



Impact of the Balanced School Day on students and schools.

September 2012

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Background...

- The “balanced school day” schedule (BSD, also known as “balanced day schedule”) refers to the reorganization from a traditional school day schedule with two short breaks for recess and one longer break for lunch, to a schedule that has three academic periods (usually 100 minutes in length) separated by two longer breaks (usually 40 to 45 minutes) that combine food and physical activity.
- This practice originated in the Peel District School Board, and has been adopted by a number of school districts in Ontario and Canada. As of September 2011, 57 schools in HWDSB follow the balanced school day schedule.
- Proponents of the BSD schedule state that it improves student achievement by increasing time available for instruction, by decreasing transition time for students, and by increasing student attention because of two nutrition breaks instead of the traditional single break. Purported teacher advantages include more flexibility for scheduling, and increased opportunities to meet and plan with other teachers.
- Careful scientific studies comparing the benefits of a balanced school day schedule with a traditional school schedule have not been carried out, and much of the evidence for or against the balanced school day is based on teacher, staff, and/or parent surveys. Two exceptions are a report based on the experiences of two Hamilton schools who implemented BSD in 2003-04 (Woehrle, Fox, & Hoskins 2005) and recent study of physical activity in 2 Sudbury schools (Gauthier, Laurence, Thirkill, & Dorman 2012).

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Key Findings...

The Hamilton study used both consumer satisfaction data and independent observation of classrooms and school settings. Woehrle and colleagues concluded that “the BSD showed some favourable results (e.g., amount of instructional and transition time, school cleanliness), some positive trends (e.g., student concentration and behaviour in the hallway), and some mixed results (e.g., supervision time and outdoor time)”. Although the evaluation did not provide a direct assessment of the schedule’s impact on student achievement, some teachers and parents felt that students were achieving better.

This report is notable in that it used independent observation to gather several of the key measures, including amount of instructional time and transition time, student time on task, behaviour in the hallway, supervision time and outdoor time. Most other reports on the balanced school day relied entirely on consumer satisfaction data from some combination of parents, students, and staff.

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The Sudbury study collected data from pedometers worn by students in grades 3 to 6 from two different schools. One school was on a traditional school schedule, while the other was on a balanced school day schedule. Students on the balanced school day schedule took significantly fewer steps daily than the students in the traditional school day schedule.

The authors concluded “these results do not support the claim that the BSD offers increased physical activity. In fact, these results suggest that students enrolled in schools using the BSD may have reduced physical activity.”

Additional research that examines the short term and long term academic outcomes of students in BSD and traditional school day schedules, as well as changes in the physical activity and eating habits of those students is warranted. An additional question is whether teachers do change their planning and meeting activities with other teachers, and whether they find the longer blocks of instructional time more effective.

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Due to the small amount of research that has been completed, firm conclusions about the advantages and disadvantages of the BSD cannot be made. The studies we found did not find any overwhelming evidence for or against the BSD. Principals interested in adopting or continuing this schedule should proceed slowly and track and observe the outcomes within their schools.

BOTTOM LINE ACTIONABLE MESSAGE



The following search terms were used to retrieve articles:

- Balanced school day
- Balanced day schedule
- Balanced schedule

The following databases were searched:

- Campbell Collaboration (no articles found)
- Education Northwest Library (no articles found)
- EPPI Centre (no articles found)
- ERIC (Education Resources Information Center) *1 article found*
- Google Scholar *3 articles, 1 thesis found*
- PsychInfo (no articles found)
- What Works Clearinghouse (no articles found)

Total # of articles found: 4

References:

The articles summarized below were reviewed in preparation of this BLAM.

- Gauthier, A., Laurence, M., Thirkil, L., & Dorman, S., (2012). Examining School-based Pedometer Step Counts Among Children in Grades 3 to 6 Using Different Timetables. *Journal of School Health* 82:7 311-317

BACKGROUND: Advocates for the implementation of the Balanced School Day (BSD) schedule argue that this schedule will increase opportunities for physical activity. However, the relationship between this scheduling change and its impact on physical activity has not been examined. Thus, this study assessed levels of physical activity in students attending 2 different schools: 1 using the BSD and the other using the Traditional School Day (TSD) schedule.

METHODS: Participation of students between grades 3 and 6 was sought. Data were collected over 4 school days using pedometers. Independent Sample t tests and 1-way analysis of variance (ANOVA) were performed.

RESULTS: A total of 117 students participated. Overall, average daily step counts for boys (6972 ± 1952) were significantly higher than girls (5742 ± 1495 ; $p < .001$). These average step counts represent 47% and 48% of the recommended amount of steps needed for health benefits for children between the ages of 6 and 12. The average daily step count for students using the BSD schedule was 6017 (± 1666), while the average daily step count for students using the TSD schedule was 6788 (± 1987). The difference in steps (771) was statistically significant ($p = .03$).

CONCLUSIONS: These results do not support claims that the BSD offers increased physical activity. In fact, these results suggest that students enrolled in schools using the BSD schedule may have reduced daily physical activity. In addition, these results demonstrate that overall school-based physical activity is less than half of the recommended level; independent of school scheduling.

- Peebles, L., & Kirkwood, K (2011). The views of teachers towards the Balanced Day schedule in five elementary pilot schools in southern Ontario. *Teaching & Learning* 6:1 83-94

Using a case study method to describe the experience of the teachers of five Ontario elementary schools to implement the Balanced Day schedule in the 2004- 2005 school year, data sources included questionnaires completed by teachers from the pilot schools, which were administered at

the beginning of the year and at the end of the year, and three focus group interviews from one school, conducted twice during the year. Findings indicate that, overall, teachers perceived the Balanced Day to be more effective than the traditional schedule for student learning, and that the schedule also resulted in changes to their own instructional practices that positively impacted student learning.

- Woehrle, T., Fox S., & Hoskin B. (2005). An Examination Of The Balanced School Day Schedule Ontario Action Researcher, 2005 - oar.nipissingu.ca

Principals are always looking for effective ways to enhance the learning environment. The Balanced School Day (BSD) schedule, an alternative to the traditional schedule, reframes the school day by eliminating recess and lunch breaks and providing two scheduled nutrition breaks. Advantages and disadvantages to the schedule have been anecdotally reported. A two-year evaluation was completed to verify these claims. The BSD showed some favourable results (e.g., amount of instructional and transition time, school cleanliness), some positive trends (e.g., student concentration and behaviour in the hallway), and some mixed results (e.g., supervision time and outdoor time). Although the evaluation did not provide a direct assessment of the schedule's impact on student achievement, some teachers and parents felt that students were achieving better. Tracking will need to take place over the next few years to examine student achievement within these schools.

- Horbul, B. A., (2007) Nutrition and physical activity among grade 6 students in the Porcupine Health Unit area: A comparison with the balanced school day. *Thesis submitted to Nipissing University (Canada)*, MR38147.

In recent years, childhood obesity prevalence has increased, and there are calls for action to reduce our obesogenic environment in the school, home, workplace, and community. Approximately 28% of children in the Porcupine Health Unit area are overweight or obese.

This research attempts to determine local data on factors that contribute to overweight and obesity such as lack of consumption of vegetables and fruits, consumption of foods of low nutritional value, family meals, body image, and physical activity and inactivity.

School boards in Ontario, including one in the Porcupine Health Unit area, are implementing the balanced school day schedule. Is there a difference in these factors among children in a balanced school day schedule compared to the traditional schedule?

This research is of value for schools considering implementation of the balanced school day schedule and provides a greater understanding of local factors to generate solutions that will reduce our obesogenic environment.

NOTE: Results of this study were not available, and have not been published in a peer-reviewed journal.

Two additional reports on the BSD have been reviewed in the past. The first is from the Ontario Physical and Health Education Association and the second is a report on the Evaluation of the Balanced School Day Pilot Project from the Ottawa-Carleton District School Board. Neither of these reports is currently available on the internet.