

A photograph of two young boys running on a green athletic track. The boy in the foreground is wearing a brown jacket and light-colored pants, and is captured in a dynamic running pose. The background is slightly blurred, showing the track's lanes and some greenery. The image is overlaid with a semi-transparent blue banner containing the title text. The entire page has a yellow vertical bar on the right side.

Montréal children and physical activity in primary schools



RÉGIE RÉGIONALE
DE LA SANTÉ ET DES
SERVICES SOCIAUX
DE MONTRÉAL-CENTRE
Direction de la santé publique



Kino-
Québec

A young boy in a school uniform is running on a grassy field. He is wearing a white shirt with a tie and dark trousers. The background is slightly blurred, showing a fence and some trees.

Topic

In 1999, a significant proportion of 13 year olds in Quebec did not exercise enough to gain major health benefits (57% of boys, 71% of girls) (1). However, experts recommend a minimum of three 20-minute sessions of moderate exercise every week (2), as well as daily physical activity. Data on the health of young people collected in Canada from 1990 to 1998 show a 17% reduction in the practice of physical activity among Grade 6 boys and 25% among girls who used to exercise twice a week or more outside school hours (3). The frequency of physical activity diminishes progressively in both girls and boys until the end of secondary school.

Conversely, youths spend a great deal of their free time watching television or playing video or computer games. In addition, an increasing number of primary school children travel to school in a motorised vehicle instead of walking or riding a bicycle. While 80% of 7- and 8-year-old Canadian children walked to school in 1971, the number fell to 9% in 1990 (4).

The increase in sedentary behaviour among youths is related to the excess weight and juvenile obesity affecting this population (5). Moreover, excess weight and

Schools are often the only place where children are sure to practice physical a

obesity are closely associated with hypertension, Type 2 diabetes (non-insulin-dependent), cardiovascular diseases, and certain types of cancer (6).

Yet, the benefits of regular exercise on health are known, especially in relation to bone mass and density, body mass, lipidic profile, blood pressure, heart health, and possibly mental health (2). Therefore, the idea of exercising to stay healthy should be promoted.

Context

In September 2000, the ministère de l'Éducation du Québec (MEQ) introduced changes to the curriculum in primary and secondary schools. As we shall see in this paper, one of the consequences of this reform is that the content of physical education courses and the time allotted to them in Québec primary schools have changed.

Since 1979, it has been recommended that children do 120 minutes of physical activity every week. However, the new program recommends that each primary school offer a minimum of 60 minutes of physical education every week, which includes a new theoretical component on health education. Consequently, this new ministerial recommendation could reduce even more the time allotted to physical education courses within the curriculum.

Under the new pedagogical program, the Department has, however, planned to add a certain number of hours per week for teaching the mandatory subjects of the program, which includes physical education courses¹. However, it is up to each school's Institutional Council to decide to allot more time to one subject than to another. Because the time schedule is already overly full, school administrators, teachers, and parents that sit on Institutional Council are in a situation where they will inevitably have to make choices that affect one or another of these subjects.

Goal of the survey

The Montréal Public Health Department is concerned with children's health and the potential impact of the education reform on the well-being of primary school students. Therefore, in the spring of 2000, it conducted a survey in collaboration with the five school boards on the Island of Montréal to profile the opportunities to practice physical activity in Montréal primary public schools before the reform was implemented.

The survey will be repeated by 2004 so that we can compare the data and evaluate the effects of the reform on the time allotted to physical education courses and the students' practice of physical activity in general.

Methodological overview of the survey

The survey was conducted in public primary schools of the five school boards on the Island of Montréal, specifically the Commission scolaire de Montréal, English Montreal School Board, Lester B. Pearson School Board, Commission scolaire Marguerite-Bourgeoys, and Commission scolaire de la Pointe-de-l'Île.

In the spring of 2000, school principals and physical education teachers completed self-administered questionnaires. Out of 316 eligible primary schools, 277 participated in the survey, for a response rate of 88%.

Definitions

Note that for this survey, an opportunity to practice physical activity is defined as a time during the school day during which students

have the possibility of being physically active. These opportunities to exercise were divided into two categories: common and selective opportunities.

Common opportunities are the opportunities to practice physical activity offered in all schools and in which all students participate. Physical education courses and recess are the only occasions that meet these two criteria.

Selective opportunities are defined as opportunities to practice physical activity that are not systematically offered in all schools and in which all students do not participate. The selective opportunities included in this survey are: the time set aside during lunch time and in school daycares, extracurricular activities, and special physical activity events.

activity. It is crucial that schools offer the opportunity for children to exercise so that all children

Results

Summary of opportunities to practice physical activity in public primary schools in Montréal

	Common opportunities (100% of students)				Selective opportunities (<100% of students)											
					Lunch time	Physical activities in school daycare program				Extracurricular physical activities				Special physical activity events		
School boards	Physical education course (minutes/week)	Physical education course (% when fully active)	Two recess periods (%)	Recess (minutes/day)	Students who eat lunch at school (%)	Duration in minutes	Schools with daycare program (%)	Students exposed (%)	Physical activity (hours/week)	Schools that offer them (%)	Students exposed (%)	Physical activities (hours/week)	Schools that offer them after school (%)	Schools that offer them during lunch time (%)	Schools that offer them (%)	Number of events/year
1	80	73	74	27	47	84	97	44	3.3	91	21	1.7	97	21	100	2.8
2	70	70	56	25	61	80	100	43	4.7	79	22	1.2	84	62	96	2.4
3	65	68	60	24	64	82	93	53	4.0	65	30	1.6	94	30	98	2.8
4	60	78	32	19	78	73	97	30	4.3	89	32	1.3	75	86	97	3.4
5	60	72	0	15	92	61	85	32	3.2	95	45	1.5	63	68	100	2.6
ALL	65	71	49	22	67	77	94	44	4.0	78	30	1.5	85	49	98	2.8

Note: The numbers in the table represent the average observed in each of the school boards.

Common opportunities

In the spring of 2000, a physical education course lasted on average 65 minutes per week. However, physical education teachers estimated that children were active on average for only 71% of the class which reduced the time during which students were fully active. Moreover, respondents considered that the course

schedule was too full, and that the policies of the MEQ and the Institutional Council's (IC) other priorities were the main barriers to increasing the time allocated to physical education classes.

Almost half of the public primary schools on the Island of Montréal (49%) had two recess periods per day, whereas 51% had only one. The average time allotted daily to recess

periods was 22 minutes. The main reasons respondents gave to rationalise the allocation of only one recess period per day were time constraints related to school transportation, the length of time children take to get dressed, and an overly full class schedule.

Regular practice of physical activity plays an essential role in children's health. Experts all agree: children should be physically active every day. However, children today are more sedentary than ever.

...be active every school day. But schools need support to meet this challenge...

Selective opportunities

A profile of selective practice opportunities indicates that 67% of children eat lunch at school and the average lunch period lasts 77 minutes. In all, 94% of schools in Montréal offer a daycare service. On average, 44% of students attend the daycare, where an average of four hours per week is dedicated to physical activity.

At the time of the survey, 78% of schools offered extracurricular physical activities. On average, 30% of children participated in these activities. The time allotted to extracurricular activities was 1.5 hours per week, on average. In 85% of cases, extracurricular physical activities took place outside class time and 49% of schools offered these activities at lunch time. Respondents estimated that use of space by the daycare service, time constraints related to school transportation, a lack of human resources, and the financial support required from parents were all barriers to developing extracurricular physical activities.

Almost all the schools on the Island (98% on average) organise special physical activity events. Every year, schools hold an average of 2.8 special physical activity events, such as Physical Education Week or Month, student sports, and end-of-the-year competitions.

Other results

Other significant results complete the profile of opportunities to exercise. As examples we should mention that schools or school boards have forged agreements with municipalities allowing schools to use municipal sports facilities and to benefit from the support of municipal recreation employees who would lead some of the activities in schools. In this regard, results indicate that an average of 62% of schools use municipal sports facilities and that 37% of schools have made arrangements with municipalities to have municipal employees lead activities in schools.

The survey also revealed that over 90% of school principals and physical education teachers believe in the physical and psychological benefits of physical activity, and say they favour increasing opportunities to practice physical activity at school.

Finally, among the schools offering more opportunities to practice physical activity, we observed that sports facilities are more available, and that the students, parents, Institutional Councils and cities are more interested in increasing the practice of physical activity at school.

Principal findings for action proposals

In light of the results presented in this summary report, we have extracted two principal findings, from which we have developed action proposals. We took into consideration the conditions in primary

school settings and made every effort to suggest ways of optimizing youths' practice of physical activity without, however, changing the structure of the school day. Nonetheless each school should analyse these possibilities, taking into consideration the means it has at its disposal.

First finding

There is a variety of existing opportunities to practice physical activity at school.

Despite the range of opportunities available for exercising, our survey results indicate that not all children have access to these opportunities and that the time allotted for them varies from one school to another. Scientific advice recommends that children be active every day, that they engage in at least three 20-minute sessions of moderate or high intensity physical activity every week, and that they have access to activities that are based on fun and learning (2). For these reasons, it is not only desirable to facilitate access to as many opportunities to exercise at school as possible but also to make these opportunities more beneficial to ensure that children participate fully.



Proposed actions

- Maintain a variety of opportunities for physical activity at school.
- Increase the number of opportunities to practice physical activity as much as possible.
- Make these opportunities for physical activity more beneficial to ensure that children are fully active during these sessions.

When looking at the potential of each opportunity for physical activity identified in this survey, is there reason to believe that some would be more beneficial for the children than others?

Of course, common opportunities are more favourable since, unlike selective opportunities, they allow all children to be active. Therefore, the time allocated to physical education classes is of great importance since of all the opportunities to practice physical activity available at school, these classes are the only compulsory opportunity for physical activity offered to all children in primary school, without exception.

As for duration, we note that even before educational reforms were implemented, the average time allotted to physical education classes in Montréal primary schools was 65 minutes, which is already 55 minutes less than the 120 minutes per week recommended by the MEQ from 1979 to 2000. In 1990, a survey carried out by the MEQ revealed that only one quarter of educational institutions in Québec had implemented the recommended 120 minutes per week. Today, this situation requires that we be vigilant since, 10 years later, our survey results show that none of the primary schools in our sample meets the ministry's original recommendation regarding time allocated for physical education.

It is important that we stop this downward trend, especially if the additional theoretical component on health education risks reducing even more the time children are active, if it is offered during physical education classes.

Proposed actions

- Anticipate the possibility of allotting part of the “unallocated time” in the school curriculum reform to physical education classes, so as to increase their duration.
- Make arrangements so that the “active” portion of physical education classes is not reduced by the new theoretical component on health education.

The schools report that children have one or two recess periods per day. Several factors have caused half of the schools to eliminate afternoon recess. Reducing recess time should not be seen as a solution that has no effect on the well-being of children since recess is one of the rare opportunities they all have to be active. The obstacles identified earlier in this document should not encourage schools to forgo afternoon recess to acquire more time.

Apart from the number of recess periods per day, and knowing that not all children benefit fully from these opportunities, since their level of participation varies, implementing measures that would optimise this opportunity for exercising should also be considered.

Proposed actions

- Maintain two recess periods per day.
- Develop projects which will ensure that someone leads the activities and/or that the school yard is better laid out to encourage youths to fully participate during the recess periods, that are already available.

Among selective opportunities for physical activity, it would be interesting to encourage the longer ones or those that reach the greatest number of children. Therefore, among the selective opportunities studied, lunch is a good time slot to explore since close to 70% of children eat lunch at school and that lunch period lasts an average of 77 minutes.

Proposed action

- Consider lunch period as a good time for children to be physically active.

The daycare program is also another good selective opportunity because of the possibility of adding physical activity to those already planned. In fact, schools offer an average of 25 hours of daycare service per week, at least one quarter of which is dedicated to physical activity.

Proposed action

- Evaluate the possibility of increasing the time allotted to physical activity at the daycare.

Although a significant proportion of schools offer extracurricular physical activities, little time is allocated to them and a low proportion of students participate. However, access to these activities is not restricted by sports performance, physical fitness, or knowledge of the activityⁱ. Yet, asking parents for a financial contribution seems to reduce access to the activities.

It is likely that offering these activities during lunch time would reach more students. Child participation is higher in schools that offer extracurricular activities during lunch timeⁱⁱ. Moreover, almost half of schools already offer extracurricular physical activities at lunch time, providing a particularly good opportunity for students in higher levels of primary school who usually no longer attend the daycare.

Proposed action

- Try to offer more free extracurricular physical activities, especially during lunch time.

Finally, special physical activity events organised in schools every year provide additional opportunities to exercise that are important to maintain because they are infrequent and offer new experiences for the children participating.

Proposed action

- Continue to organise special physical activity events.

Second finding

To continue to play a leading role in the promotion of physical activity among youths, schools have to cope with numerous barriers; already, some of their main partners are helping them with these difficulties.

Encouraging results indicate that the majority of schools have already entered into partnership agreements with municipalities to use their sports facilities. This option is a positive way to respond to one of the barriers encountered by schools: e.g. a shortage of space to practice physical activity.

ⁱ Results not shown.

ⁱⁱ Results not shown.



A lower proportion of schools have also made arrangements so that staff from the municipalities can participate in leading activities in schools. Since a lack of human resources is one of the main barriers to developing extracurricular physical activities, this solution is also encouraging.

Parents are also important partners. Schools in which parents show an interest in increasing physical activity are those that offer the greatest number of opportunities to practice it.

Proposed actions

In light of the potential for action involving these types of partnerships, it would be advisable:

- to promote partnerships between schools and municipal services to facilitate access to municipal sports facilities.

- to develop more partnership agreements to have session leaders and municipal recreation technicians lead extracurricular activities.
- to continue to raise parents' awareness regarding the importance of physical activity for their children in schools.

Although this suggestion is promising, it cannot be considered as the only solution to deal with other obstacles confronting the schools. Searching for effective and realistic solutions to help schools overcome problems such as overloaded class schedules, MEQ policies, other priorities of the Institutional Council, and time constraints related to school transportation are of concern to numerous social players.



Conclusion

When we observe the numerous opportunities available for physical activity and the interest shown by school principals and physical education teachers to increase the practice of physical activity in schools, there is no doubt that schools play a primary role in promoting exercise among young people. However, to meet this challenge, the school should also have the indispensable support of parents as well as of community, political, and municipal partners.

The suggestions presented here should persuade us to work together and make an effort to promote a physically active lifestyle with youths who are in school. By optimising as much as possible all opportunities where children can be physically active at school, we can contribute to ensuring a healthier future for them.

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