

Impact of Class Size Increases

Modelling the Effects on School Programs – Full Report

On March 15, 2019 the Ministry of Education released a B-Memo proposing an increase to average secondary class size requirements from 22 to 28 students and on April 3, 2019, the Ministry released an SB-Memo to school boards outlining the process for the calculation of attrition protection funding.

The findings are based on simulated results received from 23 teacher bargaining units encompassing 60 schools.

Methodology for determining Effect on an Individual School

OSSTF/FEESO developed a methodology to estimate effects on individual schools by the end of the 2022-23 school year based on the impact from increasing the average funding benchmark from 22:1 to 28:1. To determine an estimate, local teacher bargaining units were asked to:

- Select three (3) schools of varying sizes in the Board.
- Using each school's timetable for this current school year (2018-19), determine the number of full-time equivalent (FTE) teachers assigned to credit classes.
- Estimate that 25% of FTE teaching positions in credit classes will be lost by the 2022-23 school year.
- Using a school list of teachers currently assigned to that school, identify and total those teachers with a seniority date of 1997 or earlier. These are considered to be the retirees by the end of the 2022-23 school year.¹
- If the estimated loss of teaching positions by end of the 2022-23 school year is not fully covered by the estimated amount of retirees, then lay-offs will be anticipated. Lay-offs normally involve the least senior teachers in a school.
- Of those retiring and/or laid-off teachers, their qualifications (basic, additional) were considered to identify which subject areas may be jeopardized, in theory, as a result of no longer having these teachers.

Tables 1, 2 and 3 below depict the results, grouped by school Average Daily Enrolment (ADE) population. For the purpose of this report, small schools are characterized as having an ADE less than 500, mid-size schools between 500 - 1000 ADE, and large school over 1000 ADE.

With respect to determining which subject areas may be theoretically jeopardized as a result of no longer having specific teachers, only teacher's basic and additional qualifications were considered. The school simulation did not consider:

- Any collective agreement provision on how staffing occurs in a particular board/school (e.g. retaining less senior teachers or administratively transferring teachers due to program needs);
- The mutual consent provisions of Regulation 298;
- The granting of Temporary Letters of Approvals; and
- Any collective agreement provision that may "deem" someone qualified in a subject area for which they hold no qualifications.

¹ According to OTPP, the average years of service for retiring teachers is 26 years

The compiled detailed results depicting which relevant subject areas may be jeopardized can be reviewed in Appendix A.

TABLE 1: Summary of Individual Schools with ADE less than 500

ADE	Loss in FTE classroom teaching positions by end of 2022-2023	# of FTE teachers with seniority date of '97 or earlier	Loss of teachers in schools over & above # of retirees
43	1.83	0.00	1.83
61	1.30	2.00	0.00
79	2.46	2.00	0.46
130	3.83	2.00	1.83
152	2.86	6.00	0.00
157	3.10	2.00	1.10
165	2.80	3.00	0.00
169	3.29	4.00	0.00
186	3.75	3.00	0.75
190	4.10	2.00	2.10
235	4.00	2.00	2.00
262	3.43	2.00	1.43
301	5.00	6.00	0.00
303	4.28	0.00	4.28
351	6.08	4.00	2.08
391	10.96	4.00	6.96
422	6.80	3.00	3.80
473	6.40	5.00	1.40
490	7.33	4.00	3.33
497	9.00	4.00	5.00

Of the 22 schools reported, we see that with an average ADE of 260 students, an estimated 4.72 FTE teaching positions will be lost by the end of the 2022-23 school year per school. In 23% of the cases, there will be enough retirements to absorb these losses. In all cases, an average of 2 FTE teachers will be laid off in addition to those who retire.

Further, upon analysis of qualifications associated with those retiring or losing employment in these small schools, it is reported that 50% of these schools could lose all teachers qualified in areas such as French/languages, music, physical education, geography, guidance, co-op, visual arts, math, business, biology, computer science and/or technology (construction, transportation).

In addition, just over half of these schools would see a reduction of at least 50% of the teachers who were qualified in areas such as French/English, music, sciences, math, physical education and/or technology.

TABLE 2: Summary of Individual Schools with ADE between 500-1000

ADE	Loss in FTE classroom teaching positions by end of 2022-2023	# of FTE teachers with seniority date of '97 or earlier	Loss of teachers in schools over & above # of retirees
515	6.87	9.00	0.00
525	8.00	8.00	0.00
586	8.00	7.00	1.00
594	8.17	5.00	3.17
596	10.16	10.00	0.16
599	8.13	14.00	0.00
613	11.63	9.00	2.63
617	10.00	16.00	0.00
624	9.29	4.00	5.29
630	11.33	5.00	6.33
665	9.29	12.00	0.00
667	9.88	7.00	2.88
686	10.00	6.00	4.00
765	12.54	10.00	2.54
784	10.50	8.00	2.50
797	10.66	20.00	0.00
817	10.91	9.00	1.91
821	9.04	5.00	4.04
851	13.20	9.00	4.20
874	11.66	13.00	0.00
914	12.88	17.00	0.00
933	13.42	3.00	10.42
970	13.63	15.00	0.00

Of the 23 schools reported, we see that with an average ADE of 715 students, an estimated 10.40 FTE teaching positions will be lost by the end of the 2022-23 school year per school. In approximately 40% of the cases, there will be enough retirements to absorb these losses. In all cases, an average of 2.22 FTE teachers will be laid off in addition to those who retire.

Further, upon analysis of qualifications associated with those retiring or losing employment in these mid-size schools, it is reported that approximately 50% of these schools will lose all teachers qualified in areas such as languages, drama, green industries, co-op, computer science, and/or technology (construction, communications technology, manufacturing, and information technology).

In addition, over 60% of these schools will see a reduction of at least 50% of teachers who were qualified in areas such as drama, technology, family studies, music, computer science, physics/chemistry, French, law, and/or business.

TABLE 3: Summary of Individual Schools with ADE over 1000

ADE	Loss in FTE classroom teaching positions by end of 2022-2023	# of FTE teachers with seniority date of '97 or earlier	Loss of teachers in schools over & above # of retirees
1020	18.00	25.00	0.00
1031	22.00	11.00	11.00
1038	16.25	6.00	10.25
1121	16.25	4.00	12.25
1157	16.25	5.00	11.25
1179	15.75	10.00	5.75
1200	16.79	15.00	1.79
1214	15.00	7.00	8.00
1249	18.46	13.00	5.46
1755	22.33	19.00	3.33
1756	24.96	5.00	19.96
1848	30.00	17.00	13.00
1993	30.00	20.00	10.00
2029	31.50	7.00	24.50
2075	26.54	10.00	16.54

Of the 15 schools reported, we see that with an average ADE of 1444 students, an estimated 21.34 FTE teaching positions will be lost by the end of the 2022-23 school year per school. In approximate 7% of the cases, there will be enough retirements to absorb these losses. In cases cases, an average of 10.21 FTE teachers will be laid off in addition to those who retire.

Further, upon analysis of qualifications associated with those retiring or losing employment in these large schools, it is reported that approximately 33% of these school will lose all teachers qualified in areas such as languages, law, economics, family studies, music, and/or technology (health, culinary arts and graphic arts).

It is also reported that over 80% of these schools will see a reduction of at least 50% of teachers who were qualified in areas such as business/economics, music, French/languages, law, computer science, drama, art, social sciences, and/or technology (communications technology, transportation, construction and hospitality).

ADE	Qualifications Lost	
	red = total loss of teachers with that Q	black = 50% or more of loss of teachers with that Q
43	will lose all French (1), Philosophy (1) Q;	
61	lists the FTE in lost Q, but not what Q remain staffed at school	
79	will lose all music (1), phys ed (1) Q	
130	lists the FTE in lost Q, but not what Q remain staffed at school	
152	will lose all French (1), Geo (1), Vis Arts (1) Q; lose 2 of 4 Eng Q	
157	will lose all Bio (1), Chem (1) Q; will lose 1 of 2 French, English, Music Q	
165	lists the FTE in lost Q, but not what Q remain staffed at school	
169	will lose all Math (2), Phys ed (1) Q; lose 1 of 2 science Q	
175	will lose all Guidance (1), co-op (1), Drama (1), French (1), Comp Sci (1) Q	
186	will lose 2 of 3 tech Q; lose 1 of 2 math Q	
190	will lose all Business (1) Q; lose 2 of 3 phys ed Q; lose 1 of 2 Native St, Social Sc Q	
235	will lose 1 of 2 Tech Q	
262	will lose all Construction (1), Biology (1) Q	
301	lists the FTE in lost Q, but not what remains (will lose 2 Tech, 1 French Q)	
303	lists the FTE in lost Q, but not what Q remain staffed at school	
351	will lose all Comp. Sci (1) lose 1 of 2 French Q; lose 3 of 6 Math Q	
391	will lose all Languages (3), Visual Arts (1) Q; lose 3 of 5 tech Q; lose 3 of 6 math Q	
422	will lose all Construction (2) Q	
473	will lose all Construction, Transportation Q	
482	will lose 2 of 4 Geo Q; lose 2 of 5 Science Q	
490	will lose 3 of 6 history Q	
497	will lose 2 of 5 Phys Ed Q	
515	No data entered regarding Q	
525	No data entered regarding Q	
586	lists the FTE in lost Q, but not what remains (will lose 3 Tech, 1 Music Q)	
594	No data entered regarding Q	
596	will lose all Comp. Sci (2) Q; lose 1 of 2 Drama Q	
599	lists the FTE in lost Q, but not what Q remain staffed at school	

ADE	Qualifications Lost	
	red = total loss of teachers with that Q	black = 50% or more of loss of teachers with that Q
613	will lose 3 of 6 tech Q	
617	will lose all Green Industry (1) Q ; will lose 2 of 3 Drama, Fam Studies Q; lose 1 of 3 Soc Sci Q	
624	will lose all Comm Tech (1) Q ; lose 1 of 2 Vis Art, Comp Sci. Q;	
630	will lose all Co-op (2), Manufacturing (1) Q ; will lose 1 of 2 Business Q	
665	will lose 1 of 2 music Q, ESL;	
667	will lose all Drama (1) Q ; lose 1 of 2 Biology, Comp. Sci Q	
686	will lose 3 of 4 Geo Q; lose 2 of 3 Fam Studies; lose 1 of 2 business, music Q	
765	will lose all German (1), Info Tech (1), Comm Tech (1) ; lose 1 of 2 music, tech design, construction Q	
784	will lose 1 of 2 Design Tech, Comp. Sci, Comm Tech, Physics Q	
797	will lose 2 of 4 tech Q; lose 1 of 3 FSL Q	
817	No data entered regarding Q	
821	lists the FTE in lost Q, but not what Q remain staffed at school	
851	will lose all Construction, Drama Q ; lose 1 of 2 Comp. Sci Q; 2 of 4 French Q	
874	No data entered regarding Q	
914	lists the FTE in lost Q, but not what Q remain staffed at school	
933	will lose all Manufacturing (1) Q ; lose 5 of 12 Eng Q; lose 1 of 2 Law, Comm Tech, Construction Q	
970	will lose all Drafting (1), Machine Shop (1) Q ; lose 2 of 4 Drama Q; lose 1 of 2 Vis Arts, Comm Tech, Marketing, Data Processing Q; lose 2 of 3 Chem Q	
1020	will lose 2 of 4 Business Q; lose 3 of 7 Arts Q	
1031	will lose all Law (1), Economics (1) Q ; lose 3 of 6 music Q	
1038	will lose 1 of 2 Law, Comp. Sci, Spanish Q; lose 1 of 3 French Q	
1121	will lose 3 of 4 French Q	
1157	will lose all Tech-Health (1) Q ; lose 3 of 5 Vis Arts Q	
1179	will lose 2 of 4 Drama Q; lose 2 of 5 Visual Arts Q	
1200	will lose 1 of 2 Construction Q; lose 2 of 2 Basic Tech Q; lose 2 of 3 Comm Tech Q; 1 of 3 Visual Art Q	
1214	lists the FTE in lost Q, but not what Q remain staffed at school	
1249	will lose of 1 of 2 Family Studies, Comm Tech, Transportation, Comp. Sci., Economics Q; Lose all German (2), Hospitality (1) Q; Lose 2 of 3 French Q	
1755	will lose all German (1) Q ; lose of 2 of 4 drama, Family Studies, Ind&Soc Q teachers	

ADE	Qualifications Lost	
	red = total loss of teachers with that Q	black = 50% of more of loss of teachers with that Q
1756	will lose 2 of 3 Law, Ind& Soc Q	
1848	will lose all music (2) Q; lose 3 of 4 Art Q; lose 4 of 8 tech Q	
1993	lists the FTE in lost Q, but not what Q remain staffed at school	
2029	none listed	
2075	will lose all Culinary Art (1), Graphic Art (1) Q; lose 2 of 4 Construction Q; lose 3 of 6 Visual Art Q; lose 2 of 3 Instr Music Q; lose 1 of 2 Vocal Music Q	