Concerns about chronic disease and obesity, the physical inactivity levels of children and youth, and the importance of adopting health behaviours at an early age, has led to a focus on establishing healthy physical activity patterns early in life. As schools have access to the vast majority of children and youth for the bulk of their waking day, they are often the chosen setting for interventions targeted at children and youth. A recent systematic review by Naylor and McKay examined the literature addressing the promotion of physical activity in schools to identify emerging models and approaches.

Challenges to School Interventions
Although schools may potentially influence knowledge towards health habits and contribute to daily physical activity levels, they face a number of barriers to implementing school-based physical activity, including insufficient time, competing priorities, lack of resources and non-supportive environments. Intervention designers need to be aware of these barriers, along with the vast differences between elementary and high school environments in their class organization (e.g., all day with a generalist teacher versus multiple classes with specialists, year long versus semester subject timing, etc.) and populations (e.g., differences in influencers of younger children and adolescents). Additional challenges in assessing the impact of interventions include the use of appropriate measurement tools (objective measures, self or parent report); the research design and evaluation challenge of the inherent ‘nesting’ of children within classes, within schools; and the potential ceiling effect created by the number of children participating in school physical activity programs prior to an intervention which may dilute the intervention’s effect.

Three main types of interventions appear in the literature:
- **Educational interventions** target changing knowledge, attitudes and motivation in a classroom-based...
setting. While they are successful in achieving these goals, they have not changed physical activity levels with one exception: interventions focused on screen time have been shown to reduce sedentary activities.

Changes in the school physical environment, policies or practices, to provide more physical activity opportunities, have demonstrated a consistent positive effect. However, as most environmental changes are made within a broader whole school approach, and physical education based changes have traditionally not been considered environmental strategies, there are few studies where this is a stand-alone intervention.

Whole School or multi-component strategies combine physical activity promotion in the classroom, in physical education, at recess and school events, and involve family and the community. There is strong evidence that such an approach works for youth, and evidence is beginning to demonstrate success at the elementary level.

Next Steps
The authors call for continued research on school interventions and advise investment in these promising practices while the evidence base is built.

What have we learned?

- Playground markings and equipment to encourage play in school breaks have been successful in increasing physical activity in elementary schools.
- Classroom activity breaks hold promise for increasing physical activity levels of children in elementary schools.
- Physical education based strategies should include frequent classes, greater levels of moderate to vigorous physical activity in class, and trained teachers. Physical education and other school based physical activity initiatives should complement rather than replace each other.
- Programs targeted at youth are enhanced by involving youth themselves in planning and implementation.
- Successful multi-component strategies:
  - incorporate physical education instruction and health education focused on self-efficacy, enjoyment, sustained health behaviour change and reduced sedentary behaviour
  - provide action breaks throughout the school day,
  - need principal support, school physical activity planning teams, and communication strategies,
  - are enhanced by staff health promotion and the involvement of families and the community

Health professionals are called upon to emphasize the importance of physical activity, encourage family-based activities, support local schools in adopting an active school approach, and advocate for government and non-governmental agency support.

More Info...


What’s happening in Canada?
The CFLRI’s 2006 survey of schools reports that fully implemented policies exist to:
- provide a range of physical activities to students in 53% of schools
- hire teachers who have university qualifications in teaching physical education in 46% of schools
- provide daily physical education to all students in 35% of schools

In addition, the majority of Canadian schools encourage:
- teachers, parents and students to be involved in organizing physical activity events, services and facilities (67% of schools)
- teachers to act as role models of physical activity (61%)
- parents to coach or help with extra-curricular physical activities (57%)

A smaller proportion of schools encourage:
- active students to act as role models for their peers (45% of schools)
- parents to incorporate physical activity into family events (24%) or to be role models for their children’s activity (20%)