Volume 1, Number 2, Spring 2008

### { NEWSLETTER }

# OTARGET

## STUDENT RETENTION and SUCCESS

### INTRODUCTION

Secondary school is a time of great change for students. For some, this stage is a smooth transition, while for others, it proves to be a real obstacle course. The engagement and motivation of these youths remain deeply tied to their perseverance and their academic success. That is what two researchers reveal in the second issue of this newsletter.

In the "What's New?" section, we invite you to find out about fascinating research providing a glimpse of other factors that affect the academic success and perseverance of young people in secondary school, such as participation in extracurricular activities, behavioural difficulties or involvement in an e-mentoring program. We would like to take this opportunity to thank you for the positive response to the first issue of the newsletter. Apparently, it fills a need to keep abreast of new knowledge derived from research on student retention and academic success. We strive to present you with the research findings in a "user-friendly" way and we are open to all comments.

We hope that you will find this newsletter useful and that it will be a valuable addition to your educator's toolbox.

#### **Diane Charest**

In charge of the Service de la recherche et de l'évaluation

# WHAT IS THE RESEARCH PROGRAM

### **ON STUDENT RETENTION AND ACADEMIC SUCCESS (RPSRAS)?**

- The RPSRAS is an oriented research program managed jointly by the Ministère de l'Éducation, du Loisir et du Sport (MELS) and the Fonds québécois de recherche sur la société et la culture (FQRSC).
- The program's objectives are to promote the development of knowledge, spur the creation of partnerships (particularly between researchers and education stakeholders) and to allow school staff to assimilate and apply the research findings.
- The projects must meet annual priorities.
- Eighty-five research projects have been financed over a period of from one to three years. Following a call for proposals, projects are selected on the basis of a rigorous scientific evaluation process.
- The research concerns all educational levels from preschool through university.
- Over \$10 million have been invested since 2002.

# Québec 🖁 🕈

### IN THIS ISSUE

- 2 STUDENT RETENTION IN SECONDARY SCHOOL: A question of engagement
- 4 HOW CAN ACADEMIC MOTIVATION BE INCREASED IN YOUNG ADOLESCENTS? Interview with Roch Chouinard

### 6 WHAT'S NEW?

- Extracurricular activities and academic success
- E-mentoring and academic motivation
- Girls and behavioural problems

N-18

### RESEARCH

In addition to teaching at the Université de Montréal, Isabelle Archambault and Roch Chouinard share a common concern. They both think that the differences between elementary school and secondary school in terms of how they function are too great to properly meet the needs of young adolescents. In light of their most recent research on academic engagement and motivation, they both believe that it is time to rethink the transition between elementary school and secondary school in order to create a better relational climate and allow young people to feel comfortable in their new environment. From this perspective, they suggest creating smaller learning communities that are conducive to developing a sense of belonging and to creating more meaningful ties between young adolescents and teachers.

"Dropping out of school must be understood as the outcome of a gradual process of disengagement," explains Isabelle Archambault. To more closely define it, the researcher began by conducting an extensive review of the scientific literature, i.e. over 100 articles and chapters from periodicals and books. She chose a concept of disengagement that can be identified in terms of three distinct dimensions: behavioural, emotional and cognitive.

"This concept allows us to better identify the differences in individual paths," explains the researcher. For example, a student's disengagement in terms of behaviour is observed taking into account school attendance and respect for discipline. The emotional dimension is more concerned with

### STUDENT RETENTION IN SECONDARY SCHOOL: **A QUESTION OF ENGAGEMENT**

STUDENT RETENTION and SUCCESS

It is clear to everyone that for many young adolescents, the transition to secondary school is accompanied by declining motivation and engagement. Although we are aware of this phenomenon, Isabelle Archambault, professor of psycho-education at the Université de Montréal, wanted to gain a better understanding of the process of disengagement from school. After surveying over 13 000 young people in the secondary schools of Québec, the researcher discovered that youths in difficulty disengage from their studies in very different ways and that a more effective response to their needs means recognizing that they require individualized approaches. This research definitely marks a turning point in the prevention of dropping out of secondary school.



valuing school or finding it appealing. The cognitive dimension is rooted in the effort a student puts into learning, particularly in French and mathematics. Each of these dimensions allows us to observe a student's level of engagement.

### The behavioural dimension is the strongest predictor of dropping out of school.

Isabelle Archambault observed that 65% of students aged 12 to 16 years maintained a relatively stable level of engagement in the course of their secondary education. On the other hand, 35% experienced a degree of behavioural, emotional and/or cognitive disengagement. In this group, very different trajectories emerged, so much so that five trajectories were defined for each of the dimensions.

"The young people most at risk are those who show a low level of emotional and cognitive engagement from the outset of secondary school and growing behavioural disengagement." This group of young people represents nearly 8% of students; it comprises a higher proportion of boys than girls and youths in special education (10.5%). "They are eight times more at risk for dropping out compared with the majority of students," says the researcher.

The behavioural dimension is the strongest predictor of dropping out of school. "Since disengagement is a gradual process, its behavioural manifestations may emerge during the final stage of the process and may develop as the result of emotional and cognitive disengagement." Among the associated factors, the researcher observed that the young people most at risk of disengagement are boys who show weaker cognitive skills, have lower marks, particularly in French, and who are enrolled in special education classes.



### IMPORTANCE OF DETECTION IN THE CLASSROOM

In light of these findings, can academic engagement be maximized in secondary school? "Unlike certain areas of development, such as personality, academic engagement is an individual characteristic that can be modified," affirms Isabelle Archambault. The concept of malleability is fundamental because it underpins a potential for change and improvement. Moreover, the researcher believes that it is possible to strengthen the resiliency of young people most at risk. A pronounced decline or a great variation among the various dimensions of engagement is a sign to be taken very seriously, beginning in the first year of secondary school.

In the classroom, teachers are the first to observe declining interest, lack of attentiveness, or slacking off with respect to requirements and homework. Isabelle Archambault believes that "teachers can significantly influence engagement trajectories."

Although it is normal for the degree of engagement to evolve over the course of adolescence, a pronounced decline or a great variation among the various dimensions of engagement is a sign to be taken very seriously, beginning in the first year of secondary school. The researcher believes it is essential to detect variations in all the dimensions of engagement as early as possible in order to define an approach that focuses on the needs of each student.

For some students, the sense of belonging to the school needs to be enhanced in order to promote greater emotional engagement. For others, the challenge is to find a way of arousing their interest in basic subjects. "However, detection should mainly target youths who show signs of behavioural disengagement that intensifies over time, or that begins on entering secondary school," recommends the researcher.

Teachers alone cannot bear the entire responsibility for intervention. "It takes a village to raise a child," recalls Isabelle Archambault, advocating the involvement of the student, the school staff, parents and the community. "Combating academic disengagement requires collective mobilization rooted in the basic belief that all students are able to succeed," she concludes.

BEHAVIOURAL DIMENSION	EMOTIONAL DIMENSION	COGNITIVE DIMENSION
<ul> <li>Discipline-related behaviours (following instructions in class, being attentive and behaving in an acceptable way)</li> <li>Participation in social and extracurricular activities</li> </ul>	<ul> <li>The school's appeal and value</li> <li>Perception of the usefulness of subjects (French and mathematics)</li> <li>Sense of belonging (pride in attending school, importance attributed to this life environment and adherence to values conveyed)</li> </ul>	<ul> <li>Cognitive investment in learning (quality of effort, will to learn, intrinsic motivation)</li> <li>Self-regulation of learning (strategies used to learn)</li> </ul>

#### Signs of academic engagement based on the three dimensions

TARGET

STUDENT RETENTION and SUCCESS

### HOW CAN ACADEMIC MOTIVATION BE INCREASED IN YOUNG ADOLESCENTS?

STUDENT RETENTION and SUCCESS

### Interview with Roch Chouinard

Well known in the education community, Roch Chouinard teaches in the Département de psychopédagogie et d'andragogie at the Université de Montréal. For more than twenty years, this researcher, also Assistant Dean of the Faculté des sciences de l'éducation, has been interested in the educational options of young people. Under the Research Program on Student Retention and Academic Success, he has conducted two major research studies among thousands of young people in Québec secondary schools (see inserts).

His work led him to observe the extent to which students show a significant decline in motivation over a period of just a few months, from the end of the sixth year of elementary school to the beginning of secondary school. Surprised by the scope of this phenomenon, he wanted to gain a better understanding of the motivation gap among students during the transition from elementary school to secondary school. Today, Roch Chouinard talks to us for the first time about the findings of his analyses and a few potential solutions.

### MELS: What did you discover in your research?

From the end of elementary school to the end of the first year of secondary school, we noted a decline in motivation, in feelings of control and in the sense of belonging in nearly 25% of the students in our sampling. After assessing the perceptions that students had of their relationship with their teacher, we noted that the students who maintain a positive perception of their relationship to their teacher or who experience an improved relationship are less subject to declining motivation. This is true regardless of the subject taught.

# The students tell us that the teacher can make a difference.

The relationship to the teacher is thus a decisive factor in motivation, engagement and perseverance. The influence of this relationship is similar in boys and girls. These students are much more protected from

the effects of the transition from elementary school to secondary school. In a way, this observation opposes the usual assumptions that claim that everything happens in the family or that the education community can do nothing to influence motivation at school.

The findings show us that it is not the transition itself that is harmful but the quality of this transition. Moreover, the quality of the transition is tied to relationship. The students tell us that the teacher can make a difference.

#### MELS: *How do you explain this decline in motivation during the transition to secondary school?*

Research on the topic tells us that transitions are experienced differently by many students at all educational levels: from preschool to elementary school, from elementary school to secondary school, from secondary school to college, and even from college to university. These transitions can lead to a decline in performance and engagement, and to an increase in risk factors for dropping out of school. From the viewpoint of student retention and academic success, they are trouble spots.

The transition from elementary school to secondary school is distinctive. Elementary school and secondary school are very different. In a way, these two educational levels developed separately, and their programs and teaching methods were not really harmonized.

Another element also increases sensitivity to this transition: the age when it occurs. According to American research studies, the



transition is easier when it occurs later, at the age of 14 or 15 years. Young people who enter secondary school at 12 and 13 years of age experience more significant loss of motivation and engagement.

### MELS: Why is it more difficult at 12 or 13 years of age?

Significant events occur in terms of physiological and psychological development. This is the age when peers take on a great deal of importance and attachment to adults evolves, something all parents can corroborate. Children begin to seek out adult models to identify with elsewhere than in their family.

Young people experience profound changes. They need stability, but we put them in a situation of significant change by making them go on to secondary school. We also make them experience more impersonal relationships with teachers. From an environment in the sixth year characterized by a homeroom system, they move into an environment where subjects are taught by more teachers, who see far more students on a weekly basis.

At the end of the 1980s, American researchers were claiming that the school environment in which young adolescents were being placed in the transition to secondary school did not meet the typical developmental

In 2005, Roch Chouinard and a team of researchers conducted research on the connections between teachers' evaluation practices and academic motivation with 3700 students. They noted that certain evaluation practices could have a positive influence on students' perseverance, particularly in secondary school. "Evaluation practices are not neutral," states the researcher. They have an effect on the students' self-perception and they mediate academic behaviours." The multi-channel approach that uses varied sources of evaluation and relies more on individual work and teamwork would have beneficial effects on the motivation and social adjustment of girls in secondary school. In contrast, the single channel approach using tests and exams is more suitable for boys. The team developed a classroom intervention model that is addressed to everyone and groups together a variety of non-anxiety-inducing pedagogical practices likely to have a positive effect on motivation.

In 2007, Roch Chouinard and collaborators also discovered significant differences in terms of the motivation and psychosocial adjustment of secondary school students based on their socioeconomic background. Their findings contradict the received wisdom. Among their sampling of 5600 students, those from advantaged backgrounds found school and reading less appealing than those from disadvantaged backgrounds, even if they show greater recognition of the usefulness of school. In terms of psychosocial adjustment, the findings are similar: students from advantaged backgrounds reported more conflictual relationships with their teachers, as well as higher rates of vandalism at and outside school, petty theft and violence in intimate relationships. Furthermore, young people from advantaged backgrounds perceived dropping out as a beneficial path to take.

How can these findings be explained? Roch Chouinard suggests that "it is possible that in a very advantaged environment, the most motivated students attend private school, whereas students who are less motivated and students who are less well-adjusted to school have more difficulty being admitted to these schools and must then attend public schools." Another theory might also explain the findings. "It is quite likely that the efforts invested over the course of recent years in public secondary schools in disadvantaged areas have finally vielded results." needs of this age group. Twelve-and thirteenyear-olds need to form meaningful ties with adults other than their parents. They need to feel competent, have a degree of control and find meaning in what they do.

TARGET

STUDENT RETENTION and SUCCESS

At a time when young people have a growing need for independence and autonomy, teaching practices discourage the development of autonomy by giving greater control to the teacher. Also, at this age, when students are very sensitive to social comparison, schools use comparative grading systems that place the emphasis on grades and comparisons among students. This creates a real gap between their needs and what the environment offers.

According to the researchers, when the changes in the school environment match the developmental needs of young adolescents, an increase in motivation and the absence of negative effects associated with changing schools are observed. However, when the changes in the school environment are not adjusted to the needs of young adolescents, a decrease in motivation is observed, along with negative psychological and academic effects.

They conclude that bringing young people's needs into line with the school environment is not appropriate at 12 and 13 years of age. It is more appropriate at around 14 and 15 years of age.

### MELS: What conditions would be more favourable?

To facilitate the transition from elementary school to secondary school, it would be a good idea to reduce the number of teachers per student in secondary school and to reduce the size of the schools. We might also consider the possibility of increasing the number of intermediate schools, or "middle schools," where the last cycle of elementary school and the first cycle of secondary school are in the same school, in order to favour greater continuity. However, if we paid more attention to the quality of the relational climate in the secondary schools, we would have a significant protection factor and real gains in terms of motivation, perseverance and academic success. We have to create a welcoming school environment in which young people can feel comfortable and develop a sense of belonging. The schools could also increase the number of extracurricular activities involving teachers in order to foster better relationships between teachers and students. That is the real issue.

The role of the school is also to help students discover new interests. Think of the teachers who have truly influenced us; they are the teachers who opened up new horizons for us and who shared their interests with us.

If we paid more attention to the quality of the relational climate in the secondary schools, we would have a significant protection factor.

### MELS: Do you have other suggestions for school principals, teachers and parents of young adolescents?

You have to help young people to define goals. In elementary school, children work to please their parents and their teachers. In secondary school, we want adolescents to start working for themselves, toward their own future. They are called upon to put every effort into envisaging a longer-term identity for themselves. Schools must work on that and parents as well. Even if their children's goals do not quite fit with what they want for them, the important thing is that they have goals. It is also important to work on a timeline for gratification. A young person has to learn that he or she will reap the rewards of his or her work later.

### WHAT'S NEW?

?

The number of extracurricular activities does not adversely affect academic success, but the feeling of being overloaded that some adolescents experience has negative effects on their academic motivation.

TARGET

STUDENT RETENTION and SUCCESS

Given the unprecedented penchant for involvement in extracurricular activities, this observation comes at the right moment. Very early on, parents and various stakeholders encourage children to get involved in structured after-school activities. Although the benefits of such involvement for the well-being of young people have been clearly established, many people are questioning the limited amount of free time that adolescents have.

Can a teenager be "too" involved in extracurricular activities? In the wake of comparative research conducted in Québec, France, the United States and China, Isabelle Gingras, professor of psychology at McGill University, observed that feeling overloaded may have negative effects on certain adolescents. According to the researcher, the key is not so much to measure objectively the number of hours devoted to various extracurricular activities, but the subjective feeling of being overloaded. "Adolescents differ a great deal in terms of the activity load they can tolerate in a healthy way," the researcher explains. Some always want to do more, whereas others prefer to take time for themselves and not feel that they are always on the run. "A sense of balance is a very personal feeling."

As long as an adolescent does not feel overloaded, participating in extracurricular activities has beneficial effects. However, as soon as feelings of being overwhelmed arise, the opposite effects emerge (in particular, lower self-esteem and mood, unmet basic needs and feeling stressed). The research also indicated that basic needs, such as feeling competent, autonomous and connected to others are less well met in young people who experience strong feelings of being overloaded.

"Also, children who feel overwhelmed by extracurricular activities tend to take part in these activities because they are motivated for extrinsic reasons related to rewards or approval, rather than because they enjoy the activity or because it is important to them," Isabelle Gingras observes. This kind of motivation, focused on external factors, is also observed in their relationship to school.

Research in psychology has shown that people who aspire more strongly to extrinsic goals (money, popularity, or physical beauty) have a lower level of well-being. In contrast, people who pursue more intrinsic goals (personal growth, relationships with others and the community) fare better.

"For now, there is no need to worry about the number of activities or the time spent on extracurricular activities, but it is useful to keep in mind that the extracurricular activity load can contribute to feelings of being overwhelmed, which is a crucial factor to be monitored." According to the researcher, it is a good idea to help teenagers both slow down the pace and develop a different attitude toward their activities and school.



### While helping young people to define their career choices, e-mentoring is also an excellent tool for academic motivation.

The formula is a simple one. In the classroom, using the Academos Web site, students can contact volunteer mentors by e-mail in a safe, confidential and supportive way. They can ask all the questions they wish.

Firm believers in the success of Web-based mentoring used in colleges, a team of researchers led by Jacques Lajoie, professor of psychology at the Université du Québec à Montréal, evaluated the effects of this formula on student motivation in Secondary Cycle Two. In total, 813 16-year-old students took part in the research. More than 50% of the students who participated in the program had access to a mentor and some had the opportunity to be in touch with several mentors. A total of more than 13 000 messages were exchanged during the school year.

The results are impressive: active participation in a career-choice e-mentoring program, as a classroom activity, helps increase the academic motivation of students in both regular and differentiated-path classes. The motivation is connected just as much to the enjoyment of learning and discovery of new things as it is to the fact of attending school out of personal choice instead of obligation. "Contact with a mentor gives young people the chance to make the connections between what they learn at school and the job market," explains Jacques Lajoie. Through this special relationship, the mentor can guide, encourage and listen to a young person, in addition to providing him or her with information about the reality of the world of work. The researcher emphasizes how much the success of the program partly depends on the student's willing participation.

# TARGET STUDENT RETENTION and SUCCESS

E-mentoring also provides an excellent opportunity to forge ties with adults other than parents, while at the same time contributing to the student's education through the practice of writing. Furthermore, users can communicate with workers who practise occupations that are not represented in their region.

Participants who have interacted with e-mentors have more of a perception of the usefulness and importance of school compared with those who have not had contact with such mentors. In a sense, school becomes a required path for achieving personal goals. Much research has shown that developing and defining a career choice has a positive influence on student retention and academic success.

### Testimony

Delighted with his experience with Academos, which he began in Secondary IV while a student in Dolbeau-Mistassini, today Marc-André Gagnon, 20 years of age, has completed a DCS in Media Communication Techniques: Radio Hosting and Production. For more than a year, he exchanged "tons of e-mail messages" with a mentor, a radio host in the city of Québec. "In the beginning I was skeptical, but I soon realized how precious these exchanges were," he said. "I could ask all the questions on my mind, and my mentor truly explained the reality of his profession." For four years, Marc-André Gagnon exchanged e-mail with a dozen mentors working in different fields of communications. "I never thought I would get so far within four years," he says. "Since then, I have acquired one year of experience at a commercial radio station, four years of experience in community radio and I have also done voice-over in several radio stations, all over Saguenay–Lac-Saint-Jean." When she was in Secondary III at a school in Pierrefonds, Marilou Morin-Laferrière was in contact with three mentors: a dietician, a music therapist and a psychologist. She quickly realized that her discussion with the dietician satisfied her deepest interests. "The more I discussed things with her, the more aware I became of what really appealed to me," she says. Over the course of about twenty exchanges in only three weeks, she had found information about the work world, the education she would have to pursue, and the employment and salary possibilities. Furthermore, the mentor confirmed that she had all the qualities needed to be a good dietician. Today, Marilou Morin-Laferrière is passionate about her studies in dietetics at McGill University. Her father became a mentor in electrical engineering for the Academos Web site, and her younger brother, now in Secondary III, has started chatting with a mentor in kinesiology.





**{ 7** }

Marilou Morin-Laferrière

Reference: <www.academos.gc.ca>

Marc-André Gagnon

# ?

### Girls who have had behavioural problems in secondary school experience a more difficult and complex transition to adulthood than boys.

Becoming an adult has never been an easy transition, but the challenges increase tenfold for young people who have experienced difficulties in secondary school. Generally speaking, for some years now, many young people seem to be spending more time in emerging adulthood compared with previous generations. Researchers have also observed instability in educational paths starting at the end of secondary school, which partly explains the fact that many young adults postpone assuming financial and family responsibilities.

In order to understand how young people who have experienced behavioural problems in secondary school adjust to this critical period, Julie Marcotte, professor of psycho-education at the Université du Québec à Trois-Rivières, probed the experience of 95 young people (61 boys and 32 girls) in different regions of Québec, six years after they began secondary school. "Those who presented personal, family and social problems that hindered their academic success are particularly vulnerable during this transition," notes the researcher. Many of them also come from families who are unable to give them support, and they have reached the age when social and educational services offered to adolescents in difficulty end abruptly. Recent studies have shown that the transition to adulthood, like the transition from childhood to adolescence, is a period during which mental health problems may increase in young people who have experienced developmental difficulties. Moreover, this is what Julie Marcotte discovered in her research.

"In academic terms, young people who have experienced behavioural problems adjust to college in much the same way as youths who have not had any difficulty," says Julie Marcotte. On the other hand, their antisocial behaviour persists, particularly with respect to the consumption of drugs and alcohol, physical aggression and delinquency. Girls have more difficulty with emotional adjustment when they go to college. "They show more symptoms of depression and anxiety in addition to the same antisocial behaviours seen in boys." This accumulation of internalized and externalized symptoms increases their vulnerability.

# STUDENT RETENTION and SUCCESS

### Continuation of page 7

Transition to adulthood is particularly critical in girls. A great deal of research has already shown an increase in risk behaviours, depression, early pregnancies and an increased risk of intergenerational transmission of aggressive behaviours. "In this study, leaving school occurs nine months before a first pregnancy in young girls presenting aggressive behaviours," Julie Marcotte notes.

This research raises important questions about the attention paid to the experience of girls who experience behavioural problems during their secondary school education. Although fewer girls than boys present behavioural problems, the researcher considers it essential to better identify them starting in elementary school and in secondary school in order to plan intervention that is appropriate to their needs.

### FOR FURTHER INFORMATION:

Archambault, Isabelle. Continuité et discontinuité dans le développement de l'engagement scolaire chez les élèves du secondaire: une approche centrée sur la personne pour prédire le décrochage, 2006.

Chouinard, Roch, et al. L'effet de différentes approches évaluatives sur l'engagement et la persévérance scolaires dans le contexte du passage du primaire au secondaire, 2005.

Motivation et adaptation psychosociale des élèves du secondaire en fonction de leur milieu socioéconomique, de leur sexe et des pratiques pédagogiques de leurs enseignants, 2007.

Gingras, Isabelle. S'impliquer dans l'éducation des enfants, mais pas trop non plus: La balance clé pour le bien-être des enfants, 2007.

Lajoie, Jacques, et al. Academos à l'école. Intégration d'un programme de cybermentorat vocationnel aux activités d'orientation au deuxième cycle du secondaire, 2006.

Marcotte, Julie. Les différentes trajectoires éducationnelles empruntées à l'émergence de la vie adulte: identifier les facteurs personnels, sociaux et scolaires dans une perspective développementale pour mieux comprendre et intervenir. Étude comparative des élèves ayant présenté des problèmes de comportement et des élèves sans problèmes de comportement, 2007.

All the research reports were published as part of the Research Program on Student Retention and Academic Success (RPSRAS) and can be downloaded from the following Web site: www.fqrsc.gouv.qc.ca/recherche/index1.html.

### INFORMATION

A section devoted to the RPSRAS is now accessible on the Web site of the Ministère de l'Éducation, du Loisir et du Sport, under the heading Les programmes. You will find a search engine allowing you to obtain information about the various funded projects, information and documentation on the application and validation of the researching findings, and explanations about the project selection process, etc.

You can also subscribe to the distribution list of the Target Student Retention and Academic Success newsletter to receive publication notices.

Join us there! www.mels.gouv.qc.ca

#### **Research and development**

Nathalie Dyke, Ph.D.

#### Coordination

Julie-Madeleine Roy Service de la recherche et de l'évaluation Direction de la recherche, des statistiques et de l'information

#### Coordinator, Research Program on Student Retention and **Academic Success**

Gilbert Moisan Service de la recherche et de l'évaluation Direction de la recherche, des statistiques et de l'information

Graphic design Ose Design

#### Collaboration

Monica Rosales Eve Tellier-Bonnier Service de la recherche et de l'évaluation Direction de la recherche, des statistiques et de l'information

Martin Garneau Jacques Leclerc Direction des communications

#### **English Version**

Direction de la production en langue anglaise Secteur des services à la communauté anglophone Ministère de l'Éducation, du Loisir et Sport

© Gouvernement du Québec Ministère de l'Éducation, du Loisir et du Sport, 2008

8

### ISSN 1918-0918

Éducation, Loisir et Sport \* \* uébec 🗼

