

# Teachers' Perspective on Barriers to Implementing Physical Activity Curriculum Guidelines for School Children in Toronto

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## ABSTRACT

**Background:** Teachers in Ontario are expected to implement the physical activity guidelines in the health and physical education (HPE) curriculum document that was introduced in 1998. This study examined Toronto teachers' perspective on barriers to implementing these guidelines.

**Methods:** Forty-five teachers from five Toronto elementary schools in which generalist classroom teachers provide physical education classes participated in focus groups. An experienced moderator facilitated each session. Themes were inductively generated from the data.

**Results:** Participants reported that children were not engaged in moderate or vigorous physical activity daily and for the expected duration. Participants identified three categories of barriers to implementing the curriculum guidelines: lower priority for HPE, lack of performance measures for physical activity, and lack of sufficient infrastructure. First, they reported that the new curriculum expectations for other subjects were demanding, which left little time to focus on physical education. They felt that resource support for the HPE curriculum was not sufficient and that physical education specialists were necessary but unavailable to implement the curriculum. Second, participants felt accountable to both government and parents for high student performance on standardized tests in subjects deemed to be of higher priority. Third, participants reported inadequate facilities and equipment, use of portables for classrooms, cancelling physical education to have events in the gymnasium, and unavailability of teachers to supervise off-school physical activity.

**Conclusion:** The study suggests that participating teachers perceive physical education to be a low priority in the educational system, making it difficult for them to meet the HPE curriculum expectations.

*La traduction du résumé se trouve à la fin de l'article.*

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Recent public health concern about an increase in obesity and related conditions among North American children<sup>1</sup> has prompted renewed interest in the importance of physical activity in preventing obesity and overweight.<sup>2,3</sup> Yet, despite widespread documentation of the health and social benefits of regular physical activity for children and adolescents,<sup>4,6</sup> and the call by several organizations for quality daily physical education (QDPE) or quality daily physical activity (QDPA), many elementary students receive less than this level of school-based physical activity in physical education class.<sup>7</sup> A 1998 survey of structured opportunities for physical activity in Ontario schools indicated that elementary students were offered physical education class, on average, just under three days per week.<sup>8</sup> Moreover, there was considerable variability by grade in the average number of minutes of physical education (and the minutes of vigorous physical activity) received in these classes.

In 1998, the Ontario Ministry of Education introduced a mandatory new curriculum for publicly-funded elementary schools, which included *The Ontario Curriculum, Grades 1-8: Health and Physical Education (HPE)*.<sup>9</sup> The introduction to this document (page 5) states that, "This curriculum requires that students participate in vigorous physical activity for a sustained period of time each day." Teachers were expected to develop lesson plans and programs based on the curriculum. To support educators with implementation, the Ontario Physical and Health Education Association (OPHEA) developed extensive resource materials.<sup>10</sup>

In order to understand the barriers to physical activity more clearly, the particular constraints and other factors identified by those responsible for providing school-based opportunities need to be examined. Most of the existing empirical evidence concerning barriers to physical activity has focused on adolescents' (rather than children's) perspectives.<sup>11-13</sup> With the exception of some studies that have examined teachers' perspectives on mandated educational reform,<sup>14-16</sup> there have been few studies examining barriers to opportunities from the perspective of those working in the delivery system.<sup>8</sup> In one of these studies, teachers in British Columbia were surveyed by phone to examine their implementation of the provincial physical edu-

cation curriculum.<sup>17</sup> They commented that physical education was given low priority in the school system. Generalist teachers provide physical education in most elementary schools and student achievement in physical education was not assessed. They commented that some schools do not have adequate facilities and equipment. The findings were presented as aggregated results rather than findings for elementary and secondary teachers separately. The study reported here used a qualitative methodology to examine the context and institutional barriers to the provision of structured opportunities for physical activity in elementary schools. Specifically, the study documented what factors teachers identified as making implementation of the provincial guidelines difficult. This study was part of a larger coalition to promote physical activity in the community.

## METHODS

### Participants

A total of 45 teachers from 5 elementary schools in a Toronto school board participated in focus groups. Participants taught in schools in which generalist teachers provide physical education classes. Table I shows the characteristics of participants.

### Interview guide

The research team, in consultation with a city-wide HPE consultant in the school board, developed a structured interview guide. The HPE consultant informally pilot-tested the interview guide. The guide began by showing the curriculum expectations for physical activity for grades 1 to 6 and describing Canada's Physical Activity Guide to Healthy Active Living diagram that outlines the type, intensity, and duration of physical activity necessary to maintain health.<sup>18</sup> Examples of moderate and vigorous physical activity, based on the guide, were presented. Table II shows the three interview questions. This analysis is limited to the barriers to implementing the HPE curriculum guidelines, along with contextual information to help interpret responses to the barriers question.

### Procedure

The second and third authors' institutions and the school board provided ethics approval for the research protocol. In con-

**TABLE I**  
**Characteristics of Participants\***

Characteristic	Mean or Percentage
Sex	
Male	27
Female	73
Grade level that participant taught	
Grade 1-3	56
Grade 4-6	42
Librarian	2
Mean number of years of teaching experience	16
Some specialist training in physical and health education	
Yes	20
No	80
Rating of own physical activity level	
Not at all physically active to not very physically active	22
Moderately physically active	42
Physically active to very physically active	36

\* n = 45

**TABLE II**  
**Interview Guide**

Topic	Question
Context	Teachers have reported mixed experiences in implementing this curriculum. Can you give us a brief snapshot of your experience with implementation?
Barriers	Can you describe what factors make it difficult for you to offer moderate to vigorous physical activity on a regular basis during classroom time?
Facilitators	What would you recommend be done to ensure that children receive enough physical activity during classroom time, and how would you put your recommendations into practice?

sultation with the HPE consultant, principals from five schools were identified and requested to allow the research team to contact teachers about their interest in participating in the study. Five schools were selected based on the criteria of having a typical physical activity program, being representative of elementary schools in the board, and having a sufficient number of grade 1-6 teachers to conduct a focus group. Focus groups were used with this convenient sample typical of qualitative research methods to generate rich information on experiences and perceptions.<sup>19</sup> A letter of invitation to participate in the study was sent to teachers with a consent form, a background information survey, and a return envelope. During a period with lunch provided, a one-hour focus group was conducted among all volunteer teachers in each of the five schools during the spring of 2002. Between 8 and 11 teachers participated in each session. The sessions were facilitated (MAB) and audio-taped (EG). Audiotapes were transcribed verbatim, following specific protocol.<sup>20</sup>

All transcripts were imported into The Ethnograph.<sup>21</sup> The research team used a constant comparison approach, which involves continually integrating previously coded comments in the development of

themes by using the already coded themes as a comparison when doing further coding.<sup>22,23</sup> Authors JD, MAB, and EG independently read the five transcripts and inductively generated a list of themes with descriptive comments. They compared and discussed the themes and agreed on a common list of themes with accompanying codes. MAB and EG independently re-read two transcripts, applying codes to text. Then they compared and reached agreement on coded comments. EG coded the remaining transcripts. Then the coded comments were transferred to The Ethnograph and comments assigned the same code were retrieved and synthesized.

## RESULTS

Participants across the schools agreed that the physical activity and fitness expectations in the HPE curriculum document were not being met in their schools. They reported that children were not engaged in moderate or vigorous physical activity daily and for the expected duration. Many participants reported that no more than 60 minutes of physical education were provided per week. Typically, one 60-minute or two 30-minute classes were provided. Occasionally, participants initiated informal

physical activity between physical education classes, but this was not sufficient to meet the intensity and duration requirements.

### Barriers

There were three major categories of barriers identified by participants: lower priority for HPE, lack of performance measures for physical activity, and lack of sufficient infrastructure.

**Lower priority for HPE.** Teachers reported that the new curriculum expectations for various subjects are demanding and unrealistic, with additional curriculum demands on those teaching split grades. Typical comments were

*Most often, the curriculum is so overwhelming and overloaded that you don't have time to do little extras that you want to, to take them outside and do a little bit of extra physical education or something like that. There's so much other stuff to cover, social studies and science and so on.*

*Even though it's government policy, they're paying lip service to [physical activity] because the curriculum is so overloaded right now that it's making it very difficult [for the board or school] to prioritise this.*

Participants said that the HPE curriculum is insufficient, described as “the smallest, thinnest booklet”. Participants asserted that the document does not provide enough guidance and assistance for teachers to design physical education lessons and grade students because it provides guidelines, rather than a set HPE program. For example,

*When there's no set program, it tends to be just put on the back burner. You have your program for your math, language, and social studies. You get textbooks. But for physical education, there's nothing, there's just your curriculum.*

Participants found it difficult to integrate HPE with other subjects. However, supporting documents for the HPE curriculum provided by another organization were too detailed and thus seldom used. Participants prioritized what to teach and focus on in light of curriculum demands and time constraints that included school-wide issues. The sense of such pressures was captured in the comment,

*Because of the incidents in the neighbourhood with strangers using the wash-*

*rooms, we now have hall duty added. We have to walk up and down the halls. So we're just maxed out. It's ridiculous. So I'm not going to be worried about whether they're fit or not. I'm just worried about whether they get to school on time, have eaten properly, and have a lunch.*

Typically, HPE was deemed a lower priority – a dilemma that many emphasized could be mitigated with physical education specialists on staff to implement HPE.

**Lack of performance measures for physical activity.** Teachers had problems implementing the required program because the provincial curriculum document is unclear about expectations for physical activity during instructional time which, in turn, makes it difficult to measure performance. They noted that (a) the frequency of physical activity is not addressed in the specific expectations of the curriculum, beyond the requirement of daily vigorous physical activity, and (b) the amount of physical activity required specifically in physical education class is not specified.

In contrast, there are clear expectations and performance measures in other subjects. Participants felt accountable to the government and parents for having students perform well on the Education Quality and Accountability Office (EQAO) province-wide, standardized tests. However, they mentioned pressure originating from EQAO test results appearing in the media, parents wanting to enrol their children in schools that perform well in EQAO testing, and schools with higher enrolment receiving more provincial funding. Participants reported that preparing students for EQAO testing has put additional incentive and pressure on teachers to emphasize math and language, at the expense of HPE and other subjects. A typical comment was

*Physical education doesn't have, as far as the marks go, any clout. The parents say, “Well, ok, they got a C in phys ed. That doesn't really matter.” C in drama. C in art. It's all in that area. Whereas if it's a C in math or language, their eyebrows go up and questions start popping. So it's the value you put on the subject.*

**Lack of sufficient infrastructure.** Participants reported that the gymnasium was insufficient for the school needs. Many

said the facility was too small to accommodate the number of enrolled students, making scheduling daily physical education unfeasible. They described equipment as lacking or poorly maintained and outdoor facilities as inadequate and sometimes unsafe. Even participants who have relatively good facilities reported overcrowding and the use of portables for classrooms. Participants explained that physical activity is not usually done in classrooms because classrooms are not large enough and it disrupts other classrooms. For example, a participant said “With 32 students in these little portables, there's really not much room to move around. So I'm restricted to my two gym periods a week.”

Also, participants said that physical education is often cancelled when the gymnasium is needed for a school assembly, a presentation, or an event such as a Christmas concert. In some schools, physical education was cancelled during most of December, leading to the comment, “In some ways, it [physical education] is almost like a frill.” It was sometimes possible to have physical education class outside when the gymnasium was otherwise occupied, but this was contingent on nice weather and good outdoor facilities. Participants expressed concern about children's safety when additional teacher supervision was unavailable during off-site events, such as skating and neighbourhood walks. One participant explained its impact.

*More than ever, they're stressing safe schools. We had an incident when we worked really hard to take the kids skating... There was an issue where the parent wanted to sue but couldn't because all [procedures] ... were followed. But I found that very stressful... I've been taking kids skating for 25 years, and really haven't had any incidents, but now I'm really wary.*

### DISCUSSION

Participants reported several barriers to implementing the provincial curriculum guidelines for physical activity. Specifically, they perceived that HPE is a lower priority, other performance measures have precedence, and the infrastructure required for physical activity participation is insufficient. Interestingly, teachers in British

Columbia identified similar barriers to implementing their provincial physical education curriculum.

It appears from their accounts of what makes implementation difficult, that teachers are aware of social, political, and economic factors largely beyond their own control, such as provincial curriculum requirements for other subjects, EQAO testing, special events, parents' concerns, and school and community issues, which affect the quantity and quality of physical education in schools. Thus, the impact of the larger context influencing curriculum requirements and implementation in Ontario needs to be considered. Public health units in Ontario are required to work with boards of education in physical activity promotion activities.<sup>24</sup> The findings of this study suggest that boards of education can work in partnership with public health units to identify teachers' barriers to meeting the HPE curriculum requirements. In turn, this could lead to the development of joint plans and strategies to achieve an educational environment that ensures the provision of daily physical activity for all students.

In addition, although it was not the focus of the present study, a number of structural factors such as education budget constraints, major shifts in the authority and responsibility for provincial education policy, and labour unrest may also be related to some of the issues that teachers raised. These issues are identified in literature on mandated reform and accountability in the education system.<sup>14-16</sup> The generalizability of the findings from this study are limited by the characteristics of the sample, specifically generalist teachers from an urban board of education. In order to enhance generalizability, future research should expand both the sample under study and the range of methodological approaches used. For example, a random sample survey of elementary school teachers and administrators could be conducted concerning these issues.

In conclusion, the findings help to elucidate the issues teachers face in attempts to implement curriculum requirements for physical activity in physical education class. Clearly, teachers must be viewed as participants in institutional systems which are themselves influenced by complex social and political factors surrounding the

provision of opportunities for physical activity in schools. Only when the barriers to implementation and utilization are overcome can participation in school-based physical activity be increased.

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## RÉSUMÉ

**Contexte :** Les enseignants de l'Ontario sont tenus d'appliquer les lignes directrices sur l'activité physique contenues dans le document de programme sur la santé et l'éducation physique diffusé en 1998. Nous avons étudié le point de vue des enseignants de Toronto sur les obstacles à l'application de ces lignes directrices.

**Méthode :** Quarante-cinq enseignants de cinq écoles primaires de Toronto où les cours d'éducation physique sont donnés par des enseignants non spécialisés ont participé à des groupes d'entretien en profondeur. Chaque séance était facilitée par un animateur chevronné. Les thèmes des entretiens ont été inductivement tirés des données.

**Résultats :** Selon les participants, les enfants ne pratiquent pas chaque jour et pendant la durée prévue une activité physique modérée ou vigoureuse. Il y aurait trois types d'obstacles à l'application des lignes directrices au programme : la faible priorité accordée à la santé et à l'éducation physique, l'absence de mesures de rendement pour l'activité physique et le manque d'infrastructures. Premièrement, les participants ont déclaré que les attentes du nouveau programme dans les autres matières sont élevées, ce qui laisse peu de temps pour se concentrer sur l'éducation physique. À leur avis, les ressources à l'appui du programme de santé et d'éducation physique sont insuffisantes, et il faudrait des spécialistes en éducation physique (non disponibles à l'heure actuelle) pour appliquer le programme. Deuxièmement, les participants se sentent responsables, tant auprès du gouvernement que des parents, d'obtenir de bons résultats pour leurs élèves aux examens normalisés dans les matières jugées prioritaires. Troisièmement, les participants ont mentionné l'insuffisance des installations et du matériel, les classes préfabriquées, l'annulation de l'éducation physique lorsqu'on tient des assemblées dans le gymnase et l'absence d'enseignants pour superviser l'activité physique avant ou après l'école.

**Conclusion :** L'étude porte à croire que les enseignants participants perçoivent l'éducation physique comme étant non prioritaire dans le système éducatif, ce qui leur complique la tâche de répondre aux attentes du programme en matière de santé et d'éducation physique.

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