be used as complements, and may help with aspects such as motivation, even though they have less impact on performance. For teachers in secondary schools, examples of learning situations for several of the models can be found in Nicole Van Grunderbeeck's (2004) document. Teachers should use their expertise and professional judgment to decide which models are appropriate for and will have the greatest impact on their particular students. The Education Act clarifies one of the rights of teachers, namely "to select methods of instruction corresponding to the requirements and objectives fixed for each group or for each student entrusted to his care" (Education Act, s. 19, subparagraph 2 of the second paragraph).

1.   Explicit instruction

In explicit instruction, activities progress from simple to complex. This type of instruction can be used from kindergarten to secondary school (Raby and Viola, 2007). It is acknowledged to be one of the most effective types of instruction (Bissonnette, 2008; Bissonnette et al., 2010), in particular for successful early reading (Ehri et al., 2001).

The steps of explicit instruction[89]

First step: Modelling the practice
Teachers serve as a models, verbally explaining, in detail, what they are doing as they perform a task. They speak in the first-person singular ("I"), match their words to their actions, and explain out loud what they are thinking, step by step.

Second step: Directed practice
Directed practice then takes place; the teacher assists the students as they learn the task and become able to perform it independently. The students do the same thing as the teacher, speaking out loud as they perform the steps of the task. The teacher can offer verbal reminders or refer the students to a checklist. This step should be repeated several times, with the teacher providing reinforcement at every stage.

Third step: Peer-assisted learning (optional)
Here, the students help one another to learn the procedure.

Fourth step: Autonomous practice
The students apply the procedures without assistance from the teacher or other students. If they make mistakes, the teacher must go **back to directed practice**. It is important not to let the students reinforce incorrect methods. At least three successful attempts are needed before allowing the students to perform the task alone.

---

88   Instructional models: cooperative learning, learning through discovery, realization of intellectual potential, learning through problem-solving, inductive approach to learning, discovery learning, explicit instruction, lecture-style instruction, peer teaching, reciprocal teaching, strategic teaching, mental management, neuro-linguistic programming, open pedagogy and project-based learning.

89   The model has three steps, but some authors suggest the addition of a fourth: peer-assisted learning.

2. Strategic teaching

Strategic teaching requires verbal interactions between the teacher and the students to set goals, choose appropriate strategies for the task and adjust the strategies based on the anticipated results. The teacher gives feedback to the students and models the appropriate procedure if necessary (Swanson, 1999).

Phases of strategic teaching

First phase:

- Present the learning context.
- Activate prior learning.
- Present the steps in the activity.
- Talk to the students about the utility of the task (motivation to learn).

Second phase:

- Plan the activity according to the type of knowledge (declarative, procedural, conditional).
- Explicitly teach the cognitive and metacognitive strategies for the learning objective.
- Give examples and counter-examples.

Third phase:

- Ask questions to assess the students' comprehension, with a view to transferring their learning.
- Make connections with prior learning.

3. Reciprocal teaching

Reciprocal teaching (Sullivan Palincsar and Brown, 1984) consists in asking the students to work in small groups to explain and apply what they have learned in reading or mathematics, taking turns to play the role of teacher. It is acknowledged to be effective as a teaching model (Bissonnette et al., 2010).

Reciprocal teaching requires the application of four basic strategies.[90]

First strategy: Predicting

Taking turns, the students form hypotheses about the text's content. To do this, they use elements of the text such as the title, photographs, keys and so on. They also use their knowledge of the subject and of what they have read to anticipate what happens next in the text.

Second strategy: Clarifying

The students identify the words or passages they have not understood. They try to understand them by re-reading the text more carefully or, in the case of a word, by looking at the word family or using a synonym. They consult the dictionary or ask for help.

Third strategy: Questioning

The students ask questions about the important information in the text, and to make sure they have understood it. For example: Why? How? What is the consequence of? Compare …

Fourth strategy: Summarizing

The students make sure they have understood the text by summarizing it. They identify the most important ideas and reformulate them in their own words, in one or two sentences. They eliminate details.

---

90   Adapted from *Quatre stratégies à utiliser*, Atelier.on.ca, online teaching resources, http://atelier.on.ca/edu/pdf/Mod23_quatre_strategies.pdf.

4. Peer-Assisted Learning Strategies

Peer-assisted learning is a tutoring program prepared to help students learn reading comprehension strategies such as fluidity, summarizing and predicting (Fuchs et al., 1997). It is acknowledged to be effective when used with at-risk and special needs students (Bissonnette, 2008).

In peer-assisted learning, all the students in the class are divided into teams of two, with a strong student being paired with a weaker student. This is done by making lists.

Tutor students (+ strong) Reads first to serve as a model	Reader students (+ weak) Reads second
1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20

The teacher pairs student 1 with student 11, and so on, using his or her professional judgment to form the pairs.

- The teacher selects material that is adjusted to the skill level of the weakest partner (list of words, short text, etc.).
- Taking turns, the tutor student and reader student read by applying the strategies they have learned.
- The tutor student starts, to serve as a model for the reader student. The reader student then reads his or her part.

Appendix X
The School Board's Obligations Regarding Integration of Special Needs Students

X

Under the Education Act, the school board has three obligations in connection with the integration of special needs students.

The school board's first obligation is to adopt a policy concerning the organization of educational services (Education Act, s. 235).

Among other things, the policy must include:

- procedures for evaluating handicapped students and students with social maladjustments or learning disabilities; the procedures must provide for the participation of the parents of the students and of the students themselves, unless they are unable to do so;

- **methods for integrating** those students into regular classes or groups in order to form balanced classes, **and the support services required** for their integration;

- terms and conditions for grouping those students in specialized schools, classes or groups;

- methods for preparing and evaluating the Individualized Education Plans intended for the students.

The school board's second obligation is to adapt the educational services provided to students with special needs, according to their needs and in keeping with their abilities (Education Act, s. 234).

The school board's third obligation is to ensure the harmonious integration of special needs students into regular classes if it has been established that integration would facilitate the student's learning and social integration and would not impose an excessive constraint or significantly undermine the rights of the other students (Education Act, s. 235).

Figure AX-1 shows the elements that are considered to impose an excessive constraint or significantly undermine the rights of the other students, according to the *Lignes directrices pour l'intégration scolaire des élèves handicapés ou en difficulté d'adaptation ou d'apprentissage* (Québec, 2011).

An excessive constraint is imposed if

The students present a risk to themselves or to the people around them.

The measures required for integration are inapplicable from an instructional point of view

The integration of a special needs student would be detrimental to the physical safety and integrity of the teacher

The measures needed to integrate the student would generate unreasonable or exorbitant costs for the school board

The conditions of practice of the teachers are such that they would not enable the students to obtain the quality education to which they are entitled

The rights of the other students are significantly undermined if

Integration of a student endangers the safety of the other student

Integration of a student has a significant detrimental effect on the learning conditions of the other students

FIGURE AX-1 – EXCESSIVE CONSTRAINTS AND SIGNIFICANT UNDERMINING OF THE RIGHTS OF THE OTHER STUDENTS

In short:

As Figure AX-2 shows, the Education Act requires school boards to:

1. adopt a policy concerning the organization of educational services;
2. adapt the educational services to the needs of students with special needs, based on an evaluation of their abilities;
3. promote harmonious integration.

Step 1	Step 2	Step 3	Step 4	Step 5

Integration into a regular class would foster the student's **learning** and **social integration**

And it would not impose an excessive constraint

Nor would the rights of the other students be significantly undermined

Regular class
Resource class

Adoption of the policy regarding the organization of educational services

The evaluation of the student's abilities and needs shows that:

Integration into a regular class would not foster the student's **learning** and **social integration**

An excessive constraint would be imposed or the rights of the other students would be significantly undermined

Special class
Special school

FIGURE AX-2 – STEPS IN INTEGRATION.

The Education Act imposes a number of obligations on the school board. The school board must comply with the Act, and must comply with its own special education policy. However, only parents have sufficient interest and hence the legal capacity to ask the courts to enforce the Education Act.

Appendix XI
Demystifying So-Called Effective Teaching Practices

XI

Advocates of some so-called effective teaching practices attempt to impose the models they support. It is important to remember that one of the professional competencies of teachers is to take a critical and qualified approach to dogmatism or the imposition of specific teaching practices.

Professional judgment, knowledge of the students' needs, class composition, available methods and program content should all be considered in order to make an informed choice.

1. Questionable practices

Learning styles (auditory, visual, kinesthetic)

There are no specific areas of the brain for these domains; they are in fact interconnected (Laplante and Bédard, 2017). It is therefore not true to state that certain students have specific learning styles. Students may have learning preferences – for example, preparing tables or repeating material out loud – but this is simply their preferred way of remembering information.

Pashler, MacDaniel, Rohrer and Bjork (2008) and Landrum and McDuffie (2010), cited in Masson (2017), concluded that there was insufficient solid evidence to justify the use of learning styles in educational practices.
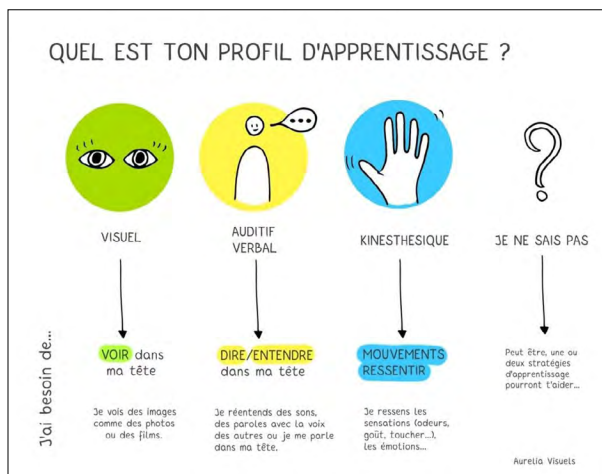
Simultaneous and sequential learning (left brain and right brain)

Some authors have suggested a theory in which each hemisphere of the brain has its own representation method (verbal for the left side and non-verbal for the right side) and that it processes information either simultaneously or sequentially. It is true that language is processed on the left side of the brain, but this should not be interpreted to mean that certain students are more verbal or non-verbal. Teachers should not base their teaching methods on this type of information.

Nielson et al. (2013), cited in Masson (2017), concluded their research by noting that their data were not compatible with the fact that some people make more use of the left brain or the right brain. People use their entire brains, and some areas are used more than others, depending on the activity.

Multiple intelligences

Les intelligences multiples
D'après la théorie du Dr Howard Gardner

Multiple intelligences (Gardner, 2004) are considered to be a neuromyth (Masson, 2017). Even the author himself admits that his theory is no longer current: "*I readily admit that the theory is no longer current. […] And that is because I am no longer wedded to the particular list of intelligences that I initially developed.*" (Masson, 2017)

Yet, the RECIT website still promotes multiple intelligences as a means of helping students in difficulty (Paquin, s. d.). The website suggests that it is important to have a means of differentiation, and that the theory of multiple intelligences offers a type of differentiation that can be used as a point of reference for the cross-curricular competency "To use information and communication technologies effectively."

Neuromyths can be very persistent.

The Brain Gym

These are coordination exercises intended to improve the functions of the left and right sides of the brain. They undoubtedly help hyperactive students to use up their energy, but they do not help with academic success.

Masson (2017) cites a scientific study that concludes that there has been no good quality empirical research to test the claims of Brain Gym.

2. Practices considered to be more reliable

Barak Rosenshine (2010) presented the principles of effective teaching based on three sources. The first is cognitive science research, which considers how the brain processes information. The second is direct observation of experienced teachers' practices. The third is cognitivist research.

Below is a list of the pedagogical procedures drawn from these three sources, enriched by the work of other researchers.

Reviewing prior learning

Starting an activity with a brief review of prior learning and what the students already know about the subject helps them to make connections. Daily reviews are an important element of teaching, and repetition is an important principle of learning.

Presenting new notions step by step

Presenting new notions individually is also good practice. Teachers can help avoid cognitive overload for their students by starting with the simplest notion and gradually moving towards the more complex ones, and limiting the number of notions taught in the same period. After each step, it is important to allow the students to practise and provide guidance as they apply what they have just learned.

Asking questions

Another recommended procedure is for teachers to ask a lot of questions in order to make sure the students have understood. In addition, instructions and explanations must be clear and detailed. The questions help students to apply what they have learned and to make connections with their prior learning.

Modelling practice

Modelling is the first stage of the explicit instruction model.[91] The students need cognitive support in order to learn. Modelling allows them to see and hear the teacher's reasoning as he or she performs the steps of a task.

Using directed practice

Directed practice is the second stage of the explicit instruction model.[93] It is important for teachers to spend a lot of time on this element, because the students need it in order to transfer what they have learned into their long-term memory. In directed practice, the teacher works with all the students at the same time. Peer-assisted learning is also an excellent way of applying directed practice.

Checking the students' comprehension

The teacher gives the student an additional opportunity to manipulate newly-learned notions by asking them to explain what they have learned. This allows the teacher to identify mistakes quickly.

Aiming for success

It is important for the students to achieve a high level of success with the exercises. Research has shown that the ideal rate of success to optimize student progress is around 80%. Students learn through training, but training can also be catastrophic if it teaches the wrong things (Rosenshine, 2010). It is therefore important for the teacher to make corrections immediately, and check the answers given by all the students.

Use scaffolding for complex content

Scaffolding, or support, consists in helping the students to perform more complex tasks by providing a model and aids such as a table or grid.

Planning autonomous practice

Autonomous practice is the third phase of the explicit instruction model.[93] It allows students to work alone and to practise applying new notions. This is a necessary step in learning a notion. It is important to prepare the students properly, and to assist them in the beginning.

Weekly and monthly revision

It is easier to learn new notions when the elements of content on a given subject are broad and interconnected, and prior learning can be used more easily. The more the elements of content are reviewed and applied, the more the connections between them are consolidated.

Teachers are the primary intervenors with students. They are therefore best-placed to understand their needs and try, as far as possible, to meet them, depending on the composition of the group and the support services available.

Note: Rosenshine's original text on the principles of effective teaching is available as a printable document on the CTREQ website (Centre de transfert pour la réussite éducative du Québec) at http://rire.ctreq.qc.ca/2016/02/enseignement-efficace/.

---

91   Appendix IX – Teaching Models that are Respectful of Professional Autonomy.

Appendix XII
Collective Actions to Improve Services for Students with Special Needs

XII

The Education Act and the Teachers' Collective Agreement provide for a series of individual and collective mechanisms through which teachers can make their voices heard. It is important for teachers to express their needs and those of their students, to improve the services offered by the school board and school. This appendix presents a number of collective mechanisms available to them. The school committee for students with special needs, which plays a very important role, is described separately in Appendix XIII.

Work together and consult

Union delegates and people who sit on the various school committees (school committee for students with special needs, governing board, teachers' participation committee provided for in the Collective Agreement) must work together to try to improve the services available to students at risk, in difficulty, with handicaps, social maladjustments or learning difficulties or with special needs. In addition to fostering interventions within the school, this will help ensure that service requests for students with special needs are forwarded to the union-school board parity committee. The parity committee can make recommendations, among other things on how the available monies are divided between the schools, and on the organizational models to be used.

Be involved in preparing student services

The principal, **with the participation of staff members**, must prepare the implementation of student services (defined in the basic school regulations) determined by the school board or provided for in an agreement entered into by the school board (Education Act, ss. 88, 89 and 110.2 (3)).

The conditions of staff participation are decided by the staff members themselves, at an assembly. The assembly can either prepare the proposals itself or form a committee to do so, in collaboration with the principal. The proposals are then submitted to the governing board, which must approve or reject them.

Consultations on needs

The principal must consult with staff members before informing the school board of the school's needs for each staff category (Education Act, ss. 96.20 and 110.13). **The school-level participating body of teachers** provided for in the Collective Agreement (Chapter 4) may take advantage of the opportunity to request additional services in order to meet real needs.

The educational project

The governing board adopts the educational project in collaboration with the various stakeholders, and must encourage participation by teachers (LIP, ss. 74 and 109). In addition, beginning in July 2018, the **means** used to achieve the educational project's objectives and targets must be **proposed to the principal by the school staff members**. The principal must then approve or reject them (Education Act, ss. 96.15 (6) and 110.12 (4)).

At each consultation, it is important for teachers to promote their opinions of the **means** they, as a group, would like to have in order to help them in their interventions with students at risk or with special needs. Another important reason for teachers to propose the means that will be used to achieve the educational project's objectives is to give official form to the ideas the teachers wish to implement.

The governing board

The governing board of the school or centre must approve or adopt proposals made by the principal that may have a key impact on the support measures available for at-risk students or students with special needs. These powers constitute opportunities to convince the other members of the governing board to support the directions recommended by the teachers. The governing board:

- adopts the educational project and analyzes the students' needs and the issues relating to their success (Education Act, ss. 74 and 109);

- approves and implements programs of **student services** (Education Act, ss. 88 and 110.2, par. 3);

- adopts the **budget** of the school or centre (Education Act, ss. 96.24 and 110.4). Discussions must be held to identify the resources needed for students in difficulty. The principal must render an account of his or her administration of the budget to the governing board (Education Act, ss. 96.24 and 110.13).

Funding for services for different categories of at-risk students or students with special needs is different in the youth sector, the vocational training sector and the adult general education sector. Regardless of the funding, however, the school board may, and in some cases must, transfer amounts to improve the situation and fulfill its obligations to those students and the students around them.

Make proposals

Teachers make recommendations concerning the service model they feel is appropriate in their school, the criteria for use of the services in the model, and the service distribution criteria. This aspect is addressed in more detail in Appendix XIII[92] of this Referential, on the school's special needs committee.

In **vocational training**, proposals can be made to finance the evaluation of the candidates' learning at the beginning of the program, as well as various reception measures, upgrading in basic subjects, remedial or catch-up activities, psychological support, orthopedic support and so on.

In **adult general education**, proposals can be made, as specified in the Ministry of Education's Frame of Reference for Complementary Educational Services in Adult General Education (Québec, 2009), to finance orthopedagogues and resource teachers, special education technicians, psycho-educators, psychologists, social workers, social work technicians and nurses, speech therapists and school life animators.

In some centres, the supply of services has improved, as has the release of staff to implement the services. The fact of improving student services may also promote academic success and encourage students to stay in school.

The school board parity committee for at-risk students and students with special needs

The committee is tasked with making recommendations on the distribution of resources between the school board, the schools and the centres. To do this, it must be aware of the needs of all the parties. It is therefore vital for teachers to submit those needs to their local union representatives. If a problem arises in a school or centre, the teachers can also involve their representatives and ask them to make the necessary approaches to the committee. Similarly, it is important for the union and the FSE-CSQ and QPAT to be aware of the needs and problems of students, so as to be able to defend their point of view with the Ministry of Education and during collective agreement negotiations.

---

92   Appendix XIII – School Special Needs Committee, Youth Sector.

Appendix XIII
School Level Special Needs Committee, Youth Sector

XIII

This appendix provides information on the operation of the school level special needs committee provided for in the Collective Agreement. The committee serves as a means of communicating with the school board parity committee, to express needs in connection with the distribution of resources between schools.

The committee is an excellent forum through which to make the school's needs known, and its purpose is to involve teachers in the organization of services for at-risk students and students with special needs in regular classes. Not only does it provide information, but it also allows participants to make recommendations that reflect the views of all the institution's teachers.

One of the committee's aims is to make services available more quickly to at-risk students and students with special needs, thereby allowing for prevention and early intervention.

1. The committee's mandate

The committee's mandate is to make recommendations to the school principal on any aspect of the organization of services for at-risk students and students with special needs. The recommendations may focus on:

- the school's needs with respect to these students;
- the organization of services.

2. The committee's composition

The **teachers** must appoint up to three representatives. Appointments are made at a general assembly, and candidates should ideally be teachers in regular classes, since the discussions will focus mainly on the organization of services for at-risk students and students with special needs in regular classes.

The school **principal** sits on the committee, but may be represented at meetings by the vice principal. A professional staff member, a support staff member or a teacher cannot represent the principal.

At the request of the teachers or principal, a **professional** staff member or a **support** staff member who normally works with at-risk students or students with special needs may be invited to join the committee.

3. Consensus

In its work, the committee should seek to obtain a consensus – in other words, an agreement between all the committee members, including the principal or his or her representative. The agreement of the professional or support staff member is not required.

The school principal must not come to the committee with a project that is complete, and simply ask the teachers to agree to it. Specific service structures cannot be imposed in this way.

The principal is bound by a recommendation unless he or she is clearly opposed to it. Where the principal does not agree with a recommendation made by the teachers and decides not to accept it, he or she must give written reasons for the decision.

If the committee encounters operational difficulties at the school, the teachers may submit the problem to the school board parity committee or to the dispute resolution mechanism established by the union and the school board.

4. Frequency of meetings

The collective agreement does not provide for a specific number of meetings. We believe at least three meetings are required to address the various issues: one in spring, to make recommendations on the school's needs for the following year, one in June or August, when the school board grants resources, to recommend an organization of services based on those resources, and a third in the middle of the school year (December or January) to review the recommendations and make adjustments where necessary.

In addition, the committee must prepare a profile of the school each year. This allows it to fulfill its various mandates.

5. The school's needs

Once a year, the principal must make known the school's needs in connection with its at-risk students and students with special needs. Although section 96.20 of the Education Act provides for the principal to consult staff members about the school's needs, the committee's mandate as described in clause 8-9.05 must also be respected. Therefore, the two mandates are not mutually exclusive; the principal cannot choose between the Education Act and the Collective Agreement.

To be able to make recommendations on the school's needs, it is important to consider the school's situation, the number of students integrated into regular classes, and the special needs of certain students. This information is obtained by consulting the teachers. Once the school's situation is known, the committee provides for the resources it needs in the following year. In addition, the school board parity committee must take this information into account when making its recommendations concerning the distribution of available monies between schools and the organizational models to be used.

The school's needs must be identified in compliance with the school board's policy concerning the organization of educational services for students with special needs.

6. Organization of services

The school board grants its resources based on the needs expressed by the schools and the recommendations made by the school board parity committee for at-risk students and students with special needs. It must make its decision known quickly. The resources may be direct service transfers or transfers of funds.

Based on the amounts transferred and services provided by resource people, the committee will make recommendations on the general organization of services.

However, the committee is not required to state its views regarding acceptance of requests (case by case) made by teachers.

7. Service models

There are numerous service models for at-risk students and students with special needs. To identify the most suitable model, it is important to know the general level of integration and the abilities and needs of the students concerned.

The service model(s) concerned must be identified with due regard for the professional autonomy of the staff members concerned.

8. Service use criteria

The committee must recommend a service access procedure.

In doing this, the committee members must consider:

- the procedure to be followed
- the use of the form
- the principal's role
- the availability of resources

9. Service distribution criteria

The following aspects must be considered when recommending service distribution criteria:

- integrated students (with handicaps, social maladjustments or learning difficulties)
- the number of students integrated or the level of integration
- the size of the groups
- the grade level to be given priority
- the presence or absence of special classes
- the Individualized Education Plans that have been drawn up
- recognized students

Conclusion

The involvement of teachers in the process of improving and organizing services for at-risk students and students with special needs is vital. As budgets are decentralized to schools, it will be all the more important for teachers to speak up, among other things by monitoring the decentralized amounts from budget measures for at-risk students and students with special needs.

Bibliography
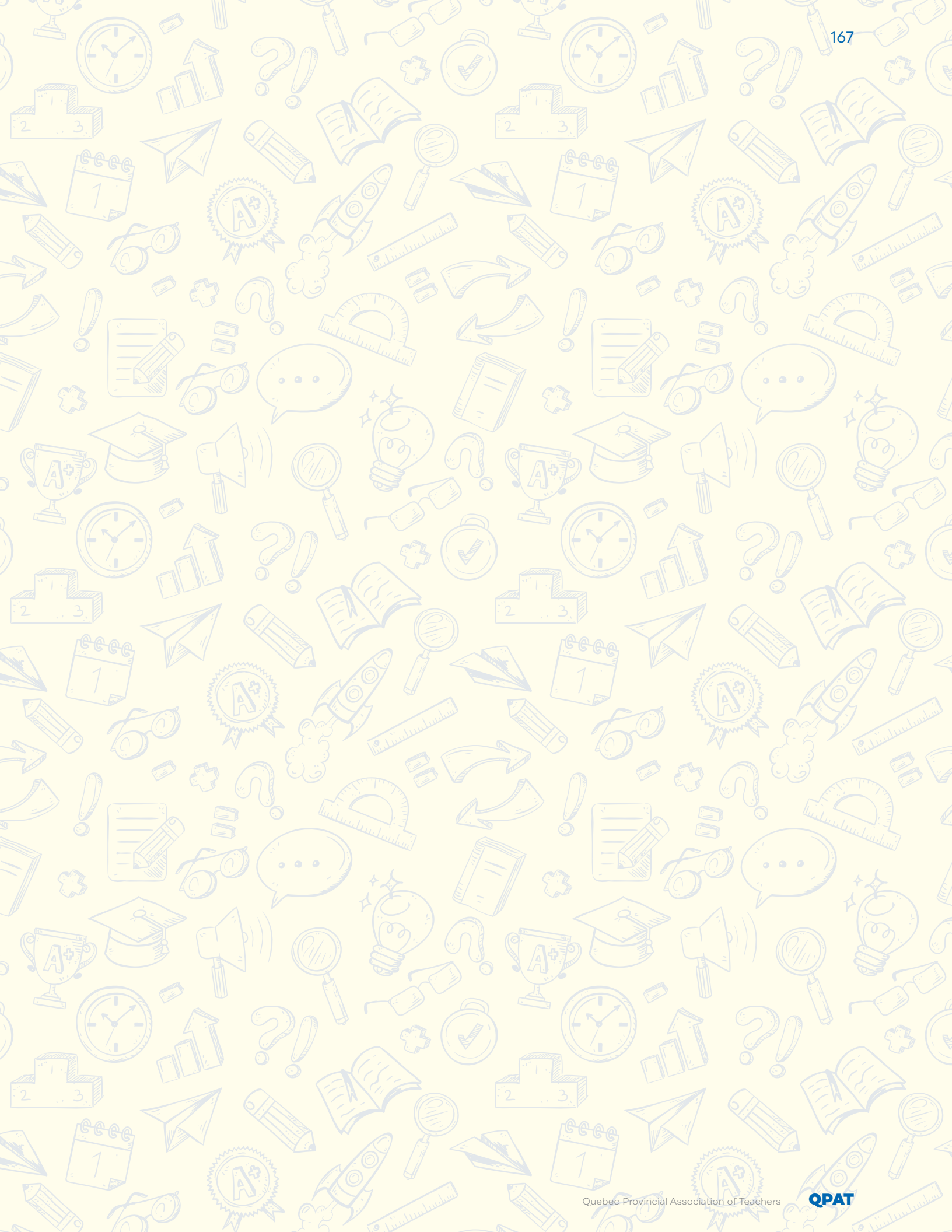
Bibliography

ALBERTA EDUCATION (2005). *Enseigner aux élèves ayant des troubles du spectre autistique*, Alberta, Direction de l'éducation française.

ALBERTA EDUCATION (2005). *Enseigner aux élèves ayant des troubles émotionnels ou psychopathologiques*, Alberta, Direction de l'éducation française.

ALBERTA EDUCATION (2008). *Viser le succès : enseigner aux élèves ayant un trouble déficitaire de l'attention avec ou sans hyperactivité*, Alberta, Direction de l'éducation française.

AMERICAN PSYCHIATRIC ASSOCIATION (2000). *DSM-IV-TR, Diagnostic and statistical Manuel of mental disorder*, 4ᵉ éd., version révisée, Washington, DC.

AMERICAN PSYCHIATRIC ASSOCIATION (2015). *DSM-5, Manuel diagnostique et statistique des troubles mentaux*, 5ᵉ éd., Elsevier Masson.

APRIL, Johanne, et Anik CHARRON (2012). *L'activité psychomotrice au préscolaire : des activités nécessaires pour soutenir le développement global de l'enfant*, Chenelière Éducation, 224 p.

ASSOCIATION CANADIENNE DES TROUBLES D'APPRENTISSAGE (2015). *Définition nationale des troubles d'apprentissage*, [En ligne] (2 mars). [https://www.ldac-acta.ca/definition-nationale-des-troubles-dapprentissage/?lang=fr].

ASSOCIATION QUÉBÉCOISE DES ORTHOPHONISTES ET AUDIOLOGISTES (2017). *Lexique*, [En ligne]. [https://aqoa.qc.ca/public/orthophoniste/lexique/].

BESSETTE, L., F. DUBÉ et C. OUELLET (2016). *Développer la fluidité et enseigner des stratégies de compréhension au primaire*, Québec, CTREQ (avril).

BISSONNETTE, Steve (2008). *Réforme éducative et stratégies d'enseignement : synthèse de recherches sur l'efficacité de l'enseignement et des écoles*, Thèse de doctorat, Université Laval, 206 p.

BISSONNETTE, Steve, et autres (2010). « Quelles sont les stratégies d'enseignement efficaces favorisant les apprentissages fondamentaux auprès des élèves en difficulté de niveau élémentaire? Résultats d'une méga-analyse », *Revue de recherche appliquée sur l'apprentissage*, vol. 3, article 1.

BLAIR, Clancy (2013). « Les fonctions exécutives à l'école », dans TREMBLAY, R. E., M. BOIVIN et R. DeV. PETERS, *Encyclopédie sur le développement des jeunes enfants*, [En ligne], Éds. J. Bruce Morton, éd. Thème (janvier). [http://www.enfant-encyclopedie.com/fonctions-executives/selon-experts/les-fonctions-executives-lecole].

BOWEN F., et autres (2006). *Rapport final d'évaluation des impacts du programme Vers le Pacifique pour les quatre années de sa mise en oeuvre (2001-2005)*, Groupe d'étude sur la médiation en milieu scolaire, 93 p.

BRODEUR, Monique, et autres (2008). *La forêt de l'alphabet. Adapté du Scott Foresman Early Reading Intervention et du Peer-Assisted Learning Strategies*.

CAPUANO, France (2002). *Fluppy*, Programme d'entraînement aux habiletés sociales s'adressant aux élèves du préscolaire et du primaire.

CAPUANO, France (2014). *Impact des habiletés socio-affectives sur la réussite scolaire*, Agence de la santé et des services sociaux de l'Estrie.

CARTIER, Sylvie C. (2007). *Apprendre en lisant au primaire et au secondaire*, Montréal, Éditions CEC.

CENTRE POUR LES SCIENCES DE L'APPRENTISSAGE, UNIVERSITÉ DU QUÉBEC À MONTRÉAL et UNIVERSITÉ CONCORDIA (2015). *ABRACADABRA*, Ressource numérique pour soutenir les premiers apprentissages en lecture et en écriture, [En ligne]. [https://petitabra.concordia.ca].

COMITÉ PATRONAL DE NÉGOCIATION POUR LES COMMISSIONS SCOLAIRES FRANCOPHONES et CENTRALE DES SYNDICATS DU QUÉBEC (2005-2010). *Dispositions liant le Comité patronal de négociation pour les commissions scolaires francophones et la Centrale des syndicats du Québec*, Québec, 295 p.

COMITÉ PATRONAL DE NÉGOCIATION POUR LES COMMISSIONS SCOLAIRES FRANCOPHONES et CENTRALE DES SYNDICATS DU QUÉBEC (2010-2015). *Entente intervenue entre le Comité patronal de négociation pour les commissions scolaires francophones et la Centrale des syndicats du Québec*, Québec, 287 p.

COMITÉ PATRONAL DE NÉGOCIATION POUR LES COMMISSIONS SCOLAIRES FRANCOPHONES et CENTRALE DES SYNDICATS DU QUÉBEC (2015-2020). *Entente intervenue entre le Comité patronal de négociation pour les commissions scolaires francophones et la Centrale des syndicats du Québec*, Québec, 389 p.

CONSEIL SUPÉRIEUR DE L'ÉDUCATION (2001). *Les élèves en difficulté de comportement à l'école primaire : comprendre, prévenir, intervenir, Québec (février)*, 86 p.

CONSEIL SUPÉRIEUR DE L'ÉDUCATION (2012). *Mieux accueillir et éduquer les enfants d'âge préscolaire, une triple question d'accès, de qualité et de continuité des services,* Avis à la ministre de l'Éducation, du Loisir et du Sport, Québec (août), 141 p.

CORNIOU, Marine, et Dominique FORGET (2015). « Autisme : un monde en soi », *Québec Science* (31 mars).

CRÊTE, Françoise, et autres (2011). *Petits mots, j'entends tes sons !*

DE WECK, Geneviève, et Pascale MARRO (2010). *Les troubles du langage chez l'enfant*, Paris, Elsevier Masson, 376 p.

DESROCHERS, A., et M. J. BERGER (2011). *L'évaluation de la littératie*, Ottawa, Les Presses de l'Université d'Ottawa, 383 p.

DESROCHERS, Alain (2016). *Le modèle de la réponse à l'intervention et sa mise en œuvre*, ADIGECS (mai), 34 p.

DESROSIERS, Hélène, et Amélie DUCHARME (2006). « Commencer l'école du bon pied. Facteurs associés à l'acquisition du vocabulaire à la fin de la maternelle », dans *Étude longitudinale du développement des enfants du Québec* (ÉLDEQ 1998 2010), Québec, Institut de la statistique, vol. 4, fascicule 1 (octobre).

DESTREMPES-MARQUEZ, D., et L. LAFLEUR (1999). *Les troubles d'apprentissage : comprendre et intervenir*, Montréal, Éditions Hôpital Ste-Justine, 128 p.

DION, Éric, et autres (2005). *Apprendre à lire à deux,* Adapté du *Peer-Assisted Learning Strategies*, Université du Québec à Montréal.

DUNBERRY, Danielle, et Benoît DUMAS (2008). *Mieux comprendre l'élève présentant une déficience intellectuelle légère pour mieux intervenir*, Montréal, Colloque du Centre François-Michelle (17 octobre), 38 p.

DUNCAN, Greg J., et autres (2007). "School readiness and later achievement", *Development Psychology*, vol. 43, n° 6 (novembre), p. 1428-1446.

ÉCALLE, Jean, et Annie MAGNAN (2015). *L'apprentissage de la lecture et ses difficultés*, 2e éd., Dunod, 288 p.

EHRI, L. C., et autres (2001). "Systematic Phonics Instruction Helps Students Learn to Read : Evidence from the National Reading Panel's Meta-Analysis", *Review of Educational Research*, vol. 71, n° 3, p. 393-447.

FÉDÉRATION DES SYNDICATS DE L'ENSEIGNEMENT (2012). *Complément au programme de formation 1er cycle du primaire en lecture-écriture*, Québec, FSE-CSQ. Inédit.

FEJZO, Anila (2015). *Histoire de famille*, Édition Geneviève Boutin et Claude Boisseau.

FLETCHER, Jack M. (2008). *Identifying Learning Disabilities in the Context of Response to Intervention: A Hybrid Model*, États-Unis, University of Houston.

FORTIN, Laurier, et Pierre POTVIN (2011). *Logiciel de dépistage du décrochage scolaire* (LDDS), CTREQ.

FUCHS, Douglas, et autres (1997). "Peer-Assisted Learning Strategies: Making Classrooms More Responsive to Diversity", *American Educational Research Journal*, vol. 34, n° 1, p. 174-206.

FUCHS, Douglas, Lynn S. FUCHS et Pamela M. STECKER (2010). "The 'Blurring' of Special Education in a New Continuum of General Education Placements and Services", *Exceptional Children*, vol. 76, n° 3, p. 301-323.

GARDNER, Howard (2004). *Les intelligences multiples*, Édition Retz.

GIASSON, Jocelyne (2003). *La lecture : de la théorie à la pratique*, 2ᵉ éd., Boucherville, Gaëtan Morin éditeur.

GIASSON, Jocelyne (2011). *La lecture : apprentissage et difficultés*, Gaëtan Morin éditeur.

GODARD, L. (2007). *Notes de cours sur les difficultés en lecture et en écriture*, Montréal, Université du Québec à Montréal.

GODIN, M. P. (2017). « Je lis, mais je ne comprends pas. Qui sont ces "faibles compreneurs" en lecture? », *Parlons apprentissage*, [En ligne]. [https://passetemps.com/blogue/je-lis-mais-je-ne-comprends-pas-qui-sont-ces-faibles-compreneurs-en-lecture-n3720].

GOMBERT, Jean Émile (2002). *La modélisation cognitive de la lecture et ses implications pédagogiques*, [En ligne], 4 p. [http://www.cndp.fr/bienlire/01-actualite/document/apprendre_a_lire_Gombert.pdf].

GOMBERT, Jean Émile (2003). *Compétences et processus mobilisés par l'apprentissage de la lecture*, [En ligne] (décembre). [http://www.cndp.fr/bienlire/01-actualite/document/gombert.pdf].

GOUPIL, Georgette (2007). *Les élèves en difficulté d'adaptation et d'apprentissage*, 3ᵉ éd., Boucherville, Gaëtan Morin éditeur, 360 p.

GOUPIL, Georgette (2014). *Les élèves en difficulté d'adaptation et d'apprentissage*, 4ᵉ éd., Boucherville, Gaëtan Morin éditeur, 362 p.

HAAGER, Diane, Janette KLINGNER et Sharon VAUGHN (2007). *Evidence-Based Reading Practices for Response to Intervention*, Baltimore, Brookes Publishing Company.

HARMS, Thelma, Richard M. CLIFFORD et Debby CRYER (2011). *Échelle d'évaluation, environnement préscolaire* (traduit par Madeleine Baillargeon et Hélène Larouche), Québec, Presses de l'Université du Québec.

HARRISSON, Brigitte (2004). *Le syndrome d'Asperger et le milieu scolaire : guide d'intervention*, Fédération québécoise de l'autisme, 45 p.

HARRISSON, Brigitte, et Lise ST-CHARLES (2010). *L'autisme : au-delà des apparences*, Rivière-du-Loup, Éditions Concept ConsulTED, 555 p.

HARRISSON, Brigitte, et Lise ST-CHARLES (2017a). *Guide scolaire Saccade 4-11 ans*, Éditions Saccade, 64 p.

HARRISSON, Brigitte, et Lise ST-CHARLES (2017b). *L'autisme expliqué aux non autistes*, Éditions Trécarré (mars), 176 p.

HATTIE, John (2007). *Developping Potentials for Learning: Evidence, assessment, and progress*, Nouvelle-Zélande, Earli, 74 p.

HATTIE, John (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*, New York, Routledge, 382 p.

HATTIE, John (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*, New York, Routledge, 296 p.

INSTITUT DE LA STATISTIQUE DU QUÉBEC (2010). *Étude longitudinale du développement des enfants du Québec*, ELDEQ 1998-2010.

INSTITUT DE LA STATISTIQUE DU QUÉBEC (2012). *Enquête québécoise sur le développement des enfants à la maternelle 2012 : portrait statistique pour le Québec et ses régions administratives*, EQDEM, Québec, 105 p.

INSTITUT DES TROUBLES D'APPRENTISSAGE (2017). *Troubles d'apprentissage et défis dans le monde d'aujourd'hui*, 42ᵉ Congrès annuel de l'Institut TA, présentation de madame Claudia Verret.

INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE (2007). *Dyslexie, dysorthographie, dyscalculie : bilan des données scientifiques*, Paris, INSERM, 842 p.

INSTITUT NATIONAL DE LA SANTÉ ET DE LA RECHERCHE MÉDICALE (2014). *Troubles des apprentissages : les troubles « dys »*, [En ligne] (octobre). [https://www.inserm.fr/thematiques/neurosciences-sciences-cognitives-neurologie-psychiatrie/dossiers-d-information/troubles-des-apprentissages-les-troubles-dys].

JANOSZ, Michel (2000). « L'abandon scolaire chez les adolescents : perspective nord américaine », *Ville-école-intégration Enjeux*, nº 122 (septembre), p. 105-127.

JANOSZ, Michel, et autres (2007). *Trousse d'évaluation des décrocheurs potentiels (TEDP)*, Université de Montréal, Groupe de recherche sur les environnements scolaires.

JAPEL, Christa, et autres (2010). *Les aventures de Mimi et ses amis*, Centre de psycho-éducation du Québec.

JOHNSTON, Judith (2010). « Facteurs qui influencent le développement du langage », dans TREMBLAY, R. E., M. BOIVIN et R. DeV. PETERS, *Encyclopédie sur le développement des jeunes enfants*, [En ligne], éds. S. Rvachew, éd. thème. [http://www.enfant-encyclopedie.com/developpement-du-langage-et-alphabetisation/selon-experts/facteurs-qui-influencent-le-developpement].

LADOUCEUR, Pauline (2012). *Les balises et les limites de l'intégration pour répondre aux besoins de tous les élèves*, Québec, Fédération des syndicats de l'enseignement (FSE-CSQ), 442 p.

LANGEVIN, Jacques, Carmen DIONNE et Sylvie ROCQUE (2004). « Incapacités intellectuelles : contexte d'inclusion et processus d'adaptation de l'intervention », dans ROUSSEAU, Nadia, et Stéphanie BÉLANGER, *La pédagogie de l'inclusion scolaire*, Québec, Presses de l'Université du Québec, p. 173-203.

LANGEVIN, L. (1992). « Stratégies d'apprentissage : où en est la recherche? », *Vie pédagogique*, Québec, nº 77 (mars), p. 39-43.

LAPLANTE, Line, et autres (2010). *Identification de la dyslexie : contribution du modèle RTI et du modèle d'intervention multiniveaux*, 36ᵉ congrès de l'AQETA, Montréal, 23 mars 2010.

LAPLANTE, Line (2013). *L'élève dyslexique en classe ordinaire : de la différence à la différenciation*, Congrès de l'Association québécoise des professeurs de français, Montréal.

LAPLANTE, Line, et autres (2011). *D'une intervention pédagogique universelle à une intervention pédagogique ciblée : caractéristiques, bénéfices et défis du modèle d'intervention à 3 niveaux*, Congrès de l'AQETA, Montréal.

LAPLANTE, Line, et autres (2016). *Écrire, une compétence qui se construit : impact du modèle d'intervention à trois niveaux sur la prévention des difficultés en écriture auprès d'élèves de la maternelle et du 1ᵉʳ cycle du primaire issus de milieux défavorisés*, Montréal, Fonds de recherche du Québec – Société et culture.

LAPLANTE, Line, et Mélanie BÉDARD (2012). *La neuroéducation : un nouvel éclairage sur la dyslexie*, Congrès de l'AQETA.

LAPLANTE, Line, et Mélanie BÉDARD (2017). *Les neurosciences, éducation, et pratiques probantes auprès des personnes qui présentent un trouble d'apprentissage*, Colloque de l'Institut des troubles d'apprentissage, Montréal.

L'audimutité (1992). [Enregistrement vidéo], réalisateur : Josée Fortin, Montréal, Association québécoise de la dysphasie, cassette vidéo CA-V1-001, 150 minutes.

LECLERC, Danielle, et autres (2012). *Guide de prévention et d'intervention contre la violence envers le personnel de l'éducation – La violence laisse des traces. Il faut s'en occuper !*, Montréal, Centrale des syndicats du Québec, 42 p.

LECLERC, Danielle, Pierre POTVIN et Line MASSÉ (2016). « Perceptions du type d'élève, du cheminement anticipé, de l'attitude des enseignants à la maternelle, première, deuxième année et qualification des élèves à la fin du secondaire : diplomation ou décrochage? », *Revue de psychoéducation*, vol. 45, nº 1, p. 113-130.

LECLERC, Julie, Jacques FORGET et Kieron P. O'CONNOR (2008). *Quand le corps fait à sa tête : le syndrome de Gilles de la Tourette*, Montréal, Éditions MultiMondes.

LEGENDRE, Renald (2005). *Dictionnaire actuel de l'éducation*, 3ᵉ éd., Montréal, Éditions Guérin.

LEMELIN, Jean-Pascal et Michel BOIVIN (2007). « Mieux réussir dès la première année : l'importance de la préparation à l'école », dans *Étude longitudinale du développement des enfants du Québec* (ÉLDEQ 1998-2010), Québec, Institut de la statistique du Québec, vol. 4, fascicule 2.

LESSARD, Anne, et autres (2013). *Synthèse des connaissances concernant l'intervention auprès des élèves à risque de décrochage scolaire à l'enseignement secondaire en classe ordinaire*, Sherbrooke, CRIRES.

MAILLART, Christelle (2017). *Que sait-on de l'apprentissage chez les enfants dysphasiques*, 42e congrès annuel de l'Institut des troubles d'apprentissage, Montréal (21 mars).

MAILLART, Christelle, et Marie-Anne SCHELSTRAETE (2012). *Les dysphasies : de l'évaluation à la rééducation*, France, Elsevier Masson.

MASSÉ, Line, et Claudia Verret (2015). *Aider les élèves ayant un TDAH à compenser leurs déficits pour réussir à l'école*, 40e congrès annuel de l'AQETA, Montréal (25 mars).

MASSÉ, Line, Martine VERREAULT et Claudia VERRET (2011). *Mieux vivre avec le TDAH à la maison*, Montréal, Chenelière Éducation, 552 p.

MASSÉ, Line, Nadia DESBIENS et Catherine LANARIS (2006). *Les troubles du comportement à l'école : prévention, évaluation et intervention*, Montréal, Gaëtan Morin éditeur.

MASSÉ, Line, Nadia DESBIENS et Catherine LANARIS (2013). *Les troubles du comportement à l'école*, 2e éd., Montréal, Gaëtan Morin éditeur, 408 p.

MASSON, Steve (2017). *Connaître les neuromythes pour mieux enseigner*, Webinaire organisé par PRECA, Saint-Georges-de-Beauce.

MAZEAU, Michèle (1999). *Dysphasies, troubles mnésiques, syndrome frontal chez l'enfant : du trouble à la rééducation*, 2e éd.,Paris, Elsevier Masson, 248 p.

MORIN, Marie-France, et Isabelle MONTÉSINOS-GELET (2007). « Effet d'un programme d'orthographes approchées en maternelle sur les performances ultérieures en lecture et en écriture d'élèves à risque », *Revue des sciences de l'éducation*, vol. 33, no 3, p. 663-683.

MOTTRON, Laurent (2016). *L'intervention précoce pour enfants autistes : nouveaux principes pour soutenir une autre intelligence*, Éditions Mardaga, 256 p.

NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS (2000). *Principles and Standards for School Mathematics*.

NATIONAL INSTITUTE FOR LITERACY (2008). *Developing Early Literacy: Report of the National Early Literacy Panel*, États-Unis, 231 p.

NATIONAL READING PANEL (2000). *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading in Instruction*, États-Unis, 449 p.

OBSERVATOIRE NATIONAL DE LA LECTURE (1998). *Apprendre à lire*, France, Éditions Odile Jacob.

ONTARIO. MINISTÈRE DE L'ÉDUCATION (2007). *Guide d'enseignement efficace en matière de littératie, de la 4e à la 6e année : fascicule 5 : la communication orale*, Toronto, Imprimeur de la Reine pour l'Ontario, 111 p.

OUELLET, Chantal, et autres (2014). *Études des profils orthographique et métagraphique d'élèves de la fin du primaire, du début du secondaire, d'élèves en difficulté et des pratiques pédagogiques de leurs enseignants*, Recherche financée par le Fonds de recherche du Québec – Société et culture, Montréal, 24 p.

PAGANI, Linda S., et autres (2011). « Prédire la réussite scolaire des enfants en quatrième année à partir de leurs habiletés cognitives, comportementales et motrices à la maternelle », dans *Étude longitudinale du développement des enfants du Québec* (ÉLDEQ 1998-2010) – *De la naissance à 10 ans*, Québec, Institut de la statistique du Québec, vol. 6, fascicule 1, 12 p.

PAQUIN, Colette [s. d.]. « Les intelligences multiples », *Service national du RÉCIT en adaptation scolaire*, [En ligne]. [http://www.recitadaptscol.qc.ca/].

PASHLER, Harold, et autres (2008). "Learning Style: Concepts and Evidence", *Psychological Science in the Public Interest*, vol. 9, n° 3, (décembre).

POIRIER, Nathalie, et Mélissa GAUCHER (2009). « Le syndrome d'Asperger et le syndrome de dysfonctions non verbales : caractéristiques et diagnostic différentiel », *L'Évolution psychiatrique*, [En ligne], vol. 74, n° 4 (octobre – décembre) p. 606-620. [http://www.sciencedirect.com/science/article/pii/S0014385509000942].

POLIQUIN-VERVILLE, Hélène, et Égide ROYER (1992). *Les troubles du comportement : état des connaissances et perspectives d'intervention*, Québec, Ministère de l'Éducation du Québec (avril), 67 p.

POTVIN, Pierre, et autres (2007). *Guide de prévention du décrochage scolaire : y'a une place pour toi !*, 2e éd., Québec, Centre de transfert pour la réussite éducative du Québec.

POTVIN, Pierre, et autres (2017). *Agir dès les premiers signes : répertoire de pratiques pour prévenir les difficultés de comportement au préscolaire et au primaire*, CTREQ.

POTVIN, Pierre, et Jean-René LAPOINTE (2014). *Premiers signes : guide de prévention des élèves à risque au préscolaire et au primaire*, Québec, CTREQ (juin), 78 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION (1999). *Une école adaptée à tous ses élèves : prendre le virage du succès : plan d'action en matière d'adaptation scolaire*, Québec, Le Ministère, 15 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION (2000). *Trouble de déficit de l'attention/hyperactivité : agir ensemble pour mieux soutenir les jeunes : plan d'action*, Québec, Le Ministère, 12 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION (2001). *Programme de formation de l'école québécoise : français, langue d'enseignement*, Québec, Le Ministère, p. 72-95.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION (2003). *Identification des élèves à risque présentant la caractéristique de retard d'apprentissage aux 1er, 2e et 3e cycles*, Québec, Le Ministère.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION (2006a). *Programme de formation de l'école québécoise : éducation préscolaire, enseignement primaire*, Québec, Le Ministère, 354 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE (2015). *Étude des crédits 2015-2016*, Québec, Le Ministère.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE (2015). *Guide de gestion – Édition 2015 : sanction des études et épreuves ministérielles, formation générale des jeunes; formation générale des adultes; formation professionnelle*, Québec, Le Ministère, 194 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION ET DE L'ENSEIGNEMENT SUPÉRIEUR (2017). *Programme de formation de l'école québécoise : éducation préscolaire 4 ans*, Québec, Le Ministère, 35 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2006b). « Dossier : pourquoi lire, aujourd'hui ? », *Vie pédagogique*, n° 139 (avril-mai), 58 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2007). *L'organisation des services éducatifs aux élèves à risque et aux élèves handicapés ou en difficulté d'adaptation ou d'apprentissage (EHDAA)*, Québec, Le Ministère, 24 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2008). *Difficultés de comportement : nouvelles connaissances, nouvelles interventions*, Québec, Le Ministère, 14 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2009). *Les services éducatifs complémentaires en formation générale des adultes : cadre de référence*, Québec, Le Ministère, 45 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2011). *Lignes directrices pour l'intégration scolaire des élèves handicapés ou en difficulté d'adaptation ou d'apprentissage*, Québec, Le Ministère, 9 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2014). *Cadre de référence : accueil et intégration des élèves issus de l'immigration au Québec : organisation des services*, Québec, Le Ministère, 23 p.

QUÉBEC. MINISTÈRE DE L'ÉDUCATION, DU LOISIR ET DU SPORT (2015). « Les décrocheurs annuels des écoles secondaires du Québec. Qui sont les décrocheurs en fin de parcours ? Que leur manque-t-il pour obtenir un diplôme ? », *Bulletin statistique de l'éducation*, n° 43 (mai), 24 p.

RABY, Carolle, et Sylvie VIOLA (2007). *Modèles d'enseignement et théories d'apprentissage : de la pratique à la théorie*, Anjou, Éditions CEC, 273 p.

RÉSEAU CANADIEN DE RECHERCHE SUR LE LANGAGE ET L'ALPHABÉTISATION (2009). *Pour un enseignement efficace de la lecture et de l'écriture : une trousse d'intervention appuyée par la recherche*, Ottawa, 148 p.

ROBERTSON, Andrée, et Pierre COLLERETTE (2005). « L'abandon scolaire au secondaire : prévention et interventions », *Revue des sciences de l'éducation*, vol. 31, n° 3.

ROSENSHINE, Barak (2010). *Principles of Instruction*, France, International Academy of Education, International Bureau of Education, 31 p.

ROSENSHINE, Barak (2012). "Principles of Instruction: Research-Based Strategies That All Teachers Should Know", *American Educator*, vol. 36, n° 1 (printemps), p. 12-19.

ROURKE, Byron P. (1989). *Nonverbal Learning Disabilities: The Syndrome and the Model*, New York, Guilford Press (mai), 253 p.

ROUSSEAU, Nadia, et Stéphanie BÉLANGER (2004). *La pédagogie de l'inclusion scolaire*, Montréal, Presses de l'Université du Québec, 402 p.

ROYAL SOCIETY (2011). *Brain Waves Module 2: Neuroscience: implications for education and lifelong learning*, Londres (février), 22 p.

SAINT-LAURENT, Lise (1997). « Recherche québécoise en déficience intellectuelle : perspective et prospective », Actes du colloque Recherche Défi, *Revue québécoise de la déficience intellectuelle*, numéro spécial (mai), 10 p.

SAINT-LAURENT, Lise (2007). *Enseigner aux élèves à risque et en difficulté au primaire*, 2e éd., Boucherville, Gaëtan Morin éditeur, 376 p.

SAINT-LAURENT, Lise, et autres (1995). *Programme d'intervention auprès des élèves à risque : une nouvelle option éducative*, Boucherville, Gaëtan Morin éditeur, 297 p.

SPRENGER-CHAROLLES, Liliane, et Pascale COLÉ (2013). *Lecture et dyslexie : approche cognitive*, 2e éd., Paris, Dunod (janvier), 352 p.

STANOVICH, Paula J., et Keith E. STANOVICH (2003), *Using Research and Reason in Education: How Teachers Can Use Scientifically Based Research to Make Curricular & Instructional Decisions*, Portsmouth, New Hampshire, RMC Research Corporation, 47 p.

SULLIVAN PALINCSAR, Annemarie, et Ann L. BROWN (1984). "Reciprocal Teaching of Comprehension-Fostering and Comprehension-Monitoring Activities", *Cognition and Instruction*, [En ligne], vol. 1, n° 2, p. 117-175. [http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.648.8749&rep=rep1&type=pdf].

SWANSON, H. Lee (1999). "Reading Research for Students with LD: A Meta-Analysis of Intervention Outcomes", *Journal of Learning Disabilities*, vol. 32, n° 6 (novembre-décembre), p. 504-532.

TOMLINSON, Carol Ann (2003). *La classe différenciée, Chenelière Éducation*, 184 p.

TORGESEN, Joseph K. (2004). "Avoiding the Devastating Downward Spiral: The Evidence That Early Intervention Prevents Reading Failure", *American Educator*, [En ligne] (automne). [https://www.aft.org/periodical/american-educator/fall-2004/avoiding-devastating-downward-spiral].

TORGESEN, Joseph K. (2006). "Recent Discoveries from Research on Remedial Interventions for Children with Dyslexia", dans SNOWLING, M., et C. HULME (éd.), *The Science of Reading: Handbook*, Oxford, Blackwell Publishers.

TORGESEN, Joseph K. (2006). *Reflections on Reading First and the Path Ahead: Our Continuing Challenges and Responsabilities* (juin), North Carolina Reading First.

TORGESEN, Joseph K., et autres (1999). "Preventing Reading Failure in Youg Children With Phonological Processing Disabilities: Group and Individual Responses to Instruction", *Journal of Educational Psychology*, vol. 91, n° 4, p. 579-593.

TRÉPANIER, Maryse, et Lise SAINT-LAURENT (1996). *Les services aux élèves handicapés ou en difficulté : état de la situation et perspectives*, Fédération des enseignantes et enseignants de commissions scolaires, Québec, Centrale de l'enseignement du Québec   communications.

VAN GRUNDERBEECK, N., et autres (2004). *Suggestions de pratiques d'enseignement favorables au développement de la lecture chez les élèves du secondaire*, [En ligne], Université de Montréal (novembre). [http://www.education.gouv.qc.ca/fileadmin/site_web/documents/dpse/adaptation_serv_compl/guide.pdf].

VAUGHN, Sharon, Candace S. BOS et Jeanne S. SCHUMM (2007). *Teaching Students Who Are Exceptional, Diverse, and At Risk in the General Education Classroom*, 4e éd., États-Unis, Pearson Allyn & Bacon, 562 p.

VERRET, Claudia, et autres (2017). *L'inclusion scolaire des élèves ayant des besoins particuliers en éducation physique et à la santé : état des connaissances et pistes d'action*, 42e congrès de l'Institut des troubles d'apprentissage, Montréal (22 mars).

VIAU, Rolland (1999). *La motivation dans l'apprentissage du français*, Saint-Laurent, Éditions du Renouveau pédagogique, 161 p.

WALCOT-GAYDA, Elizabeth (2005). « Comprendre les troubles d'apprentissage », *Association canadienne des troubles d'apprentissage*, [En ligne]. [https://www.ldac-acta.ca/definition-nationale-des-troubles-dapprentissage/?lang=fr].

WANG, Margaret C., Geneva D. HAERTEL et Herbert J. WALBERG (1990). "What Influences Learning? A Content Analysis of Review Literature", *The Journal of Educational Research*, vol. 84, n° 1, p. 30-43.

Sites visited

Académie Nancy Metz
http://www.ac-nancy-metz.fr/

Apprenants en difficulté et littératie (ADEL)
http://www.adel.uqam.ca

Association canadienne des troubles d'apprentissage (ACTA)
https://www.ldac-acta.ca/?lang=fr

Centre de psycho-éducation du Québec (CPEQ)
http://www.cpeq.net

Centre de transfert pour la réussite éducative du Québec (CTREQ)
https://www.ctreq.qc.ca/

Centre François-Michelle (déficience intellectuelle légère)
http://www.francois-michelle.qc.ca/admission/

Clinique Orthofino (orthopédagogie)
http://www.orthofino.com

Encyclopédie sur le développement des jeunes enfants
www.enfant-encyclopedie.com

Institut des troubles d'apprentissage
http://www.institutta.com

International Academy of Education
http://www.iaoed.org/index.php/ed-practices-series

Laboratoire sur les pratiques d'enseignement appuyées par la recherche
http://www.labpe.uqam.ca

Ministère de l'Éducation et de l'Enseignement supérieur (MESS)
http://www.education.gouv.qc.ca

Programme d'enseignement en adaptation scolaire et sociale (EASS), UQAM
https://etudier.uqam.ca/programme?code=7088

Réseau d'information pour la réussite éducative (RIRE)
http://www.rire.ctreq.qc.ca/

SACCADE – Centre d'expertise en autisme
http://saccade.ca/