



New Brunswick Student Wellness Survey: School Feedback Report for James M. Hill Memorial High School





## New Brunswick Student Wellness Survey: School Feedback Report for

James M. Hill Memorial High School

The New Brunswick Student Wellness Survey: School Feedback Report provides highlights of key provincial indicators that are considered crucial for monitoring student wellness behaviours and for developing a culture of well-being in our province.

For more information on this report, please contact:

**Dr. William Morrison, Co-Executive Director** wmorriso@unb.ca **Dr. Patricia Peterson, Co-Executive Director** plp@unb.ca

#### Health and Education Research Group

Room 228 Marshall d'Avray Hall University of New Brunswick PO Box 4400 Fredericton, NB Canada E3B 5A3 Tel: 506 453 5114

Fax: 506 451 6920

We would like to acknowledge the contributions of the Canadian Research Institute for Social Policy, the Joint Consortium for School Health, and the SHAPES Collaborative Team for their contributions and expertise. The analysis and preparation of the report was conducted by The Learning Bar Inc., building on earlier work by researchers at the University of Waterloo.



### Introduction

## New Brunswick Student Wellness Survey

The New Brunswick Student Wellness Survey (NBSWS) is a provincial initiative of the New Brunswick Department of Wellness, Culture and Sport (WCS). Data collection and analysis is carried out by the Health and Education Research Group (University of New Brunswick and Université de Moncton) in collaboration with WCS, and in cooperation with the Department of Education. The purpose of the survey is to examine the health and wellness attitudes and behaviours of students in grades 6-12.

The questions on the New Brunswick Student Wellness Survey address four pillars of wellness:

- Healthy Eating
- Physical Activity
- Tobacco-free Living
- Mental Fitness

In the 2009-2010 survey, 21,078 students from 127 schools participated. Over 39,000 students from 184 schools participated in the 2006-2007 survey. Each participating school receives a personalized School Feedback Report. This report provides individual school results, unless the number of students responding is insufficient to ensure student confidentiality. Unless otherwise stated, all numbers listed in the report are presented as a percentage of total respondents in the school. If your school participated in the previous School Wellness Survey, you will soon receive a "Your School at a Glance" table that shows results from 2006-2007 and 2009-2010.

The organization of your School Feedback Report recognizes the interrelatedness of the four wellness pillars and the importance that family influences, peer relationships and the school environment play in influencing students' health behaviour choices and attitudes. The information contained in this School Feedback Report is provided to each school to assist with the prioritization, development and implementation of initiatives that promote healthy lifestyle behaviours and attitudes among students. In many instances, School Feedback Reports are shared with other health and wellness stakeholders, such as parents, district-level personnel, departmental and community service providers, and business and civic leaders.

## Importance of Student Wellness to Academic Development

The School Feedback Report provides a unique opportunity to reinforce the importance of healthy lifestyle behaviours to student learning. Current research provides evidence of positive associations among the wellness pillars and measures of students' academic readiness, engagement and success. For example:

- **Healthy Eating**: Eating breakfast every day can help improve concentration, and increase students' potential to learn (Public Health Agency of Canada, 2009).
- **Tobacco Use**: There is an association between tobacco use and low academic achievement and motivation in students; students who use tobacco tend to have lower academic grades than their peers (Morrison and Peterson, 2010).
- Physical Activity: Active and healthy students have increased levels of concentration, relaxation and focus. Students who succeed academically in school also tend to be more physically active (Public Health Agency of Canada, 2009).
- Mental Fitness: The satisfaction of mental fitness needs (competency, relatedness and autonomy) in the educational context has been associated with a range of positive personal and academic outcomes, including enhanced academic self-esteem and engagement, increased scholastic confidence and performance, and decreased likelihood of dropping out of school (Morrison and Peterson, 2010).

## A Comprehensive Approach to School Health

The Joint Consortium for School Health recommends the use of a Comprehensive School Health framework in addressing both the academic development and wellness of students. The framework emphasizes the need for planning and implementing whole school approaches that incorporate key wellness perspectives and practices across four domains:

- Social and physical environment
- Teaching and learning
- Healthy school policy
- Partnerships and services

To learn more about the Comprehensive School Health framework and the Joint Consortium for School Health, please visit www.jcsh-cces.ca.



Your School Feedback Report is a valuable source of information for planning initiatives using a Comprehensive School Health framework. The survey outcomes detailed in the report may assist in identifying areas of strength on which to build, as well as priority wellness areas that require further attention or promotion. It is critical that all stakeholders work together, including students, teachers, parents, administrators, service providers, and members of the wider community. The following provides some key ideas on how to use your School Feedback Report.

#### Students can use the results to:

- Relate the results to curriculum concepts being taught in the classroom
- Engage in dialogue about the results to seek solutions and create student-driven action plans
- Participate in planning activities for programs like the School Feedback Grants
- Organize a school-based action team or student club in wellness
- Help organize new initiatives (e.g., start an intramural program, hold a health fair, create a video, develop a presentation, or explore health behaviours of another country)
- Share and use the data in class, at home and in the community

#### **Parents and communities** can use the results to:

- Plan activities with students, staff, community members and the Parent School Support Committee or Home and School Association
- Model healthy behaviours and support the adoption of healthy behaviours
- Share their skills, talents and expertise to support the school and the community
- Work with community groups to help address identified issues

#### **School staff** can use the results to:

- Communicate outcomes with students and staff and the Parent School Support Committee (PSSC) or Home and School Association (HSA)
- Incorporate wellness objectives into School Improvement Plans
- Develop class assignments and activities (e.g., grade 6-8 Curriculum Connectors at <a href="www.unbf.ca/education/herg/wellness/curriculum-connectors.php">www.unbf.ca/education/herg/wellness/curriculum-connectors.php</a>)
- Engage students in planning and delivering wellness activities
- Create opportunities for staff to model healthy behaviours
- Support requests for funding (e.g., Wellness Grant Programs)
- Support the development, monitoring and implementation of healthy school policies
- Enhance delivery of services or programs for students (e.g., counselling, breakfast program)
- Form new partnerships with parents and the wider community to take collective action
- Implement and evaluate actions to promote wellness

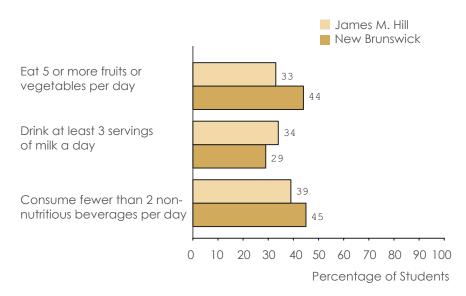
## **Healthy Eating**

In the past 25 years, there has been a dramatic increase in the percentage of Canadian adolescents who are considered to be overweight or obese. Overweight and obesity rates in adolescence often persist into adulthood (Heart and Stroke Foundation of Canada, 2006). Fast food consumption and food portion sizes have increased significantly in the past 20 years. During the same period, youth have become less physically active. This section discusses healthy eating, while the next section discusses physical activity. The prevalence of overweight and obesity is discussed in the next section, as a healthy body weight depends on both healthy eating and physical activity.

#### Food Intake

The amount of fruits and vegetables teens eat is an especially important marker. Children and adolescents who eat fruits and vegetables five or more times a day are substantially less likely to be overweight or obese than those whose fruit and vegetable consumption is less frequent (*Tjepkema & Shields, 2005*). Consuming an adequate amount of milk and milk products is also important. In addition, limiting food and beverages high in calories, fat, sugar and salt (sodium) is an important step towards better health and healthy body weight (Canada's Food Guide). Figure 1 shows the food intake for three key indicators of healthy eating.

Figure 1: Food intake for three key markers of healthy eating.



### Healthy Eating at Home

Healthy eating routines in both home and school settings play an important role in creating readiness for learning. For example, students who eat breakfast have improved memory, problemsolving skills and creative abilities (Health Canada, 2007c).

In New Brunswick, only 42% of the students ate breakfast every day in the previous week, while 26% reported eating breakfast 2 or fewer times per week. Figure 2 shows the results for James M. Hill compared with the provincial results. Figure 3 displays the percentage of students that gave various reasons for skipping breakfast.

Figure 2: Percentage of students eating breakfast two or fewer times per week

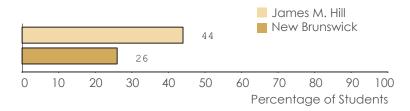
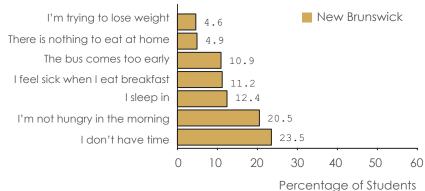


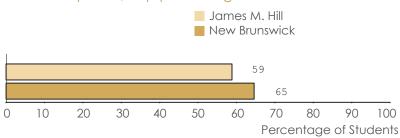
Figure 3: Reasons students give for skipping breakfast



## Social Relations Influence Healthy Eating

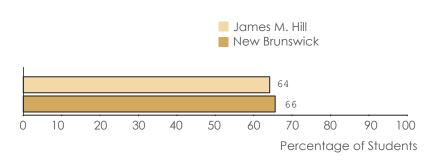
Family members influence students' eating routines and choices. Parents can play an important role in helping students develop healthy attitudes toward food through establishing consistent meal-time routines and modelling healthy food choices. Eating the evening meal with the family is particularly important.

Figure 4: Percentage of students eating dinner with at least one parent, step-parent or quardian



During the adolescent years, students' peers also play an important role in shaping attitudes and behaviours related to healthy eating routines and choices (Health Canada, 2007b).

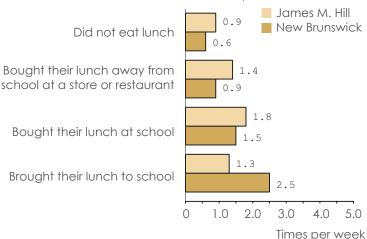
Figure 5: Percentage of students eating lunch with one or more friends



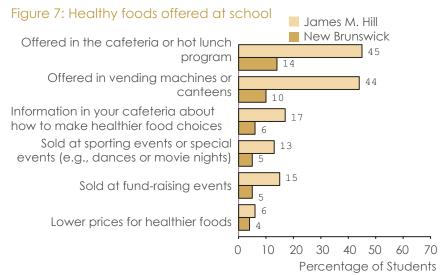
## Schools Influence Healthy Eating

Schools can also influence healthy eating habits. The nutritional value of the food eaten at lunch is an important indicator. Offering healthy foods at sports and fund-raising events, in vending machines, and in the cafeteria helps promote healthy eating. Figure 6 shows the frequency with which students ate lunch at school.

Figure 6: Students' lunch habits on school days



Students were asked whether they noticed a *trend* in their school over the past 12 months related to the offering of healthier foods. The figure below shows the results for James M. Hill compared with the province.



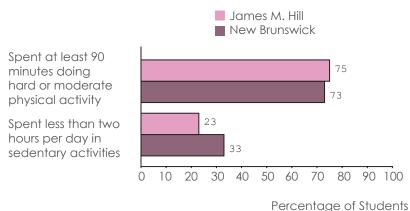
## **Physical Activity**

Today, students spend 40% less time being physically active than students did 15 years ago (Canadian Association for Health, Physical Education, Recreation and Dance, 2005). Physical activity can help students achieve and maintain a healthy body weight, reduce stress, increase energy levels, and improve their overall outlook on life (Health Canada, 2002).

Canada's Physical Activity Guide recommends that students spend at least 90 minutes a day doing hard or moderate physical activity. This amount is roughly equivalent to 16,500 steps daily. The Guide also calls for students to spend less than two hours per day in sedentary activities such as watching TV or using a computer.

The after school period is a perfect time to introduce change from sedentary screen-related activities to those that will get students moving! About 27% of New Brunswick youth were not physically active in the week prior to the survey. The figure below shows the percentage of students that were physically active.

Figure 8: Physical activity and inactivity



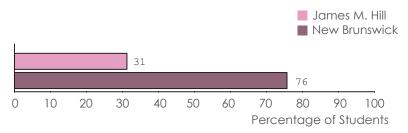
## Overweight and Obesity

The prevalence of overweight and obese children aged 7 to 13 in Canada increased from 11.4% in 1981 to 29.3% in 2006; the increase in New Brunswick over that period was from 9.9% to 33.8% (Willms, Tremblay, & Katzmarzyk, 2003). The 2004 results from the Canadian Community Health Survey indicated that 33.4% of New Brunswick youth are overweight or obese, which is well above the Canadian average of 26%.

Healthy body weight can be determined using the Body Mass Index (BMI). BMI is a measure of a person's weight in comparison to their height. International definitions for overweight and obesity based on the distribution of BMI for boys and girls at each age have been established (Cole et al., 2000).

The figure below shows the percentage of students that were of healthy weight.

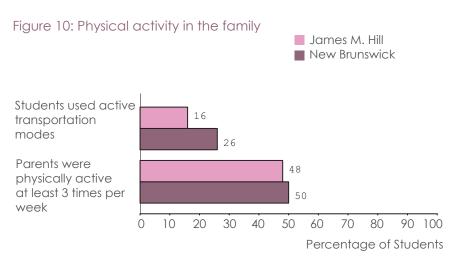
Figure 9: Prevalence of students of healthy body weight





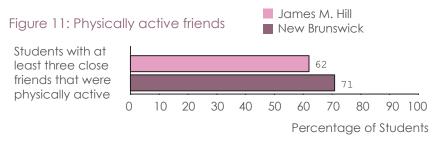
## Family Influences

Parents are important role models, and encourage healthy behaviours in their children through participation in regular physical activity and using active modes of transportation, such as cycling or walking. Active parents often have active kids (Canada's Physical Activity Guide, Health Canada, 2002). In the 2009-2010 New Brunswick survey, 76% of the children of active parents were physically active, while only 66% of the children of inactive parents were physically active.



#### Peer Influences

Students were asked "How many of your close friends are physically active?" Physically active students are more likely than those who are inactive to report that they have active friends. In the 2009-2010 New Brunswick survey, 71% of children had at least three physically active friends, and among those children, 77% were themselves physically active. In contrast, only 59% of those with less than three active friends were physically active.

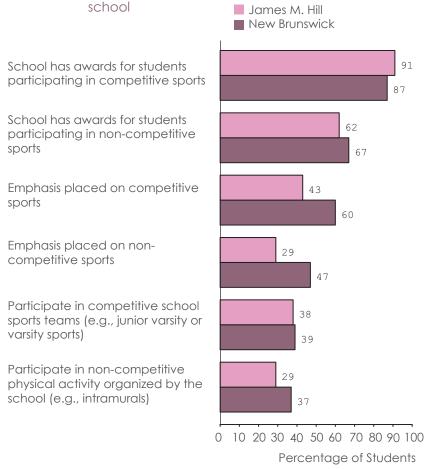


## Physical Activity at School

School environments that support and encourage physical activity have been shown to be effective in increasing student activity levels (Heart and Stroke Foundation of Canada, 2005). Physical activities at school provide opportunities for students to be active and to form relationships that reinforce healthy lifestyle attitudes and behaviours.

Students were asked a number of questions about the opportunity to be engaged in school sports, whether they did engage in non-competitive sports, and the relative emphasis placed on competitive versus non-competitive sports.

Figure 12: Access, participation and support for physical activity at



## **Tobacco-Free Living**

Low academic achievement and motivation have been associated with smoking behaviours in students. Using tobacco at an early age has also been associated with other risk behaviours, including problem alcohol and substance use. Twenty-two percent of all deaths in Canada are attributable to tobacco use. Half of all long-term smokers will die or be disabled by a smoking-related illness (Health Canada, 2007a).

The use of tobacco tends to go hand-in-hand with drinking alcohol and using marijuana. In New Brunswick, amongst students in grades 9 to 12, 96% of those who had smoked in the past 30 days had tried drinking alcohol and 88% had tried using marijuana. In contrast, 63% of non-smokers had drunk alcohol and 23% had tried using marijuana.

Amongst students in grades 5 to 8, 25% of those who had tried using tobacco reported that they bought them at a store, while a further 29% received them from a friend or someone else. Older students – those in grades 9 to 12 – most often bought their cigarettes at a store (22%), bought them from a friend or someone else (15%) or asked someone to buy them for them (15%). About 27% were given their cigarettes by a friend or someone else.

## A Commitment to Tobacco-Free Living

Students who had never smoked were asked about their intentions to remain *smoke-free* and their confidence in resisting peer-pressure to smoke. The figure below shows the percentage of students in New Brunswick who had never tried smoking and were committed to not smoking in the future.

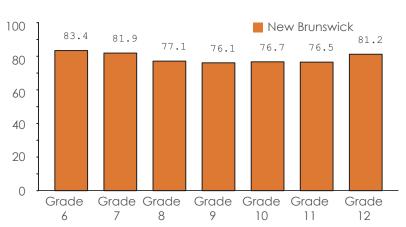


Figure 13: Students committed to remaining tobacco-free

## Prevalence of Smoking

#### Initiation

Students were asked whether they have ever tried smoking, even just a few puffs. By grade 12, about 40% of girls and 50% of boys have tried smoking. This is a key indicator as students who try smoking at a young age are more susceptible to becoming regular smokers. The figure below shows the percentage of students that have tried smoking.

100 James M. Hill New Brunswick 80 67 60 49 60 45 44 42 39 31 40 18 13 20 10 ()Grade Grade Grade Grade Grade Grade Grade 7 8 9 10 11 12 6

Figure 14: Students that have tried smoking

## Regular Smoking

Students are considered regular smokers if they smoked at least one cigarette on 11 or more of the previous 30 days. In New Brunswick, 14% of girls and 24% of boys in grades 11 and 12 are regular smokers. The figure below shows the percentage of students that are regular smokers.

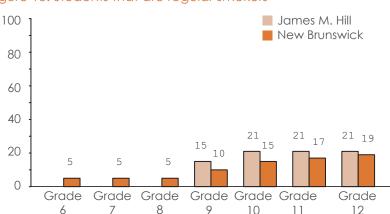
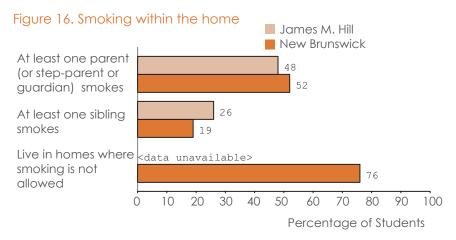


Figure 15: Students that are regular smokers

## Family Influences

Smoking within the home is related to student smoking behaviour. When both parents smoke, students are more likely to smoke than when only one parent smokes. The greater the number of smokers inside the home, the more likely a student is to smoke (Youth Smoking Survey Technical Report, Health Canada, 2002). In New Brunswick, about one-half of all students have at least one family member that smokes. Among those students whose parents smoke, 28% are regular smokers by grade 12, while only 15% of students whose parents do not smoke are regular smokers by grade 12.



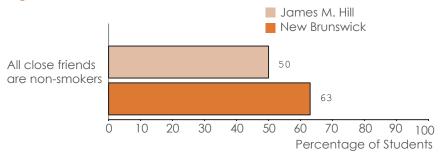
Students were asked about whether there were rules in their household about smoking, and amongst all New Brunswick students, 75% lived in homes where smoking was not allowed. In 4% of the homes, only special guests were allowed to smoke, while in 11% there were designated areas for smoking and in 10% of homes smoking was allowed anywhere in the home.



#### Peer Influences

Students who have close friends who smoke are more likely to smoke than those who have only non-smoking friends. This trend is the same for males and females (Health Canada, 2002). In the 2009-2010 New Brunswick survey, among high school students that smoked, 95% had friends that smoked, while among non-smokers only 41% had close friends that smoked.

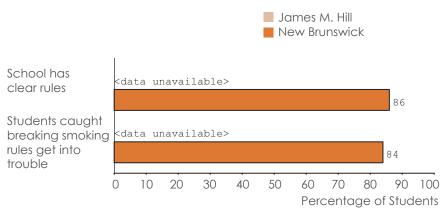
Figure 17: Students with close friends that do not smoke



#### Tobacco-free at School

Students were asked "Does your school have a clear set of rules about smoking for students to follow?" About 18% of the students did not know. The response pattern among those that did know is shown in the following figure.

Figure 18: Rules about smoking at school



## **Mental Fitness**

Mental fitness refers to a state of psychosocial well-being that goes beyond the absence of disease or sickness. It means having a positive sense of how we feel, think and act which improves our ability to enjoy life. It also implies the ability to efficiently respond to life's challenges, and to effectively restore and sustain a state of balance. Having a higher level of mental fitness enables us to more fully enjoy and appreciate our environment and the people in it. When mental fitness needs are sufficiently met, people adopt behaviours that contribute to their own personal wellness and that of others, and they make healthier choices (New Brunswick Wellness Strategy, 2009).

A recent review of 17 studies involving positive mental health promotion in schools reported that comprehensive school health approaches that were sustained beyond one year were more likely to be effective than singular interventions that were carried out for shorter periods of time (Stewart-Brown, 2006; Morrison & Peterson, 2010).

The Joint Consortium for School Health has recently published a resource document for schools. The publication outlines key perspectives and practices for applying comprehensive positive mental health approaches in the school context. This resource document can be accessed at <a href="http://www.jcsh-cces.ca/">http://www.jcsh-cces.ca/</a>, by selecting Schools as a Setting for Promoting Positive Mental Health: Better Practices and Perspectives.

Satisfaction of all three mental fitness needs is associated with resilience, as well as participation in healthy lifestyle choices during childhood and adolescence. Analyses of data from the 2006-07 Wellness Survey revealed that high levels of mental fitness were associated with:

- higher levels of positive affect and pro-social attitudes and fewer oppositional behaviours;
- a lower prevalence of smoking in the 30 days prior to the survey and a lower susceptibility to smoking;
- engagement in competitive physical activities; and
- higher levels of school connectedness (Morrison & Peterson, 2010).

Mental fitness is fostered in environments and relationships that address three interrelated psychological needs: autonomy, relatedness, and competency.

#### Autonomy.

# "I am able to make choices about things that are important to me."

Students need personal freedom to make choices or decisions that affect their lives. When this need is satisfied in conjunction with other need areas, freedom and choice are expressed in ways in which respect is demonstrated for self and others.

#### Relatedness.

## "I feel included, supported and encouraged by others."

Students need connection to and closeness with family, peers, teachers and other significant individuals. This need is met through interaction with others, membership in groups, and the support and encouragement students receive from others.

## Competency.

## "I have strengths and gifts that are recognized by myself and others."

Students need to recognize and use their personal gifts and strengths in achieving personal goals. Fulfillment of this need provides them with a sense of personal achievement and accomplishment.



#### Mental Fitness at James M. Hill

Students were asked six questions corresponding to each of the three aspects of mental fitness. The figure below shows the results for mental fitness at James M. Hill compared with the provincial results.

High Medium Low

James M. Hill 18 70 12

New Brunswick 10 70 20

30

40

50

60

80

Percentage of Students

90

Figure 19: Percentage of students considered "mentally fit"

10

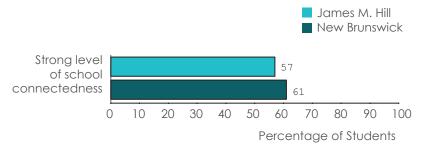
20

The data were scaled on a 10-point scale such that a score of 10 represented a high level of mental fitness. Students that scored below 5.2 on the 10-point scale were considered to have a low level of mental fitness, while those with scores above 9 were considered to have a high level of mental fitness.

#### School Connectedness

A sense of school connectedness can support students in making healthy choices. Students who feel an attachment to their school, and who consider their teachers to be supportive, are less likely to engage in unhealthy or high-risk behaviours. Students were asked about the extent to which they agreed or disagreed with six statements concerning their sense of connectedness to school. The figure below shows the results for school connectedness at James M. Hill compared with the provincial results. The table that follows shows the results for the questions that comprise the scale.

Figure 20: School connectedness



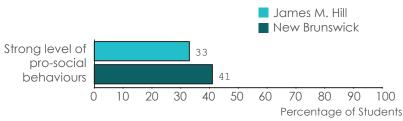
The data were scaled on a 10-point scale such that a score of 10 represented a strong level of school connectedness. Students that scored above 6.5 on the 10-point scale were considered to have a strong level of school connectedness.

How strongly do you agree	Percentage of Students Responding			
or disagree with the following statements?	Strongly Agree	Agree	Disagree	Strongly Disagree
I feel close to people at my school.	24	55	14	7
I feel I am part of my school.	18	57	15	10
I am happy to be at my school.	16	50	22	12
I feel the teachers at my school treat me fairly.	16	63	14	7
I feel safe in my school.	16	66	11	7
I feel my learning needs are met at my school	14	64	14	8

#### Pro-social Behaviours

Students with higher levels of mental fitness tend to report more pro-social behaviours such as helping people and sharing things without being asked. Students were asked about the extent to which they engaged in five pro-social behaviours. The figure below shows the results for James M. Hill compared with the provincial results. The table that follows shows the results for the questions that comprise the scale.

Figure 21: Pro-social behaviours



The results were scaled on a 10-point scale such that a score of 10 represented a high level of pro-social behaviours. Students that scored above 6.5 on the 10-point scale were considered to have a strong level of pro-social behaviour.

How strongly do you agree	Percentage of Students Responding			
or disagree with the following statements?	Definitely not like me	Somewhat like me	Definitely like me	
I often do favours for people without being asked.	17	48	35	
I often lend things to people without being asked.	32	43	25	
I often help people without being asked.	18	44	38	
I often compliment people without being asked.	17	36	47	
I often share things with people without being asked.	21	45	34	

## **School Activity Participation**

As part of school routines, providing positive opportunities for students to interact with one another (relatedness), to use their strengths (competency), and to exercise choice (autonomy) is important for promoting mental fitness. In this regard, providing an array of diverse activities that reflect students' interests is beneficial.

Do you participate in any of the following activities at school?	Percentage of Students Responding "Yes"
Dance (e.g., jazz, hip hop)	data unavailable
Drama (e.g., plays, variety shows)	data unavailable
Music (e.g., choirs, bands)	data unavailable
Art (e.g., drawing, photography)	data unavailable
Science or Technology (e.g., science fairs, school website)	data unavailable
Student Clubs or Groups (e.g., peer helper, yearbook, TADD)	data unavailable
Sports or Intramurals	data unavailable
Other	data unavailable



#### References

- Canadian Association for Health, Physical Education, Recreation and Dance. (2005). Take action: What teachers can do. Available online: http://www.cahperd.ca/eng/advocacy/action/teachers.cfm.
- Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. (2000). Establishing a standard definition for child overweight and obesity worldwide: international survey. Br Med J 320:1-6.
- Health Canada. (2002). Youth Smoking Survey Technical Report (Cat.: H46-1/44-2002E, ISBN: 0-662-40683-4). Ottawa.
- Health Canada. (2007a). Canadian Tobacco Use Monitory Survey (CTUMS). Retrieved November 11, 2008 from http://nesstar.tdr.uoguelph.ca/webview/index.jsp
- Health Canada. (2007b). Eating Well with Canada's Food Guide: A Resource for Educators and Communicators (Cat.: H164-38/2-2007E-PDF, ISBN: 0-662-44470-1).
- Health Canada. (2007c). Reaching for the Top: A Report by the Advisor for Healthy Children and Youth (Cat.: H21-296/2007E, ISBN: 978-0-662-46455-6).
- Heart and Stroke Foundation of Canada. (2005). Schools and physical activity. Heart and Stroke Foundation of Canada Position Statement.
- Heart and Stroke Foundation of Canada. (2006). Overweight Canadian Children and Adolescents. Heart and Stroke Foundation of Canada Position Statement.
- Morrison, W. & Peterson, P. (2010). Schools as a setting for positive mental health: Better practices and perspectives. Joint Consortium for School Health, January 2010.
- Province of New Brunswick (2009). Live Well, Be Well: New Brunswick's Wellness Strategy 2009-2013. Department of Wellness, Culture and Sport. ISBN 978-1-55471-203-8.
- Public Health Agency of Canada. (2002). Canada's Canada's Physical Activity Guide to Healthy Active Living. Available online: http://www.phacaspc.gc.ca/hp-ps/hl-mvs/pag-gap/cy-ej/index-eng.php
- Public Health Agency of Canada. (2009). Tracking heart disease and stroke in Canada (Cat.: HP32-3/2009E ISBN: 978-1-100-12541-1).
- Seigel, D. (2005). The short- and long-term effects of quality physical education. Journal of Physical Education, Recreation and Dance, 76 (8), 13.
- Tjepkema M, Shields M. (2005). Nutrition: Findings from the Canadian Community Health Survey Overweight Canadian children and adolescents (Catalogue 82-620-MWE2005001). Ottawa: Statistics Canada.
- Stewart-Brown, S. (2006). What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting schools approach? Copenhagen: WHO Regional Office for Europe.
- Willms, J.D., Tremblay, M.S., & Katzmarzyk, P.T. (2003). Geographic and demographic variation in the prevalence of overweight Canadian children. Obesity Research, 11(5), 668-673.