

FEEDING OUR FUTURE:

THE FIRST- AND SECOND-YEAR EVALUATION

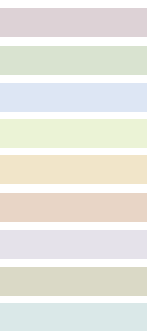


Easwaramoorthy Muthuswamy, Research Coordinator
Research & Information Services
Toronto District School Board
11/12-06



Table of Contents

ACKNOWLEDGEMENTS	3
EXECUTIVE SUMMARY	4
INTRODUCTION	7
Background	8
Organization of This Report	8
PROGRAM OVERVIEW	9
Program Goals	10
Program Rationale	10
The TDSB's Commitment to Student Nutrition	10
Evaluation	11
Evaluation Framework	12
Evaluation Objectives	12
EVALUATION METHODOLOGY	13
First-Year Methodology (2009)	14
Second-Year Methodology (2010)	14
KEY FINDINGS	15
Key Findings from the First-Year Evaluation (2009): Program Implementation	15
Program Promotion	16
Training and Orientation	16
Morning Meal Setting	17
A. Serving and Eating in the Classroom	17
B. Serving Meals in the School Foyer (Grab 'n' Go)	17
Menu	18
Program Participation	19
Decision-Making	20
School Operations	20
Resources	21
Perceptions of Key Stakeholders: Students, School Staff, Administrators, Volunteers, and Program Staff	22
Key Findings from the Second-Year Evaluation (2010): Program Impact	22
Participation	22
Impact Analysis	25
Other Possible Impacts: Changing Trends in Students' Eating Behaviour	29



CONCLUSIONS AND RECOMMENDATIONS 31

NEXT STEPS 33

REFERENCES. 34

TABLES

Table 1: Profile of Students Served in the First Year of the Feeding Our Future Program 12

FIGURES

Figure 1: Conceptual Framework for Analyzing the Effects of a Universal-Free School Breakfast Program (USBP) 12

Figure 2: Average Daily Program Participation Rate, 2008-09 19

Figure 3: Students’ Eating Habits on Most Days During a School Week 22

Figure 4: Participation in the Morning Meal Program During a School Week, 2009-10 23

Figure 5: Participation in the Program by Student Characteristics 23

Figure 6: Perceived School Meal Characteristics. 24

Figure 7: Top Ten Student Perspectives on Increasing Participation 24

Figure 8: Student Satisfaction with the Program 25

Figure 9: Top Ten Student Perspectives on the Benefits of the Morning Meal Program 25

Figure 10: Percentage of Students Suspended 26

Figure 11: Absenteeism Rate. 26

Figure 12: Percentage of Grade 7 and 8 Students Who Achieved “Excellent” or “Good” on the
Nine Learning Skills (2009-10 Term 3 Report Card) 27

Figure 13: Grade 7 and 8 Student Academic Achievement (2009-10 Term 3 Report Card) and
Eating in the Morning During a School Week. 27

Figure 14: Secondary School Student Academic Achievement (2009-10)
and Eating in the Morning During a School Week 28

Figure 15: Health in Comparison to Other Students 29

Figure 16: Health Compared to Previous School Year 29

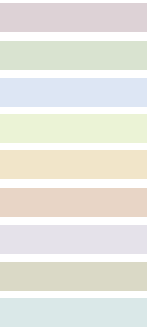
Figure 17: Eating Behaviour Snapshots, 2006-07 and 2009-10 30

Figure 18: Eating Behaviour Cohort Comparison, 2006-07 and 2009-10 30

APPENDICES

Appendix 1: Student Nutrition Program Grant Application Guide 2011/2012 35

Appendix 2: School Operations: First-Year Findings Trends in Achievement, Behaviour and Absenteeism 50



Acknowledgements

I would like to acknowledge a number of people who contributed to this evaluation and to the preparation of this report:

The evaluation advisory committee whose members provided guidance and input regarding the development of the evaluation framework, methods, tools, and communication materials; the committee members are:

- **Toronto District School Board (TDSB):** Glenford Duffus (Superintendent of Education), Monica Jacobs (Vice Principal), Patricia Manousos (District Manager, Nutrition Services), Larry Maloney (Vice Principal), Barbara Fry (Teacher), Meghan Roberts (Teacher), Patricia Vanetti (Vice Principal), Sunita Joshi (Vice Principal), Grace Lewis-Antoine (Teacher), Angela Dozzi (Nutrition Liaison Officer), Mena Paternostro (Coordinator Student Nutrition Program), Lorna Looby-Crosse (Vice Principal), Frankie Halls (Vice Principal), Monday Gala (Vice Principal), Ed Malabre (Principal), Carmen Wynter-Ellis (Principal), and Shosh Brenner (Principal).
- **Toronto Foundation for Student Success (TFSS):** John Embry (Chairman), Steven Harper (Finance Director), and Catherine Parsonage (Executive Director and CEO).
- **Toronto Public Health (TPH):** Judi Wilkie (Manager, Healthy Living), Denise Vavaroutsos (Supervisor, Student Nutrition Program), and Neera Chaudhary (Consultant, Nutrition Promotion).
- **Toronto Partners for Student Nutrition:** Fiona Bowser (Manager) and Lori Nikkel (Manager).

I would also like to thank Jennifer Ghadiali, (Program Evaluator, TPH) and Kimberly McColl (Consultant, Nutrition Promotion, TPH) for reviewing the student surveys and providing valuable suggestions, and Anne Turpin from the TFSS (Senior Student Nutrition Program Budget Analyst) for providing the program-related data and documents.

At Research and Information Services, TDSB: Tammy Denike (Office Manager), for coordination and support at all stages of this project, its development, and production of all communication materials, including this report; Karen Kozovski (Research and Information Analyst) who created the survey in Teleform, assisted in coordinating the survey printing and distribution process, coordinated the scanning and verification process, and prepared the dataset for further analysis; Matthew Botts (Data/Research Technician) for scanning and verifying all of the survey data; Pascal Huang (Research and Information Analyst) for data analyses and graphs required for this project; Bryce Archer (Research Assistant) for comments and suggestions on an early draft of this report; Research Coordinators, Jan O'Reilly, Maria Yau, and Rob Brown for providing guidance and support; and Silvia Girod (Manager) and Roula Anastasakos (Superintendent) for their encouragement and support throughout this project.

Thanks to the TDSB Nutrition Task Force Chair, Trustee Michael Couteau and The Nutrition Task Force members for supporting this evaluation and ensuring funding to do this research.

Finally, thanks to all the students who participated in the focus groups and survey, and the school staff, teachers, school administrators, and volunteers for participating in the interviews and sharing their candid thoughts about the program.

Executive Summary



The Feeding Our Future program is a student nutrition program in the Toronto District School Board (TDSB) that offers nutritious meals to all students regardless of their ability to pay. Initiated in 2008 as a two-year pilot program, it has continued beyond the planned two years. This program aims to provide a healthy morning meal to about 6,000 students in four middle schools (Grades 6 to 8) and three secondary schools located in the Jane and Finch neighbourhood.



The objective of this evaluation was to monitor the implementation of the program across these seven sites to gain an in-depth understanding of strengths and areas for improvement and to determine the impact of the program on student health, behaviour, attendance, attention, and achievement.

Both qualitative and quantitative methods were used to evaluate the Feeding Our Future program. Qualitative methods were predominantly used in the first year of the program evaluation. The first-year evaluation mostly focused on implementation-related topics such as training and orientation, meal setting, promotion, participation, decision-making, school operations, menu, and resources. These findings were shared with school administrators and program staff, leading to modifications in the implementation of the program. A student survey was conducted at the end of the second year of the program (Spring 2010). It covered topics such as student participation in the program, eating habits, quality and quantity of the food provided, perceived well-being, and satisfaction with the program. This evaluation also used student data (e.g., attendance, suspensions, achievement) from the Student Information System.

Program Delivery and Student Participation

Students from six of the seven schools participating in the program had the morning meal served and eaten in the classroom around 10:00 a.m. The remaining school, a secondary school, chose to distribute the morning meal in the school foyer before the start of school; students then ate their meal in the school hallways, classroom (if allowed by the teacher), cafeteria, or other parts of the school. In all seven schools, the morning meal was also available in the school office. Toronto Public Health (TPH) provided expertise and ensured compliance with respect to the nutritional value of the meal and food safety, handling, and sanitation issues by regularly sending in its dietitians and public health inspectors. They also offered free workshops on safe food handling, sanitation, and nutrition. Generally, the meal program affected the school operations in a minor way only.

Almost all middle school students (97%) participated in the program, with the vast majority (82%) participating at least three days in a school week. In the participating secondary schools, the majority of students

(85%) participated in the program and nearly half (46%) participated at least three days in a school week.

Morning meals served in classrooms around 10:00 a.m. provided all students with an opportunity to eat a nutritious meal. However, meals provided in the school foyer tended to restrict student participation in the program. Student participation was also affected by perceptions about the nature of the food (e.g., freshness, taste, variety) and the ways it was prepared.

Outcomes

In the interviews conducted at the end of the first year of the implementation of this program, most of the school administrators, teachers, and school and program staff indicated numerous benefits resulting from eating morning meals, such as:

- improved student behaviour or attitude;
- reduced tardiness;
- reduced incidence of disciplinary problems; and
- improved ability to stay on task.

At the end of the second year of the implementation of this program, outcomes related to attendance, suspensions, and achievement were studied using data from 4,050 student surveys, the Student Information System, and Safe Schools data.

To measure the relationship between academic achievement and eating a morning meal, survey responses from students who participated in the program were matched with the students' achievement data. The findings indicate that:

- The Grade 7 and 8 students who ate morning meals most days in a school week achieved better results on their learning skills (i.e., excellent or good) compared to those students who ate in the morning on only one to two days or who never ate in the morning. Differences were noticeable in the areas of independent work (70% vs. 56%), initiative (65% vs. 51%), problem solving (66% vs. 53%), and class participation (72% vs. 60%).
- The information from report card data for the Grade 7 and 8 students shows significant differences in the case of Reading, where 61% of students who ate the morning meal on most

days in a school week achieved or exceeded the provincial standard (Levels 3 and 4) compared to half (50%) of the students who ate morning meals on only a few days or not at all. Fewer students (28%) who ate morning meals at least three days in a school week were at-risk in Science, compared to nearly half (44%) of those students who ate morning meals only one to two days or who never ate them.

- Secondary school students who ate morning meals on most days during a school week were on-track for graduation by accumulating sufficient credits and achieved better scores in Mathematics than those who ate morning meals on fewer days during the school week or who never ate in the morning.
- Most students indicated that the program fulfilled their basic needs and improved their well-being. Students who ate morning meals on most days during a school week were more likely to rate their health as excellent or good (75% vs. 58%) and to indicate that their health had improved since the last school year (63% vs. 45%).
- Students who ate morning meals on most days during a school week were less likely to be suspended and more likely to come to school regularly.

The findings in general suggest that school breakfast programs providing access to a healthy morning meal to all students in their classrooms can be a valuable intervention measure to facilitate student success and well-being.

Recommendations

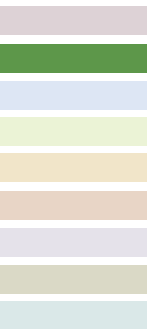
Based on these findings, it is recommended that the Feeding Our Future program should continue to:

- provide morning meals, preferably in the classroom so as to ensure maximum participation;
- promote the meal as cleanly prepared and nutritious fresh food;
- explore the possibility of rotating menus more frequently and making regular changes based on student surveys;
- seek to involve more students, parents, and community members as volunteers; and
- explore ways to better meet the best practices outlined in the TPH Student Nutrition Program Funding Criteria (see Appendix 1).

Introduction



This report presents the findings from the evaluation of the Feeding Our Future program, a universal (i.e., provided to all students regardless of their ability to pay) morning meal program that has been operating in seven Toronto schools since 2008.



Background

Data from the Toronto District School Board's (TDSB) 2006 Student Census¹ indicated that the majority of students (51% of elementary school students and 68% of secondary school students) from the Jane and Finch neighbourhood in Toronto came to school without eating breakfast every day. These findings are not surprising; the Jane and Finch neighbourhood faces considerable socio-economic challenges, such as elevated rates of poverty, immigration, and violent incidents, and health challenges, such as elevated rates of diabetes, obesity, and nutrition/eating disorders (e.g., Williams & Clarke, 2003; Prescod, 2008; Glazier & Booth, 2007). The findings from the 2006 Student Census coupled with the request from school administrators for a nutritious morning meal for all students led to the launch of the Feeding Our Future program.

The pilot program was jointly funded by the Ministry of Children and Youth Services, the City of Toronto, and the Toronto Foundation for Student Success (TFSS). Parental contributions and fundraising were also required to fund this program. The TFSS managed the funding and administration of the program along with the TDSB's Student Nutrition Services, with the support of Toronto Public Health (TPH) and the Toronto Partners for Student Nutrition, which includes organizations such as FoodShare. Participating schools were required to qualify for the program through an application process administered by TPH in order to access the funding from the City of Toronto.²

As part of the funding criteria, both TPH and the Ministry of Children and Youth Services required the schools to provide

nutritious food based on Canada's Food Guide and to offer a variety of healthy food choices suitable to the cultures of the community.³ There were also requirements for food safety, handling and sanitation, accessibility, budget, and other accountability and best practices (see Appendix 1). As part of the funding arrangements, TPH ensured compliance with respect to the nutritional value of the food provided through periodic evaluations of and consultations on the menus and food by a public health dietician/nutritionist, and with respect to food safety handling and sanitation through inspection of kitchen facilities by a public health inspector. It also offered free workshops on safe food handling, sanitation, and nutrition.

In May 2008, the TDSB approved a recommendation from the Nutrition Task Force to evaluate the impact of the Feeding Our Future program. The TDSB's Research and Information Services department was asked to carry out this evaluation.

Organization of This Report

This report is divided into four major sections. The first section presents an overview of the program, its goals and rationale, the evaluation, and its objectives. The second section describes the evaluation methodology. The third section presents key findings organized into two subsections: the first-year evaluation (2009) focuses on the implementation of the program; the second-year evaluation (2010) focuses on the program's impact. The last section of the report provides a summary of the main findings, discusses their implications, and provides recommendations for action.

¹ For an overview of the 2006 Student Census see http://www.tdsb.on.ca/wwwdocuments/about_us/external_research_application/docs/2006StudentCensusSystemOverview1.pdf.

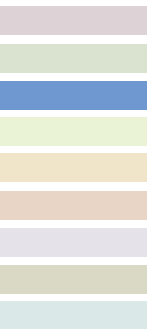
² See http://www.toronto.ca/health/student_nutrition_program/ for complete details on the application process.

³ See the Ministry of Children and Youth Services nutrition guidelines: http://www.children.gov.on.ca/htdocs/English/topics/schoolsnacks/nutrition_guidelines.aspx.

Program Overview



The Feeding Our Future program aimed to provide a nutritious morning meal to all students in four middle schools (Grades 6 to 8) and three secondary schools in the TDSB located in the Jane and Finch neighbourhood. Started as a two-year pilot program, it has continued beyond the planned two years. Six of the schools chose to have the morning meal served and eaten in the classroom. The remaining school, a secondary school, chose to provide the morning meal in the school foyer; students then ate the meal in the cafeteria or in other parts of the school. A more detailed description about how the program was implemented is presented as part of the first-year findings (see p. 15).



Program Goals

The following are the short-term and long-term goals of the program:

Short-term Goals

- **To improve**
 - health;
 - student behaviour;
 - attention in school;
 - attendance; and
 - student achievement.

Long-term Goals

- **To improve**
 - graduation rates; and
 - nutrition for entire families; and
- **To reduce**
 - violence in the school and community; and
 - diabetes and hypertension.

Program Rationale

Proponents of universal school breakfast programs (i.e., programs that are available to all students regardless of their ability to pay) believe that making school breakfast free to all students removes social stigma and financial barriers to participation and that, as a result, more children, especially those who might otherwise not eat breakfast or might eat nutritionally inadequate breakfasts, will consume breakfast at school. Since school breakfasts are nutritious and improve student cognition and classroom behaviour, it is expected that universal school breakfast programs will improve student academic achievement (Ponza et al., 1999).

The reasons for implementing student nutrition programs such as the Feeding Our Future program are well illustrated in the TDSB's commitment to student nutrition programs.

The TDSB's Commitment to Student Nutrition

The Toronto District School Board (TDSB) recognizes the direct relationship between healthy nutrition and the academic achievement of our students.

Healthy food is necessary for student development - physical, emotional, intellectual and social. Well-nourished children are ready and able to learn in our classrooms. Students participating in nutrition programs are able to concentrate better, retain and apply information more effectively, and are more likely to demonstrate positive behaviours and relationships with peers.

Nutrition programs are open to all students from Kindergarten to Grade 12, regardless of their ability to contribute financially to the program.

Nutrition programs also provide teachers with the opportunity to eat with the children and incorporate nutrition education into the curriculum.

The TDSB is committed to working with its community partners to ensure that students have equitable access to high quality school-based nutrition programs; and through curriculum activities, they have opportunities to develop an appreciation for good nutrition habits that will last a lifetime. (TDSB Nutrition Liaison Team, n.d., p. 1)

The TDSB's commitment to student nutrition is supported by an international literature review by the Board's Nutrition Task Force (NTF) and other recent literature reviews. In a 2009 report, based on their literature review, the NTF observed:

We were not surprised to find that there are strong physiological foundations to explain the link between nutritional intake and academic achievement, as well as evidence that children who experience malnutrition show increased behavioural disorders and aggressive behaviour as they grow older. What we were surprised to find was that Canada is the only westernized country that does not have a national subsidized student meal program. (Nutrition Task Force, 2009, p. 4)



An earlier study by the Toronto Board of Education (Brown, 1993) indicated school food programs have some effect on student absence and lateness, and improved students' knowledge of nutrition principles.

Below are some findings from recent literature reviews that capture the reasoning behind providing a morning meal or breakfast at school.

Researchers at the Harvard School of Public Health and Harvard Medical School analyzed scientific research on the impact of school breakfasts on children's health and learning. They concluded the following:

- Serving breakfast to school children who don't get it elsewhere significantly improves their cognitive or mental abilities, enabling them to be more alert, pay better attention, and to do better on Reading, Math, and other standardized test scores.
- Children who eat breakfast are sick less often, have fewer problems associated with hunger (such as dizziness, lethargy, stomach aches, and earaches), and do significantly better than their non-breakfasted peers in terms of cooperation, discipline, and interpersonal behaviours (Brown, Beardslee, & Prothrow-Stith, 2008).

J. M. Murphy (2007), in his updated review on Breakfast and Learning, notes that literature reviews published in the late 1990s set the stage for understanding this new evidence by showing the associations between regular breakfast consumption/non-consumption and student outcomes. Research over the past five years has provided new evidence for these associations and definitive evidence for others:

- Most notably, universally free school breakfast programs increase the rate of overall breakfast eating and are judged to improve learning by teachers and school principals.

- These findings, along with accumulating evidence for the danger of nutritional risks, provide a clear rationale for continued efforts to promote breakfast eating for children, schools, and the nation as a whole.

A more succinct review of literature by Levin (2011) illustrates the following:

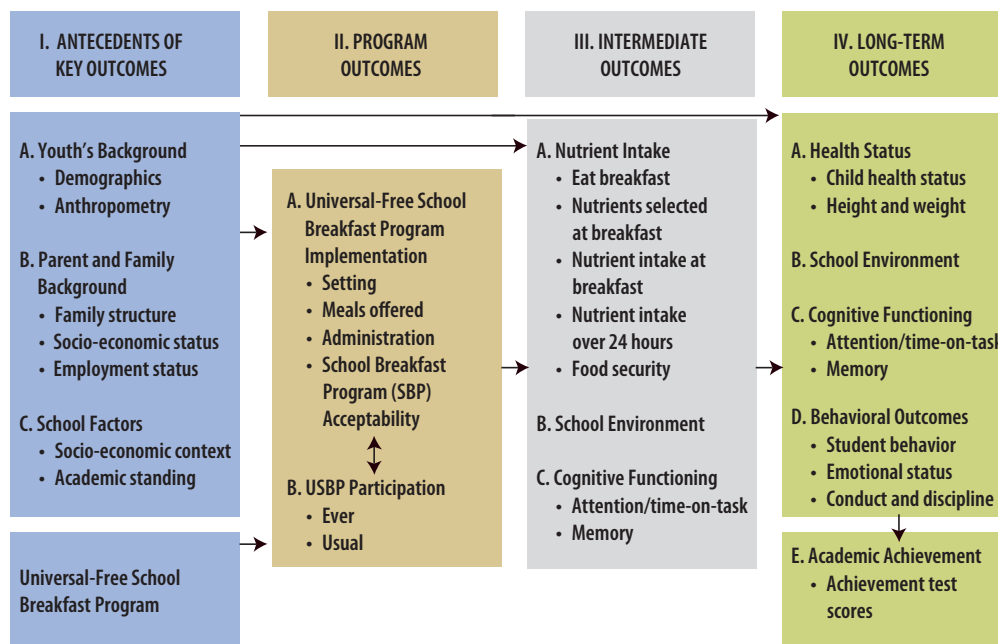
- Skipping breakfast and experiencing hunger impair children's ability to learn.
- Eating breakfast at school helps improve children's academic performance.
- School breakfasts improve student behaviour and learning environments.
- Breakfast in classroom programs and programs offering breakfast free to all children in the cafeteria yield other positive results for health and learning.
- Beliefs about breakfast can influence participation in school breakfasts.
- School breakfasts can improve children's nutrition and protect against obesity.
- School breakfasts decrease the risk of food insecurity.

Evaluation

Evaluating a universal morning meal program requires a clear understanding of the linkages of various aspects or processes of the program and background variables and how they influence the outcomes. For this evaluation, an evidence-based conceptual framework by Ponza et al. (1999) informed the development of the evaluation methodology (see Figure 1).

Evaluation Framework

Figure 1: Conceptual Framework for Analyzing the Effects of a Universal-Free School Breakfast Program (USBP)



Source: Ponza et al. (1999)

Evaluation Objectives

The following are the objectives of this evaluation:

- to monitor the implementation of the program across sites to gain an in-depth understanding of strengths and areas for improvement; and
- to determine the impact of the program on student health, behaviour, attendance, attention, and achievement.

Table 1: Profile of Students Served in the First Year of the Feeding Our Future Program

	Middle Schools	Secondary Schools	Total
Number of Students	2,289	3,154	5,443
Age	From 10 to 14	From 13 to 21	From 10 to 21
Female	1,088 (48%)	1,494 (47%)	2,582 (47%)
Born in Canada	1,678 (73%)	1,898 (60%)	3,576 (66%)
Home Language- English	840 (37%)	1,344 (43%)	2,184 (40%)

Data source: The TDSB Student Information System, October 2008 snapshot.

Note: The number of students served varies every school year based on the number of students enrolled as well as within a school year due to a number of reasons such as mobility, drop out, etc.

Evaluation Methodology



The evaluation methodology was informed by literature reviews and studies, the conceptual framework by Ponza et al. (1999), and an **evaluation advisory committee**. The evaluation advisory committee was constituted to advise on the evaluation framework, methods, tools, and communication materials. This committee consisted of school administrators, teachers, and staff from the participating schools; representatives from partner organizations (TPH, FoodShare, and TFSS); program staff; and the Board's Superintendent of Education for the area.

Both qualitative and quantitative methods were used to evaluate the Feeding Our Future program. The first-year evaluation focused on program implementation (i.e., training and orientation, meal setting, promotion, participation, decision-making, school operations, menu, and resources). The second-year evaluation focused on the program's impact on students.

First-Year Methodology (2009)

The first-year evaluation was based on the following:

1. A total of 52 interviews with:
 - a. School administrators (7);
 - b. School nutrition coordinators (7);
 - c. Teachers and educational assistants (18);
 - d. School head caretakers (7);
 - e. Program managers/staff (2); and
 - f. Volunteers (i.e., students, parents, grandparents, and others) (11).
2. Three student focus groups (one middle school and two secondary schools).
3. Site visits to all seven schools.
4. A review of the program records for estimates on participation rates and implementation-related communications.
5. A review of system data for pre- and post-program comparisons of school level changes in terms of achievement, absenteeism, and suspensions (See Appendix 2).

These findings were shared with the school administrators and program staff, leading to modifications in the implementation of the program.

Second-Year Methodology (2010)

The second-year evaluation was based on a student survey that was sent to all students in the participating schools. It was voluntary and confidential but not anonymous. The student survey covered topics such as student participation in the program, eating habits, quality and quantity of the food provided, perceived well-being, and satisfaction with the program. The overall response rate for the survey was 76%. The return rate for the middle schools was higher (93%) than it was for the secondary schools (64%).

The student surveys (4,050) were matched with information collected from the TDSB's Student Information System and other datasets such as the 2008 Parent Census,⁴ the 2006 Student Census, and Safe Schools to review the program and its outcomes.

⁴ For an overview of the 2008 Parent Census see http://www.tdsb.on.ca/wwwdocuments/about_us/external_research_application/docs/2008ParentCensusK-6SystemOverviewAndDetailedFindings.pdf.

Key Findings



Key Findings from the First-Year Evaluation (2009): Program Implementation

This section presents the description of the following key implementation components, their strengths, and areas for improvement:

- Program Promotion
- Training and Orientation
- Morning Meal Setting
- Menu
- Program Participation
- Decision-Making
- School Operations
- Resources
- Perceptions of Key Stakeholders

Program Promotion

Description

- Letters about the program were sent to students' homes.
- Mention was made of the program in school newsletters.
- The program was verbally explained to students in school announcements.
- The program was mentioned on TV and radio and in newspapers.
- Posters about the program were displayed within participating schools.
- To inaugurate the program, in one secondary school all students were invited to the school cafeteria and were served breakfast by the vice principal.

Strengths

- The program was promoted to parents, students, and the community in multiple ways.

Areas for Improvement

- **Teachers and staff:** The program needs to be promoted among secondary school teachers and school staff so that they know about the program and its implications for teaching and learning.
- **New students:** There should be special promotion of the program to new students who enter the school after the beginning of term.
- **Menus and nutritional value:** The menu needs to be promoted through posters in classrooms, providing students and teachers with information on the nutritional value of the menu, and stressing the cultural background of food. Menus should also be sent home with students so parents are aware of the nutritional value and can be assured that the menu is culturally appropriate. These measures will help to increase participation by boosting buy-in to the program.

Training and Orientation

Description

- Almost all school nutrition coordinators have experience working in school food programs or in school settings (e.g., school cafeteria, lunch room).
- Two-day program orientation sessions were held by TDSB nutrition liaisons or the staff from Student Nutrition Services for school nutrition coordinators and school administrators on operational aspects of the program (e.g., preparing food, serving food, etc.).
- Most school nutrition coordinators also attended TPH food safety and nutrition workshops, as did student volunteers from one of the secondary schools.
- The TFSS and nutrition liaison/Nutrition Services staff provided support to school staff in the initial set-up of the program and guidance throughout the year.

Strengths

- Staff who attended the orientation sessions and workshops expressed satisfaction with the training/orientation and found it useful.
- Considerable support was provided by the TFSS and nutrition liaison/Nutrition Services staff in the initial set-up of the program, and guidance was given throughout the year.

Areas for Improvement

- Provide **orientation/training for teachers, school staff, and student volunteers** to assist them in managing the morning meal in the classroom (e.g., serving, eating, cleaning, trash removal, and regular classroom activities during the meal).
- Provide **volunteer management training for administrative and school coordinators/staff** (e.g., recruitment, retention, training, the role of the volunteer, parent/family volunteers, community and corporate volunteers) through the use of the motivations identified in this study (see p. 21).



Morning Meal Setting

Of the seven schools that participated in the program, six chose to have the morning meal served and eaten in the classroom. The remaining school, a secondary school, chose to distribute the morning meal in the school foyer; students then ate their meal in the school hallways, classroom (when allowed by teachers), cafeteria, or other parts of the school. In all seven schools, the morning meal was also available in the school office, and in one school it was also available in the guidance counsellor's office.

A. Serving and Eating in the Classroom

Description

- The morning meal was distributed to classrooms by student volunteers.
- The meal was served between 9:40 a.m. and 10:30 a.m. in most schools, and in one secondary school students were allowed to eat the meal after 11:00 a.m.
- Some teachers participated in serving food, which required gloves, and did minor cleanup, although clean-up was usually done by students.
- During the morning meal time, most teachers (except for those in special education classes) asked students to do seated work (e.g., reading, independent work, answering language questions, etc.).
- In one of the secondary schools, the meal time was used for making school announcements.
- Generally it took about 10 to 15 minutes to serve and eat the meal and to clean up.

Strengths

- More students were likely to participate because of timing, convenience, familiarity, reduction in stigma, and eating as a social activity.
- Many teachers acted as models by eating the morning meal with their students.
- There were opportunities for teachers to encourage students to eat, talk about healthy eating habits, model proper table etiquette, share information, appreciate the value of food, promote recycling, etc.
- Eating together in the class has the potential to create social bonding with peers and teachers.

Areas for Improvement

- **Hygiene:** An alternative area should be provided for eating during gym class. Schools need adequate cleaning materials (i.e., sprays, cleaners, sponges, paper towels, nonalcoholic wipes, and hand sanitizers).
- **School cleanliness:** Students need enough time to eat and clean-up. Recycling bins and carpets need to be cleaned more frequently.
- **Supervision:** Protocols are needed for supervision and classroom activities during meals.
- **Timing/delivery:** Students should be allowed to eat around 10:00 a.m. (especially in secondary schools), and food must be maintained at the proper temperature (e.g., hot foods in insulated bags, fruit stored in a refrigerator).
- **Access to water:** Although students have access to water, there is a need to explore ways to provide readily available access to drinking water in classrooms.

B. Serving Meals in the School Foyer (Grab 'n' Go)

Description

- Between 8:00 a.m. and 9:00 a.m., the morning meals for students were placed in the school foyer; students picked them up and usually ate in the cafeteria, hallways, or in other parts of the school.
- Toasters and/or warmers were provided for selected food items as required.
- Grab 'n' Go meals were generally not allowed in the classrooms.

Strengths

- Easier to administer and lower cost than classroom meals (e.g., did not require food bins, fewer volunteers were required, avoided a mess in the classrooms, required less clean-up, etc.).
- The cafeteria supplied the necessary clean space and access to water or drinks.
- The time for serving the meal catered more to those who did not eat breakfast before coming to school.
- Had the ability to provide hot food.

Areas for Improvement

- **Timing:** Serving meals too early restricts participation in the program. Many students indicated that they felt hungry only around 10:00 a.m. or around the second period.
- **Late arrivals:** Meals were not available for those who arrived late. Late arrivals could usually only get fruit.
- **Time to eat:** Since the meals were not generally allowed in the classrooms, students had less time to eat.
- **Food pick-up location:** Students who do not enter the school through the main door tended not to pick up the meal. Even though the meals were available in the school office, some students felt uncomfortable picking them up there.
- **School cleanliness:** Students tended to eat in various parts of the school thereby increasing the need for cleaning and garbage collection in various parts of the school.
- **Availability of food:** To improve the students' access to the school meal program, the school needs to consider making all food items available until 10:30 a.m. in the school foyer. The best solution, however, would be to allow the morning meal to be served and eaten in classrooms.

Menu

Description

- The menu was developed by the TDSB Student Nutrition Services department in consultation with TPH and with input from partners and schools. Menus are based on Canada's Food Guide as outlined by TPH.
- Meals generally included the three food groups with at least one full serving from each (i.e., vegetable and fruit, grain products, milk and alternatives). However, at least one school tended to provide food from only two food groups. Over the year, the menu was modified several times for various reasons (e.g., availability of menu items, to reduce cost and waste, to cater to student needs, to ensure variety, as a result of suggestions from TPH and partners, or for ease in preparation, packing, and delivery).
- Drinking water was always available.

- All food items were culturally appropriate, peanut free, and accommodated students' allergies.
- Initially there was considerable food waste (e.g., because students were unfamiliar with certain food items, because of stigma, and because of problems with the temperature of some foods).
- The menu was improved with input from TPH, student menu surveys, and school staff associated with the program.
- Food waste was reduced when the menu improved, the stigma associated with the program decreased and/or was eliminated, and when food ordering was based on actual consumption.
- TPH dieticians made unannounced visits to schools to monitor compliance with nutritional standards and provide feedback for improvements.

Menu Quality and Quantity

- Almost all teachers and students indicated that the food provided was of good quality, nutritious, and sufficient.
- Students reported that it reduced cravings and they ate less junk food, while teachers reported increased concentration, calming effect on students, etc.
- School nutrition coordinators mentioned that food items usually declined by students were white milk, wraps, hummus, broccoli, waffles, apple sauce, tuna sandwiches, cereal, bagels without jam, pizza served cold, pita bread, salsa, English muffins, carrots without dip, and bananas.

Student Wish List

- More choice and variety, especially to accommodate different ethnic backgrounds.
- More warm food and more spicy food.
- Food served at the proper temperature.
- Fruits (strawberries, fruit bowls) instead of vegetables.
- Beverages every day ("After eating, we feel thirsty"): water and a larger variety of juices.
- More carrots with dip, toast, carrot muffins, chocolate milk, banana cake, yogurt tubes, and granola bars.



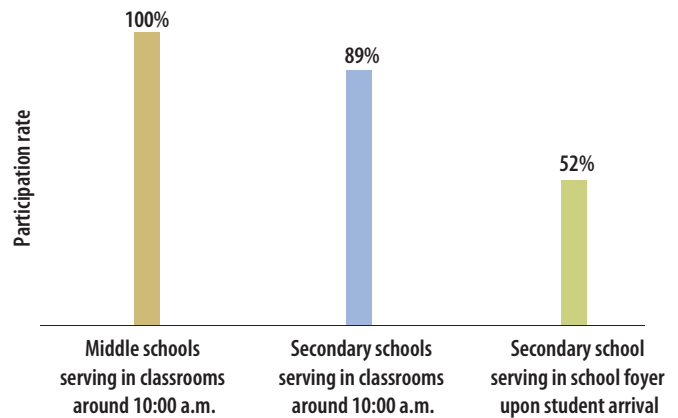
Areas for Improvement

- **Modifications to menu items:** While periodic modifications to the menu are desirable, changes to the menu need to be done in consultation with students and any changes made need to be appropriately communicated to students and teachers. For example, students did not like the discontinuation of pancakes and granola bars and the reduction in availability of chocolate milk (it was reduced from being served twice a week to only twice a month) and did not understand the rationale behind those changes.
- **Monitoring:** Menus should be monitored to ensure uniformity and consistency (e.g., two teachers mentioned that there were instances where students in different grades in the same school got different food items).
- **Menu surveys:** Almost all students and teachers agreed that the menu implemented in March 2009 was the best and hoped it would continue in the next school year; almost all expressed the need for a menu survey in the next school year.
- **Communications:** Parents and students (especially new students) need to be made aware of the menu and that meals are available to all students regardless of their ability to pay.

Program Participation

The success of any meal program hinges on how many students eat the meal provided. To assess this, data based on program records on the number of meals ordered throughout the year and the number of students enrolled as of October 2008 was used.⁵ The average of the number of meals ordered per day during the 2008-09 school year divided by the number of students in each school (see Figure 2) indicates that more students ate the school meal when it was provided in the classrooms around 10:00 a.m. (100% in the middle schools and 89% in the secondary schools) versus picking it up on arrival to school (only 52% in the secondary school).

Figure 2: Average Daily Program Participation Rate, 2008-09



Data sources: TFSS program records and the TDSB's Student Information System.

Description

- Participation was initially low due to stigma and an unfamiliar menu.
- Modifications to make the menu more acceptable to different groups of students led to increased participation and reduction/elimination of stigma.
- Participation was almost universal in the middle schools; there was comparatively less participation in the secondary schools.

Strengths

- School administrators, program staff, school staff volunteers, and program partners worked collaboratively to find ways and means to improve the program participation throughout the year.
- Proven delivery models were used.

Areas for Improvement: Focus on Timing and Delivery

- Providing the **morning meal in classrooms around 10:00 a.m.** and allowing **sufficient time to eat** it would enable more secondary school students to participate in the program.
- Teachers in the secondary schools need to encourage or at least allow students to **eat in the classroom.**

⁵ For more information on the calculation of the average daily participation rate see <http://www.fns.usda.gov/tn/healthierus/calculatingADP.pdf>.

Decision-Making

Description

- A centrally planned common menu was decided on by TDSB Nutrition Services with input from partners and schools.
- Schools generally had substantial autonomy in how the program was implemented.
- Schools determined when and where the meals were to be served, the time allocated for eating, and the mechanism for delivery.
- Stakeholder participation in decision-making included school administrators, teachers, students through feedback surveys, input from student volunteers, and school nutrition coordinators. Parents were kept informed through letters and school council meetings.
- Generally, vice principals supervised the program by working with nutrition liaison/Nutrition Services staff, school nutrition coordinators, teachers, students, parents, and caretakers; they were also involved in program promotion.
- Teachers were involved primarily through informal consultations and staff meetings; two schools mentioned that they had teachers represented on a formal committee.
- When implementing the program, schools took into consideration how to:
 - maximize the time spent on classroom teaching;
 - ensure students had time to eat the meal;
 - keep teachers happy; and
 - avoid mess in the classroom.
- After implementation, teachers' main concerns were loss of teaching time, disruption, mess in the classroom, hygiene, and additional responsibilities.

Strengths

- Program staff, program partners, school administration, volunteers, and school staff collaborated to make modifications to the program to meet the needs of their particular school.

Areas for Improvement

- **Involvement:** Steps are needed to boost formal involvement of teachers, parents, students, school nutrition coordinators, and head caretakers in the decision-making process.

School Operations

Description

- One of the key issues in running a school meal program is the impact the program has on regular school and classroom activities and overall administration. School administrators and teachers were asked how the program affects their day-to-day running of the school.

School Administrators

- The program requires additional staffing (i.e., the need to hire school nutrition coordinators).
- It increases the workload for school administrators, teachers, student volunteers, office staff, school nutrition coordinators, and caretakers.
- There is no impact on the time classes begin.
- One secondary school integrated meal preparation and delivery into its special education program and leadership development classes to promote skill development.
- Almost all administrators perceived that overall student attitude and behaviour improved following the implementation of this program.
- Four of the seven administrators perceived a drop in the rate of tardiness.
- Five out of seven administrators perceived a reduction in the incidence of disciplinary problems.

Teachers

- Nine of the 14 teaching staff in whose classrooms the morning meal was served played some role in serving the meal.
- A few teachers (4) had to clean up after the morning meal was served.
- Twelve of the 14 teachers indicated that there was only a minor reduction or little or no reduction in instructional time due to serving the morning meal in the classroom.
- Almost all teaching staff (13 out of 14) were either very positive or positive about serving/eating breakfast in the classroom.
- Many teaching staff (9 out of 14) reported that they had minor problems due to spillage.
- Most teaching staff perceived an improvement in student behaviour or attitude and student ability to stay on task.



Volunteers and Their Motivations

- Volunteers helped the school nutrition coordinators in activities related to the preparation of food, packing, filling bins, organizing bins, recycling packing materials, cleaning, serving food in the classroom (or the school foyer), carrying bins to classrooms, etc.
- Student volunteers reported the following motivations: the work was interesting, they got to know people and make friends, volunteering enabled them to meet their community service requirements for graduation, and they developed skills (e.g., people skills and work experience).
- Adult volunteers (e.g., parents, grandparents, etc.) reported the following motivations: they liked to help the school and the kids, it helped them learn English, they enjoyed working with children, and they wanted to give back to community.
- Some adult volunteers also mentioned that the school was nearby and made it easier for them to volunteer. A couple of volunteers mentioned that volunteering for this program helped them fulfill requirements to receive social assistance.

Strengths

- School administrators, teachers, and school staff were committed to taking on additional responsibilities.
- The program has resulted in no major changes in the school's day-to-day functioning.
- It has resulted in no major reduction in instructional time for most teachers.
- It has improved student behaviour or attitude, reduced tardiness, reduced incidence of disciplinary problems, and improved student ability to stay on task (see also Appendix 2).
- It has provided an opportunity for students and other volunteers to contribute and develop skills.

Areas for Improvement

- **Workload:** Measures need to be taken to see how the increased workload reported by school administrators, school nutrition coordinators, caretakers, and teachers/staff directly associated with the program can be reduced, perhaps by enhancing the role of volunteers and/or recruiting more volunteers.
- **Volunteers:** Steps need to be taken to recruit, train and retain more volunteers.

- **Coordination:** Better coordination of the meal is needed on days when students go on trips or have tests.
- **Integration with other school programs:** In one secondary school the program was integrated with special education and leadership classes. While the idea behind this method of delivery is a good one (i.e., fulfilling the educational goals of the students with special education needs and leadership class students), it delayed delivery of the morning meal and reduced the opportunity for others to volunteer.

Resources

Description

- Over the 2008-09 school year, more resources were allocated to participating schools in the form of refrigerators; retrofits to modify the storage space into preparation areas; installation of sinks and electric plugs; and provision of extra garbage bins, storage bins, carts, and other food-preparation-related materials.
- Retrofits were also made to meet the public health code.
- Parents were asked to make a voluntary contribution of \$20 to meet program costs, resulting in a total contribution of \$6,878.
- Volunteers contributed more than 5,000 hours with an estimated value of about \$50,000.

Strengths

- Considerable resources were allocated to schools to implement the program.

Areas for Improvement

- **Storage space:** This remains an issue in a few schools. In two schools, the program was operated out of classrooms; in one school, it operated out of the staff room.
- **Ventilation:** In some of the storage rooms, excess heat from refrigerators and lack of ventilation created operational difficulties and the inability to keep proper food temperatures.
- **Temperature:** Refrigerators used in the program need temperature indicators to ensure that food items are maintained at the correct temperature.
- **Preparation space:** Some schools lacked sufficient space for meal preparation.
- **Hair restraints:** All staff/volunteers involved in preparing/

packing the meals need to be provided with hair restraints.

- **Family volunteers:** More could be done to solicit parents and family members to volunteer through the use of the volunteer motivations identified above (see p. 21).
- **Additional volunteers:** Community organizations, school settlement workers from the Settlement Education Partnership in Toronto (SEPT), and corporations should be considered as potential sources for recruiting volunteers.

Perceptions of Key Stakeholders: Students, School Staff, Administrators, Volunteers, and Program Staff

- All school administrators believed that major stakeholders were either extremely positive or positive toward the program.
- Almost all teachers viewed the program as either extremely positive or positive.
- All teachers interviewed understood the importance of a morning meal in preparing a student to learn.
- All school nutrition coordinators indicated that students and staff attitudes toward the meal program became more positive over the year.
- Volunteers mentioned that it was a great program and very helpful to students who do not eat breakfast at home.
- Students generally spoke very positively about the program.
- Caretakers were more neutral toward the program; a few felt that it was not a good idea to allow food in classrooms. Almost all indicated that the program has increased their workload.
- The TFSS and nutrition liaison/Nutrition Services staff as well as school nutrition coordinators were highly committed to and extremely positive about the program.

The findings from the first-year evaluation (2009) were shared with the evaluation advisory committee, of which all key players of the program are members. While program managers indicated that there were not sufficient funds to implement all the suggested improvements, the findings were used to make a number of program improvements such as modifications to the

time of meal delivery and consumption in secondary schools, posting of menus, sending menus home, and improved coordination of food delivery within schools. The secondary school that served meals in the school foyer has continued to do so due to teacher and staff support for a Grab n' Go delivery model.

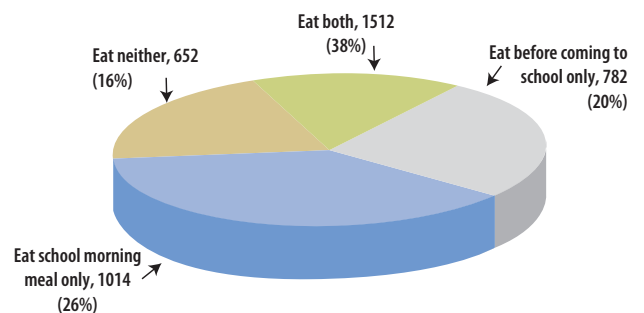
Key Findings from the Second-Year Evaluation (2010): Program Impact

A student survey was conducted at the end of the second year of the program (Spring 2010). The survey responses were matched with the student data collected from the TDSB's Student Information System, the 2008 Parent Census, and Safe Schools. The second-year evaluation focused on understanding the participation of students, which is a key factor in determining the impact of the program in terms of student health, behaviour, attendance, and achievement.

Participation

Students were asked about eating breakfast or snacks before coming to school and eating the morning meal provided at school.⁶ The majority of the students (64%) tended to eat the morning meal provided at the school at least three days in a school week. On most school days, more than a third (38%) of the students ate before coming to school and then also ate the meal provided at the school (see Figure 3).

Figure 3: Students' Eating Habits on Most Days During a School Week



Data source: The 2010 Feeding Our Future Survey.

Note: Percentages may not add up to 100 due to rounding.

⁶ A total of 3,960 students answered both questions, i.e., eating before coming to school and eating the school meal.



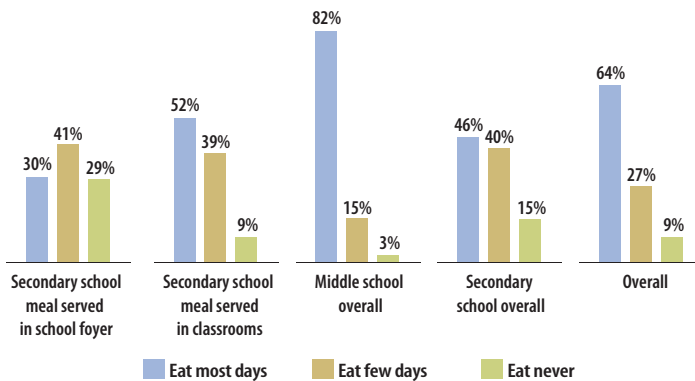
In the participating middle schools, almost all students (97%) took part in the program, with the vast majority (82%) participating most days (i.e., at least three days in a school week). In the participating secondary schools, the majority of students (85%) took part in the program and nearly half (46%) participated most days (see Figure 4).

In the secondary schools, more students tended to eat the school meal when it was served and eaten in the classroom than when it was served in the school foyer (91% vs. 71%). When the meal was served in the classroom, more than half (52%) of the secondary school students ate the meal most days during a school week; when it was provided in the school foyer, only 30% did so. Nearly a third (29%) of the secondary school students never ate the school meal when it was served in the school foyer (see Figure 4).

Participation in the Program by Student Background Characteristics

The success of any universal school meal program depends on how well the meal provided is eaten by students from diverse backgrounds. Data from the 2006 Student Census and 2008 Parent Census was used to identify students' background characteristics. Differences were observed in participation patterns relating to grade (i.e., Grade 6 students participated at the highest rate and the rate then declined until Grade 12). There was no noticeable difference in participation rates according to gender. Across various backgrounds (i.e., race, family income, country of birth), the majority of students participated in the program (see Figure 5).

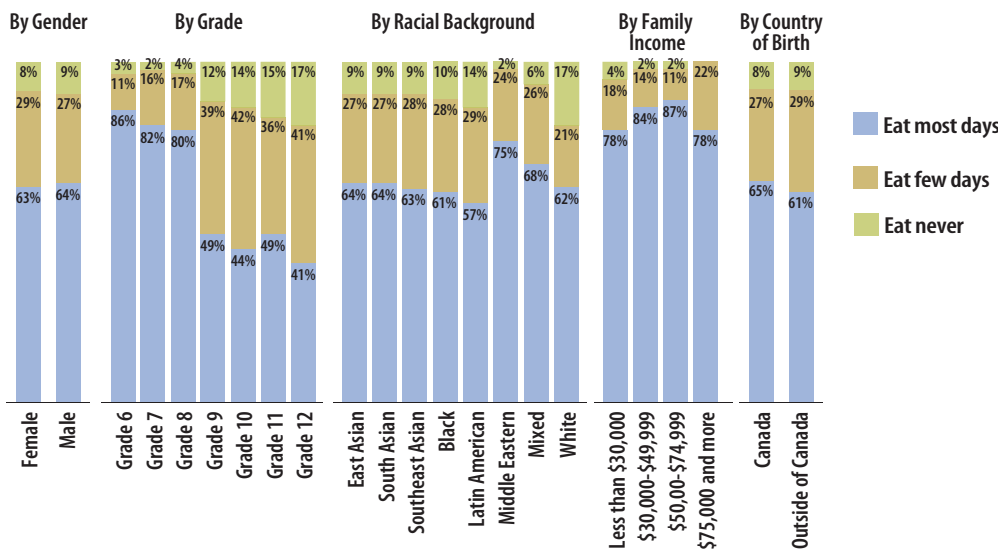
Figure 4: Participation in the Morning Meal Program During a School Week, 2009-10



Data source: The 2010 Feeding Our Future Survey.

Note: Percentages may not add up to 100 due to rounding.

Figure 5: Participation in the Program by Student Characteristics



Data sources: The 2010 Feeding Our Future Survey, the TDSB's Student Information System, the 2006 Student Census, and the 2008 Parent Census.

Note: Percentages may not add up to 100 due to rounding. Information relating to background variables was used only when available. Caution is advised when making comparisons between these groups.

Program Factors That Facilitate Student Participation

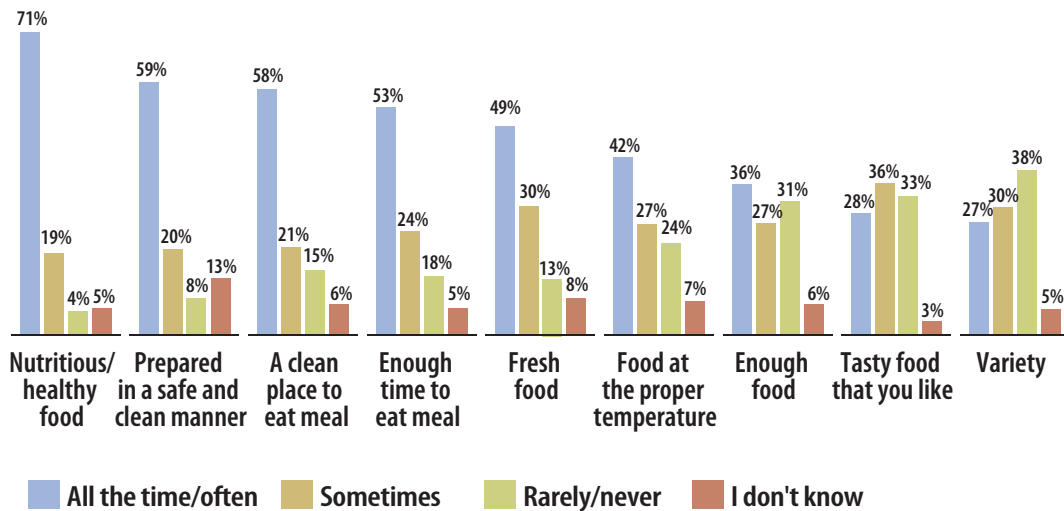
A number of program factors influence student participation in the program. Key factors include how the students perceived the nature of the meal provided, overall program delivery, and the benefits. These factors are presented in this section.

When students were asked to rate their school meal characteristics, almost three quarters (71%) reported that their school meal was nutritious or healthy most of the time. However, taste and variety received the lowest ratings: less than a third (28% and 27% respectively) of the students reported that the school meal was tasty and provided enough variety (see Figure 6).

Student Perspectives on Increasing Participation

When students were asked what would make more students in their school eat the school meal, an overwhelming majority said providing food prepared in a safe and clean manner and providing it at the right temperature (84% for each response). The vast majority (over 80%) also indicated that allowing students to eat during class time (83%), providing enough time to eat (83%), providing a clean space to eat (82%), and providing tasty food (81%) would make more students eat the school meal (see Figure 7). These findings suggest there is still room for program improvement and that this would boost student participation.

Figure 6: Perceived School Meal Characteristics



Data source: The 2010 Feeding Our Future Survey.
 Note: Percentages may not add up to 100 due to rounding.

Figure 7: Top Ten Student Perspectives on Increasing Participation

More students would eat the school meal if the program...



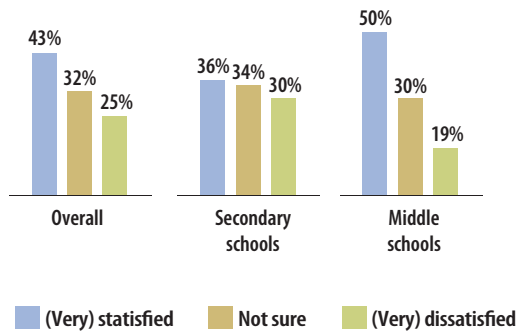
Data source: The 2010 Feeding Our Future Survey.
 Note: Percentages do not add up to 100 because respondents could choose more than one response.



Program Satisfaction

When asked about their satisfaction with the school meal program, overall nearly half (43%) of the students reported that they were satisfied, with middle school students reporting greater satisfaction (50%) than secondary school students (36%) (see Figure 8). An analysis of the open-ended responses on the school meal program reveals possible reasons for student dissatisfaction. Often the students who responded that they were “not sure” or “dissatisfied” were those who had issues with the nature of the meal provided (i.e., taste, variety, need for a drink/chocolate milk, food preparation, temperature, etc.).

Figure 8: Student Satisfaction with the Program



Data source: The 2010 Feeding Our Future Survey.

Note: Percentages may not add up to 100 due to rounding.

A sample of student comments:

Satisfied:

“School’s morning meal/snack program is very healthy and I think that it is a way for us to produce more energy and stay focused on your studies. The meal/snacks are very yummy and at times very different. I really encourage this program and I want it to continue for the future. It is also good for people who don’t have time to eat breakfast in the morning.”

Not sure:

“I think we need drinks also chocolate milk more often fresh food if there is dry food... drinks.”

“I think they should try to give different types of food and I think they should give more chocolate milk for everyone.”

Dissatisfied:

“Boring, bland, tasteless, too healthy, not what we want, hate it, not colourful, no drinks, doesn’t taste like anything at all sometimes.”

“Rarely its good, it usually has had combinations and boring foods. They should ask us what we want, but healthy foods of course.”

Impact Analysis

Five measures were used to determine the impact of the program on student health, behaviour, attendance, and achievement:

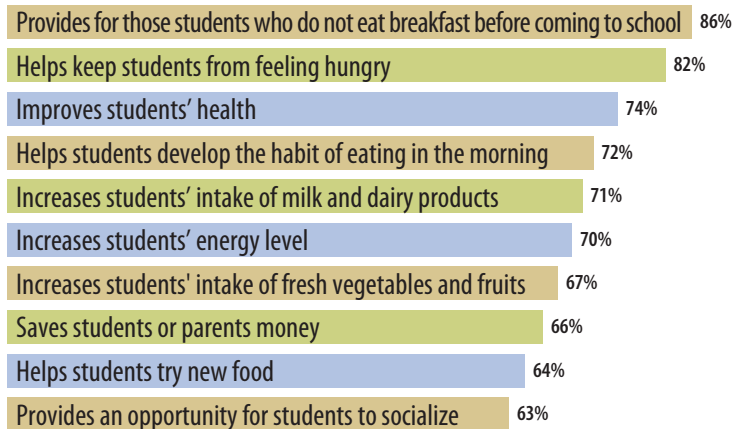
- students’ perception about the benefits of the school meal program;
- student suspensions;
- attendance;
- academic achievement; and
- students’ rating of their health.

Student Perception of Benefits

When asked about the benefits of the program, the vast majority of the students agreed that it fulfilled their basic needs, i.e., provided a breakfast for those who wouldn’t otherwise eat in the morning (86%) and kept them from feeling hungry (82%). About three quarters of the students indicated that the school meal improved their well-being, e.g., improved their health (74%), increased their intake of milk and dairy products (71%), and increased their intake of fresh vegetables and fruits (67%) (see Figure 9).

Figure 9: Top Ten Student Perspectives on the Benefits of the Morning Meal Program

My school’s morning meal program...



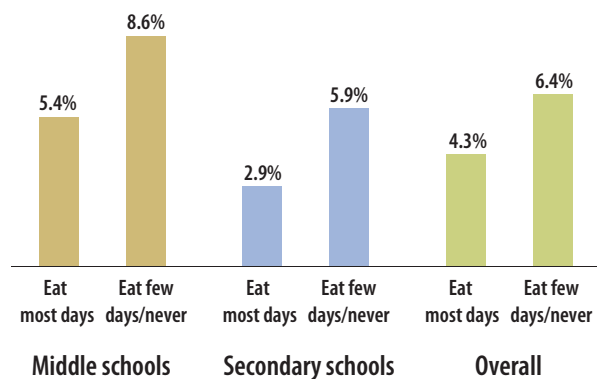
Data source: The 2010 Feeding Our Future Survey.

Note: Percentages do not add up to 100 because respondents could choose more than one response.

Suspensions and Expulsions

Student suspensions and expulsions are one way of looking at discipline or student behaviour. The students who ate a morning meal at least three days during a school week were less likely to be suspended than students who ate a morning meal on fewer days or never ate them.⁷ Though the differences are modest (3% vs. 6%), results are statistically significant for the secondary school students (see Figure 10).⁸

Figure 10: Percentage of Students Suspended

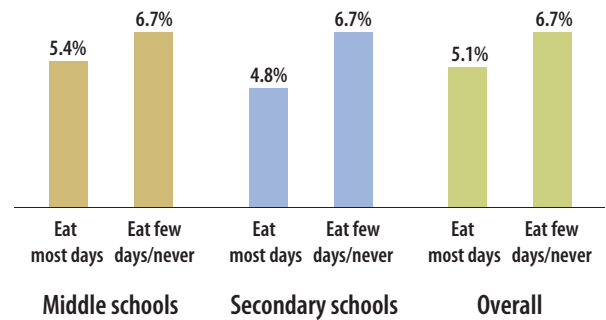


Data sources: The 2010 Feeding Our Future Survey and TDSB Safe Schools data.

Attendance

Student attendance is another indicator of student success. Students who ate morning meals most days in a school week were less likely to be absent compared to students who ate morning meals on fewer days or never ate them. Again, the differences in the absenteeism rate between the two groups are modest but are significant for secondary school students (see Figure 11).⁹

Figure 11: Absenteeism Rate



Data sources: The 2010 Feeding Our Future Survey and the TDSB's Student Information System.

Academic Achievement

To measure the relationship between academic achievement and eating a morning meal, responses from students who participated in the survey were matched with the students' achievement data.

The development of learning skills plays an important role in ensuring student success. Students who ate morning meals most days in a school week achieved better results on their learning skills (i.e., excellent or good) compared to those who ate the morning meal on only one to two days or who never ate in the morning. Differences were remarkable in the areas of independent work (70% vs. 56%), initiative (65% vs. 51%), problem solving (66% vs. 53%), and class participation (72% vs. 60%) (see Figure 12).

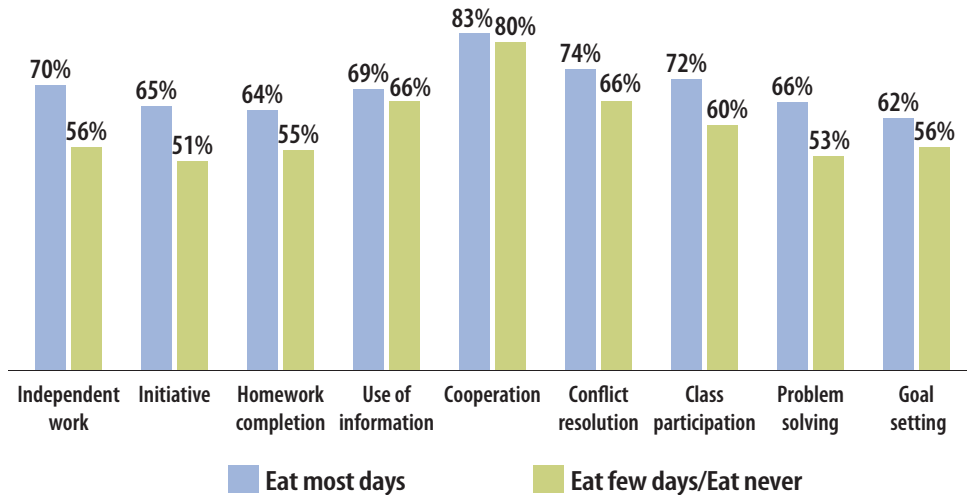
⁷ This includes eating before coming to school, at school, or both.

⁸ In this report, a result considered statistically significant will be illustrated using terms such as remarkable, considerable, and significant and these results will have a p-value of less than 0.05. All results are important. Statistically significant results indicate that the probability of the results happening by chance is very low. Causal pathways relating to the variables presented here are multi-factorial and complex; caution is advised when interpreting the causality of these results.

⁹ The absenteeism 'rate' is calculated by dividing the number of days the student was absent by the number of days that student was registered in the TDSB over the school year.



Figure 12: Percentage of Grade 7 and 8 Students Who Achieved “Excellent” or “Good” on the Nine Learning Skills (2009-10 Term 3 Report Card)

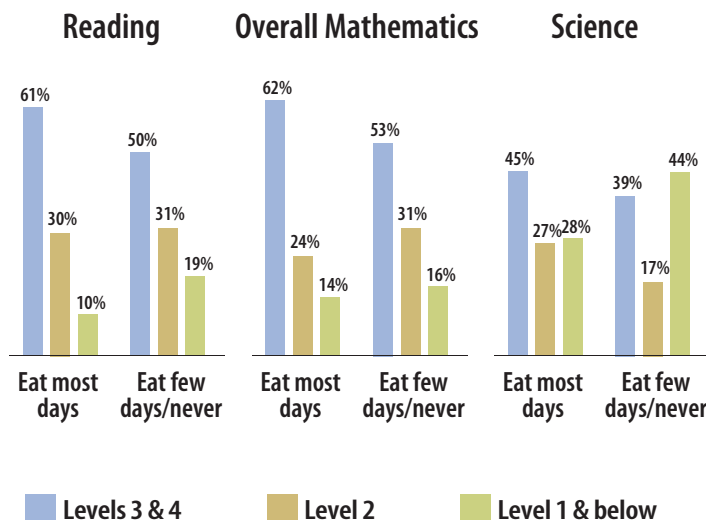


Data sources: The 2010 Feeding Our Future Survey and the TDSB’s Student Information System.
 Note: Percentages may not add up to 100 due to rounding.

A total of 1,332 middle school students (i.e., Grades 7 and 8 in 2009-10) had the opportunity to eat the school meal for two years. Those Grade 7 and 8 students who ate morning meals on most days during a school week achieved better grades and were less likely to be at-risk (achieving Level 1 and below on their report cards) when compared to those who ate morning meals on only a few days or who never ate in the morning.

The differences are significant in the case of Reading, where 61% of students who ate the morning meal on most days in a school week achieved or exceeded the provincial standard (Levels 3 and 4) compared to half (50%) of the students who ate morning meals on only a few days or never (see Figure 13). Fewer students (28%) who ate morning meals most days (i.e., at least three days in a school week) were at-risk in Science, compared to nearly half (44%) of those who ate morning meals only one to two days or who never ate them.

Figure 13: Grade 7 and 8 Student Academic Achievement (2009-10 Term 3 Report Card) and Eating in the Morning During a School Week



Data sources: The 2010 Feeding Our Future Survey and the TDSB’s Student Information System.
 Note: Percentages may not add up to 100 due to rounding.

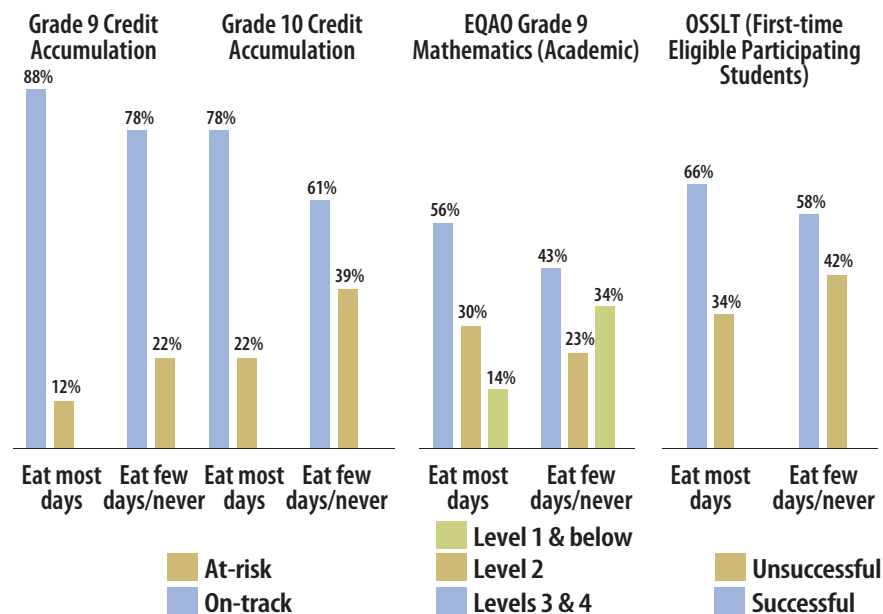
Secondary school students who ate morning meals on most days during a school week were on-track for graduation by accumulating sufficient credits, achieving better scores in Mathematics, and were less likely to be at-risk than were those who ate morning meals on fewer days during the school week or who never ate in the morning.

Research has shown that accumulating seven or more credits by the end of Grade 9 and fifteen or more credits by the end of Grade 10 are powerful predictors of graduation (Brown, 2010). The differences in credit accumulation among Grade 10 students is particularly noticeable: more than three quarters (78%) of the Grade 10 students who ate morning meals on most days were on-track for graduation, having accumulated fifteen or more credits, compared to fewer than two thirds (61%) of students who ate morning meals on only a few days or not at all (see Figure 14).

In the TDSB, the majority of Grade 9 students take most of their courses in the Academic program of study (Brown, 2010). Remarkable differences are seen in the standardized Mathematics test scores for Grade 9 students in the Academic

course. In the assessment of Mathematics by the Education Quality and Accountability Office (EQAO), the majority of students (56%) who ate a morning meal most days in a school week achieved or exceeded the provincial standard (Levels 3 and 4) compared to less than half (43%) of students who ate a morning meal on only a few days or not at all. Fewer students (14%) who ate morning meals at least three days in a school week were at-risk (achieving Level 1 and below), compared to just over one third (34%) of those who ate morning meals only one to two days or who never ate them. Somewhat similar trends can be seen for credit accumulation among Grade 9 students and for the Ontario Secondary School Literacy Test (OSSLT) results (see Figure 14). Many of the students at-risk take Applied courses in the TDSB (Brown, 2006). When the standardized Mathematics test scores for Grade 9 students in the Applied course was compared, no difference was observed between those students who ate a morning meal most days in a school week and students who ate a morning meal on only a few days or not at all. This suggests that more investigations are required to understand the long-term impacts of the program on students at-risk.

Figure 14: Secondary School Student Academic Achievement (2009-10) and Eating in the Morning During a School Week



Data sources: The 2010 Feeding Our Future Survey and the TDSB's Student Information System.

Note: On-track: Grade 9 students accumulating seven or more credits, Grade 10 students accumulating fifteen or more credits. At-risk: Grade 9 students accumulating six or fewer credits, Grade 10 students accumulating fourteen or fewer credits. Percentages may not add up to 100 due to rounding.



Perceived Health

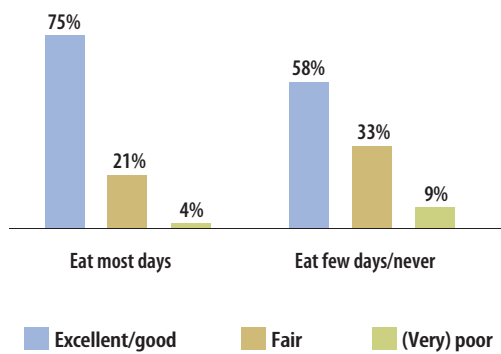
Perceived health is an individual’s perception of his or her overall health and is widely used as an indicator of overall health status and well-being. According to Statistics Canada, perceived health can reflect aspects of health not captured in other measures, such as incipient disease, disease severity, and physiological and psychological reserves, as well as social and mental function. Perceived health refers to a person’s health in general — not only the absence of disease or injury, but also physical, mental, and social well-being.¹⁰

Students who completed the survey (4,050) from the participating middle and secondary schools were asked to rate their health in comparison to the previous school year and in comparison to other students their age.

Students who ate morning meals on most days during a school week were more likely to rate their health as excellent or good and to indicate that their health had improved since the last school year.

Three quarters (75%) of students who ate morning meals on most days in a school week rated their health as excellent or good compared to only 58% of those who ate in the morning on only one to two days or who never ate in the morning (see Figure 15).

Figure 15: Health in Comparison to Other Students

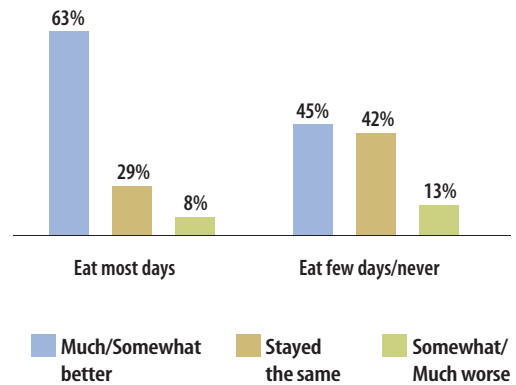


Data source: The 2010 Feeding Our Future Survey.
 Note: Percentages may not add up to 100 due to rounding.

When students were asked to rate their health in comparison to the previous school year, the majority (63%) of the students who ate

morning meals at least three days during a school week rated their health as better than the previous school year, whereas only fewer than half (45%) of those who ate in the morning only one to two days or who never ate in the morning rated their health as improved (see Figure 16).

Figure 16: Health Compared to Previous School Year



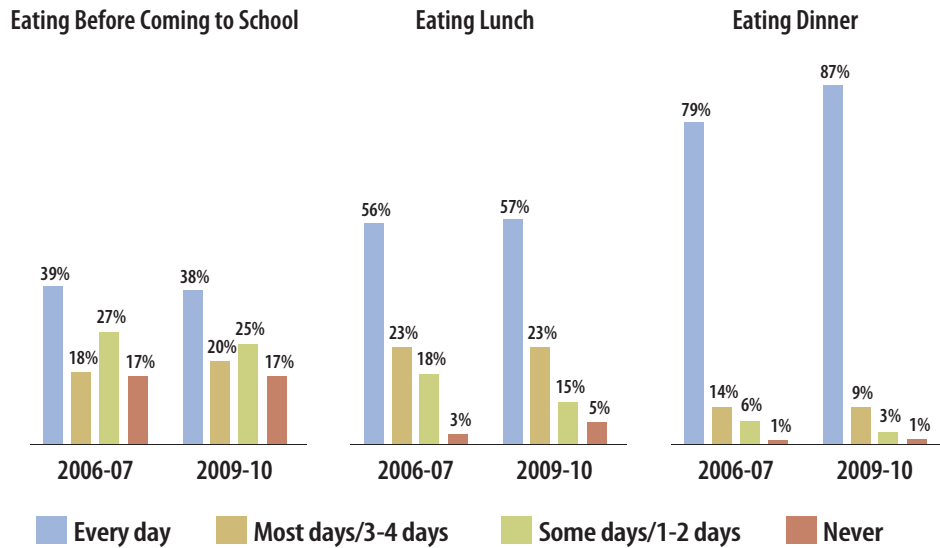
Data source: The 2010 Feeding Our Future Survey.
 Note: Percentages may not add up to 100 due to rounding.

Other Possible Impacts: Changing Trends in Students’ Eating Behaviour

Students’ survey responses to questions on eating behaviour were compared to the data from the 2006 Student Census for the schools participating in the program. The findings indicate that there are not any noticeable changes with regard to eating breakfast before coming to school or with regard to eating lunch. However, there was a notable difference when 2006 data on eating dinner was compared to 2010 data. In 2010, more students were eating dinner everyday compared to 2006 (87% in 2010 vs. 79% in 2006) (see Figure 17). These findings are not surprising considering the observations of Ponza et al. (1999), who indicate that it is expected that participation in a universal school breakfast program will enhance students’ household food security status. Household resources freed up by not having to spend money for students’ breakfast may be used for other purposes, including the purchase of food for other eating occasions and for other family members.

¹⁰ For more information on perceived health, see Statistics Canada’s website: <http://www.statcan.gc.ca/pub/82-625-x/2011001/article/11465-eng.htm>.

Figure 17: Eating Behaviour Snapshots, 2006-07 and 2009-10



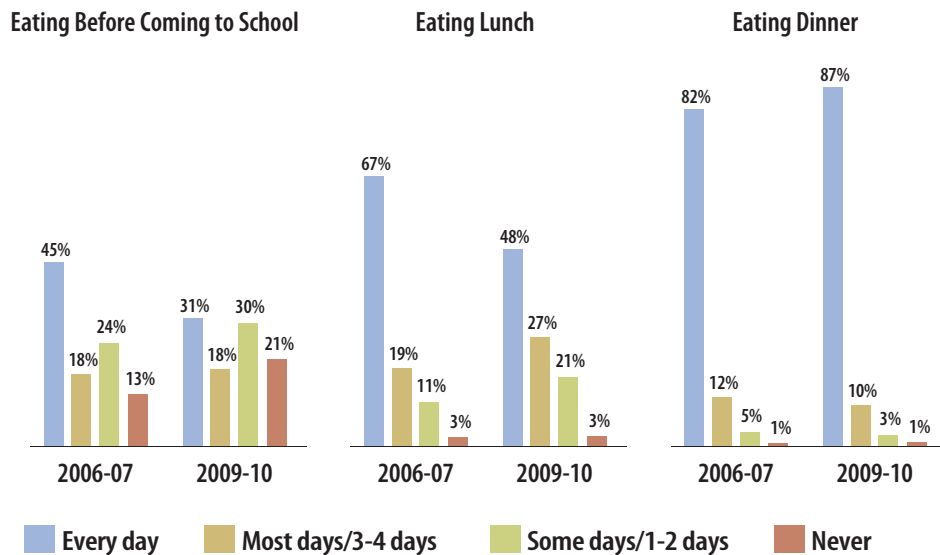
Data sources: The 2010 Feeding Our Future Survey and the 2006 Student Census.

Note: Percentages may not add up to 100 due to rounding.

To further understand the changes in eating behaviour, the group of students who responded to the 2006 Student Census were identified in the 2010 Feeding Our Future Survey and their responses were compared. These comparisons have to be treated with caution; as children mature, their eating behaviour is likely to change. When compared to 2006, the same students were less likely to eat breakfast everyday before coming to school

(45% in 2006 vs. 31% in 2010) and eat lunch everyday (67% in 2006 vs. 48% in 2010). When eating dinner is compared, this trend is somewhat different; slightly more students ate dinner in 2010 compared to 2006 (87% in 2010 vs. 82% in 2006) (see Figure 18). More research is required to confirm if these changes are due to improved household food security.

Figure 18: Eating Behaviour Cohort Comparison, 2006-07 and 2009-10



Data sources: The 2010 Feeding Our Future Survey and the 2006 Student Census.

Note: Percentages may not add up to 100 due to rounding. Information regarding the 2006 eating behavior was not available to all the students who participated in the 2010 survey.

Conclusions and Recommendations



Conclusions

In summary, the Feeding Our Future program can be an effective tool to enhance student learning and health:

- A free morning meal in classrooms, served around 10:00 a.m., provided all students with an opportunity to benefit from a nutritious meal.
- Students, irrespective of gender, socio-economic, or cultural backgrounds, tended to benefit from the program.
- School meals provided in the school foyer tended to restrict student participation in the meal program.

- Student perceptions about the nature of the food and the ways it was prepared affected participation.
- The program did not affect school operations in general; however, there was an increase in workload reported by school administrators and school staff directly associated with the program.
- Most of the teaching staff interviewed perceived an improvement in student behaviour or attitude and student ability to stay on task.
- School administrators indicated that after the implementation of the program, overall student attitude and behaviour improved; there was a drop in the rate of tardiness and a reduction in the incidence of disciplinary problems.
- Students who ate in the morning were more likely to succeed academically, were more likely to come to school regularly, and were less likely to be suspended.
- Students who ate in the morning were more likely to be healthy.
- The program lacks sufficient funding to make further improvements.

Recommendations

- Feeding Our Future should continue to provide the school meal in the classroom and allow students to eat around 10:00 a.m.
- Providing meals in the school foyer is an impediment to student participation; either this method of delivery should be discontinued or students should be allowed to collect the meal until 11:00 a.m. and eat it in the classroom.
- The school meal should be promoted as cleanly prepared fresh food.
- The possibility of rotating the menu more frequently and making changes regularly, based on menu surveys, should be explored.
- Steps should be taken to involve more students, parents, and community members as volunteers.
- Overall, the improvements made so far and exploring ways to address all the issues outlined in this report as well as the best practices outlined in the TPH Student Nutrition Program Funding Criteria should continue.

Next Steps in the Evaluation



Program impacts will be further investigated using cohort analyses and the 2011 Student Census to see how the program affects changes in eating behaviour, improvements in achievement, reduction of suspensions and absenteeism, acceptance to post-secondary institutions, and overall well-being, especially for the at-risk students.

Data from the 2011 Student Census will be used to track the students participating in school meal programs and to study the educational outcomes for meal-skipping students in a larger context. Comparisons of different school meal delivery models will be made to further understand the outcomes.

References

Brown, J. L., Beardslee, W. H., & Prothrow-Stith, D. (2008).

Impact of school breakfast on children's health and learning: An analysis of the scientific research.

Retrieved from [http://www.breakfastfirst.org/pdfs/HarvardAssessmentSchoolBreakfast\[Sodexo2008\].pdf](http://www.breakfastfirst.org/pdfs/HarvardAssessmentSchoolBreakfast[Sodexo2008].pdf)

Brown, R. S. (1993). *An evaluation of the pilot joint school food programs in the Toronto Board of Education* (Research Report No. 203).

Toronto, Ontario, Canada: Toronto Board of Education.

Brown, R. S. (2006). *The TDSB grade 9 cohort study: A five-year analysis, 2000-2005* (Research Report 05/06-05). Toronto, Ontario, Canada:

Toronto District School Board.

Brown, R. S. (2010). *The grade 9 cohort of fall 2004* (Research Report 09/10-15). Toronto, Ontario, Canada: Toronto District School Board.

Glazier, R., & Booth, G. (2007). *Neighbourhood environments and resources for healthy living: A focus on diabetes in Toronto.*

Toronto, Ontario, Canada: Institute for Clinical Evaluative Sciences.

Retrieved from http://www.ices.on.ca/webpage.cfm?site_id=1&org_id=67&morg_id=0&gsec_id=0&item_id=4406&type=atlas

Levin, M. (2011). *Breakfast for learning: Scientific research on the link between children's nutrition and academic performance.*

Retrieved from <http://frac.org/wpcontent/uploads/2009/09/breakfastforlearning.pdf>

Murphy, J. M. (2007). Breakfast and learning: An updated review. *Journal of Current Nutrition and Food Science*, 3(1), 3-36.

Nutrition Liaison Team. (n.d.). *Student nutrition handbook*. Toronto, Ontario, Canada: Toronto District School Board.

Retrieved from http://www.tdsb.on.ca/wwwdocuments/parents/nutrition_programs/docs/handbook_webversion.pdf

Nutrition Task Force. (2009). *Nutrition task force report April 2009*. Toronto, Ontario, Canada: Toronto District School Board.

Retrieved from http://www.tdsb.on.ca/wwwdocuments/Trustees/Ward_99/docs/nutrition%20task%20force%20report_09.pdf

O'Reilly, J., & Yau, M. (2009). 2008 parent census, kindergarten-grade 6: System overview and detailed findings.

(Research Report 08/09-16). Toronto, Ontario, Canada: Toronto District School Board.

Ponza, M., Briefel, R., Corson, W., Devaney, B., Glaserman, S., Gleason, P., . . . Ohls, J. (1999).

Universal-free school breakfast program evaluation design project; Final Evaluation Design (MPR Reference No.: 8640-600).

Retrieved from <http://www.fns.usda.gov/oane/MENU/DemoProjects/sbppilot/SBPdesign.pdf>

Prescod, C. (2008). Diversity and inclusion community of practice. Report on the community of practice project development;

Submitted to Circle of Care Central LHIN Diversity and Inclusion Advisory group.

Williams, C., & Clarke, J., working with James C., Benjamin, A., & Moss, K. (2003). *Toronto Community Profile*.

Retrieved from <http://rvh.socialwork.dal.ca/04%20Community%20Profiles/Toronto/profile2003to.html#jane>

Yau, M., & O'Reilly, J. (2007). *2006 student census, grades 7-12: System overview* (Research Report 07/08-01). Toronto, Ontario, Canada:

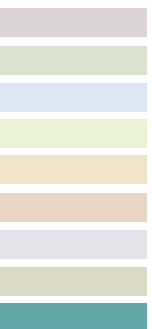
Toronto District School Board.

Appendices



Appendix 1: Student Nutrition Program Grant
Application Guide 2011/2012

Appendix 2: School Operations: First-Year Findings
Trends in Achievement, Behaviour and
Absenteeism



Appendix 1

Student Nutrition Program – Grant Application Guide 2011/2012

Application Deadlines:

For September 2011 funding: Friday February 25, 2011 by 4:30 p.m. For late applications and January 2012 funding: Friday, October 28, 2011 by 4:30 p.m.

Please read the following information before you complete your application.

If you are completing your application by computer, Macros must be enabled. Please refer to page 41 for further information on how to complete and / or submit your application electronically.

The Application is divided into four sections:

Section I: Program Description

Section II: Financial Information

Section III: Nutrition

Section IV: Authorization and Execution

Attachments:

1. Student Nutrition Program Funding Criteria
2. Guide to the Nutrition Standard, Toronto Student Nutrition Programs for Children and Youth
3. Food Safety Requirements for Student Nutrition Programs
4. Sample Menus: Breakfast and Morning Meal menus; Dinner and Lunch menus; Snack menus

SECTION I – Program Description (Refer to Application Form, pages 1 and 2)

Select definitions

- **Location Type** – Check mark the box that corresponds to your school board or indicate if your program is in a community site.
- **Name of School/Site** – Provide the name of the school or community site that your program is affiliated with.
- **Program Name** – Provide the full name of your program (e.g., Acme Snack Program).
- **School/Site Address** – Provide the complete address where your program operates.
- **Mailing Address** – If different from the School / Site Address (above), please provide the complete address where cheques and program information should be sent.
- **Name of Sponsoring Agency** – Cheques are not sent to individuals. Cheques for programs in schools will be payable to the school. If your program is in a community site, provide the name and address of the agency that will administer your funds.



Contact Persons:

- **Principal or Site Authority** – must be person who is in charge of the school or community organization, such as the Principal or Executive Director. A teacher or program coordinator is not an appropriate Site Authority.
- **Coordinator** – should be person responsible for delivering meal or snack program. Please use business numbers only (e.g., school’s phone number). Do not use personal home numbers.

Type of Meal Program (Table)

- **Program type** – Please note the different types of programs and their descriptions. For existing programs, if you are unsure of your program’s current funding status, please contact your school board representative or the school board foundation which administers your funds.
- **Number of days a week that the program will run** – Funding Requirement: Programs must operate a minimum of 2 days per week. However, breakfast and morning meal programs in provincially designated communities are required to operate 5 days per week.

Number of days a year that the program will run

Example

Number of Days per Week	Number of Operating Weeks	Total Operating Days
5 days/week	35 weeks	175 days
5 days/week	30 weeks	150 days
3 days/week	35 weeks	105 days
3 days/week	30 weeks	90 days

Planned start date – Examples: ‘Oct 11’ or ‘Oct 2011’

Local Program Committee

- Funding Requirement: A Local Program Committee must meet **at least 2 times** in every school year.
- List all the names of your local program committee members (over the age of 18) and their role (i.e., parent, youth, teacher, community member, school board representative, community development Animator). The membership of the committee should reflect the make-up of your school and community.
- Local program committees support programs with menu planning, shopping, food preparation, financial reports, recruiting volunteers, etc. They also create an opportunity for parent, student, and community involvement.
- If you do not have a local program committee, please contact: Mat Palmer, Student Nutrition Program Administrator, FoodShare, (416) 363-6441 ext. 271.

SECTION II – Financial Information (Refer to Application Form, pages 3 and 4)

Financial Accountability and Liability

Applications must include all financial information, including **two** signing officers. One of the signing officers must be a Site Authority, such as Principal (for schools) or Executive Director (for Community sites).

- **If you have questions about financial accountability and liability, contact:**

- Anne Turpin (TDSB and Community sites), (416) 394-7355 or
- Tina Giustizia (TCDSB sites), (416) 222-8282 ext. 2194

Community Fundraising

It is important to note that funding for Student Nutrition Programs comes from different sources:

- contributions from parents and students
- corporate donors
- local fundraising
- the City of Toronto
- the Province of Ontario
- non-profit organizations

Municipal and/or provincial grants cover only a modest portion of the total estimated costs to operate your program(s), depending on funding availability and eligibility criteria.

Fundraising or other efforts to cover the remainder of the program costs are essential to running a program throughout the school year.

Please describe the plans that your school / community organization have to raise funds throughout the year.

Note: This application will be reviewed for eligibility for both municipal and provincial subsidies.

Estimates of Program Costs

Funding requirement: Programs must submit a completed estimate of costs for each meal or snack program.

How to calculate estimate of program costs:

1. Average food cost per student per day.

Use the estimated food cost related to the type of program you are planning (breakfast, morning meal, lunch/dinner or snack), provided on page 4 of the application.

Menus for Children (JK-grade 8)		Menus for Youth (grades 9-12)	
Snack:	\$0.91 per child	Snack:	\$1.31 per youth
Breakfast:	\$1.02 per child	Breakfast:	\$1.59 per youth
Morning Meal:	\$1.02 per child	Morning Meal:	\$1.59 per youth
Lunch/Dinner:	\$1.59 per youth	Lunch/Dinner:	\$2.49 per youth

2. Estimate the average number of students in the program each day (from table page 1).

3. Determine the number of days the program will run per year (from table page 1)

Chart for calculating operating days (maximum number of school days/year is 190):

Number of Days per Week	Number of Operating Weeks	Total Operating Days
5 days/week	35 weeks	175 days
5 days/week	30 weeks	150 days
3 days/week	35 weeks	105 days
3 days/week	30 weeks	90 days



4. Calculate an estimate of the total cost to purchase food:
 - average daily food cost per student (figure A) X number of students (figure B) X number of operating days (figure C)

Note: A minimum of 70% of program costs must be spent on food.
5. Estimate the cost of kitchen supplies:
 - This includes cleaning supplies and disposable items. Do not include the cost of one-time purchases such as large equipment.

Note: Programs should make any equipment needs known to the Toronto Foundation for Student Success (for TDSB or community sites) or the Angel Foundation for Learning (for TCDSB sites). Funding for equipment is sometimes available.
6. Estimate staff costs:
 - This includes paid staff involved in food preparation, shopping, financial records, attending a food safety training session, etc. You may need to account for approximately 7% of gross pay for the employer cost of CPP/El.
7. Estimate other program expenses
 - This includes costs such as police checks and TTC tokens (optional) to enable volunteers and/or coordinators to participate in the program.

Note re 5, 6 & 7, Kitchen supplies, Staffing costs and 'Other' expenses: A maximum of 30% of program costs can be allocated to these expenses combined.
8. Calculate total estimated program costs (D+1+2+3)

Example (Elementary):

	Breakfast	Morning meal	Snack AM	Lunch	Snack PM	Dinner
Estimated cost of food per elementary or middle school participant	\$1.02 A	\$1.02 A	\$0.91 A	\$1.59 A	\$0.91 A	\$1.59 A
**Note: Costs above are estimates only . It is not expected that programs spend this as a rule.						
Number of students participating in program per day (from table on page 1)	25 B	225 B	B	B	30 B	B
Number of days the program will run per year (from table on page 1)	175 C	175 C	C	C	175 C	C
Total estimated cost of purchased food per year (A x B x C= D)	\$4,462.50 D	\$40,162.50 D	D	D	\$4,777.50 C	D
Note: If costs below are shared between programs, e.g. staff work on more than one program, costs should be divided across programs						
Estimated cost of kitchen supplies day e.g. disposable and cleaning items	\$100.00 1	\$600.00 1	1	1	\$300.00 1	1
Estimated Staff costs e.g. wages and honoraria	1,500.00 2	\$7,250.00 2	2	2	– 2	2
Estimated other expenses	– 3	– 3	3	3	– 3	3
Note: kitchen, staff and other costs cannot equal more than 30% of total program costs						
Estimated Total Program Costs (D+1+2+3)	\$6,062.50	\$48,012.50			\$5,077.50	

SECTION III – Nutrition (Refer to Application Form, page 4)

Nutrition Education – It is a funding requirement that your Student Nutrition Program include plans for nutrition education for your students.

If your school or site has not provided Nutrition Education activities before, please call Toronto Health Connection, 416-338-7600.

Sample Menu

Funding Requirement: Programs must submit a separate one-week sample menu meeting the nutrition standards *for each meal or snack program*.

- Complete the **Program Menu Form** (page7). Blank copies of the menu page are also available at www.toronto.ca/health/student_nutrition_program.
- Follow the Guide to the Nutrition Standard, Toronto Student Nutrition Programs for Children and Youth (attached) to plan your menu.
- You may also use the Sample Menus for Toronto Student Nutrition Programs (attached) for ideas.

Part IV – Authorization and Execution

Funding Requirement: The Site Authority is required to review and authorize the application with a signature. Applications received by mail and e-mail must have the original signature of the Site Authority. Applications received by e-mail require the electronic signature of the Site Authority; applications received must be in PDF format. Incomplete applications and those without authorizing signatures will be returned. Faxes and photocopies will not be accepted.

Review list of Commitments

- Before signing, the Site Authority should review the list of commitments that are a component of applying for funding. Check mark each commitment to indicate that the site authority has read, reviewed and agreed to each.

Background on some of the commitments:

Accessibility

What it means to be an accessible program:

- Student Nutrition Programs must be offered to all students regardless of their ability to pay.
- Programs must be non-stigmatizing or efforts to reduce stigma must be made.
- All students are made to feel welcome.
- The program location must be safe, clean and comfortable.
- Measures are taken to ensure that all families and students are aware of the program.

If you are not sure that your program meets all the above criteria, contact:

- Mat Palmer, Student Nutrition Program Administrator, FoodShare, (416) 363-6441 ext. 271
- Mena Paternostro (TDSB Coordinator, Student Nutrition Programs), (416) 394-7435, or
- David Letra (TCDSB Community Relations Officer), (416) 222-8282 ext. 2687

Food Safety

Funding requirement:

- As per Public Health's requirements, each program will receive a visit from a Public Health Inspector to inspect kitchen facilities and/or food preparation areas.
- At least one person trained in food safety within the past two years must be on site every day the program operates.
- It is recommended that every staff member or volunteer involved in food purchasing, preparation or serving receive food safety training which is renewed at least every 2 years.

If you are not sure how to meet the above criteria, please call Toronto Health Connection, (416) 338-7600.



Signatures Required For First Time Applicants

If your program is **new**, your application needs a signature from a Community Development Animator. Please contact Mat Palmer, Student Nutrition Program Administrator, FoodShare, (416) 363-6441 ext. 271

If your program is **new** and is located in a TDSB or TCDSB school, your application needs a signature from a School Board representatives. Please contact:

- Mena Paternostro (TDSB Coordinator, Student Nutrition Programs), (416) 394-7435
- David Letra (TCDSB Community Relations Officer), (416) 222-8282 ext.2687

Key Dates and Important Information

Application Deadlines:

- for September 2011 funding – **Friday, February 25, 2011 by 4:30 p.m.**
- for late applications and January 2012 funding – **Friday, October 28, 2011 by 4:30 p.m.**

Applications including attachments (e.g. menus) may be submitted my mail or e-mail. **Faxed and/or photocopied applications will not be accepted.**

Tips for completing your application by computer:

1. Enable Macros on your computer. This may be done through the security settings of your Word program. In Word 2007, this may be found through: Office button (top left of Word screen), Word Options, Trust Centre, Trust Centre Settings, Enable all Macros. (Remember to turn Macros off again once you are finished.) You may also be given a pop-up Enable Macros option.
2. Create a SNP Application folder on your desktop or hard drive.
3. Open the Application document and save it to the Application folder.
4. Complete the Application.
5. Save the Application regularly to the Application folder, so that your work is not accidentally lost.
6. Have the Site Authority save his or her scanned signature to the Application folder, maximum approximate size 220 x 50 (length and height in pixels). The signature must be named one of the following: signature.jpg, signature.jpeg, signature.bmp, signature.png or signature.gif
7. When you have completed the Application, have the Site Authority review the content of the Application and review and authorize the terms on page 6. When the Site Authority clicks on the Signature of Principal / Site Authority field, a pop-up will appear, asking, 'Do you want to add a signature now?' Click 'yes' and the signature will be inserted from the Application folder. The signature must be properly named (see 6, above) and in the same folder as the Application, in order for this to work.
8. Once Site Authority has inserted his or her signature, save and print the final copy for your own records.
9. Convert file to PDF and submit by e-mail as instructed below.
10. If you have a problem with the Signature features, print the application as is, have the Site Authority sign it and mail as instructed below..

Mailed and delivered applications:

- Applications including attachments (e.g. menus) must be **received** by the date and time above.
- Applications received after this date and time will not be considered until Fall 2011.
- Application must include original signature of the Site Authority.
- **Faxed or photocopied applications will not be accepted.**
- Incomplete applications will be returned.
- You will be notified by mail when your completed grant application has been received.
- Please keep a copy of your completed application for your records
- Applications may be mailed or delivered to:

Student Nutrition Program
 Toronto Public Health
 5100 Yonge Street, 2nd floor
 Toronto, ON M2N 5V7

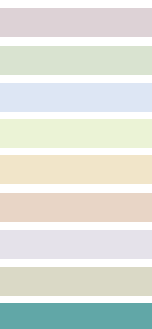
E-mailed applications:

- Applications including attachments (e.g. menus) must be **received** by the date and time above.
- Applications received after this date and time will not be considered until Fall 2011.
- **Application must include the electronic signature of Site Authority**
- **Application must be submitted in PDF format**
- Incomplete applications will be returned.
- You will be notified by mail when your completed grant application has been received.
- Please keep a copy of your completed application for your records.
- Applications may be e-mailed to:
snp@toronto.ca

Key Dates:

Applications will be reviewed in March 2011 and November 2011 (late applications and appeals) for eligibility for funding. Eligibility will be determined by the application meeting the Program Funding Criteria (attached).

Key Items in the SNP Application Process	Date
Decisions will be made about funding.	March 31, 2011
Funding allocations submitted to Toronto Board of Health and City Council for approval.	May 2011 meetings of Toronto Board of Health & City Council
All programs are notified by mail if they will/will not be receiving funding.	week of June 6, 2011
Funding cheques are mailed to programs in 3 instalments	September 2011 January 2012 March 2012
Late applications to be submitted to the same Toronto Foundation for Student Success address listed above.	Deadline is Friday, October 28, 2011 by 4:30 p.m.
Decisions will be made about funding late applications.	November 30, 2011
All late applicant programs are notified by mail if they will/will not be receiving funding.	week of December 5, 2011
Funding cheques are mailed to late applicants in 2 instalments.	January 2012 March 2012





Student Nutrition Program Funding Criteria

The City of Toronto provides grant funding to Student Nutrition Programs that currently receive municipal funding. The goal of funding is to increase the number of days that programs operate and the nutritional quality of food served. The focus of this program is to ensure food access to those with the greatest needs, within the context of universal access.

Municipal funding covers only a modest portion of total program costs, based on individual program needs. Eligibility for funding will be determined for those programs that operate a minimum of 2 days per week; provincially designated breakfast and morning meal programs are required to run 5 days a week. All programs receiving a municipal and/or provincial grant are required to meet the criteria outlined below. Programs will be monitored for adherence to the criteria for nutritious food, food safety, and financial accountability.

1. Nutritious Food

- A cycle menu is planned based upon the Guide to the Nutrition Standard and offers a variety of healthy food choices, suitable to the cultures of your community.
- Meal menus (breakfast, morning meal, lunch, and dinner) include at least three of the four food groups: Vegetables and Fruit, Grain Products and Milk and Alternatives.
- Snack menus offer two to three food groups, with at least one serving from the Vegetables and Fruit food group.
- Full serving sizes, according to Canada's Food Guide, are available.
- A Public Health Dietitian/Nutritionist will visit your program.

2. Food Safety

- Staff and volunteers involved in food preparation must attend a Food Safety and Nutrition workshop offered by Public Health once every two years. At least one person trained in safe food handling should be on site every day of program operation.
- A Public Health Inspector will inspect the kitchen facility and student nutrition program.

3. Ethnocultural Sensitivity

- Menus and educational components are inclusive and consider the faiths, cultures and preferences of the children/youth and their families.

4. Access

- The program is universally accessible, regardless of a participant's ability to pay.
- The program is non-stigmatising or efforts to reduce stigmatisation are made.
- All children/youth are made to feel welcome.
- The location of the program is safe, clean and comfortable.
- Measures are taken to ensure that all children/youth are aware of program.

5. Budget

- A budget is completed to estimate program costs.
- A minimum of 70% of program costs must be spent on food.
- Programs must operate according to number of children/youth estimated to attend the program as well as the number of days the program is operating as stated on the application. Any changes to numbers estimated on the application must be reported.

6. Confidentiality

- All information on volunteers, including name, address and telephone number are kept confidential.
- Names of program participants and contributions are kept confidential.

7. Financial Accountability and Liability

- A The program has a separate bank account in the local program committee’s name. (Where not possible, please contact the Toronto Foundation for Student Success or the Angel Foundation for Learning for assistance.)
- Each cheque is signed by two signing officers, one being the school principal/authority for site or designate.
- The program agrees to provide monthly financial and activity reports on how the grant was spent.
- The program is responsible to ensure that its practices in paying staff are in accordance with Canada Customs and Revenue Agency guidelines (e.g., payroll deductions).

8. Local Program Planning and Consultation

- A local program committee is established to plan and administer the program and meets a minimum of twice a year.
- This committee may include, but is not limited to: school principal or staff, parents, students, food program staff and other interested individuals such as volunteers, local business people, faith group members, community agency staff, and school board representatives.
- For a [youth Student Nutrition Program](#), the majority of the committee members should be youth program participants.
- This committee will collaborate with a site authority (e.g. principal, executive director)
- This committee is responsible for:
 - choosing the type of meal to be served
 - recruiting, training and co-ordinating volunteers
 - communicating with youth/parents and receiving contributions
 - other aspects of operating the program
 - approving the menu and budget
 - organizing fundraising
 - applying for funding

9. Contributions

- The local program committee ensures that youth and/or parents are informed of the total program costs and are **asked to contribute as much of the cost as possible** (if deemed appropriate) to ensure the sustainability of the program.
- The committee may organize fundraising activities in the school or program site as part of contributions. Fundraising involving food sales should be focused on healthy food choices.
- Effective September 2011, the School Food and Beverage Policy (PPM 150, The Ministry of Education) outlines food and beverage standards related to on-site school fundraising.
- For a [youth Student Nutrition Program](#), the program committee requests non-financial contributions from youth to facilitate life skill development and provide the opportunity to youth to be actively involved in the program (i.e. participation in fundraising, shopping, cooking, cleaning, other life skills, etc.).

Other Principles:

• Food Donations

Donated food can be used by Student Nutrition Programs as long as:

- donated food is fresh, safe to eat and conforms with the Guide to the Nutrition Standard;
- the “best-before date” on pre-packaged donated food is clearly visible and can be safely stored and consumed before the “best-before date”; and
- donated food does not originate from the emergency food system (i.e., food banks).

• Local Fundraising / Community Partnerships

- Local fundraising from businesses, faith groups, charities, or the community is required in order to supplement the funding received from this grant.
- There is an operating budget that is used to set targets for fundraising.

• Environmental Practices

- The program strives to achieve minimal waste through minimal food packaging, recycling, composting, etc. These principles are reflected in program planning.

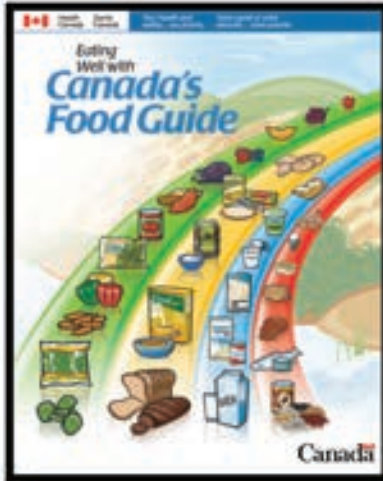
• Nutrition Education and Physical Activity Promotion

- The program incorporates nutrition education and physical activity promotion for children/youth in the program. Resources are available from a number of sources, including Public Health.
- For [youth Student Nutrition Programs](#), youth are involved in learning skills related to the nutrition program (e.g., budgeting and financial skills, healthy food shopping, etc.).



Guide to the Nutrition Standard

Toronto Student Nutrition Program for Children and Youth



What is the Nutrition Standard?

- Defines nutritious meals and snacks based on Canada's Food Guide
 - Helps coordinators plan nutritious meals and snacks
 - Provides examples of healthy foods and serving sizes
 - Lists criteria for choosing healthy foods per serving
- * Programs that receive money from the City of Toronto and/or the Government of Ontario agree to serve healthy meals and snacks according to the Nutrition Standard.

What is a nutritious meal or snack according to the Nutrition Standard?

Offers **full** serving sizes from the **four** food groups in Canada's Food Guide:



✓ **Vegetables and Fruit** ✓ **Grain Products** ✓ **Milk and Alternatives** ✓ **Meat and Alternatives**

Meal (Breakfast, Morning meal, Lunch, Dinner)

A meal has at least 3-4 **full** servings.

Include:

- ✓ 1 **full** serving of **Vegetables and Fruit** **and**
- ✓ 1 **full** serving of **Grain Products** **and**
- ✓ 1 **full** serving of **Milk and Alternatives**



Snack

A snack has at least 2-3 **full** servings.

Include:












- ✓ 1 **full** serving of **Vegetables and Fruit** **and**
- ✓ 1 **full** serving of **Grain Products** **and/or**
- ✓ 1 **full** serving of **Milk and Alternatives**



A dietitian from Toronto Public Health will visit your program each year. You can ask for help with your menu by emailing your questions to snp@toronto.ca.












Vegetables and Fruit

- Serve a variety of fresh vegetables and fruit each day.
- Choose **dark green and orange** vegetables and fruit more often.
- Serve vegetables and fruit prepared with little or no added fat or salt.
- Offer **100% juice no more than once a week**.

	Choose <u>every day</u>				
	Fresh or frozen	<ul style="list-style-type: none"> • Contains no added sugar or salt • Ontario grown and/or produced foods when in season 			
	Canned or jarred vegetables and tomato based sauce	<ul style="list-style-type: none"> • Rinse canned vegetables before use • Sodium: 480 mg or less 			
	Canned or jarred fruit and fruit sauces	<ul style="list-style-type: none"> • Packed in 100% fruit juice • Contains no added sugar or syrup 			
	Only one item <u>once a week</u>				
	Juice	<ul style="list-style-type: none"> • Only 100% unsweetened juice • Sodium: 480 mg or less 			
	Dried fruit	<ul style="list-style-type: none"> • Fruit is listed as the first ingredient • No added sugar or fat 			
Examples of one <u>full</u> serving					
	Carrots 125 mL, ½ cup, 8-10 mini		Leafy greens - Lettuce 250 mL, 1 cup - raw		Frozen mixed vegetables 125 mL, ½ cup
	Cucumbers 125 mL, ½ cup, 8-10 slices		Leafy greens - Bok choy 125 mL, 1/2 cup - cooked		Tomato sauce & canned tomato 125 mL, ½ cup
	Fresh fruit 125 mL, ½ cup, 1 medium		Dried fruit 60 mL, ¼ cup, (about 40 g)		100% fruit & vegetable juice 125 mL, ½ cup

Grain Products

- Only serve a variety of **whole grain and/or whole wheat** products.
- Choose whole grain and whole wheat products that provide a source of fibre.
- Serve whole grain and whole wheat products that limit fat, sugar and salt.

	Choose <u>every day</u>				
	Breads, cereal, pasta, rice and other grains* crackers	<ul style="list-style-type: none"> • Fibre: 2 g or more • Fat: 3 g or less • Saturated fat: 2 g or less • Trans fat free • Sodium: 480 mg or less <p><small>* Rice may not meet fibre criteria; brown rice is a healthy choice to serve.</small></p>			
	Only one item <u>once a week</u>				
	Baked goods : Grain-based bars, muffins, waffles, pancakes, cookies Snacking foods: Popcorn, pretzels	<ul style="list-style-type: none"> • Fat: 5 g or less • Saturated fat: 2 g or less • Trans fat free • Sodium: 480 mg or less 			
Examples of one <u>full</u> serving					
	Bread 35 g, 1 slice		Rice and other grains 125 mL, ½ cup - cooked		Pasta, noodles, couscous 125 mL, ½ cup - cooked
	Bagel 45 g, ½ bagel		Pita & tortilla 35 g, ½ piece		Cereal Cold: 30 g Hot: 150 g, 175 mL, ¾ cup - cooked
	English muffin 35 g, ½ English muffin		Crackers 30 g, (10 saltine crackers)		Melba toast 30 g, (4-6 melba toasts)



Milk and Alternatives

- **Serve skim or 1% milk more often.** *% M.F. = Percent milk fat
- Choose lower fat cheese and milk alternatives.

Choose every day		
	Milk: White or chocolate milk Fortified soy beverages*	<ul style="list-style-type: none"> • % M.F.: skim, 1%, 2% milk or *Fat: 5 g or less • Calcium: 25% Daily Value or more • Vitamin D: 25% Daily Value or more
	Cheese	<ul style="list-style-type: none"> • % M.F.: 20% or less • Calcium: 15% Daily Value or more
	Yogurt, Kefir, Yogurt drink	<ul style="list-style-type: none"> • % M.F.: 2% or less • Calcium: 15% Daily Value or more
Only one item once a week		
	Processed cheese slices & spreads	• Light, fat free, made from skim milk
	Milk based desserts: Puddings, custards	<ul style="list-style-type: none"> • Saturated fat: 2 g or less • Calcium: 5% Daily Value or more

Examples of one full serving

	Milk & fortified soy beverage 250 mL, 1 cup		Cheese, block 50 g, 1 ½ oz		Yogurt & kefir 175 g, 175 mL, ¾ cup
	Yogurt drink 200 mL		Cheese slices & strings 50 g, 2 slices or strings		Cottage cheese 250 mL, 1 cup

Meat and Alternatives

- Serve meat alternatives such as beans, lentils, and tofu more often.
- Serve **extra lean or lean** meat and alternatives with little or no added fat or salt.
- Prepare meat and alternatives using a lower fat cooking method (e.g. bake, boil, stir-fry, sauté).

Choose every day		
	Meat alternatives: Legumes – beans, peas, lentils Soy products – Tofu*	<ul style="list-style-type: none"> • Rinse canned legumes before use • Iron: 5% Daily Value or more • Fat: 3 g or less • Sodium: 480 mg or less * <i>Tofu may not meet fat criteria; tofu is a healthy choice to serve.</i>
	Meat: Fresh, frozen, prepared, canned Chicken, beef, pork, fish	<ul style="list-style-type: none"> • Packed in water, not oil • Fat: 5 g or less for fresh, frozen or prepared meats 3 g or less for canned meats • Sodium: 480 mg or less
	Canned fish:	<ul style="list-style-type: none"> • Select light tuna, not albacore or white • Packed in water, not oil • Sodium: 480 mg or less
Only one item once a week		
	Deli meats	• Sodium: 480 mg or less

Examples of one full serving

	Legumes – lentils, peas, beans		Tofu 150 g, 175 mL, ¾ cup
	Hummus 175 mL, ¾ cup		Eggs 2 eggs
	Meat – chicken, beef, pork		Deli meat 75 g, 2 ½ oz, 125 mL, ½ cup
	Canned fish – light tuna, salmon 75 g, 2 ½ oz, 125 mL, ½ cup		

Not Recommended for Student Nutrition Programs

Limit these items to only **one** per meal or snack



- Jams, jellies, marmalades, sweetened fruit butters, honey, syrup, light cream cheese
- Sauces, dips, gravy and condiments (e.g. salt)
- Fats and oils (e.g. butter, non-hydrogenated margarine, vegetable oil, low-fat salad dressing, low-fat mayonnaise, etc.)



Do NOT serve these foods



- * Expired food
- * Foods not in their original container
- * Jars or packages with broken seals
- * Foods from emergency food systems (e.g. food bank)
- * Home preserves: home canned foods (e.g. meat, fish, vegetables, combination foods, antipasto, etc.)
- * Candy, chocolate, marshmallows, fruit flavoured candies, gummies, rolls or chews
- * Deep-fried foods (e.g. chicken nuggets, French fries, fish sticks, samosas, spring rolls, etc.)
- * Foods with artificial trans fat (e.g. shortenings, partially hydrogenated and hydrogenated margarines)
- * Soft drinks, sports drinks, energy drinks, coffee and caffeinated tea based drinks
- * Fruit-flavoured drinks that are not 100% fruit juice
- * Unpasteurized ciders and juices
- * Cakes, cupcakes, doughnuts, pastries and croissants
- * High fat, salty snacks (e.g. chips, cheese puffs, etc.)
- * Instant noodle soups
- * Frozen ice treats (e.g. freezies, popsicles)
- * Full fat sour cream and cream cheese, cream, whipped cream and non-dairy creamers
- * Unpasteurized milk or milk alternatives
- * *Peanuts, nuts, nut and seed butters
- * Hot dogs, sausages and bacon (regular side bacon, turkey bacon, chicken bacon)
- * Cured meats (e.g. salami, pepperoni, bologna)
- * Gelatin-based snacks (e.g. flavoured jellios)

*Food Allergies

- Some children and youth have life threatening food allergies.
- Programs should clearly communicate their food allergy policies.
- It is recommended that children and youth with life threatening allergies NOT participate in Student Nutrition Programs.

For more information on food allergies go to:

- ✓ **Toronto Public Health website:**
http://www.toronto.ca/health/nm_index.htm#allergies
- ✓ **Health Canada website:**
www.hc-sc.gc.ca/fn-an/securit/allerg/fa-aa

What should we look for when shopping?

Nutrition Facts	
Per 125 mL (30 g)	
Amount	% Daily Value
Calories 99	
Fat 3.0 g	5%
Saturated 2 g + Trans 0 g	3%
Cholesterol 0 mg	
Sodium 480 mg	20%
Carbohydrates 15 g	5%
Fibre 2 g	
Sugar 2 g	
Protein 3 g	
Vitamin A 5%	Vitamin C 10%
Calcium 15%	Iron 5%

For more information about food labels:
Call 1-800-0-Canada (1-800-622-6232)
www.hc-sc.gc.ca/fn-an/label-etiquet/nutrition/index-eng.php



Attention Student Nutrition Program Supervisors/Co-ordinators

The goal of the Food Safety Program is to improve the health of the population by reducing the incidence of foodborne illness. Student Nutrition Program (SNP) sites serve food to children, who are considered at risk in regard to foodborne illness. The foods prepared and/or served at these food premises include but are not limited to, the service of non-hazardous baked products, cutting of fruits and vegetables, and/or the preparation of hazardous foods (meat, milk, cheese etc.). These foods are served as a breakfast, lunch or snack.

Foods must be prepared, stored and served in a manner consistent with acceptable public health practices as required by Ontario Regulation 562/90 as amended (Food Premises). Food Service facilities at the SNP sites must have the following equipment:

	Criteria	Requirements
Does your site?	<ul style="list-style-type: none"> • serve non-hazardous baked products (i.e. muffins) • serve frozen heat & serve products • serve drinks from original containers • serve food using single service products (plastic cutlery, cups, plates) 	<ul style="list-style-type: none"> • hand basin, with hot & cold running water, equipped with soap & towels in dispensers for hand washing
Does your site?	<ul style="list-style-type: none"> • prepare food products (fruit, vegetables, etc) using utensils (knives, cutting boards, etc.) • serve food using single service products (single use plastic cutlery, cups, plates) 	<ul style="list-style-type: none"> • hand basin, with hot & cold running water, equipped with soap & towels in dispensers for hand washing • 2 compartment sink for utensil washing and sanitizing • smooth, non-absorbent flooring in food preparation area • accurate thermometer for refrigeration unit
Does your site?	<ul style="list-style-type: none"> • Prepare hazardous foods on site • Serve food using multiservice articles (reusable glasses, plates, bowls, cutlery) 	<ul style="list-style-type: none"> • hand basin, with hot & cold running water, equipped with soap & towels in dispensers for hand washing • 3 compartment sink or • dishwasher* and a 2 compartment sink for multiservice articles • smooth, non-absorbent flooring in food preparation area • accurate thermometer for refrigeration unit • adequate refrigeration & food storage space

***New Toronto Public Health Policy in Effect Starting in 2006**

All new student nutrition programs using dishwashers must use one that meets the Ontario Food Premises Regulation (commercial dishwasher).

Existing student nutrition programs may continue to use currently installed domestic dishwashers until a replacement is required. All new or replacement dishwashers must meet the Ontario Food Premises Regulation (commercial dishwasher).

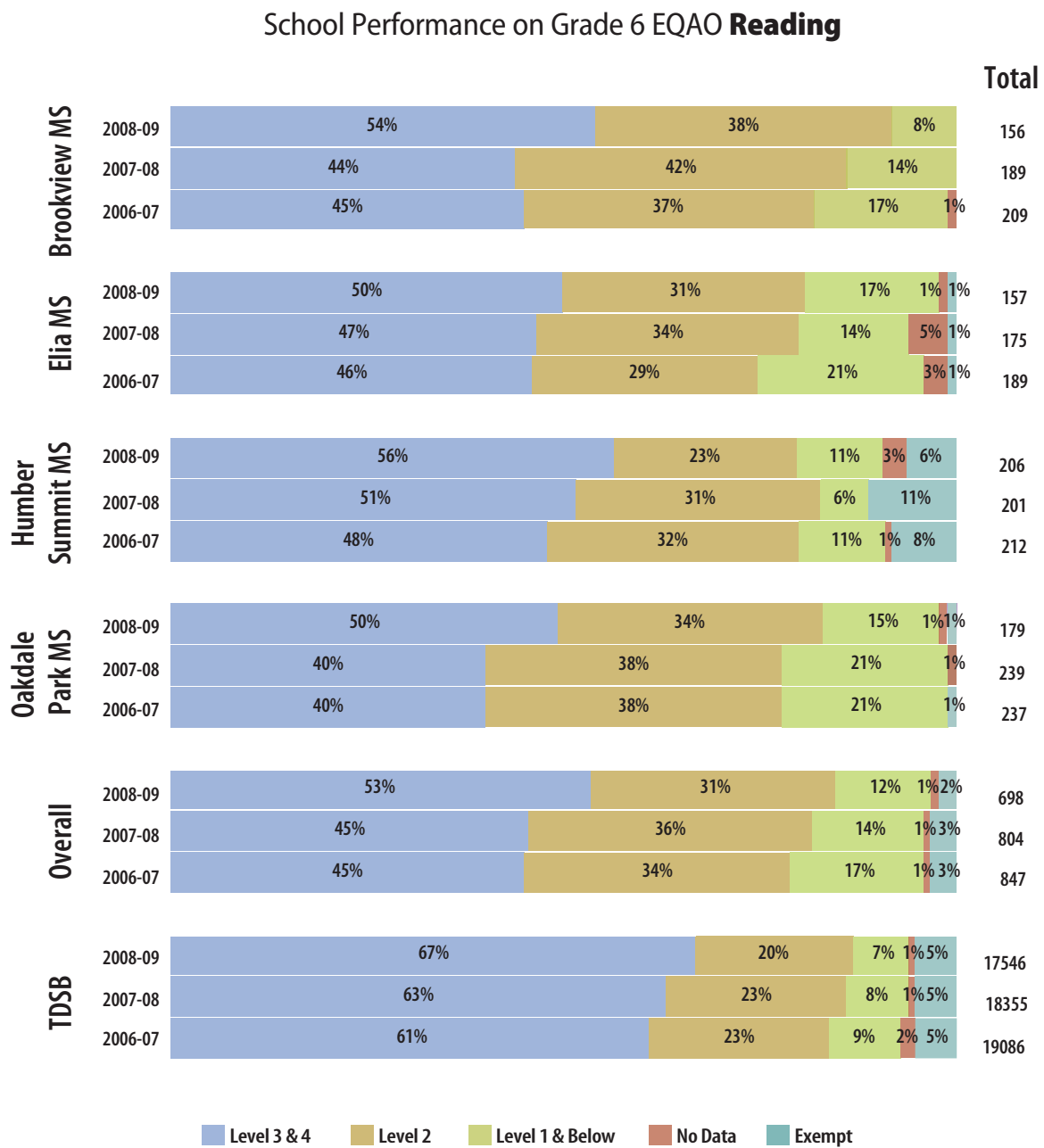
Questions?

If you have any questions about these requirements, contact the Public Health Inspector for your site or call 416-338-7600 and ask to speak with a district Public Health Inspector or Manager, Healthy Environments.

Appendix 2

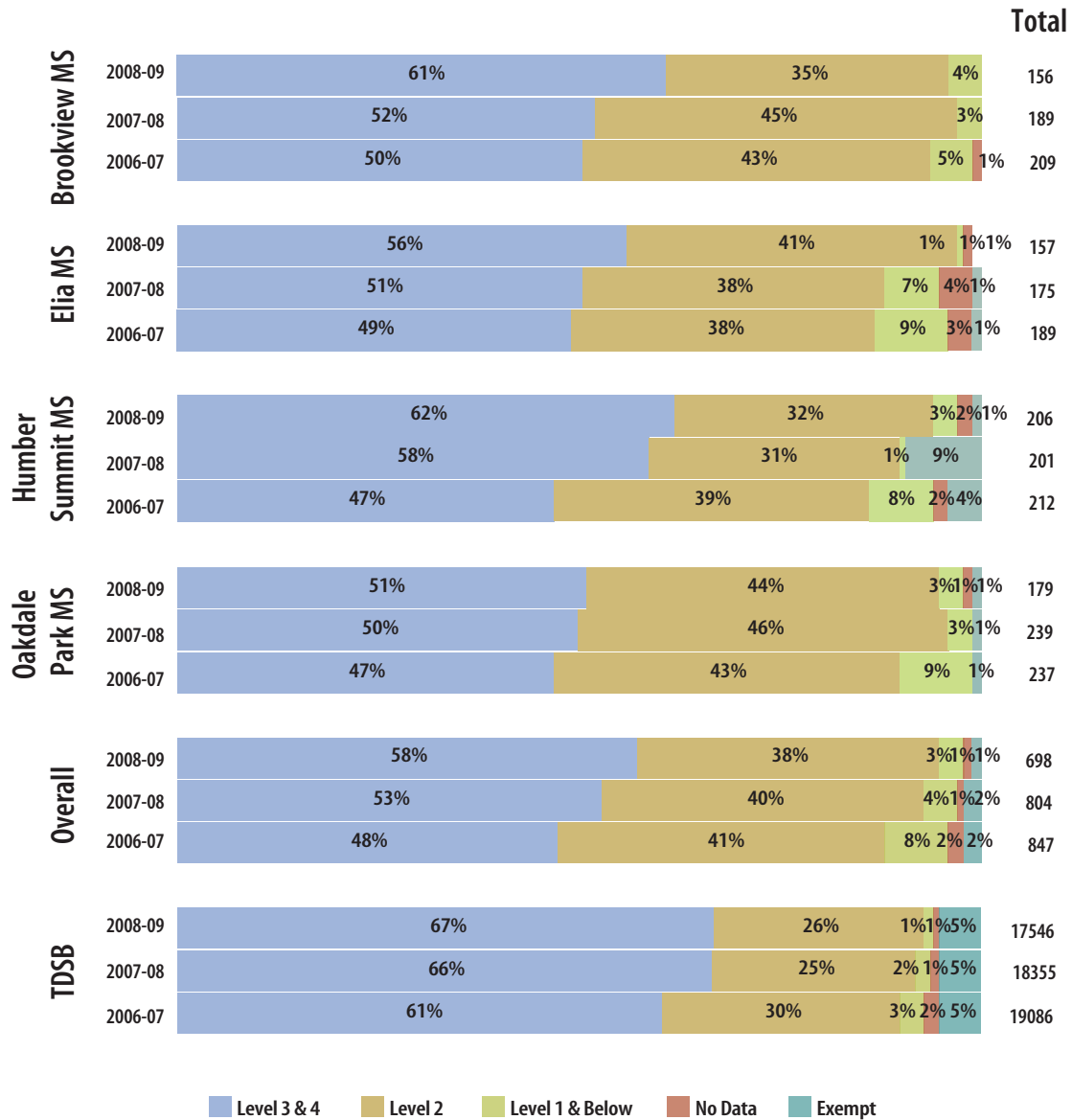
School Operations: First-Year Findings Trends in Achievement, Behaviour and Absenteeism 2006-07 to 2008-09

School Operations: Trends in Achievement



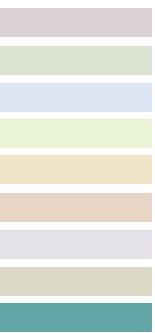
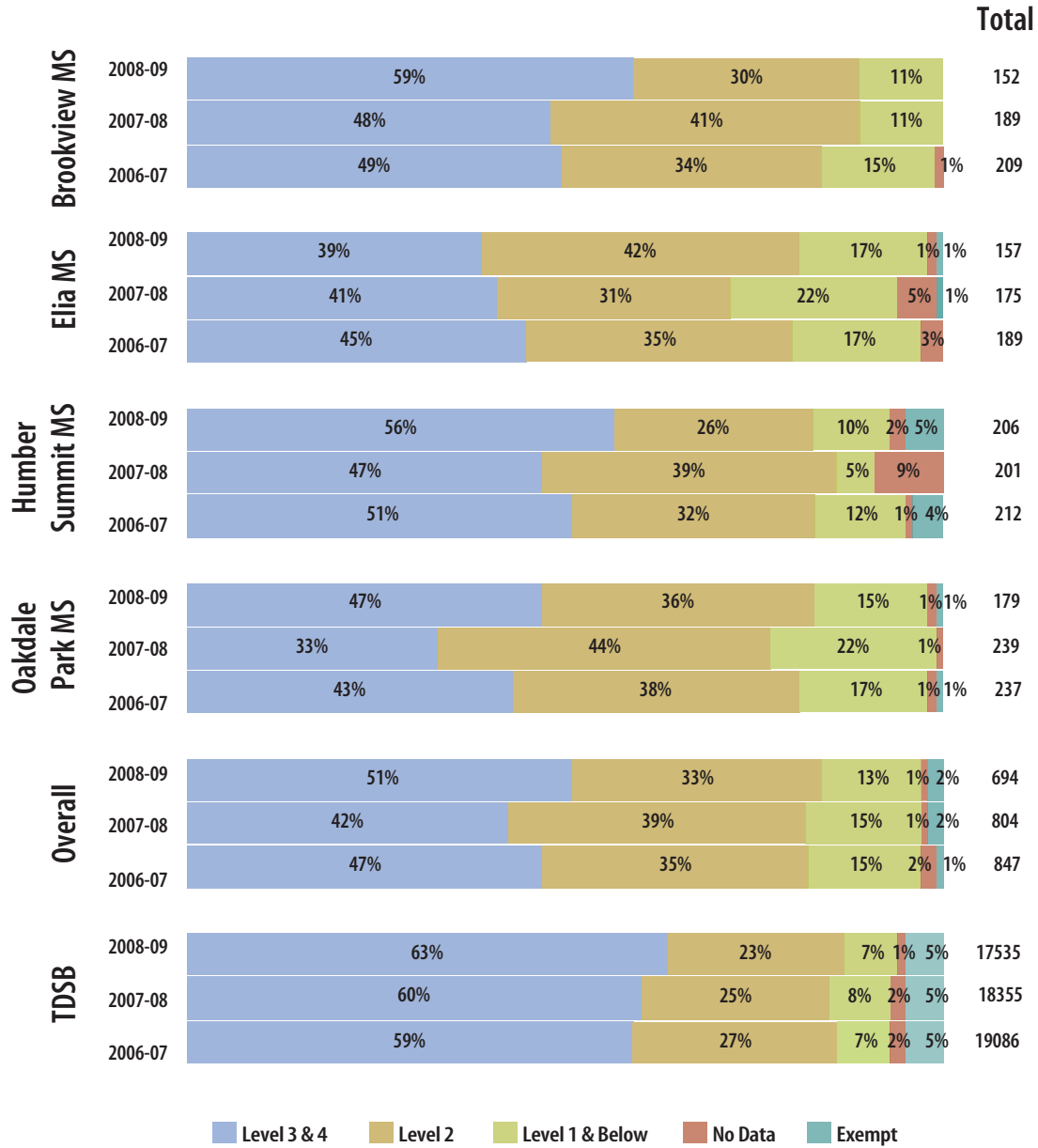


School Performance on Grade 6 EQAO Writing



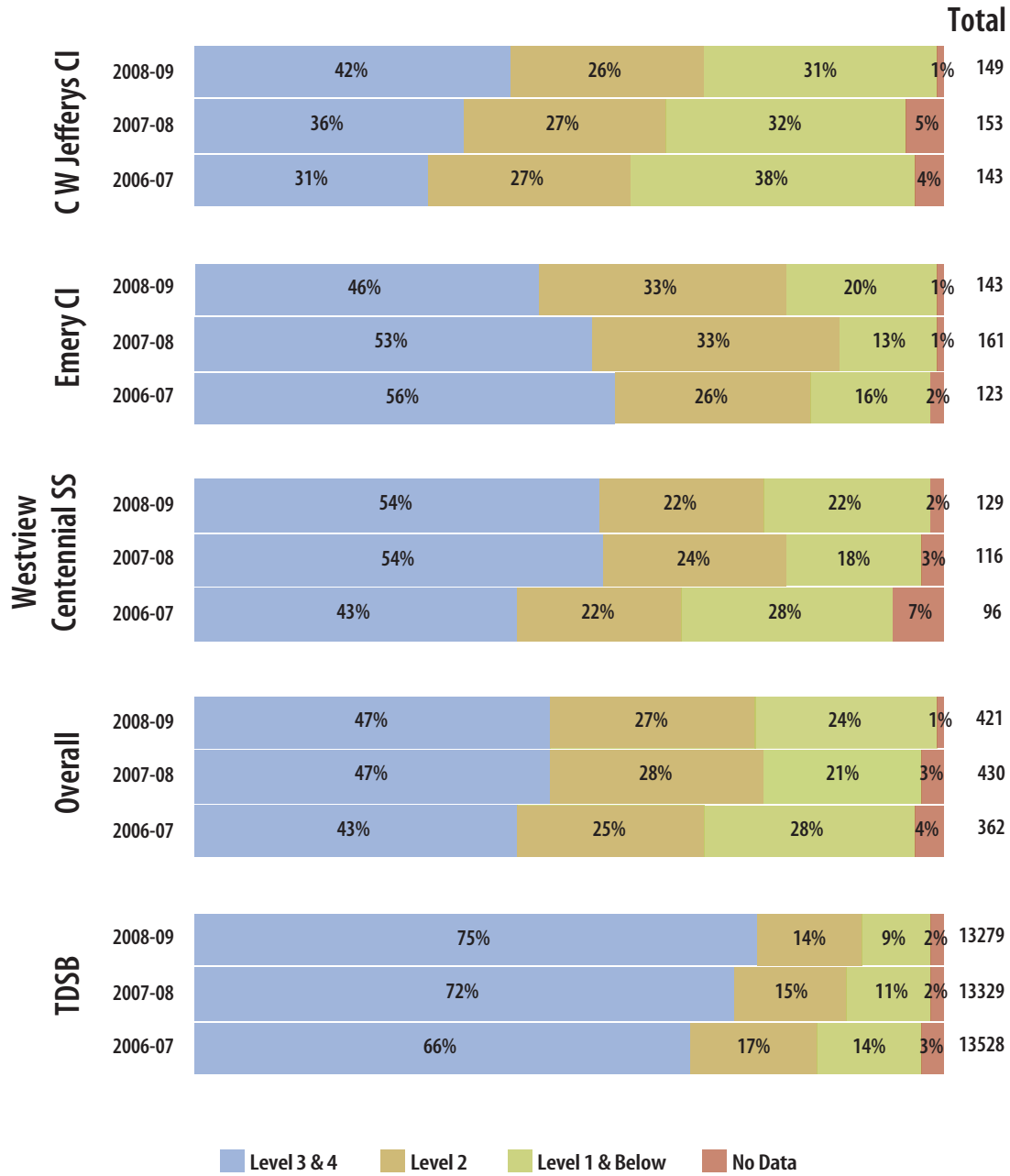
School Operations: Trends in Achievement

School Performance on Grade 6 EQAO: **Mathematics**



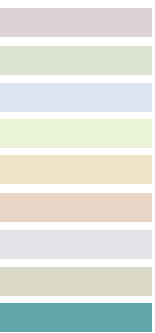
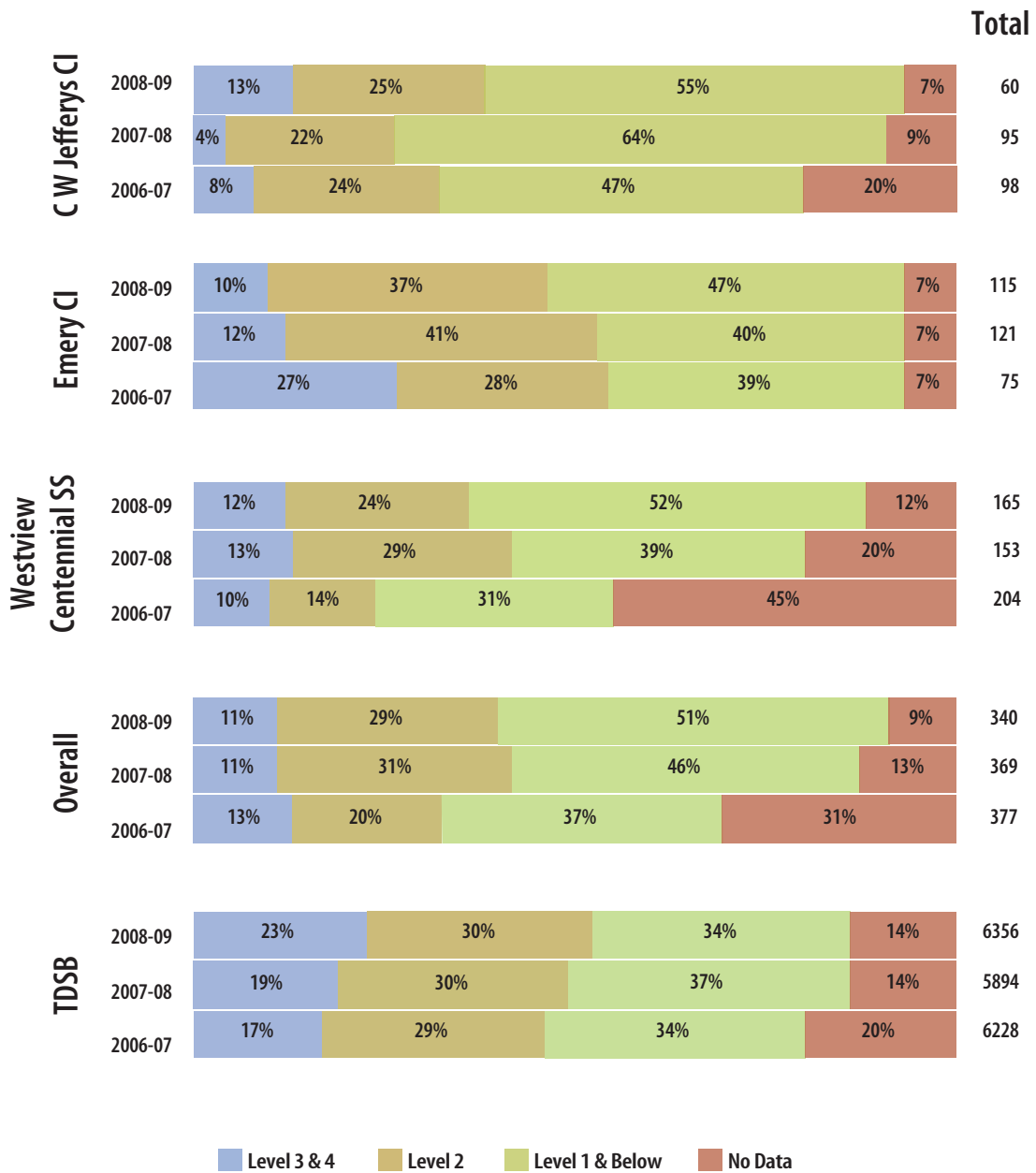


School Performance on Gr. 9 EQAO Math: **Academic**



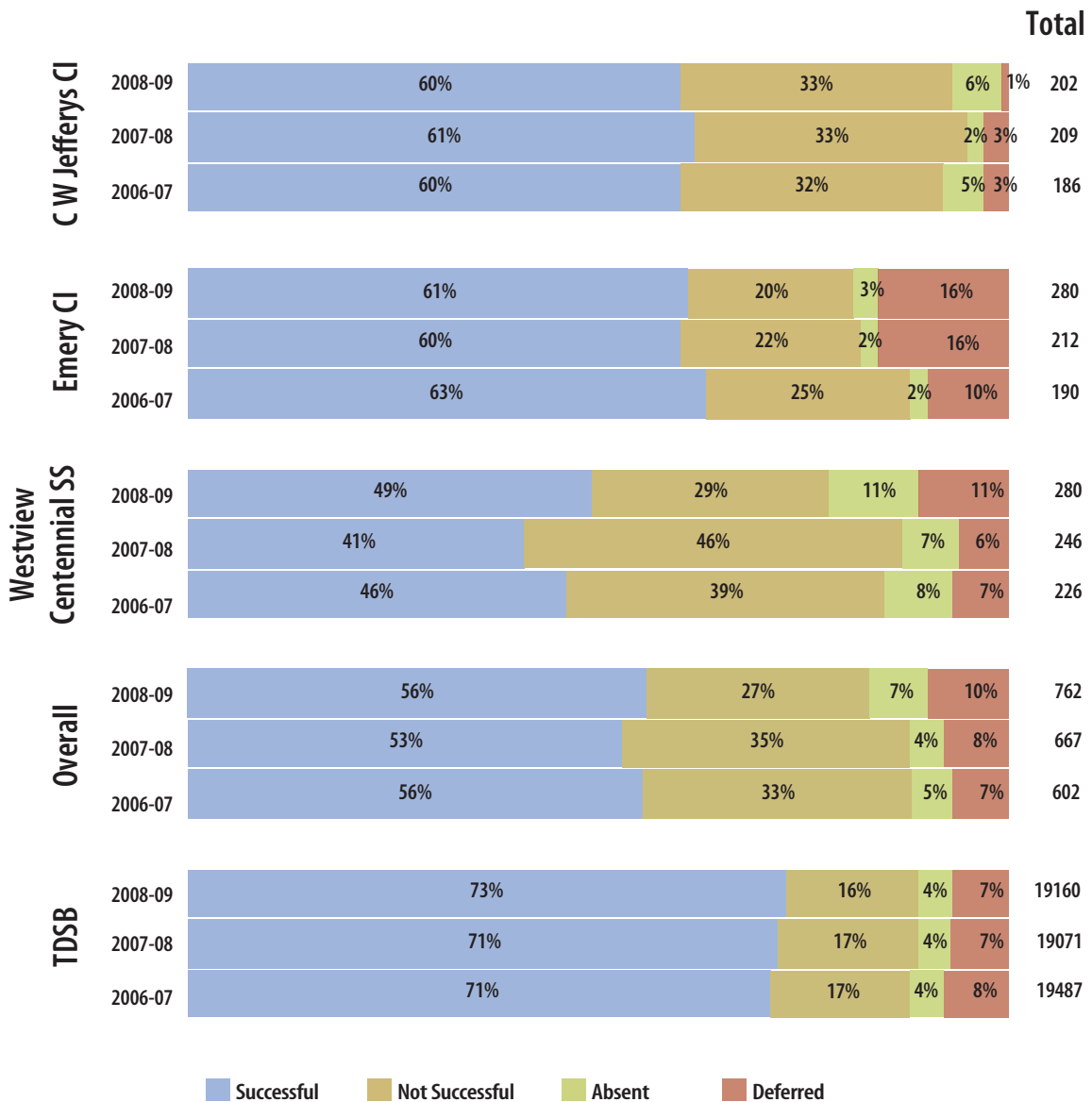
School Operations: Trends in Achievement

School Performance on Gr. 9 EQAO Math: **Applied**



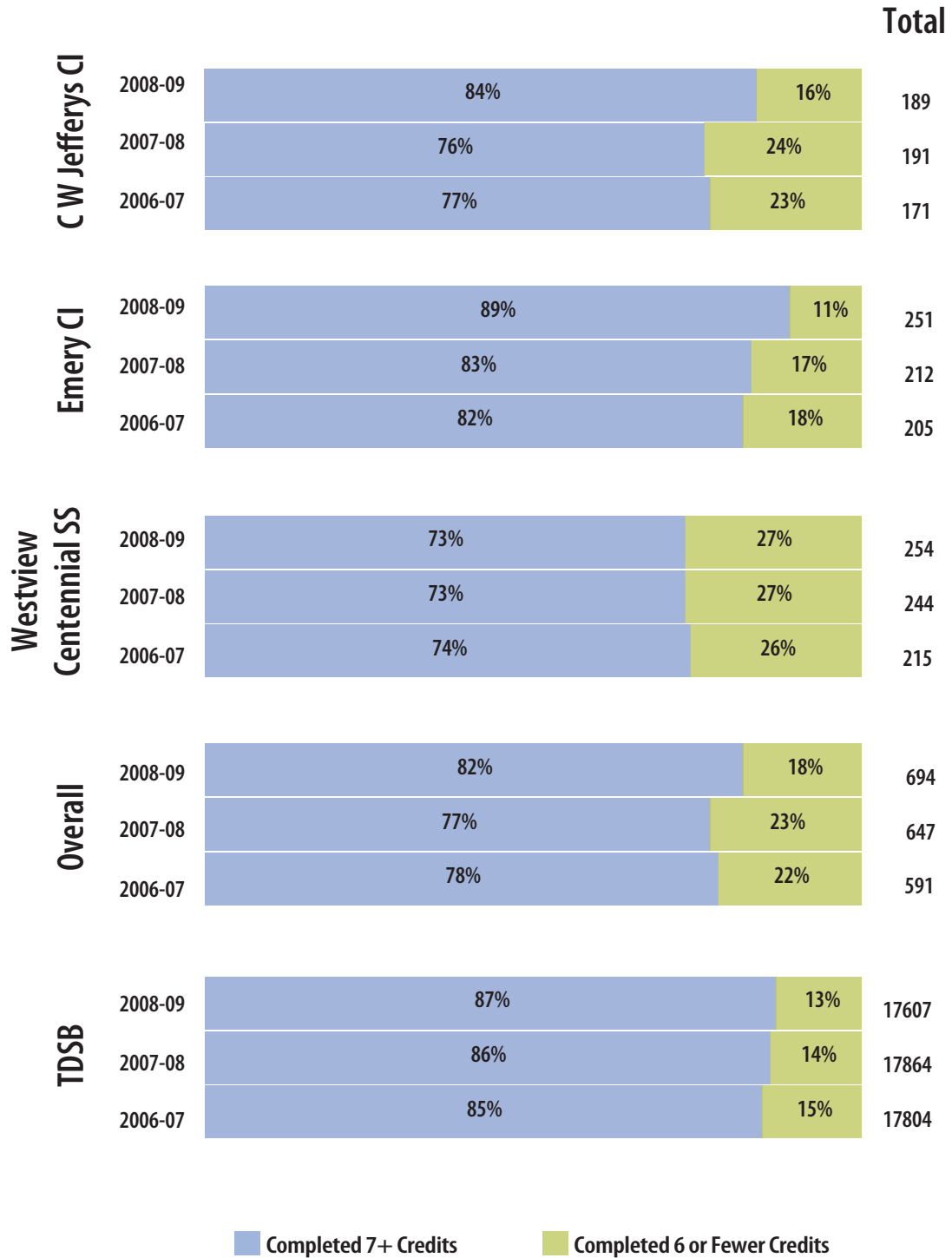


School Performance on The OSSLT: **First-Time Eligible**



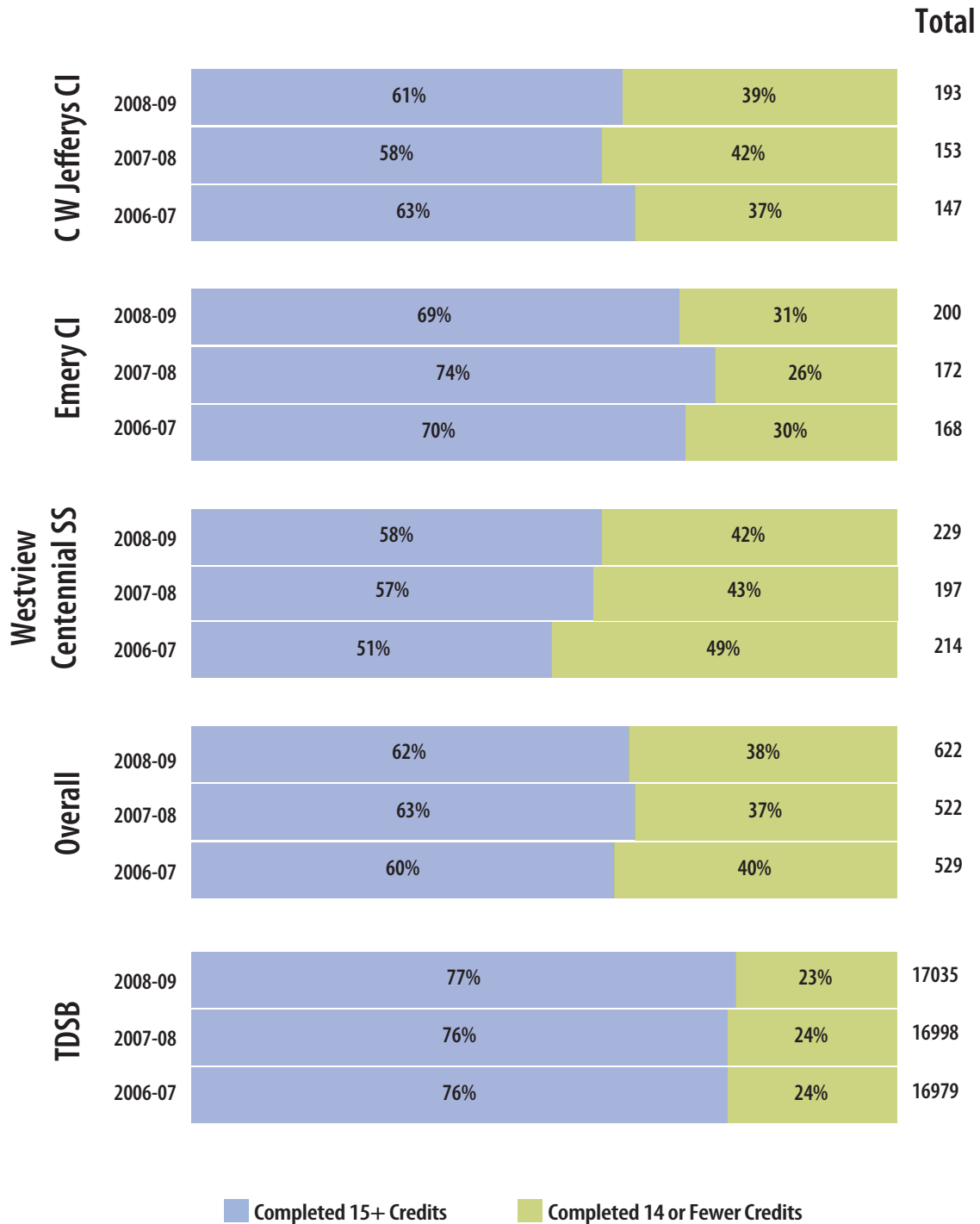
School Operations: Trends in Achievement

School Performance on Gr. 9 Credit Accumulation

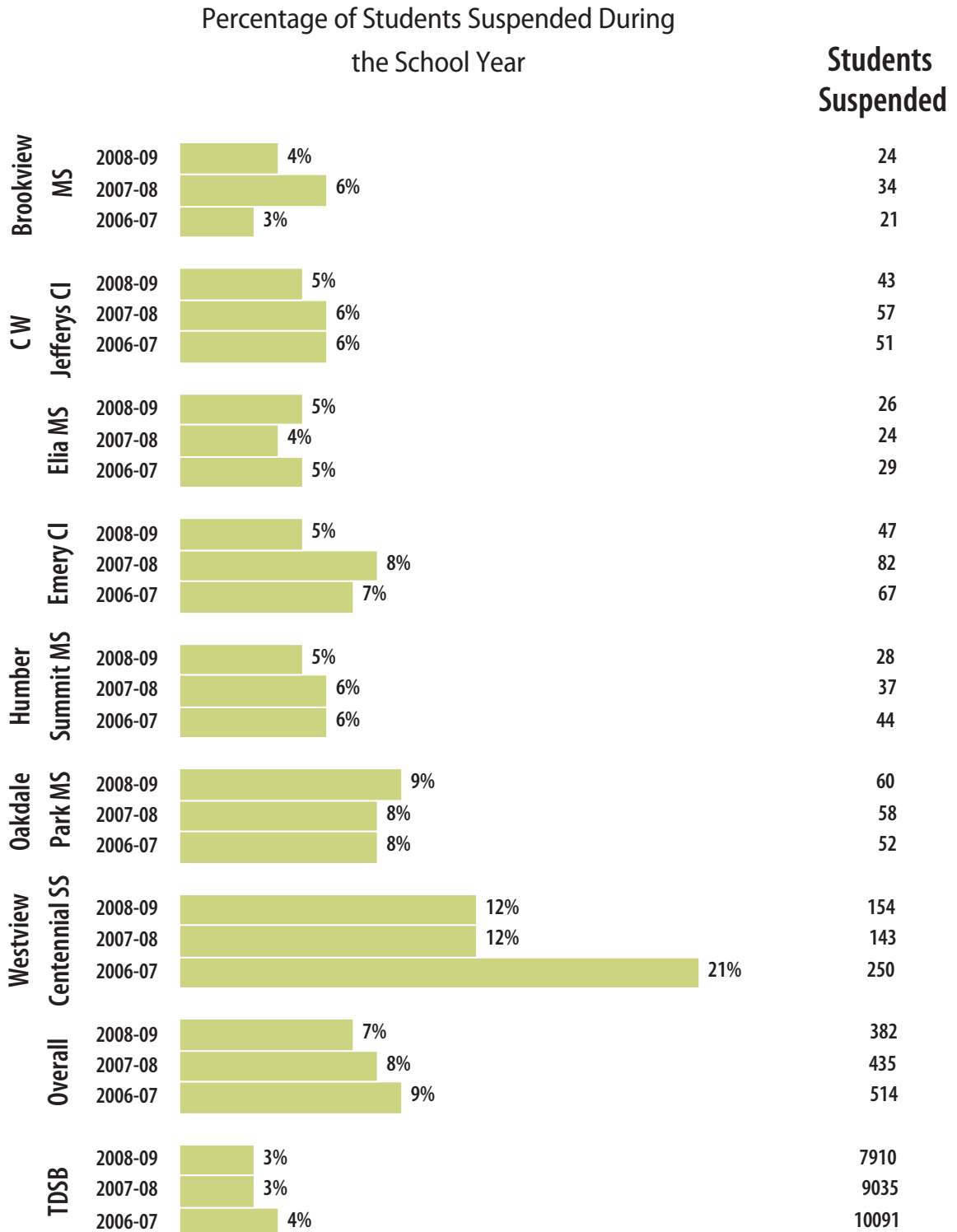




School Performance on Gr. 10 Credit Accumulation

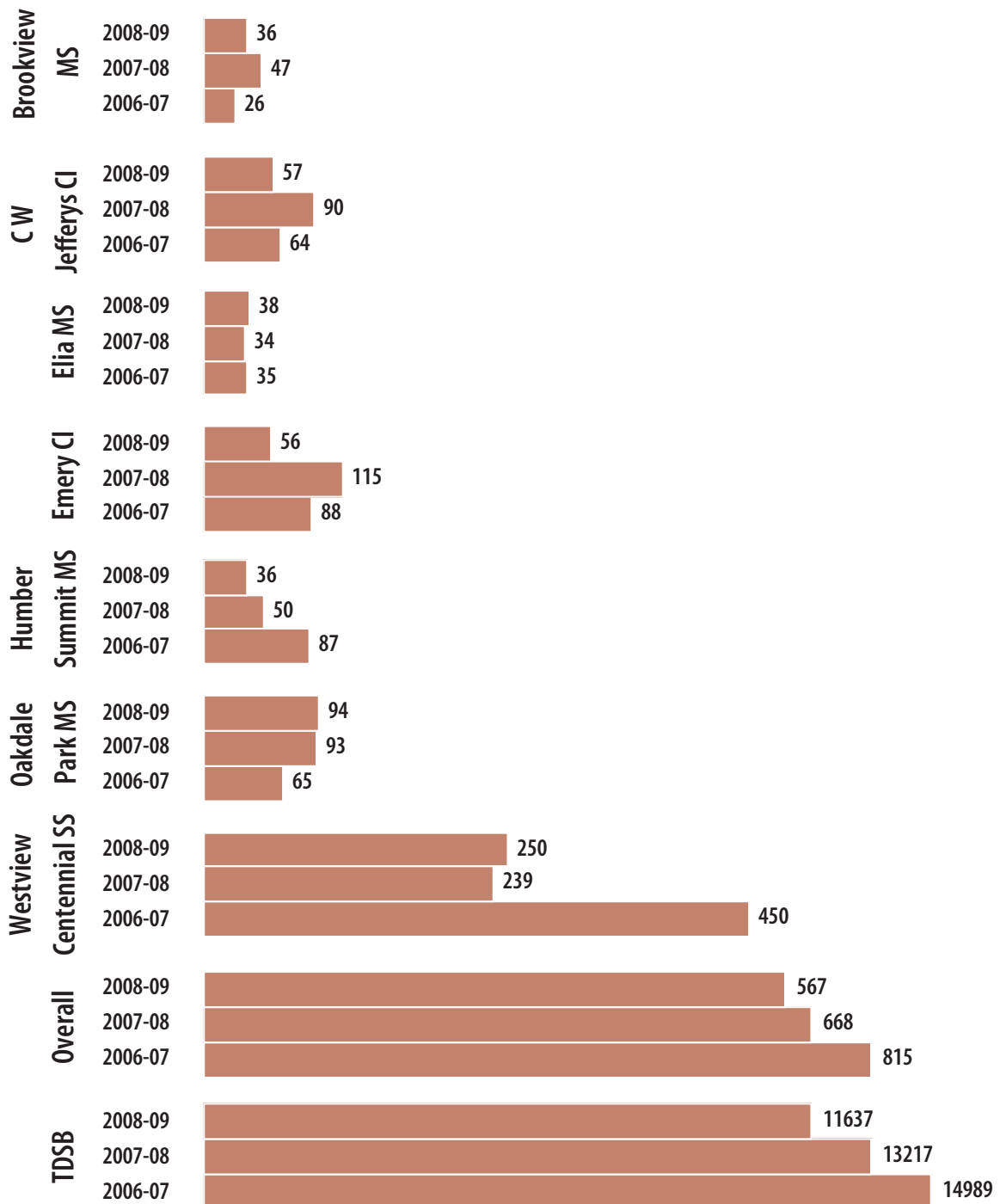


School Operations: Trends in Behaviour



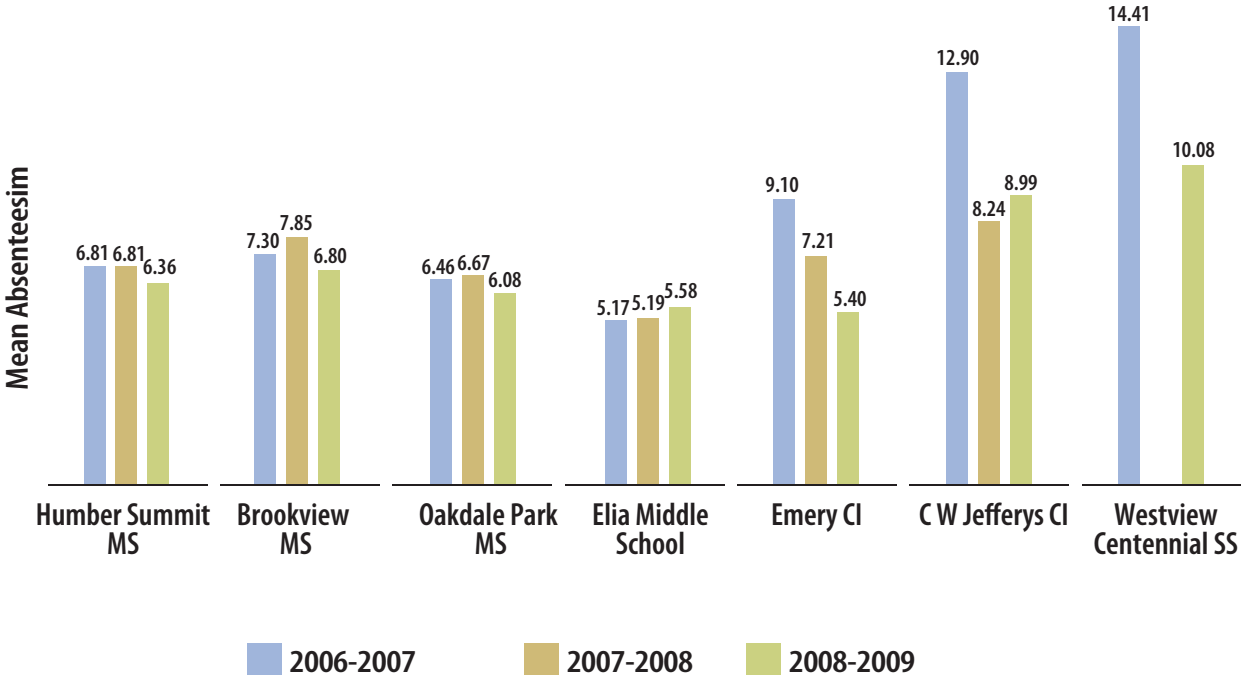


Number of Suspensions During the School Year



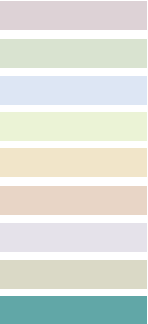
School Operations: Trends In Absenteeism

Absenteeism Rate



The absenteeism 'rate' is calculated by dividing the number of days the student was absent by the number of days that the student was registered in TDSB over the year.

Note: 2007-2008 data has been excluded for Westview Centennial SS due to data quality issues.



FEEDING OUR FUTURE:

THE FIRST- AND SECOND-YEAR EVALUATION
Easwaramoorthy Muthuswamy

Copyright © (March 2012) Toronto District School Board

Reproduction of this document for use in the schools of the Toronto District School Board is encouraged.

For any other purpose, permission must be requested and obtained in writing from:

Research and Information Services
Toronto District School Board
1 Civic Centre Court, Lower Level
Etobicoke, ON M9C 2B3
Tel.: 416-394-4929
Fax: 416-394-4946

Every reasonable precaution has been taken to trace the owners of copyrighted material and to make due acknowledgement. Any omission will gladly be rectified in future printings.