Chapter 3
Section
3.03

Ministry of Education

3.03 Healthy Schools Strategy

Background

While academic success is a major priority for the Ministry of Education (Ministry), so too is student health and well-being. Because healthy children are better prepared to learn, and schools can help students lead healthier lives, the Ministry has established the Healthy Schools Strategy to help support student learning and growth through proper nutrition and daily physical activity. To achieve better student health, the Ministry relies on the support of other government organizations, such as the Ministry of Health and Long-Term Care, which often takes a lead role in child and youth health-related matters, and the Ministry of Children and Youth Services, which sponsors programs to provide meals to students in many Ontario schools. The Healthy Schools Strategy also supports the efforts of parents, who play the primary role in child development.

The number of overweight children and youth in Canada has increased dramatically over the past 30 years. Nearly one in three students is overweight. Almost 12% are considered obese—almost twice as many as in the late 1970s. In addition, Statistics Canada says just 7% of Canadian children get the recommended 60 minutes of physical activity daily. The increasing rate of overweight children is a significant public concern, and in 2012 the

Ontario government set a goal to reduce childhood obesity by 20% in five years.

The Ministry has the primary responsibility for developing and supporting the implementation of policies and programs related to students in publicly funded schools. In recent years, we have audited the Ministry's four key strategies designed to contribute to student achievement: Literacy and Numeracy Strategy (2009); Safe Schools Strategy (2010); Student Success Strategy (2011); and now the Healthy Schools Strategy.

Ontario's 72 publicly funded school boards are responsible for implementing Ministry policies and programs. These boards operate 4,900 elementary and secondary schools with an enrolment of approximately 2 million students. The Ministry advised us that it spent approximately \$4 million annually over the three fiscal years 2009/10 to 2011/12 on activities related to the Healthy Schools Strategy.

Audit Objective and Scope

The objective of this audit was to assess whether the Ministry of Education and selected school boards had adequate procedures in place to:

- implement policies and initiatives designed to help improve health and academic achievement for Ontario's students through better eating habits and increased physical activity; and
- ensure the identification of good practices, oversight of schools, and the measurement and reporting of results.

Senior management at the Ministry and selected school boards reviewed and agreed to our audit objective and associated criteria.

Our audit work was conducted at the Ministry's Healthy Schools and Student Well-Being Unit, which holds primary responsibility for the Healthy Schools Strategy, as well as at three school boards and at selected elementary and secondary schools within these boards. The school boards we visited were the York Catholic District School Board, the Hamilton-Wentworth District School Board and the Trillium Lakelands District School Board.

We also spoke with representatives from a number of other ministries and organizations, including the Ministry of Health and Long-Term Care; Public Health Ontario, an arm's length government agency dedicated to protecting and promoting the health of all Ontarians; the Healthy Kids Panel, a body of experts that provided recommendations to the Minister of Health and Long-Term Care on how to reduce childhood obesity and improve children's health; the Ministry of Children and Youth Services, which provides oversight and funding for schoolbased student nutrition programs; local public health units that have a mandate to work with school boards and schools on topics such as healthy eating and physical activity; and the Ontario Society of Nutrition Professionals in Public Health, which represents dietitians working in public health.

In conducting our audit work, we reviewed relevant legislation, policies and procedures. We also met with appropriate staff from the Ministry and the school boards and schools visited, including supervisory officers, principals and teachers. We also researched policies and practices in other jurisdictions and consulted with experts with knowledge of healthy eating and physical activity in the school environment.

Summary

The Ministry of Education has recognized that healthy students are better prepared to learn and has taken several steps to help students increase their physical activity and eat healthier foods. For example, the Ministry has developed policies for the nutritional requirements of food and beverages sold in schools, and revised the school curriculum to require that all elementary students get 20 minutes of daily physical activity. However, the Ministry and school boards need to make greater efforts to ensure compliance with their requirements and they need to work more effectively with other organizations and stakeholders, including parents, to share best practices and achieve common goals. Our more significant concerns include the following:

- Neither the Ministry nor the school boards visited had an effective monitoring strategy in place to ensure that food and beverages sold in schools comply with the nutrition standards in the Ministry's School Food and Beverage Policy. To illustrate, none of the three school boards we visited had reviewed the food and beverages sold in their cafeterias to ensure that the items met nutrition standards. Furthermore, a cafeteria vendor at one school board did not have sufficient nutrition information to show compliance, and based on the nutrition information that was provided, we identified a number of instances where the products did not comply.
- Both the Ministry and school boards visited had limited data to assess whether the School Food and Beverage Policy contributed to better student eating behaviours. After introducing healthier food choices, secondary school cafeteria sales at the three boards visited decreased between 25% and 45%, and vending machine revenues dropped between 70% and 85%. The secondary school principals to whom we spoke indicated that many

- students now prefer to eat at nearby fast food outlets instead of choosing the healthier foods offered in the school cafeteria.
- Information we received was not always complete in terms of nutritional detail or listing all food items available for sale. Nevertheless, our review of a sample of menu items at one school board identified a significant number that did not meet the nutrition criteria in the School Food and Beverage Policy, including some that deviated from it significantly. For example, we noted a soup that contained twice the amount of fat allowed, a side dish that exceeded the allowable limit of sodium by more than 40%, and a dessert that had just one quarter of the required amount of fibre.
- Many of the board and school staff we spoke to noted that children's eating habits can be more effectively influenced while children are still in elementary school. However, most elementary schools do not have cafeterias or otherwise give students the opportunity to make healthy food choices. Therefore, effective communication is critical to establishing healthy eating habits at an early age. Greater efforts are needed by boards and schools to identify and share good practices and the materials they have developed.
- There is no formal monitoring strategy at either the Ministry, the school boards or the schools visited to ensure that students in grades 1 to 8 get 20 minutes of daily physical activity during instruction time as the Ministry's curriculum requires. Two of the three boards we visited surveyed school representatives, and more than half of those who responded said that students at their schools did not get the required 20 minutes of daily physical activity. As well, a recent report by the Healthy Kids Panel said teachers find it difficult to integrate the policy and still achieve other learning goals, and that the policy did not appear to have had a significant impact on students' activity levels since it was

- introduced in 2005. The teachers we spoke to confirmed the Panel's observations.
- The Ministry's only requirement for physical activity at the secondary school level is the completion of one credit course in health and physical education during a student's four years of high school. A 2011 survey by the Centre for Addiction and Mental Health of students in grades 7 to 12 indicated that just 20% of students reported that they participated in 60 minutes of daily physical activity as recommended by the Canadian Physical Activity Guidelines. Some other jurisdictions have substantially greater physical activity requirements for secondary students; for example, Manitoba students must obtain four high school health and physical education credits in order to graduate, and British Columbia expects high school students to participate in at least 150 minutes of physical activity per week.
- The Ministry and school boards need to better integrate their activities with other ministries and organizations, and leverage their resources and expertise. For example, in the 2011/12 school year, student nutrition programs funded by the Ministry of Children and Youth Services provided almost 700,000 children and youth with meals and snacks at little or no cost that were subject to different nutrition standards than those of the Ministry of Education. In another example, in 2011, in preparation for the School Food and Beverage Policy's implementation, one board arranged for the local public health unit to make site visits to its schools' cafeterias and found that a significant number of items did not meet the Ministry's nutrition requirements. Although the health unit offered to undertake a subsequent review, the school board did not commit to a follow-up visit.

OVERALL MINISTRY RESPONSE

The Ministry of Education appreciates the work of the Auditor General in highlighting the contribution healthy schools make in supporting student learning and growth. The Ministry acknowledges the recommendations that suggest more needs to be done to help ensure that provincial policies related to healthy eating and physical activity are being implemented effectively across the province.

Although parents play the primary role in child development, through the education system, the Ministry is uniquely positioned to work with other ministries, such as the Ministry of Children and Youth Services (MCYS), the Ministry of Health and Long-Term Care (MOHLTC) and the Ministry of Tourism, Culture and Sport, to contribute to healthy child and youth development. For instance, the Ministry supports Ontario's Healthy Kids Strategy, a threepronged approach to combat childhood obesity: start all kids on the path to health, change the food environment, and create healthy communities. In this regard, the Ministry works with MOHLTC and MCYS through a ministers' working group and steering committee to help implement elements of the Healthy Schools Strategy relevant to the Ministry's mandate.

Within schools, the Ontario curriculum continues to provide a foundation for healthy eating and physical activity and encourages the development, commitment and capacity to lead healthy, active lives. The Ministry has developed policies and programs specifically designed to complement the curriculum and create healthier learning environments for students. The report acknowledges the Ministry's efforts in this regard. In the interest of Ontario's students, the Ministry remains committed to continuing to work with all of its partners at the provincial, regional and local levels to examine implementation of healthy schools policies, explore opportunities to further promote and build

capacity through evidence-based strategies, and align our collective efforts.

Finally, as the Ministry embarks on its extensive consultations on the next phase of Ontario's education strategy, a key conversation will be about student well-being and the role of schools in supporting it. As we continue to define the role of student well-being in the education system, any potential future ministry activity related to healthy eating and physical activity will need to be examined within this context.

Detailed Audit Observations

HEALTHY EATING

The number of overweight and obese children in Canada has increased dramatically over the past 30 years. Although the magnitude of the increase varies depending on the definition of overweight and obese, the trend is upward, and the increasing rate of overweight children is a significant public concern. This concern led to amendments to the *Education Act* in 2008 that gave the Minister of Education the power to establish policies with respect to nutrition standards for food and beverages provided on school premises.

In 2010, the Ministry introduced the School Food and Beverage Policy, which sets nutrition standards for food and beverages sold in publicly funded elementary and secondary schools. Ministry efforts have subsequently focused on providing supports to implement this policy. School boards were required to ensure that all food and beverages sold on school premises complied with the policy by September 1, 2011.

The Ministry expects its policy to improve the overall nutritional quality of food and beverages offered for sale in schools. This policy is also intended to complement what is taught through the curriculum and contribute to overall government efforts to encourage healthier food choices and improve student eating behaviours. As well, it is intended to complement what is already taught in health and physical education classes and contribute to overall government efforts to increase the percentage of school-aged children and youth who have healthy weights and decrease the rates of chronic weight-related health issues such as heart disease and type 2 diabetes. The Healthy Kids Panel recently reported that obesity alone cost Ontario about \$4.5 billion in 2009, including \$1.6 billion in direct health-care costs.

Monitoring Implementation of the School Food and Beverage Policy

Ministry efforts to ensure that school boards comply with the School Food and Beverage Policy were mainly limited to obtaining letters from the boards indicating they would be in compliance by September 1, 2011. The Ministry advised us that all but one of the 72 school boards had provided such a letter. The Ministry also initiated an annual support and monitoring plan in the 2012/13 school year to gain insight into the implementation of ministry policies and programs relating to healthy schools, including the School Food and Beverage Policy. As part of this process, the Ministry gave web-based seminars and distributed bulletins on related research and promising practices from the field. The Ministry also conducted site visits to 12 school boards and a number of schools in each of these boards. Although the Ministry did not specifically assess compliance with the School Food and Beverage Policy, it did identify strategies deemed important to the successful implementation of the policy, including working with community partners and engaging parents to promote healthy eating. The Ministry also identified school board challenges to the implementation of the policy, such as a decline in cafeteria revenues and concerns about parental support for the policy. The Ministry told us it plans to share the information gathered from these visits with all school boards.

The School Food and Beverage Policy says school boards are responsible for monitoring its implementation. However, we observed that centralized school board efforts to ensure compliance were either not in place or were limited. At all three school boards we visited, the responsibility to ensure compliance with the policy had been delegated in whole or in part to the school principals. As well, a recent survey of the perceptions of dietitians from public health units identified challenges that may warrant school board and/or ministry attention, including concerns regarding efforts to monitor for compliance, and inconsistencies in the policy's implementation from school to school.

Since the implementation of the School Food and Beverage Policy, none of the boards visited had reviewed the food and beverages sold in their school cafeterias to ensure that the items complied with the policy. This was of particular concern at one school board we visited where its cafeteria vendors either did not have sufficient nutrition information to show compliance with the policy, or the nutrition information provided identified a number of instances where items did not comply.

In lieu of direct monitoring or assessments, one of the school boards we visited required school principals to obtain letters from vendors indicating compliance with the School Food and Beverage Policy. Principals were also expected to complete a form concluding on whether the food and beverages sold were compliant. However, we were informed that in the 2012/13 school year the board did not collect the forms completed by principals, and the principals at the schools visited indicated that they did not maintain documentation to support their conclusions. At another board, we were told that school principals were required to obtain letters from vendors indicating that they would comply with the Ministry's policy. The principals were not expected to confirm that the items for sale did in fact comply. The third school board did not require principals to obtain or complete any documentation, and the principals at the schools we visited in this board did not formally monitor compliance with the policy.

None of the elementary schools in the boards we visited had cafeterias or vending machines. At two of the boards visited, food and beverages were seldom sold in elementary schools. However, we were told that elementary schools in the third board regularly offered food and beverages for sale. While the schools visited at this board had obtained letters from most of their vendors indicating they would comply with the policy, the schools had generally not formally assessed the nutrition information for the food sold in such programs to ensure that it complied.

Compliance with the School Food and Beverage Policy

Virtually all the secondary schools at the three school boards visited had a cafeteria for students to purchase food and beverages, and most had vending machines. External vendors operated the vast majority of cafeterias and vending machines. Since none of the boards we visited maintained nutrition information for the food and beverages sold in their cafeterias, we obtained nutrition information directly from these external vendors.

Information we received from the vendors was not always complete in terms of nutritional detail or listing all items available for sale. Nevertheless, our review of a sample of menu items at one school board identified a significant number that did not meet the nutrition criteria in the School Food and Beverage Policy, including some that deviated from it significantly. For example, we noted a soup that contained twice the amount of fat allowed, a side dish that exceeded the allowable limit of sodium by more than 40%, and a dessert that had just one quarter of the required amount of fibre.

Although our review of the information provided by vendors at the other two boards revealed only minor compliance exceptions, we noted that compliance with the policy presents challenges and might not always result in offering students the healthiest options or students making the healthiest choices:

- In some circumstances, where a serving contains more than one major ingredient, the School Food and Beverage Policy can be applied to individual product ingredients rather than the meal as a whole. If whole meal information is not available, each individual ingredient must comply with the policy's nutrition criteria. At two school boards we were supplied with information on the ingredients of entrees that had been classified as healthy options. Upon reviewing this information, we found examples where entrees were compliant because each ingredient met the nutrition criteria, whereas if the criteria for the meal as a whole were used, the entree would have been reclassified as a less healthy option or not permitted for sale in a school cafeteria because the sodium or fat exceeded the policy's limits.
- Compliance with the policy's nutrition standards can depend on portion size. Consequently, a student can purchase two servings that, although individually compliant with the policy, would not comply if they were deemed a single meal. For example, at one elementary school we visited, pizza was the most popular hot lunch offered for sale to students, and each piece complied with the policy. However, if two pieces were purchased, the meal would exceed the criteria for fat and sodium. We found that approximately 20% of students purchased more than one piece. We also observed that other pizza brands could have been ordered by the school that would have been compliant even if two pieces were consumed.
- We reviewed school board revenue information for the cafeterias that had sufficient comparable data and found that sales decreased by 25% to 45% at the three school boards visited following implementation of the School Food and Beverage Policy. Vending machine revenues at these school boards also dropped by about 70% to 85%. Most school board administrators indicated that the substantial decline in sales suggested

that the policy's introduction was not as successful as had been hoped. The secondary school principals generally shared this view and noted that many students now choose to eat lunch at nearby fast food outlets instead of eating the food available in the school cafeteria. A survey of dietitians from public health units also highlighted these concerns as challenges to the implementation of the policy. As well, cafeteria vendors from all three school boards identified concerns to varying degrees about their ability to meet the nutrition requirements while providing food at a reasonable price and quantity that was also appealing to students.

Training on the School Food and Beverage Policy

To reinforce the benefits of healthy eating and support the implementation of the School Food and Beverage Policy, which took effect in September 2011, the Ministry developed and distributed several resources to school boards. These included a resource guide for school board and school administrators and a quick reference guide for those responsible for purchasing food and beverages. Resource guides were also produced for elementary and secondary school teachers that included information about the policy's nutrition standards and strategies to make connections to healthy eating in classroom instruction.

The Ministry also provided three rounds of training between January 2010 and March 2012 for principals, teachers and public health staff. For each round of training the Ministry invited each school board to send seven to eight participants; in total, more than 1,200 school board staff were trained. The Ministry told us that the intent was for those who attended the sessions to subsequently train other teachers and principals in their school boards. Accordingly, the Ministry provided approximately \$2.4 million in funding to school boards for such training.

All three school boards we visited indicated that they had provided additional training on the policy to all their principals in 2010; two of the boards said they also trained all their vice-principals. We observed that all three boards had used a train-the-trainer approach whereby they centrally provided training to teachers from individual schools who were expected to take that information back to the rest of the school's teachers and staff. Based on the information available, we found that the three boards trained between 5% and 15% of their teachers. However, none of the boards had collected information to determine how many teachers were subsequently trained by either these teachers or their principals.

At one school board, most teachers we spoke to indicated that they had not received training on the policy. At another board, less than half of the teachers to whom we spoke said they had received training although some instruction had been given in staff meetings. At the third school board, we were told that all teachers were trained during staff meetings, and almost all teachers to whom we spoke at this school board said they had received such training.

Overall, although both the Ministry and boards indicated that it would be beneficial for teachers to be trained on the requirements of the School Food and Beverage Policy and how to integrate healthy eating concepts into classroom instruction, including in subjects that do not cover curricular components on healthy eating, no procedures were in place to ensure that current and new teachers and school administrators received such training. In addition, many of the teachers to whom we spoke said teachers do not generally have the training to integrate healthy eating concepts into subjects that do not already include a curricular component on healthy eating. They also noted that, if the intent is for teachers to include healthy eating concepts in classroom instruction, healthy eating concepts should be added to the curriculum. The school board representatives to whom we spoke generally shared this view. Furthermore, a recent survey of the perceptions of

dietitians from public health units cited a lack of buyin and knowledge of the policy among school staff as one of the barriers to its successful implementation.

Measuring the School Food and Beverage Policy's Effectiveness

The Ministry issued the School Food and Beverage Policy to improve the overall nutritional quality of food and beverages offered for sale in schools. The policy was also intended to help reinforce the instruction provided to students on healthy eating through courses such as health and physical education. The Ministry's intent is to provide students with the opportunity to put into practice what they are taught in the classroom by ensuring that food and beverages sold in schools are healthy. However, the Ministry does not have information systems in place to gather data that would provide insight into the degree to which the policy has been successfully implemented. The Ministry has also not yet established how it plans to measure the success of the policy or assess whether it has contributed to healthier student eating behaviours.

As part of its Healthy Schools Strategy, the Ministry encouraged schools to participate in its Healthy Schools Recognition Program, a voluntary program in which schools pledge to undertake at least one healthy activity. From the time the program began in 2006 to its temporary suspension in the 2012/13 school year, the Ministry noted that more than 2,300 schools had pledged to undertake more than 11,600 healthy activities. The Ministry did not have aggregate information on how many such activities related to healthy eating or physical activity and could not say how many students these activities reached or whether they were effective in increasing physical activity or encouraging healthier eating. This was similarly the case at the school boards we visited, where we observed that participation in this program ranged from about 2% to 35% of schools in the 2011/12 school year. Also, the boards were generally unaware of the reach or effectiveness of school-based programs that might be in place.

The Ministry notes that the school environment has a significant impact on student attitudes, preferences and behaviours. The Ministry's policy groups food and beverages into three categories—"sell most," "sell less" and "not permitted for sale." Food and beverages meeting the "sell-most" nutrition criteria are described as the healthiest and must comprise at least 80% of available options. However, while many "sell-most" items are healthy options, they may not all be the healthiest options to encourage better eating behaviours. To illustrate, we noted examples in the "sell-most" category included hot dogs, pizza, muffins and cookies that meet nutrition requirements. The Ministry informed us that part of the intent is to teach students that it is possible to eat healthier versions of food not traditionally considered healthy, and it is better to offer healthier versions of the foods students prefer than have students eat unhealthy options elsewhere.

The School Food and Beverage Policy applies only to items sold at publicly funded schools. Since food and beverages were not generally sold in elementary schools at two of the three boards visited, the opportunity for the policy to affect students at the elementary level was limited at those boards. Only one of the three school boards visited gave students regular opportunities to purchase lunch supplied by a vendor. Thus, the impact of the policy at elementary school often is limited to food and beverages sold for fundraising and special events. Most school board representatives to whom we spoke said they could more effectively influence the eating habits of elementary students than secondary students. As well, a number of elementary school teachers and administrators indicated that more in-school opportunities could help their students develop healthier eating habits.

Two of the three school boards visited had not attempted to measure their success in implementing the policy or to determine how well they had contributed to healthier eating behaviours. Nevertheless, our discussions with school and board staff at these two boards revealed that most felt the food and beverages sold at their schools

were healthier since the policy's implementation. The third school board had put in place a good practice to review its policy annually. As part of its most recent review, this board surveyed almost 200 stakeholders, including parents, students and school board staff. Most respondents said that the board's policy encouraged students to make healthier choices, that information about healthy eating had been provided to parents, and that foods with poor nutrition had been removed from the school. However, only half of the survey respondents indicated that students were now eating the more nutritious food available at school. As well, the majority of school staff we spoke to at this board said they had not seen a significant change in student eating habits since the policy's implementation. Overall, the results suggested that some progress had been made in encouraging healthier eating by students but significant work remained to be done.

RECOMMENDATION 1

To help ensure that offering healthier food choices in schools contributes to improved student eating behaviours and their goals of improving student health and academic achievement, the Ministry of Education (Ministry) and school boards should:

- develop consistent and effective strategies to monitor compliance with the Ministry's School Food and Beverage Policy, especially ensuring that all items sold in schools comply with the policy's nutrition standards;
- capture additional data on the benefits of and challenges to implementing the School Food and Beverage Policy in order to assess the policy's impact and identify areas on which to focus future efforts;
- ensure that school administrators and teachers receive sufficient training and supports
 on how to implement the policy and promote
 healthy eating concepts in the classroom; and
- develop measurable objectives and related performance indicators for healthy eating

activities, and periodically measure progress in achieving these objectives.

MINISTRY RESPONSE

The Ministry agrees that in order to contribute to improving student eating behaviours, strategies need to be in place to effectively implement the School Food and Beverage Policy.

The School Food and Beverage Policy is one initiative intended to contribute to improved child and youth eating behaviours. It represents, for many, a significant shift in the type of food and beverages schools can choose to sell. The Ministry remains committed to its policy that if food and beverages are offered for sale in schools they meet nutrition standards.

As such, the Ministry will continue to engage with school boards, educators, students, parents and our partners in the health and food services sectors to promote effective evidence-based strategies that contribute to the promotion of healthy eating behaviours among Ontario's students.

The Ministry will do the following:

- review and improve our support and monitoring plan in an effort to capture and share implementation challenges, effective practices and supports;
- work with school boards to establish a riskbased approach to monitoring compliance and reporting on implementation of the School Food and Beverage Policy;
- provide implementation supports to those within the education sector, based on identified needs; and
- continue to encourage and foster the development of local partnerships between the education and health sectors to support implementation and contribute to improved student health and academic success.

The Ministry is also committed to developing measurable objectives and related performance indicators for its healthy eating activities, as part of a broader effort to establish objectives and indicators for its Healthy Schools Strategy.

RESPONSE OF SCHOOL BOARDS

All three school boards agreed with this recommendation and all three were supportive of the need to ensure that items sold in schools comply with the Ministry's School Food and Beverage Policy. One school board noted that more strategies to monitor the implementation of the policy would be helpful. Another school board indicated that it would be beneficial if an accreditation process was established for businesses that provide food services in Ontario education settings. Such a process, which would rely on professionals with expertise in nutrition, would strengthen compliance and allow educators to focus their resources on education.

All three school boards were also supportive of capturing additional data to assess the policy's impact and developing measurable objectives and performance indicators for activities intended to improve healthy eating. However, one board commented that any measurable objectives that are established must be manageable within the context of the education setting, and another board cautioned that it will always be a challenge to assess the impact on student eating habits because most meals and snacks are consumed at home and many factors impact what a student eats at home, including financial considerations.

The school boards were also supportive of the need to ensure that school administrators and teachers have sufficient training on how to implement the School Food and Beverage Policy and promote healthy eating concepts in the classroom. One board noted that providing training to teachers and principals to link healthy eating to the curriculum has the most positive potential to impact students' understanding of the impact that healthy eating can have on their quality of life. Another school board commented that it would be beneficial if healthy eating and nutrition was a mandated component of teacher pre-service programs.

PHYSICAL ACTIVITY

Research indicates that increased daily physical activity may help improve a student's academic achievement. In general, physical inactivity is increasingly becoming a national concern as several sources suggest that Canadian children and youth do not engage in the minimum 60 minutes of daily moderate-to-vigorous physical activity recommended by the Canadian Physical Activity Guidelines. For instance, Statistics Canada says just 7% of Canadian children aged six to 19 participated in at least 60 minutes of moderate-to-vigorous physical activity at least six days a week.

To address concerns about the health and physical fitness of students and to help improve academic achievement, in October 2005 the Ministry issued a policy on daily physical activity. The policy requires school boards to provide all elementary students (grades 1 to 8) with a minimum of 20 minutes of sustained moderate-to-vigorous physical activity each school day during instructional time. This policy noted that procedures must be developed to ensure the highest level of safety during such activities. To support the policy's implementation, the Ministry included these requirements in the elementary school curriculum. Schools were required to implement the policy fully by the end of the 2005/06 school year.

Implementation of Daily Physical Activity in Elementary School

The Ministry took a number of measures to support the implementation of daily physical activity in elementary school. These included developing daily physical activity resource guides for school boards, principals and teachers that also address safety; creating an e-learning module to provide guidance on how to implement daily physical activity, including ideas for such activities in the classroom; and funding school boards for purposes such as professional development for teachers and principals, the purchase of school athletic equipment and other resources.

As previously noted, in the 2012/13 school year, the Ministry visited 12 school boards and a number of schools in these boards to see how well the Healthy Schools Strategy was being implemented. Although the Ministry did not specifically measure the degree to which daily physical activity had been implemented, it identified promising practices and challenges. According to the Ministry, some good practices to increase physical activity included committed leadership by school staff and encouraging intramural sports. The most frequently identified challenges were limited time, space and facilities for physical activities. The Ministry plans to share this and other information gathered with all school boards.

The Daily Physical Activity Policy says school boards are responsible for monitoring its implementation to ensure that all elementary students receive 20 minutes of physical activity during instruction time each day. However, we found that none of the boards or schools we visited had a formal process in place to monitor whether students took part in the required physical activity. A study at a school board we did not visit noted that less than half of the students took part in physical activity every school day and not a single child engaged in sustained moderate-to-vigorous physical activity for 20 minutes or more. In addition, a 2013 report by the Healthy Kids Panel said that according to parents, teachers and students, the Daily Physical Activity Policy has not been implemented consistently and is not having the desired impact. The report also noted that teachers find it difficult to integrate daily physical activity into the school day and still achieve all other learning expectations.

At two of the school boards we visited, recent surveys suggested that the policy was not implemented as required. At one board, 63% of the school principals who responded to the survey said students did not get the required 20 minutes of daily physical activity for reasons that included a lack of time and space, as well as giving priority to other academic areas. At the other board, at least half of the school representatives who responded

to the survey indicated that daily physical activity was not provided at their schools to the extent the policy required. At this board, the administration at an elementary school we visited said it did not require teachers to provide students with the opportunity for daily physical activity, choosing instead to focus efforts on literacy. At the third board, while no survey had been done, about half of the teachers to whom we spoke told us students did not get 20 minutes of daily physical activity. They cited reasons such as a lack of space to exercise in the classroom and a lack of time to schedule such activities around other curriculum requirements.

Secondary School Physical Activity Requirements

The only requirement for physical activity at the secondary school level is the completion of one credit course in health and physical education during a student's four years of high school. In many cases this requirement can be completed in just half a school year. According to the Ministry, secondary school students who graduated in 2012 earned an average of just over two health and physical education credits. However, 37% of these students completed only one health and physical education credit.

In addition to physical education classes, all three school boards provided opportunities for students to participate in intramural sports, competitive team sports and other activities such as dance. However, many students do not participate and these boards could not provide an overall indication of the participation time in such activities. Nevertheless, a 2011 survey by the Centre for Addiction and Mental Health found that only two in 10 Ontario high school students surveyed reported that they participated in 60 minutes of physical activity daily as recommended by the Canadian Physical Activity Guidelines.

Most of the staff to whom we spoke at the school boards and secondary schools we visited were of

the opinion that more physical activity should be required for secondary students. The Ministry told us that it too saw value in requiring additional physical education for secondary students but noted a number of challenges in accommodating additional requirements, including all the other curricular commitments. Recent reports by the Healthy Kids Panel as well as Public Health Ontario and Cancer Care Ontario recommend making physical education compulsory in every year of high school.

In other provinces, more physical activity is required of students. For example, British Columbia expects high school students to participate in at least 150 minutes of moderate-to-vigorous physical activity per week; in Manitoba, secondary school students must obtain a minimum of four health and physical education credits.

Daily Physical Activity Policy Training

To support the implementation of its elementary school policy on daily physical activity, the Ministry provided school boards with approximately \$15 million between the fiscal years 2005/06 and 2008/09 for purposes that included professional development for teachers and principals. However, the recent Ministry school board visits found that many boards identified a need for training on the Daily Physical Activity Policy.

The three boards we visited did not maintain records on how many principals and vice-principals had received training on the policy. However, one board informed us that it trained all principals and vice-principals while a second board said it trained all principals but not specifically vice-principals when the policy was introduced in the 2005/06 school year. The third board was unable to tell us how many of its principals and vice-principals were trained. None of the three boards had a process in place to train administrators appointed subsequent to the 2005/06 training.

The Ministry, as well as those to whom we spoke at all three school boards visited, indicated that all elementary teachers would benefit from training on how to implement daily physical activity in the classroom. Also, the three boards said training was provided to 15%, 30% and 45% of total elementary teachers, respectively. The boards expected these teachers to disseminate this information at their schools. However, the boards did not know how many of the other teachers were provided with training, and none of the schools we visited maintained records of how many of their teachers had received training on daily physical activity. Only one of the three school boards indicated that it offered new teachers training that included at least some instruction on daily physical activity, but we were informed that few new teachers participated in such training.

Ensuring Safe Physical Activities

The Ministry's Daily Physical Activity Policy for elementary school children stipulates that procedures must be developed to ensure the highest level of safety during physical activity sessions. Although safety information is included in the health and physical education curriculum, the Ministry encourages boards and schools to use the Ontario Physical Education Safety Guidelines put out by the Ontario Physical and Health Education Association (Ophea), a not-for-profit organization. These guidelines outline safe practices for teachers and other personnel involved in physical activities for students in order to minimize the risk of accidents or injuries. The guidelines address topics such as equipment, clothing and footwear, supervision and the facilities where activities take place.

Although the Ministry had not provided training on these safety guidelines, it partnered with Ophea to develop and distribute resource guides for school boards, principals and teachers on daily physical activity that included safety considerations. In addition, the Ministry entered into a contract with Ophea in 2012 to provide its safety guidelines on a publicly accessible website.

All three of the school boards visited said they required or strongly encouraged their schools to

use Ophea's safety guidelines, but they had not provided training specifically on the guidelines to principals and vice-principals. Two of the three boards said they had provided specific training on the guidelines to some teachers.

The elementary schools we visited at the three boards could not determine how many teachers had received training on the safety guidelines. While almost all of the elementary teachers we interviewed at two of the school boards were aware of the guidelines, about half the elementary teachers we interviewed at the third board were not. At all three boards, none of the elementary teachers we interviewed said they had received training on the guidelines, although the majority thought at least some training would be beneficial.

Measuring the Effectiveness of Physical Activity Requirements

The Ministry expects its Daily Physical Activity Policy to not only increase students' physical activity but also contribute to decreased sedentary behaviour and improved student achievement. The Canadian Physical Activity Guidelines recommend 60 minutes of physical activity daily, well in excess of the Ministry's elementary school policy of 20 minutes per day during instruction time. Although students spend only part of their day at school, the Ministry did not have a rationale for why it set its requirement at just 20 minutes a day for elementary students. Other provinces, such as British Columbia and Alberta, expect elementary students to get 30 minutes of physical activity each school day, which can be achieved during instructional time and non-instructional time, such as recess. In addition, the Healthy Kids Panel recently recommended increasing the minimum amount of daily physical activity in elementary schools from 20 to 30 minutes.

We noted that the Ministry specified outcomes for elementary students in very general terms and had not established specific targets or measurable goals against which to measure and report on the success of its Daily Physical Activity Policy. We also noted that the Ministry and school boards do not have information systems in place to gather data that would show such progress. Consequently, more than seven years after the policy was issued, the Ministry has not formally measured its success. Furthermore, a recent report by an expert panel to the Minister of Health and Long-Term Care identified that the policy does not appear to have had a significant impact on student activity levels.

In contrast to Ontario, California requires students in grades 5, 7 and 9 to have an annual physical fitness test. The results of these tests are to be used to help students plan personal fitness programs, assist teachers in developing physical education programs, and provide parents with an understanding of their child's fitness level and needs. As well, these results are used to monitor changes in the physical fitness of California's students in general, and the aggregated results are reported publicly.

RECOMMENDATION 2

To help safely increase physical activity as well as contribute to reduced sedentary behaviour and improved academic achievement, the Ministry of Education (Ministry) and school boards should:

- assess options, including practices in other jurisdictions, for providing sufficient physical activity to both elementary and secondary school students;
- ensure that elementary school administrators and teachers receive sufficient training on good practices and on how to effectively incorporate daily physical activity into the school day;
- familiarize teachers with physical activity safety guidelines; and
- set specific goals and targets for increasing physical activity in schools, and periodically monitor, measure and publicly report on the progress made.

MINISTRY RESPONSE

The Ministry agrees that the education system is uniquely positioned to make a significant contribution to increasing awareness of the importance of physical activity and in helping to lay the foundation for increased physical activity among Ontario's students.

Recognizing the many benefits of physical activity, the Ministry is committed to full implementation of the Daily Physical Activity Policy and exploring options to increase physical activity opportunities in secondary schools. Any future decisions on revising physical activity requirements for elementary or secondary students will need to be informed through research and outcome-based evidence.

The Ministry will do the following:

- work on research on implementation of the policy, including examining the extent to which it is being implemented in Ontario's elementary schools and identifying factors associated with implementation;
- review and improve our support and monitoring plan in an effort to identify and share implementation challenges and effective practices of the policy and communicate strategies to increase physical activity opportunities in secondary schools;
- work with school boards to establish a riskbased approach to monitoring compliance and reporting on implementation of the policy;
- update, as necessary, and further promote existing ministry resources designed to assist with implementation of the policy;
- work with our partners to develop initiatives to help increase interest and motivate
 Ontario's students to lead active and healthy lives; and
- continue to work with the Ontario Physical and Health Education Association (Ophea) to promote and provide free and open access to the Ontario Physical Education Safety Guidelines.

RESPONSE OF SCHOOL BOARDS

All three school boards agreed with this recommendation. One school board commented that continued work to ensure that daily physical activity is provided to students and monitored is needed and the board will work collaboratively with the Ministry and others to explore best practices to provide opportunities for and monitoring of daily physical activity and to promote the importance of physical activity.

Another school board indicated that it strongly encouraged the recommendation to assess options to increase secondary school students' participation in physical activity and that increasing teacher training in policy implementation and communicating safety guidelines to all teachers will increase teacher confidence to undertake physical activity in the classroom setting. However, this board cautioned that goals and targets for increasing physical activity in schools should be well researched so that suggested strategies will be evidence-based.

The remaining school board noted that it would be beneficial if daily physical activity was a mandated component of teacher pre-service programs and that it would be beneficial if the Ministry would issue an updated online training module that informs educators of the key learning points related to daily physical activity and safety guidelines to ensure consistent and current messaging is communicated throughout the province. The board also noted that creating these modules at the provincial level would be both a cost-saving and time-saving measure.

COMMUNICATION WITH PARENTS

Parents play an important role in developing children's eating habits and in helping children learn to be active and stay active throughout their lives. The Healthy Kids Panel suggested developing a comprehensive social marketing program aimed

at children, youth and parents to reinforce the importance of issues such as healthy eating and active living.

The Ministry said it does not generally engage in direct communication with parents but does provide information on its website about healthy eating and physical activity. Other ministry communication efforts include the distribution of a guide for parents concerning healthy schools that provides suggestions for physical activity and healthy eating. We noted that all three school boards we visited also provided information to parents on their websites. Such information included notification of events involving physical activity, a parent handbook, school board nutrition policies, information related to healthy eating and videos focusing on healthy eating. Other school board communications included providing parents with information on the School Food and Beverage Policy and providing schools with materials to be distributed to parents.

At the schools visited, we observed varying degrees of communication with parents. Such efforts included distributing information through newsletters, websites, parent meetings and direct conversations. However, many of the teachers to whom we spoke indicated that more outreach to parents to promote healthy eating was necessary to help improve the eating habits of students. As well, representatives from the public health units to whom we spoke were generally of the opinion that more communication with parents about healthy eating and physical activity was needed.

We also noted that neither the Ministry nor the school boards visited had evaluated how effectively they communicated with parents about healthy eating and physical activity. Nevertheless, one of the school boards did gather some insight into the effectiveness of its communication efforts by surveying stakeholders, including parents. For example, more than half the parents would like additional information about the board's nutrition policy but did not want information on healthy nutrition and how to put it into practice at home.

RECOMMENDATION 3

To help encourage healthier eating and increased physical activity among students, the Ministry of Education (Ministry) and school boards should further explore opportunities to improve communication with parents and assess the effectiveness of such efforts.

MINISTRY RESPONSE

The Ministry agrees that parents, as primary caregivers, are a critical audience to target information to on the importance of healthy eating and physical activity to overall child and youth development.

The Ministry will work with school boards and parents to identify appropriate and effective means to communicate information to parents across the province on ministry requirements and activities related to healthy eating and safe physical activity. The Ministry will also work with other ministries and partners to support connections with parents and students through the education system.

RESPONSE OF SCHOOL BOARDS

All three school boards agreed with the recommendation and were supportive of exploring opportunities to improve communication with parents. One board indicated that increased parental awareness of healthy habits should be very beneficial to students and noted that while the development and implementation of practices to monitor communication strategies could take considerable time and effort, gains in student health will justify the effort needed to encourage best practices in this area. Another board commented that parental involvement is a priority since parents have the primary responsibility for their children's health and well-being and that school boards have a responsibility to work with other stakeholders to promote student health and well-being. The remaining

board noted that it would be beneficial if the government launched a communication strategy regarding healthy nutrition and physical activity with messaging that reinforces adults as role models to health and well-being and that such a strategy could include the distribution of information to families through school boards via newsletters and websites.

CO-OPERATION WITH OTHER MINISTRIES AND ORGANIZATIONS

The goals of the Ministry's policies on daily physical activity and food and beverages are to contribute to better student health and academic achievement. Other ministries and organizations have complementary goals or activities, including the Ministry of Health and Long-Term Care, public health units and the Ministry of Children and Youth Services (MCYS). The Ministry, school boards and schools often cooperate with these and other ministries, organizations and stakeholder groups to develop policies and help implement healthy school initiatives.

Although the school boards and schools we visited work with many other organizations, the activities of these organizations did not formally factor into the school boards' strategies to promote healthier eating or increased physical activity among students. As well, the Ministry and the school boards we visited generally did not have information about the contribution of other organizations to the development of healthier eating habits by students or increasing their physical activity at the school level. Nevertheless, we observed programs and supports in place at the schools we visited that could help the Ministry and school boards achieve their goals concerning better student health and academic achievement.

For example, Ontario's local boards of health, through the public health units they govern, have a mandate to work with school boards and schools to influence the development and implementation

of health-related initiatives. At the school boards visited, we were advised that a number of schools worked with public health units to promote student health activities through school teams or committees of various school stakeholders. Such activities included presentations on healthy eating, cooking lessons to help students establish better eating habits, and a campaign that encouraged students to put down their electronic devices and engage in physical activity. Gathering additional information on the success of such initiatives can help school boards identify successful activities worth implementing in other schools.

In one specific example, just prior to the 2011 implementation deadline for the School Food and Beverage Policy, one board in co-operation with dietitians from public health conducted visits to schools to gauge how well the board's cafeteria vendor had begun to implement the policy. The dietitians identified a significant number of items that did not meet nutrition requirements and offered to undertake a subsequent review. However, the school board did not commit to any follow-up visits. In general, dietitians from public health units could be a resource to provide school boards and principals with the expertise needed to assess the nutrition of items sold to students to reinforce the value of healthier eating habits.

MCYS provides partial funding for student nutrition programs in many of Ontario's schools. The goal of these programs is to support the healthy growth and development of students by providing them with generally free meals and snacks so that they are ready to learn. According to MCYS, when children and youth arrive at school hungry, their capacity to learn is diminished. Many of the schools at the three boards we visited had student nutrition programs. According to MCYS, almost 700,000 students province-wide participated in such nutrition programs in the 2011/12 school year. These nutrition programs can promote healthy eating by students, particularly at the elementary level where there may be fewer opportunities for the Ministry's School Food and Beverage Policy to affect student behaviours.

The Ministry of Education's School Food and Beverage Policy does not apply to food and beverages that are provided to students free of charge, and the providers of these products and other nutrition program providers were not required to follow MCYS nutrition guidelines. Although all three school boards that we visited recommended or required that their schools follow MCYS nutrition guidelines, neither the school boards nor the schools we visited monitored these programs for compliance with the guidelines. In addition, at the three school boards visited, only half of the organizations that work with MCYS to provide nutrition programs visited schools to monitor compliance with these nutrition programs. A recent report by the Healthy Kids Panel recommended developing a single standard for food and beverages served or sold in schools, as other provinces have done. The school nutrition policies in provinces such as Nova Scotia and New Brunswick apply equally to food sold to students and food provided to them free of charge.

RECOMMENDATION 4

The Ministry of Education (Ministry) and school boards should work more effectively with other relevant organizations with similar goals to better integrate and leverage their activities to help encourage healthier eating and physical activity among students.

MINISTRY RESPONSE

The Ministry agrees that given the numerous other ministries, levels of government, not-for-profit organizations and other groups involved in activities designed to encourage healthy eating and physical activity among children and youth, it is important to mobilize collective knowledge, resources and efforts.

Throughout the development and implementation phases of its policies related to healthy eating and physical activity, the Ministry has relied on input and expertise from within

government, the broader public sector and notfor-profit organizations.

The Ministry will continue to work with other ministries and partners to help encourage healthier eating and physical activity. For instance, the Ministry will do the following:

- support implementation of Ontario's Healthy Kids Strategy;
- continue to consult with education- and school-based health organizations on matters related to healthy schools;
- examine ways to build strong, collaborative and sustainable partnerships between school boards and public health units;
- highlight the important role that public health and other community agencies and regional networks can play in supporting implementation of ministry policies through its support and monitoring plan; and
- continue to meet with representatives from other Canadian jurisdictions to discuss and share practices intended to improve the overall health of young people.

RESPONSE OF SCHOOL BOARDS

All three school boards agreed with the recommendation. One board commented that a more co-ordinated effort among all those invested in children's health would definitely be helpful and that better sharing of information among those involved in children's health could greatly increase the effectiveness of each group's efforts. Another board commented that effective partnerships, consulting, co-planning and co-funding with other relevant organizations with similar goals can all help encourage healthier eating and physical activity among students. The remaining board commented that following significant work in the past few years to establish working relationships between the board and community organizations, the board planned to expand its collaborative work to focus on overall student well-being.