



## **SOCIAL CLIMATE AND ENVIRONMENT**



## *Introduction*

Research has shown that an improvement in the environment along with supervision can result in a greater likelihood of physical activity among children and youth. Building a school environment that encourages physical activity by improving the environment and social supports may help to increase overall physical activity levels of children. This section looks at the opportunities at school to integrate physical activity into various aspects of school life and the availability of building a more socially supportive environment for physical activity in the school setting. The data are analyzed by region of school locale, student population size, and other school demographics such as setting, type, language and general income distribution of the students' families. The analyses also compare trend data over time when applicable and concludes with policy and program recommendations.

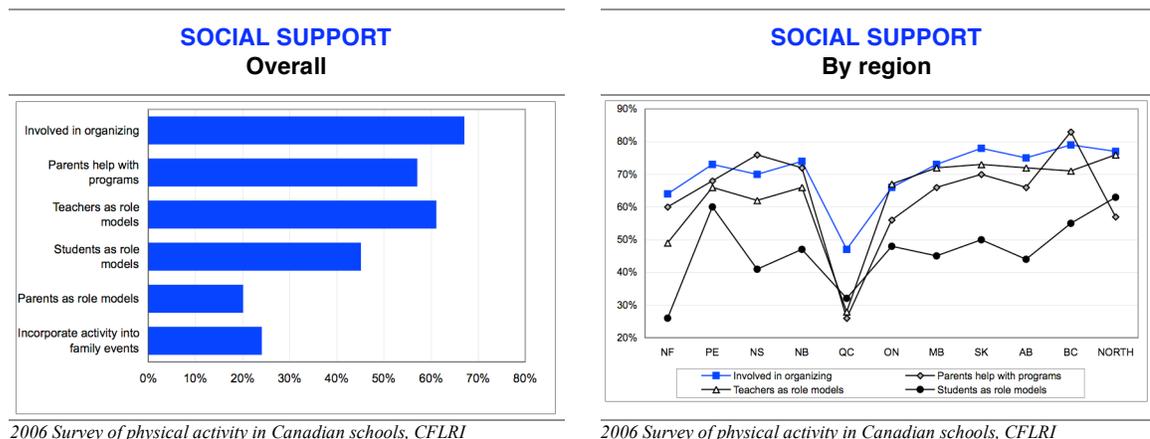
## Social support for student physical activity

Two-thirds (67%) of Canadian schools report that they have policies or programs which encourage teachers, parents, and students to be involved in organizing physical activity events, services, and facilities. Three out of five (60%) schools report having policies or programs which encourage parents to coach or help with extra-curricular physical activities. Many Canadian schools (61%) report having policies or programs in place which encourage teachers to act as role models for physical activity, 45% of schools encourage active students to act as role models for their peers, and fewer schools (20%) encourage parents to be role models for their children’s activity. Less than one-quarter (24%) of Canadian schools report that they have policies or programs which encourage parents to incorporate physical activity into family events.

**Region** Schools in Manitoba, Saskatchewan, and Alberta are more likely, whereas schools in Quebec are less likely to report having policies or programs in place which encourage teachers to act as physical activity role models. Schools in Saskatchewan and British Columbia are more likely, whereas those in Quebec are less likely to have policies or programs to encourage teachers, parents, and students to be involved in organizing physical activity events, services, and facilities. Schools in the North are more likely to report having policies or programs which encourage students to act as role models, whereas schools in Newfoundland and Quebec are less likely to report this. Schools in Quebec are also less likely, whereas schools in the New Brunswick, Nova Scotia, Saskatchewan, and British Columbia are more likely to report having policies or programs which encourage parents to coach or help with extra-curricular physical activities. Manitoba schools are more likely than others to report having policies or programs in place which encourage parents to incorporate physical activity into family events.

**Student Population Size** Schools with 500 to 999 students are more likely than the smallest schools to report having policies or programs encouraging physically active students to serve as role models or to encourage parents to incorporate physical activity into family events.

**School Setting** There are no significant differences among inner-city, urban, suburban, or rural schools in the provision of social support for the activity of students.



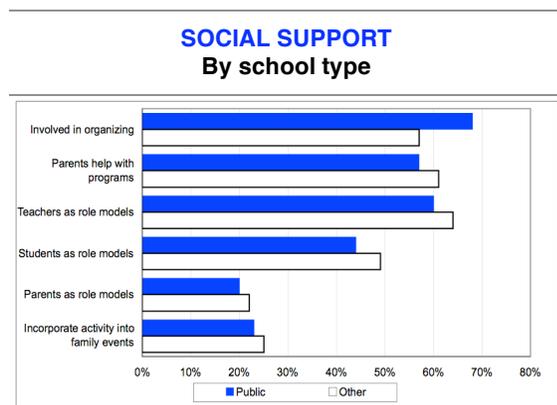
## Social support for student physical activity (cont'd)

**School Type** Elementary schools are more likely than high schools to report having policies or programs which encourage parents to act as role models for their children or to encourage parents to incorporate activity into family events. Public schools are more likely than non-public schools to indicate that they encourage teachers, parents, and students, to be involved in organizing physical activity opportunities. There are no other differences among elementary schools, high schools, middle schools, or those providing instruction to all grades, nor are there between public and non-public schools.

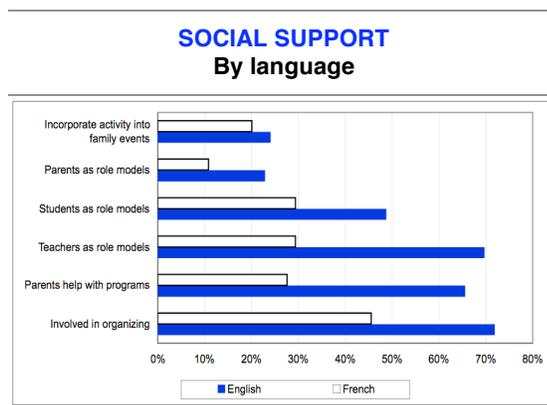
**Language** French schools are less likely than others to report having policies or programs in place to encourage teachers to act as role models for physical activity. French schools are also less likely than others to encourage students or parents to act as role models, to encourage involvement in organizing physical activity opportunities, and to encourage parents to coach or help with extra-curricular activities.

**Estimated Family Income** Schools with more students from higher income families are more likely than schools with more students from lower income families to encourage students and parents to act as role models and to report having policies or programs encouraging parents to coach or help with extra-curricular physical activities.

**Community Size** Schools located in towns with 1,000 to 4,999 residents are less likely than schools in the larger communities (more than 75,000 residents) to report having policies or programs which encourage teachers to be role models for physical activity.



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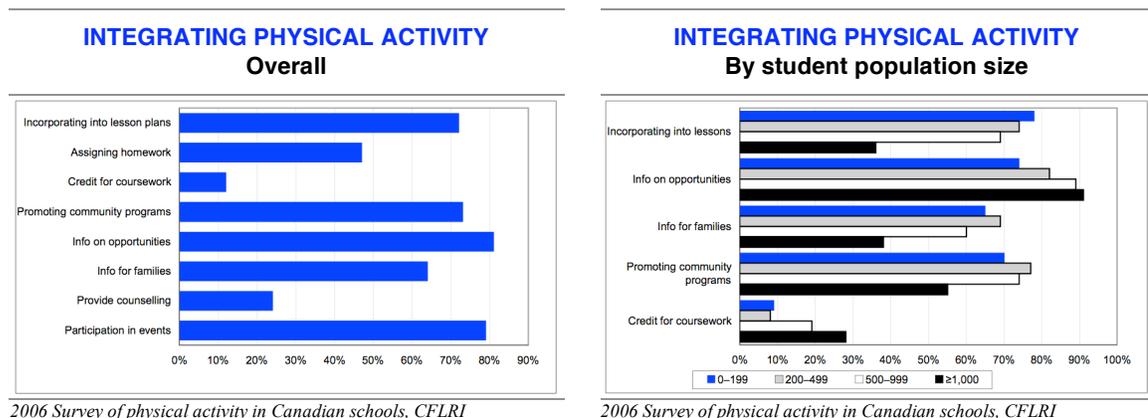
## *Integrating physical activity into the broader school life*

Nearly three-quarters (72%) of Canadian schools report having integrated physical activity into their lesson plans over the past year, whereas considerably fewer (47%) schools report having assigned homework involving physical activity. A very small proportion of schools (12%) indicate providing credit to course work for physical activity training or certification. Most Canadian schools (81%) report providing information on opportunities to be physically active at school (through such means as bulletin boards, web pages, and public service announcements), while somewhat fewer (64%) provided such information specifically to parents and families of students (e.g., through flyers or newsletters). Almost three-quarters of schools (73%) promote community physical activity programs to students and their families. A large number of schools (79%) report having encouraged participation in special physical activity events.

**Region** Schools in Nova Scotia, Manitoba, and Saskatchewan are more likely, whereas schools in Quebec are less likely to integrate physical activity into lesson plans. Schools in New Brunswick, Nova Scotia and Saskatchewan are more likely to assign homework involving physical activity. Schools in New Brunswick, Nova Scotia, and Prince Edward Island are more likely, whereas those in Quebec are less likely to encourage participation in special physical activity events. Schools in British Columbia are more likely to report offering credit for training or certification, while schools in Ontario are less likely to report this. Schools in Quebec are less likely to provide physical activity information on opportunities to be active at school, and schools in Saskatchewan and Alberta are more likely, whereas schools in Newfoundland and Quebec are less likely to provide information to parents and families more specifically. Schools in Saskatchewan are more likely, whereas those in Quebec are less likely to promote community physical activity programs.

**Student Population Size** The largest schools are generally less likely to report incorporating physical activity into lesson plans, to provide information to parents and families, and to promote community programs. Those schools with 500 or more students are more likely to report offering credit for training or certification. The smallest schools are less likely than others to report providing information on physical activity opportunities at school.

**School Setting** Inner-city schools are less likely than rural schools to incorporate physical activity into their lesson plans.



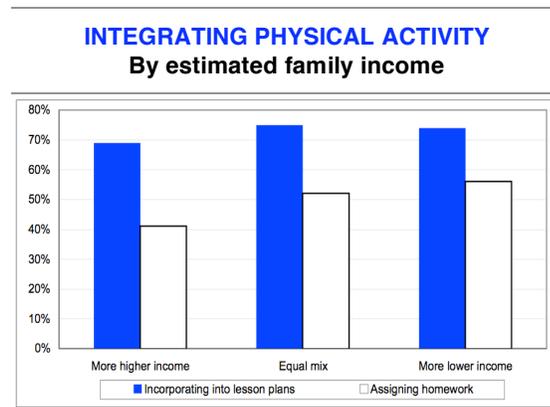
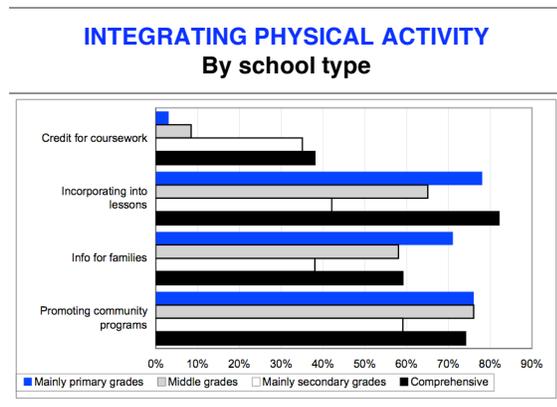
## *Integrating physical activity into the broader school life (cont'd)*

**School Type** High schools are more likely than elementary schools to offer credit for training or certification. High schools, however, are less likely than elementary schools to incorporate physical activity into lesson plans, to provide information to parents and families and to promote community physical activity programs.

**Language** English schools are more likely than French schools to report incorporating physical activity into lesson plans. French schools are less likely than English school to provide information on opportunities to be physically active at school, to provide physical activity information to parents and families more specifically, to encourage participation in special events and to promote community programs.

**Estimated Family Income** Schools with more students from higher income families are more likely to report assigning homework involving physical activity compared to schools with more students from lower income families.

**Community Size** Schools in communities with less than 1,000 residents are generally more likely than other schools to report incorporating physical activity into lesson plans.



## Integration of cultural backgrounds

Approximately 30% of Canadian schools report having provided their students with examples of physical activity drawn from different cultural backgrounds.

**Region** Schools in Nova Scotia, Manitoba, Saskatchewan and the North are significantly more likely than others to report offering examples of physical activity from different cultural backgrounds.

**Student Population Size** There are no significant differences in terms of student population size for schools offering physical activity examples from different cultural backgrounds.

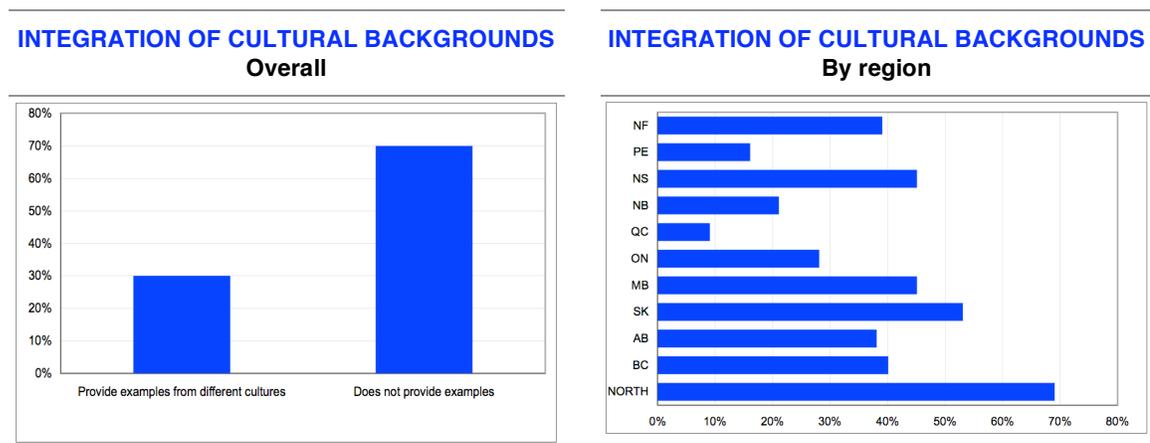
**School Setting** There are no significant differences among inner-city, urban, suburban, or rural schools in offering physical activity examples from different cultural backgrounds.

**School Type** There are no differences among elementary schools, high schools, or middle schools, nor are there between public and non-public schools, in reporting offering physical activity examples from different cultural backgrounds.

**Language** English schools are more likely than French schools to offer physical activity examples from different cultural backgrounds.

**Estimated Family Income** The proportion of students' with various levels of household incomes does not appear to be related to the likelihood of schools offering physical activity examples from different cultural backgrounds.

**Community Size** Schools in communities with 10,000 to 74,999 residents are somewhat less likely than those from the smallest and the largest communities to report offering their students physical activity examples from different cultural backgrounds.



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## Transportation

Only 10% of Canadian schools indicate having provided late bussing so that their students could participate in physical activity programs after school.

**Region** Regional differences are not evident with regards to the provision of late bussing for physical activity programs after school.

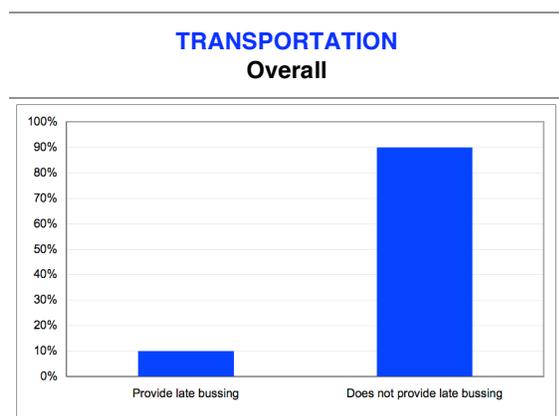
**Student Population Size and school setting** There are no differences in terms of student population size nor among inner-city, urban, suburban, or rural schools in offering late bussing to their students.

**School Type** High schools are more likely than other schools to report offering late bussing to students. There are no differences between public and non-public schools in reporting this.

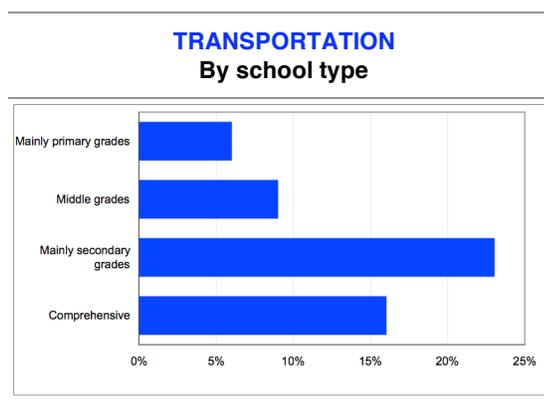
**Language** French schools are less likely than English schools to offer late bussing to their students.

**Estimated Family Income** There is no relationship between the proportion of students with various household incomes and the likelihood of their schools' reporting that they offer late bussing.

**Community Size** There is no relationship between community size and the likelihood of schools' reporting that they provide late bussing to their students.



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## Recognition and awards for physical activity participation

About 73% of all Canadian schools report that they provide certificates or rewards to students who participate in physical activities or sports. Somewhat fewer (61%) report providing awards or trophies to recognize the efforts of participating students, and less than half (48%) report hosting social events in order to publicly recognize students who participate in physical activity or sport.

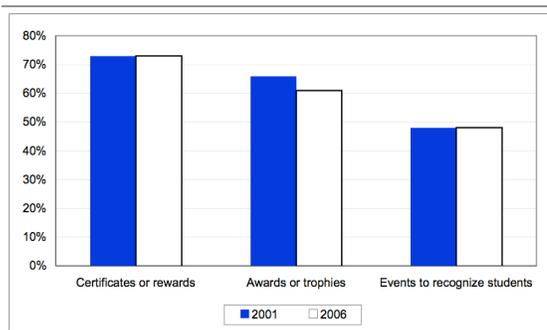
**Region** Alberta schools are less likely than others to report providing certificates or rewards to students, whereas schools in Quebec are less likely and schools in Saskatchewan are more likely to host social events. There are no significant differences in terms of region for schools giving awards or trophies to students.

**Student Population Size** Larger schools are more likely to report providing awards or trophies to their students. These schools are also more likely to report hosting social events, while the smallest schools are less likely to report doing this.

**School Setting** There are no significant differences among inner-city, urban, suburban, or rural schools in reporting providing certificates or rewards, giving awards or trophies, or hosting social events for students.

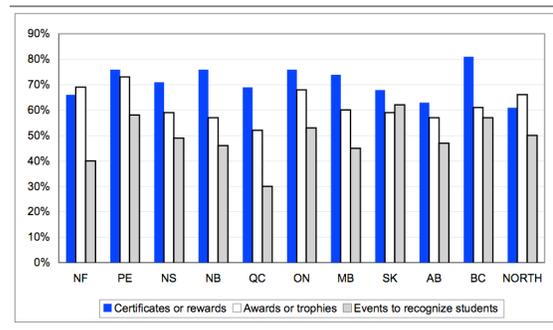
**School Type** High schools are more likely than elementary schools to provide certificates or rewards, to provide awards or trophies to their students, and to host social events.

**RECOGNITION AND AWARDS**  
Overall trends, 2001-2006



2001 & 2006 Survey of physical activity in Canadian schools, CFLRI

**RECOGNITION AND AWARDS**  
By region



2006 Survey of physical activity in Canadian schools, CFLRI

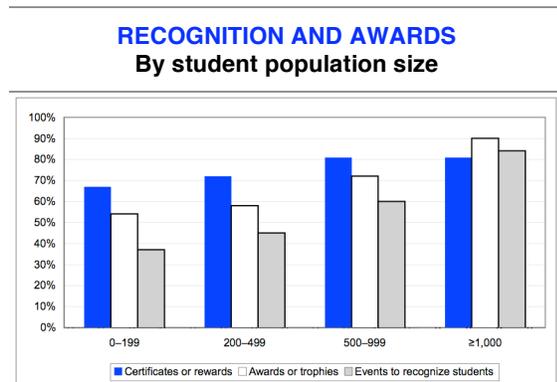
## Recognition and awards for physical activity participation (cont'd)

**Language** There is no relationship between a school's language of instruction and the likelihood of providing certificates or rewards to students. French schools, however, are less likely than English school to provide awards or trophies to students and to host social events.

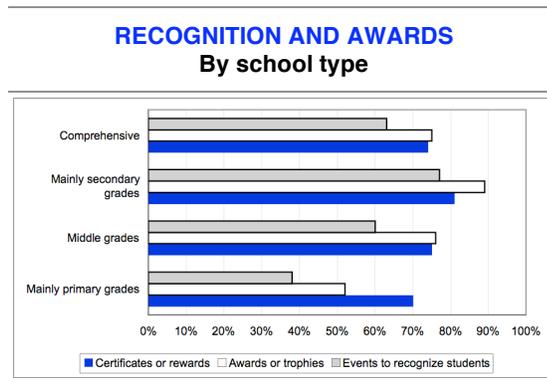
**Estimated Family Income** There is no relationship between the proportion of students with various household incomes and the likelihood of schools' providing certificates or rewards, nor on schools' giving awards or trophies or hosting social events.

**Community Size** Community size has no significant impact on schools' providing certificates or rewards, giving awards or trophies, or hosting social events.

**Trends** The proportion of schools that provide rewards or incentives for participation in physical activity have remained fairly constant since 2001, with one exception. In 2006, schools were slightly less likely to offer awards or trophies for physical activity. Larger schools are still more likely to offer these types of rewards or incentives to their student population. However, there have been some notable changes regarding estimated family income over time. In 2001, schools with mostly higher income students were more likely than schools with mostly low income students to host events recognizing physical activity achievements, however, in 2006, these differences no longer are evident.



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## Physical activity as a reward or disciplinary measure

Students can be offered opportunities for physical activity as a reward, such as an extra recess or participation in a sporting event, for good behaviour or for academic achievement. A small proportion of Canadian schools report *frequently* using physical activity as a reward to students (10%), while 43% do this *occasionally*, 27% *rarely*, and 20% *never* do. On the contrary, schools can also cancel scheduled physical activity sessions, such as recess or gym class, as a disciplinary measure. As such, only 2% of schools *frequently* use physical activity as a disciplinary measure, while 15% do this *occasionally*, 41% *rarely* do this, and 38% *never* do.

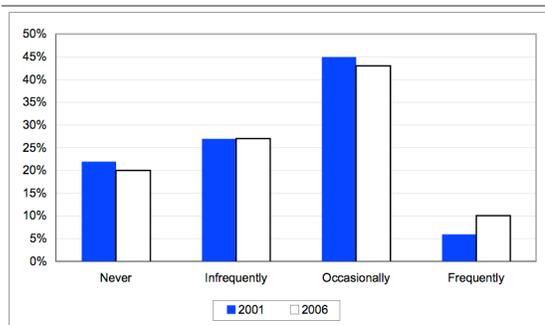
**Region** Schools in New Brunswick and Saskatchewan are more likely to report *occasionally* using physical activity as a reward; schools in Newfoundland and Nova Scotia are more likely whereas schools in Saskatchewan are less likely to report *never* using physical activity as a form of discipline.

**Student Population Size** While there are few significant differences in terms of student population size for schools using physical activity as a reward, it can be noted that larger schools (those with 500 or more students) are more likely to indicate that they *never* do this, while slightly smaller schools (those with 200 to 499 students) are less likely to indicate that they *never* do. The only notable difference in examining physical activity as a form of discipline can be found with the largest schools, which are more likely than others to indicate that they *never* do this.

**School Setting** There are no differences between inner-city, urban, suburban, or rural schools in reporting using physical activity as a reward or as a form of discipline.

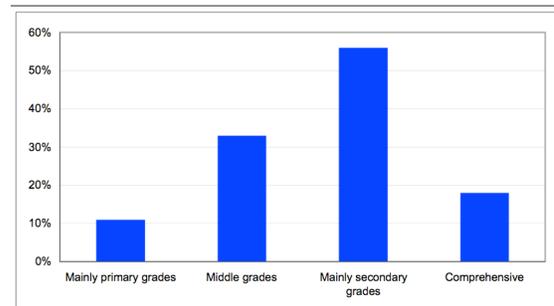
**School Type** High schools are more likely than elementary schools to report *never* using physical activity as a reward. In addition, high schools are less likely to report *occasionally* using physical activity as a reward. High schools are more likely to report *never* using physical activity as a form of discipline.

**NEVER REWARD WITH PHYSICAL ACTIVITY**  
Overall trends, 2001-2006



2001 & 2006 Survey of physical activity in Canadian schools, CFLRI

**NEVER REWARD WITH PHYSICAL ACTIVITY**  
By school type



2006 Survey of physical activity in Canadian schools, CFLRI

## *Physical activity as a reward or disciplinary measure (cont'd)*

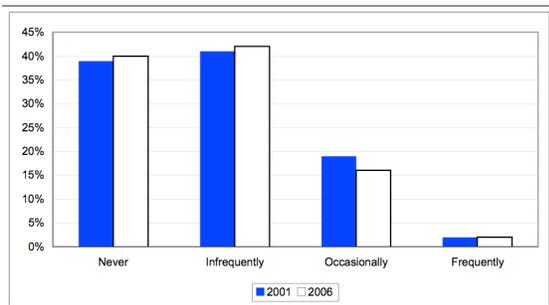
**Language** A school's language of instruction does not appear to be related to using physical activity as a reward or as a form of discipline.

**Estimated Family Income** There are no significant differences in terms of students' household incomes for schools reporting using physical activity as a form of reward or discipline.

**Community Size** There are no significant differences in terms of community size for schools reporting using physical activity as a reward or as a disciplinary measure.

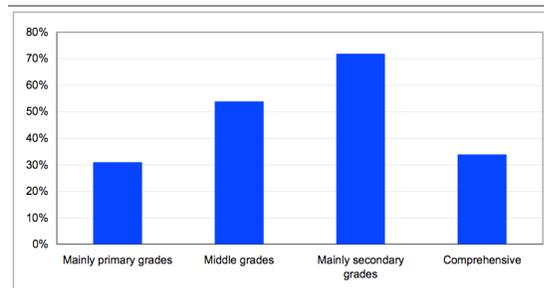
**Trends** The proportion of schools that report that they cancel physical activity as a disciplinary measure has remained fairly constant over the past 5 years, whereas a slightly higher proportion of schools report using physical activity as a reward measure. High schools and the largest schools are more likely to report that they never use the cancellation of physical activity periods as a form of punishment, and this is a pattern that has persisted since 2001. Interestingly, in 2001, schools with a predominately low income student base were more likely to report using the cancellation of physical activity opportunities as a disciplinary measure, but this relationship does not appear in 2006.

**NEVER CANCEL PHYSICAL ACTIVITY**  
Overall trends



2001 & 2006 Survey of physical activity in Canadian schools, CFLRI

**NEVER CANCEL PHYSICAL ACTIVITY**  
By school type



2006 Survey of physical activity in Canadian schools, CFLRI

## Summary of section

Canadian schools' social climates and environments are direct means of fostering students' physical activity choices. Such fostering encompasses many elements, including integration, providing transportation, and recognizing achievement. There are numerous supports which most Canadian schools appear to be offering their students, but there is perhaps room for improvement with others:

- 81% of schools provide information on opportunities to be physically active at school;
- Between 70-80% of schools encourage participation in physical activity events, promote community physical activity programs to students and their families, provide certificates or rewards to students participating in physical activity, or integrate physical activity into lesson plans;
- Between 60-65% of schools provide physical activity information to families of students, provide awards or trophies to recognize efforts of participating students, encourage teachers, parents, students to be involved in organizing physical activity opportunities, encouraging parents to coach or help with extracurricular physical activity opportunities, and encourage teachers to act as role models;
- Between 45-50% of schools host social events to recognize participating students, assigned homework involving physical activity, or encourage active students to act as role models for their peers;
- Between 20-30% of schools provide students with examples of physical activity drawn from different cultural backgrounds, provide physical activity counselling, encourage parents to act as role models or to include physical activity into family events;
- Between 10-15% provide credit for physical activity training or certification, frequently use physical activity as a reward, or provide late bussing for students participating in physical activity after school.

*Table 1: School characteristics associated with a more positive physical activity social climate and environment*

	<b>Region</b>	<b>School descriptors</b>
<b>Integrating PA in lesson plans</b>	Nova Scotia, Manitoba, Saskatchewan	Larger schools Elementary schools Smallest communities English
<b>Assigning PA homework</b>	Nova Scotia, Saskatchewan	More higher income students
<b>Providing credit for PA training or certification</b>	British Columbia	Larger schools High schools
<b>Providing PA info on opportunities at school</b>		English
<b>Providing PA info to students' families</b>	Saskatchewan, Alberta	Larger schools Elementary schools English
<b>Encouraging participation in PA events</b>	New Brunswick, Nova Scotia, Prince Edward Island	Larger schools Elementary schools English
<b>Encouraging involvement in PA organization</b>	Saskatchewan, British Columbia	English Public schools
<b>Encouraging parents to help with extra-curricular activities</b>	New Brunswick, Nova Scotia, Saskatchewan, British Columbia	English More higher income students
<b>Encouraging parents to use PA in family events</b>	Manitoba	Schools with 500-999 students Elementary schools

<b>Encouraging teachers as role models</b>	Manitoba, Saskatchewan, Alberta	English
<b>Encouraging students as role models</b>	North	Schools with 500-999 students English More higher income students
<b>Providing certificates or rewards</b>		High schools
<b>Providing awards or trophies</b>		Larger schools High schools
<b>Hosting social events</b>	Saskatchewan	Larger schools High schools
<b>Providing PA examples from different cultures</b>	Nova Scotia, Manitoba, Saskatchewan, North	English
<b>Providing late bussing</b>		High schools English schools

The proportion of schools that provide rewards or incentives for participation in physical activity and of those who report that they cancel physical activity as a disciplinary measure have remained the stable over time, with two exceptions. Schools in 2006 are slightly less likely to offer awards or trophies for physical activity, yet are slightly more likely to report using physical activity as a reward measure. Larger schools are more likely to offer these types of rewards or incentives to their student population and along with high schools, are also more likely to report that they never use the cancellation of physical activity as a form of punishment. These patterns have persisted since 2001. Relationships that appeared in 2001 regarding the income distribution of students among schools hosting events recognizing physical achievements no longer exist in 2006.

### *Discussion, Implications and Recommendations*

Recent data have confirmed the suspicions of researchers: the vast majority of Canadian children do not meet the requirements of Canada's Physical Activity Guide.<sup>4</sup> Given this, a comprehensive strategy involving schools, the family and the community is required to address this situation. It is therefore a positive finding that most Canadian schools have policies or programs encouraging teachers, parents, students, and the community to be involved in organizing physical activity events, services, and facilities.

Parents can play an important role in influencing the activity behaviours of children beginning in childhood and through their adolescent years, since roughly 60% of children participate in physical activity with their family members.<sup>41</sup> Yet, a national survey of parents found that relative few parents (21%) have supervised a recess or helped out at a physical activity event at school during the past year.<sup>4</sup> Research has suggested that parental encouragement and support, particularly for adolescents, are related to young people's physical activity,<sup>42,43</sup> and that children whose parents, siblings, and friends frequently watch them participate in activity demonstrate higher levels of activity.<sup>44</sup> Given the decrease in physical activity levels and sport participation among adolescents,<sup>4</sup> parents should be encouraged to support their children's activity both verbally and through participation or watching, transportation, or financial assistance. Parents and other family members are also in a potential position of modeling appropriate active behaviours for their children, as research has shown that when both parents participate in sports, their child is more likely to participate in non-school, structured physical activity than when neither parent does.<sup>45</sup> Other research shows a dose-response relationship between greater participation rates, if both parents participate or volunteer in sport, than if only one or neither do.<sup>46</sup> There is also a greater likelihood of reporting parental

involvement in children's activities for parents who themselves participate in sport and if their children participate in sport.<sup>4</sup> Moreover, parents who are highly active are more likely to indicate that they are involved in their child's physical activity or sport in some way. This research suggests that active role-modeling by parents and volunteering to support their activity may positively impact the activity levels of children and youth. Parental involvement in school physical activities can potentially be helpful. Parents or other community members can be recruited to volunteer during recess, lunch hour, or for assisting in coaching an after-school activity. In addition, opportunities for physical activity during breaks (recess or lunch) should be promoted along with staff education to prompt physical activity among the students. Appropriately trained teachers, specialists and coaches are also important (this is further discussion in a previous section).

Involving students in the development, organization, and planning of physical activity and sport opportunities at school should be encouraged, as this may contribute to increased participation and interest in these programs.<sup>34</sup> Physical activity professionals, fitness leaders, health care professionals and the like can also be recruited to speak to both students and staff members regarding aspects of physical activity. Incorporating physical activity and sport related opportunities into the daily communication (i.e., announcements, assemblies, etc.) with the school population is important. This can range from an update on daily school sport results, or the promotion of activity or sporting events. A physical activity component can also be incorporated into coursework of other subjects.

Data from this section reveal that only 10% of schools provide transportation for children who wish to participate in physical activity after school. This is an issue, as the majority (almost 60%) of Canadian children use an inactive means of getting to and from school each day, and the proportion of those using inactive means has increased over time. In addition, lower rates of active commuting by children are indicated by parents from lower income homes. Providing access to inexpensive or free transportation in order to get to and from extra-curricular physical activities within the school environment is important, as this permits the participation of all students in activities, regardless of financial background. The promotion of extra-curricular activities is important, given that extra-curricular activities seem positively related to academic achievement, staying in school and positive social skills.<sup>34</sup>

A review of published research, theory, and practice by the Centers for Disease Control and Prevention in the United States provides recommendations for school and community programs for promoting physical activity to youth. In this review, one recommendation stresses the importance of avoiding using physical activity as a disciplinary measure or a form of punishment, as this may contribute to negative associations with or negative attitudes towards physical activity and sport.<sup>25</sup> However, data from this report show that at least 62% of Canadian schools have used this as a form of punishment at some point. An interesting result appears in this section in that high schools and the largest schools are more likely to report that they never use the cancellation of physical activity periods as a form of punishment. Although larger school and high schools are more likely to never use physical activity as a reward, they are more likely to provide award or trophies, host social events recognizing the contribution of student's physical activity. These schools also are more likely to provide physical education specialists for teaching physical education.

With children spending most of their waking day at school, having a school environment that supports, models and promotes physical activity as a way of life is essential in creating a society in which active children are the norm. Policy is an important tool in this regard, shaping the type of programs and facilities offered both as part of the formal physical activity programming (see section entitled “Physical activity programming, curricula, and instruction”) in schools as well as in the informal supports (recess, modeling of active lifestyles, valuing physical activity and so on) that reinforce physical activity.