

Benchmarking Engagement: Staff Utilization & Programming (2018-19)

Participating Boards:

 Toronto District School Board and three GTA District School Boards

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Introduction

As part of the 2019-20 regional internal audit plan, the Toronto and Area Regional Internal Audit Team (RIAT) conducted a benchmarking engagement across four Boards within the region.

Senior Management and the Audit Committee at each Board often ask how their Board compares to others in the region. The purpose of this report is to share comparative metrics with the participating Boards in order to highlight potential differences in staffing or programming approaches, identify outliers that could lead to further investigation, and foster greater collaboration between Boards. The intent was to focus on areas of significant spend.

Data pertaining to the other Boards has been anonymized.

Engagement Objective and Scope

As noted above, the objective of this engagement was to share comparative programming and staffing metrics across participating Boards. The specific metrics reviewed were selected through joint consultations with participating Boards. The engagement covered the 2018-19 fiscal year, with year-over-year comparative data in certain sections.

The engagement focused on the following key areas:

- French Immersion (FI) FI policies and FI enrolment;
- Special Education Special education funding, demographics;
- Paraprofessionals and support staff;
- Non-academic metrics including administrative staffing, custodians and maintenance, IT spending and transportation.

Data was primarily gathered from Education Finance Information System (EFIS) forms, review of Board websites, consultations with Board staff, and the Ontario School Information System (OnSIS). This data has not been audited by the RIAT.

Conclusion

While all Boards work toward common goals, there are many different approaches to achieve these goals. The data presented within the body of this report provides good insight for the participating Boards. For example, it shows how various areas are interconnected and that programming choices should not be made in isolation (i.e. a local decision to provide a relatively higher level of special programming means that limited resources are being allocated to that area, potentially at the expense of other areas). The data also highlights a number of similarities, such as Boards allocating more funds to Special Education than they receive from the Ministry.

Where applicable, we have provided recommendations for Boards to consider. While some might not apply to all Boards, these areas for consideration encourage Boards to further analyze the impact of local situations /



decisions and reach out to other Boards to understand differences in delivery models. This could help identify successful practices which, if implemented, could lead to process improvements or cost savings. These recommendations do not require management responses and are up to each Board to monitor and track should they choose to take action.

In addition, this report highlights the importance of measuring outcomes based on the programming, staffing and spending choices made by each Board. Tracking and evaluating outcomes helps identify where enhancements to support and delivery models should be considered to ensure that objectives are achieved, especially given limited funding. Being able to use data in a more "real-time" basis would, in our opinion, be very beneficial to help Boards make more informed decisions.

COVID-19 delayed the release of this report, as Boards were focused on other areas of priority. Depending on each Board's appetite, the RIAT may consider future benchmarking engagements to cover metrics and Boards not included in this engagement. These additional metrics may involve a deeper dive into the existing categories reviewed (FI, Special Education and Other areas) or other areas of interest.

We thank the management and staff of all participating Boards for their feedback and participation in this engagement.

Limitations on use of Report

This report is intended primarily for the information and use of the Audit Committee and Senior Management of the Toronto District School Board and should not be provided to any other party without the consent of the Senior Manager, Regional Internal Audit, Toronto and Area Region.



Observations

As highlighted in each section, there is some variation within the metrics due to differences in policy or priorities of individual Boards. The intent of the report is not to review the merit of these local decisions, but rather illustrate their impact in comparison to the decisions of other Boards.

A - FRENCH IMMERSION

A.1. French Immersion (FI) Enrolment Policies

Purpose: To compare various policies relating to FI for the year 2018-19.

	TDSB	Board A	Board B	Board C
Acceptance policies	 Guaranteed to on-time applicants. Admission to a specific school is not guaranteed. 	- Guaranteed to all who wish to enroll.	- Random selection.	- Based on random selection.
School Type	- Dual Track - FI programming provided at some schools but schools are not full FI. Applies to Elementary and Secondary.	- Fully dedicated FI schools & dual track at the Elementary level. Continuation of FI at Secondary level (schools are dual track).	- Dual Track - Both Elementary and Secondary.	- Dual Track - Both Elementary and Secondary.
Entry points	- Senior Kindergarten	- Grade 1	- Grade 1	- Grade 1
% of day in French	 At first, all subjects are taught in French. English instruction introduced in Grade 4, until it becomes a half- day program from Grades 6-8. 	 In Grades 1 to 3, all subjects are taught in French. In Grades 4 to 8, time is shared equally between French and English instruction. 	- Time is shared equally between French and English instruction until Grade 8.	 In Grade 1, 90% of the instructional day is delivered in French 70% Grades 2&3 50% Grades 4-8
Eligibility	- Open to all students not already enrolled in an intensive French as a Second Language program, i.e. FI or Extended French (EF).	- Open to all students.	- The Grade 1 Fl enrolment cap is set at 25 per cent of all students enrolling in Grade 1.	- Open to all students. Limited number of FI schools and random selection process where applications exceed space available.



	TDSB	Board A	Board B	Board C
Transportation	- Students are eligible for bussing/ transit to their designated FI school based on the Board's transportation criteria.	- Students are eligible for bussing to their designated FI school based on the Board's transportation criteria.	- Students are eligible for bussing to their designated FI school based on the Board's transportation criteria.	- Bussing is provided for students that reside within the FI school boundary. Students outside the FI school boundary are not eligible for
				bussing.

Source data: Board websites, discussion with Board staff

Based on the above and further discussions with Board staff, RIAT noted the following:

- Three Boards start French Immersion in Grade 1. TDSB starts in Senior Kindergarten. The percentage of time spent on French instruction varies by board.
- There are varying approaches to FI acceptance policies. Some boards restrict enrolment based on a province-wide shortage of French teachers.

Recommendation: Calculate incremental cost of providing transportation to FI students

French Immersion is a programming choice for which some Boards provide transportation. This requires additional spending where a student may not have otherwise been eligible for transportation had they remained at their local, regular track school (or has to travel a longer distance to the FI school). In order to understand the impact of this programming choice, Boards that provide additional FI transportation are encouraged to calculate the incremental cost of providing transportation for FI, particularly where enrolment is not capped.

Recommendation: Conduct further analysis of FI pressures

Boards are encouraged to further analyze the pressures related to French Immersion. These include how open enrolment is balanced with the shortage of FI teachers, analyzing additional transportation costs that may be calculated through the above recommendation, as well as community interests and the impact FI has on the overall system.



A.2. French Immersion Enrolment Metrics

Purpose: To identify enrolment trends in FI.

Board	TDSB		Board A		Board B		Board C	
Year	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Elem % FI enrolment	11.0%	10.8%	14.4%	14.5%	13.8%	13.3%	4.3%	4.3%
Sec % FI enrolment	4.4%	4.1%	7.6%	7.1%	4.7%	4.3%	1.1%	0.6%

Source data: *FI data provided by Boards as at March 31*

Based on the above and discussions with Board staff, RIAT noted the following:

• Elementary enrolment is consistent in three of the four Boards. Enrolment in FI declines significantly from elementary to secondary school.



B – SPECIAL EDUCATION

B.1. % of Special Education Students Enrolled in Community/Self Contained Classes

Purpose: To highlight each Board's use of self-contained classes for Special Education students.

As a background, the following definitions have been used in this section:

Fully Self-Contained Class: Identified students are placed in a special education class and receive all (100%) or almost all of the programming in a special education setting.

Partially Integrated Class: Identified students are placed in a special education class and receive at least 50% of the programming in a special education setting, but are integrated with a regular class for at least one instructional period daily.

Pupils requiring Special Education support that are not allocated to a fully self-contained or partially integrated class would be part of a regular classroom (with any necessary support). The metrics below highlight the percentage of identified students (excluding gifted) enrolled in a fully self contained or partially integrated class. We have excluded gifted students as they require less intensive support compared to students with other exceptionalities in a fully self-contained or partially integrated class.

Elementary (excluding giftedness)	TDSB	Board A	Board B	Board C
% of Students Enrolled in Fully Self-Contained Classes	9%	0%	11%	2%
% of Students Enrolled in Partially Integrated Classes	16%	34%	0%*	11%
Total % of Students in Special Education Classes	26%	34%	11%	12%
Secondary (excluding giftedness)	TDSB	Board A	Board B	Board C
% of Students Enrolled in Fully Self-Contained Classes	7%	0%	11%	3%
% of Students Enrolled in Partially Integrated Classes	7%	10%	14%	4%
Total % of Students in Special Education Classes	14%	10%	25%	7%

Source data: OnSIS Section J (2018-2019)

*Although ratio is rounded to zero, the Board has 34 pupils in this category

RIAT noted the following based on the data provided and discussions with each Board:

- TDSB has a higher than average number of identified students in fully self-contained classes. Students are enrolled in fully self-contained classes based on need, not by exceptionality.
- Board B also has a higher than average number of fully self-contained classes. They noted that students with intellectual disabilities (i.e. Developmental Disability, Mild Intellectual Disability, Autism and Learning Impairment) are more likely to be served in a Special Education contained class.
- Board C integrates most special education students into regular classrooms, with a resource assistant if required. Therefore, they only offer a limited number of self-contained classroom placements.
- Although Board A does not offer fully self-contained classes, they have the highest % of identified students in special education classes. Special education students typically have some integration as part of their programme.



B.2. % of Special Education Students Identified with an Exceptionality

In OnSIS, students supported by the Special Education grant can be categorized as either a student identified with an exceptionality or a non-identified student¹. This metric identifies the breakdown of students who have been identified with an exceptionality over all pupils supported by the Special Education Grant.

% of Special Education Students Identified with an Exceptionality	TDSB	Board A	Board B	Board C
Elementary	37%	95%*	36%	39%
Secondary	54%	95%*	70%	70%

Source data: OnSIS Section J (2018-2019)

*There were approximately 1,200 students with an IEP who did not yet have an IPRC and therefore not identified with an exceptionality at the time.

Based on the above table:

- At the elementary level, all Boards (except Board A) have a similar percentage of special education students identified with an exceptionality (37%-39%). This indicates that the majority of elementary students at these Boards receiving special education support are without a formally identified exceptionality.
- TDSB noted that some students may not meet the criteria for an exceptionality but still have an IEP. Some schools may also place students on an IEP if they believe that additional resources will support the student.
- This metric was discussed with the other Boards and the following comments were noted:
 - Ministry guidelines state that students receiving special education support do not necessarily need to be formally identified.
 - Where assessments occur centrally, there may be a delay in identification.
 - In some cases, students at the early stages of development benefit from professional support staff but may not require an IEP or formal identification at their current stage.
 - Board A relies heavily on processes outlined in Ontario Regulation 181/98² and established an "Identification, Placement and Review Committee" (IPRC) for almost all of its students with special education needs.

¹ "Non-identified" students are defined as students that have an IEP and access Special Education services but have not been formally identified with an "exceptionality".

² Reg. 181/98 – Identification and Placement of Exceptional Pupils. The Identification Placement Review Committee (IPRC) meets to decide whether a child should be identified as "exceptional". An exceptional pupil is defined as a pupil whose behavioral, communication, intellectual, physical or multiple exceptionalities are such that he or she is considered to need placement in a special education program.



B.3. Breakdown of Special Education Students by Exceptionality

Purpose: To highlight, by panel, the breakdown of Special Education students by exceptionality for each Board.

Elementary Special Education Students by Exceptionality	TDSB	Board A	Board B	Board C
Giftedness	39.2%	21.0%	12.8%	10.3%
Learning Disability	23.1%	29.5%	32.9%	39.7%
Autism	17.1%	17.4%	23.0%	20.3%
Language Impairment	0.5%	12.4%	14.6%	7.4%
Behavior	4.3%	11.1%	2.2%	0.6%
Developmental Disability	6.4%	2.1%	6.1%	1.8%
Mild Intellectual Disability	5.8%	3.0%	5.3%	3.9%
Physical Disability	1.4%	1.3%	1.0%	1.3%
Deaf/Hard of Hearing*	1.9%	1.8%	1.1%	0.7%
Multiple Exceptionalities	0.0%	0.1%	0.9%	13.5%
Blind/Low Vision	0.2%	0.3%	0.1%	0.4%
Speech Impairment	0.0%	0.0%	0.0%	0.0%
Total	100%	100%	100%	100%

Secondary Special Education Students by Exceptionality	TDSB	Board A	Board B	Board C
Giftedness	31.9%	20.4%	9.8%	5.9%
Learning Disability	41.0%	46.5%	42.4%	58.0%
Autism	7.8%	8.5%	10.6%	4.8%
Language Impairment	0.5%	3.4%	21.5%	5.5%
Behavior	2.0%	10.5%	0.8%	0.9%
Developmental Disability	4.5%	2.5%	7.3%	2.7%
Mild Intellectual Disability	10.2%	5.6%	5.4%	7.0%
Physical disability	1.0%	1.3%	0.6%	0.5%
Deaf/Hard of Hearing*	0.9%	1.0%	0.5%	0.4%
Multiple Exceptionalities	0.0%	0.2%	0.9%	13.9%
Blind/Low Vision	0.2%	0.2%	0.2%	0.3%
Speech Impairment	0.0%	0.0%	0.1%	0.0%
Total	100%	100%	100%	100%

Source data: OnSIS Section J (2018-2019)

*Includes: Deaf and deaf/blind alternative programs, hard of hearing, hard of hearing (preschool)



Based on the above data, the RIAT noted the following:

- In aggregate, the three largest categories are Learning Disability, Giftedness and Autism.
- Based on comments from each Board, the exceptionalities that require the greatest support at the highest cost were as follows:
 - Board A Students with multiple complex needs including severe Autism Spectrum Disorder (ASD) and medical and physical concerns require the greatest support.
 - TDSB Costs were noted as higher for the Developmental Disabilities program cost considerations include transportation, increased support staff costs, professional learning, and Occupational therapy and Physical therapy services.
 - Board B Costs are most significant for students with a dual exceptionality of Autism and Developmental Disability. Cost considerations include transportation, increased support staff costs and class caps.
 - Board C Multiple complex needs, ASD, developmental disabilities and physical/medical diagnoses are identifications that often require the most significant multi-layer support for students.
- TDSB and Board A had higher numbers in gifted programming compared to the other Boards.
 - TDSB noted that while gifted programming is a small portion of overall Special Education spending, there are higher costs for offering gifted programming when compared to regular day school programs. These include additional teacher costs due to dedicated gifted teachers and more program locations (sites) across the board.
 - Board A noted that transportation is provided for elementary gifted programs at an incremental cost. Other costs for providing gifted programming include Special Education Resource Teacher (SERT) allocations.
- For all Boards, the percentage of students in the Learning Disability category was significantly higher in the secondary panel compared to the elementary panel.

Recommendation: Review Special Education support costs by exceptionality

Boards are encouraged to review the support costs by exceptionality, if this analysis has not been done in the past. This would allow the Board to identify which categories require the most resources and help to manage costs.

Recommendation: Review differences in exceptionality profiles across Boards

Given that the participating Boards are large and within the same geographic area, a similar breakdown of students by exceptionality might be expected. The noted differences in profile provide an opportunity for Boards to collaborate and understand any differences in support models or programming, and consider whether any changes are desired.



B.4. % of Special Education Students that have an Individual Education Plan (IEP)

Purpose: To identify the percentage of students with an IEP in place.

The first part of the table below shows the percentage, by panel, of the total student population that has an IEP in place. The second part of the table shows special education students that have an IEP as a percentage of students identified as having special education needs, by panel.

% of Students with an IEP over total student population	TDSB	Board A	Board B	Board C
Elementary	17%	12%	10%	10%
Secondary	26%	23%	16%	16%
% of Special Education Students with an IEP	TDSB	Board A	Board B	Board C
Elementary	100%	100%	73%	74%
Secondary	100%	100%	83%	99%

Source data: *OnSIS Section J* (2018-2019)

- TDSB and Board A have IEPs in place for all special education students.
- In some cases, Board B and Board C do not have an IEP for special education students receiving support, including students receiving services from professional student services personnel such as Social Workers. These Boards noted that Ministry guidelines do not require an IEP for a student to receive special education supports.
- Board B staff indicated that an IEP at the early stages may not always be the most appropriate for students as professional support could prevent the need for an IEP. It may also be the case that students are at various stages of development or implementation of an IEP.

B.5. Gifted Programming

Purpose: To show the percentage of the total student population that has been identified as gifted.

% of students in Gifted Programming	TDSB	Board A	Board B	Board C
Elementary	2%	3%	1%	1%
Secondary	4%	5%	1%	1%

Source data: OnSIS Section J (2018-2019)

• TDSB and Board A conduct screening for gifted programming in Grade 3. Board B and C conduct the screening in Grade 4.

Recommendation: Review resource allocation towards gifted programming

Participating Boards may consider collaborating to understand the difference in the percentage of students identified as gifted (i.e. testing and acceptance criteria, other factors, etc.). They should also understand if providing a greater access to gifted programming impacts how they serve other students with exceptionalities that require more support.



B.6. Special Education Spending

Purpose: To show the percentage each Board spent over the special education grant received from the Ministry of Education.

	TDSB	Board A	Board B	Board C
% Spent over Ministry of Education Special Education Allocation (2018-2019)	13%	18%	5%	1%

Source data: *EFIS Data Form A.2 – Enveloping Special Education (2018-2019)*

- All Boards are spending over the Ministry allocation by varying percentages.
- Although categories of expenses are defined, expenditure reporting may differ between Boards and therefore further analysis would be required to understand the differences in amounts spent over/under the Ministry funding allocation.

Recommendation: Collaborate to identify differences in Special Education delivery models

Boards should consider collaborating to understand the differences in delivery models. Although policies differ between Boards due to local decisions, a review of other approaches may identify leading practices that could help manage costs.



C – PARAPROFESSIONALS AND SUPPORT STAFF

Purpose: To provide metrics for various categories of student support staff, i.e., ratio of Average Daily Enrolment (ADE) to support staff.

C.1. Support Staff Ratios – Elementary

Support Staff – Elementary	TDSB	Board A	Board B	Board C	Average
Students per social services and attendance counselor	2,151	2,207	2,486	2,003	2,212
Students per psychologist	2,240	2,445	2,564	1,810	2,265
Students per speech services	3,059	2,358	2,935	2,045	2,599
Students per educational assistant (EA)/teaching assistant	127	80	78	103	97
Students per child and youth worker (CYW)	802	14,347	28,840	654	11,161

Source data: EFIS Appendix H as at March 31, 2019

- Overall, there is greater variability in ratios for EAs and CYWs.
- The chart below shows the average number of elementary special education students per EA (as the majority of EAs support special education students). TDSB and Board C have relatively fewer EAs over the special education student population, but more CYWs across all students.
- Some boards classify positions differently, although students are supported in a similar capacity.

Elementary	TDSB	Board A	Board B	Board C	Average
Special education students per EA/teaching assistant	21	10	11	15	14

Source data: *EFIS Appendix H as at March 31, 2019*

C.2. Support Staff Ratios – Secondary

Support Staff – Secondary		Board A	Board B	Board C	Average
Students per social services and attendance counselor	2,068	1,429	2,160	1,789	1,861
Students per psychologist	1,887	4,367	2,172	1,719	2,536
Students per speech services	2,234	4,177	2,430	1,959	2,700
Students per educational assistant (EA)/teaching assistant	145	103	82	192	130
Students per child and youth worker (CYW)	516	7,687	0	581	2,196

Source data: EFIS Appendix H as at March 31, 2019

- For CYWs, differences between the Boards were similar to those found in the Elementary panel.
- Board A had a higher number of students per psychologist compared to the other Boards. They did not note any specific reason other than spending choices for the difference.

Secondary	TDSB	Board A	Board B	Board C	Average
Special education students per EA/teaching assistant		23	16	32	27

Source data: EFIS Appendix H as at March 31, 2019



D - OTHER AREAS

D.1. Non-Academic Support Areas

Purpose: To identify staffing levels (i.e., ratio of students to staff) in selected non-academic departments and allow for comparison to other participating Boards.

# of Students* per Managerial and Admin Support staff	TDSB	Board A	Board B	Board C	Average
HR	1,160	1,500	1,639	1,619	1,479
Payroll	8,081	5,929	11,570	7,256	8,209
IT Administration	16,162	4,789	4,733	3,991	7,419
Finance	5,510	3,662	4,339	3,470	4,245
Purchasing/Procurement	5,510	8,894	17,355	7,981	9,935
Administration, Other Support and Non- staff	1,203	1,465	2,116	3,516	2,075

*Total ADE for both Elementary and Secondary Panels

Source data: EFIS Appendix H as at March 31, 2019

Overall, there were a number of differences noted in ratios of ADE per non-academic support staff. Staffing levels are based on local needs / decisions, different systems in use, etc. See observations below:

- TDSB has more purchasing/procurement staff per student compared to the other Boards.
- We also noted that TDSB had the lowest number of "IT Administration" per student. The Board stated that they only include IT Management within that line in EFIS. IT staff are classified under another category of paraprofessionals in EFIS.
- Board B had fewer payroll staff than the average on a per student basis.
- Administrative and other staff levels also varied between Boards. We noted that TDSB and Board A had relatively higher administrative staff levels compared to Board B and Board C.
- Most Boards had similar ratios of students per Finance staff member.

D.2. Custodial Staff Ratios

Purpose: To help Boards understand where they fall in the ratio of mid-management supervisors to the pool of custodial staff, as well custodial staffing levels.

Elementary and Secondary	TDSB	Board A	Board B	Board C
Custodial and maintenance staff per managerial staff **	88	16	19	32
Square feet per custodial and maintenance staff	15405	14182	17097	15775
# of students* per custodial and maintenance staff	86	111	133	113

*Total students = ADE for Elementary and Secondary Panels combined

**Managerial staff Includes managers, team leads, supervisors and coordinators

Source data: EFIS Appendix H as at March 31, 2019, square footage data provided by Boards



- Comments provided noted that responsibilities for caretaking can vary between Boards. The use of
 outsourced staff could be a factor that explains differences in staff ratios. Information regarding
 outsourced caretaking services was not a part of this review, but could be an item for discussion
 between Boards.
- On average, each manager at TDSB had a higher number of staff reporting to them. Also, the Board had more custodial and maintenance staff per student compared to the other Boards, while the square feet per custodial and maintenance staff is in line with the other Boards. The Board noted that average age of their schools is 60 years and the older schools were typically built larger (i.e., larger hallways, more staircases, larger classroom sizes, etc.), therefore requiring more staff time to clean. Additionally, given the age of schools and the repair backlog, more maintenance and repairs are required compared to Boards with newer schools.

D.3. IT Spending per Student (ADE)

Purpose: To compare spending on computer equipment per student to the other participating Boards and to understand the impact of policies such as BYOD on overall spending.

IT Spending	TDSB	Board A	Board B	Board C	Average
Computer equipment spending per student*	\$132	\$102	\$62	\$39	\$84

*Total ADE for both Elementary and Secondary Panels

Source data: EFIS Schedule 10 (2018-19)

• TDSB spent the most on computer equipment per student (\$132/student), while Board C spent the least (\$39/student, or approximately half of the average spend).

D.4. Transportation Spending

Purpose: To identify how much each Board spends on transportation per student.

Transportation	TDSB	Board A	Board B	Board C	Average
Transportation spending per student transported	\$3,168	\$1,179	\$1,356	\$1,266	\$1,742
Students transported as % of total ADE	9%	29%	26%	22%	21%

Source data: EFIS Schedule 10 (2018-19); transported pupils' data provided by Boards as at March 31, 2019

- Although TDSB is the most urban Board, they spent the most on transportation per student, due in part to the significantly higher costs of accommodating students with specific transportation needs.
- TDSB only transports approximately 10% of the student population as most students live within walking distance to their home school. The other Boards had higher percentages of total students transported.