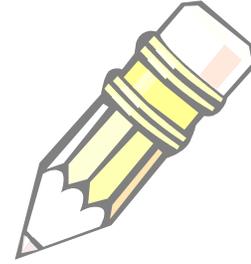




# Class Size Census 2011



## Background

October 16, 2012

"The empirical data over the last 5 years in this Class Size Census report clearly shows that **there is a class size crisis in our junior and senior high schools**. Surely it is putting those students that graduate from Edmonton Public Schools at a great disadvantage when competing for scholarships and gaining entrance to post-secondary institutions."  
- Denis Chalifoux, Author, Class Size Census Report

The 11th annual Edmonton Public Teachers Local No. 37 Class Size Census was conducted on Wednesday, December 7, 2011. Teachers were asked to report on the numbers of students in each class that day to get a "snapshot" of the maximum class size and makeup of our classrooms. The first or second Wednesday in December has been the date used for the census all 11 years because this is far enough into the school year for class sizes to have stabilized. The census was instituted because District information systems initially could not provide a simple, universally applicable tool to measure the size of the classes taught. It has now evolved into a useful tool to provide us with real data to monitor whether the recommendations of the *Alberta Commission on Learning (ACOL)* are being met. We have chosen not to report average class size because averages do not reveal the fact that there are a great number of classes larger than those levels set out by the ACOL and also classes over 30 students (a comparative benchmark that we have used since 2001). The survey also provides unique data to allow comparisons between "straight" or "weighted" counts of students in classes. *Weighted students* refer to the funding levels for special needs students. For instance, a regular student is weighted 1.0 while a mild special needs student is weighted 1.25. Every effort is being made to maintain consistency in the methodology from year to year so as to ensure the integrity of the data.

## Participation

Classroom teacher participation has now surpassed 85% with over 2,921 classroom teachers reporting. This report includes census data on 8,355 classes taught December 7, 2011 with an increase (3.3%) in the teachers participating from all four divisions. This suggests that we continue to have a representative sample size and that teachers consider class size to be a critical issue.

## The Results and Trends

- 2002 - LOW benchmark (white bar on graphs) when class sizes were somewhat tolerable.
- 2003 - HIGH benchmark (black bar on graphs) a peak year after 457 teachers cut because of extreme cutbacks in funding (We believed this would be the year of highest class size.)
- 2008 - The number of classes exceeding 30 students was **stable** except in Div IV where it **increased** 4.5% hitting 28.5%. **There were still 56 elementary classes over 30 students**
- 2009 - The number of classes exceeding the ACOL levels had an **alarming increase of 4.1% for Div 1**. The number of classes exceeding 30 students was relatively **stable** except for Div IV where it **increased** (for the second year over the "peak" in 2003) **hitting an all-time high of 29.4%**. **There were still 91 elementary classes over 30 students** (straight count).
- 2010 - Div IV **high school class sizes over 30 students continue to be extremely high (31.5%)**, the fourth year that it exceeds the 2003 HI level. **Over 67% of the K-3 classes are over the ACOL recommended levels**. There are still **128 elementary classrooms with over 30 students** (straight count). The

weighted counts reveal **noticeable "clusters" of integrated special needs students** in classes. It does not appear that **class sizes are balanced or adjusted for this as required by the ACOL report**.

- 2011 - **High School class sizes surged upward by 8.8% to 40.3% of classes over 30 students**, the fifth year that it exceeds the 2003 HI level. **Over 74% of the K-3 classes are over the ACOL recommended levels**. There are still **136 elementary classrooms with over 30 students** (straight count). The weighted counts again reveal **noticeable "clusters" of integrated special needs students** in classes. It does not appear that **class sizes are balanced or adjusted for this as required by the ACOL report**.

**Table 1** shows the Detailed Class Size Census 2011 results broken down by grade with comparisons to the Alberta Commission on Learning (ACOL) Guidelines. These are the number of classes OVER the ACOL guidelines, not the average class size. *COMMENT: the values for K-3 remain high and over 1486 of the 2008 classes surveyed (74%) are still over the ACOL levels. The largest spikes were in Gr. 6 and Gr. 8. For classes over 30 students, the 40.2% peak in high school is the Largest ever jump in class size, jumping 8.8% in one year.*

**Table 1: DETAILED DATA - Classes Exceeding Alberta Commission on Learning (ACOL) Recommendations (Dec. 2011 with Dec. 2010 for comparison)**

Grade	ACL Recs.	Straight Count (of 8355 classes)					Weighted Count (of 8355 classes)				
		2010 - No. / Percent		2011 - No. / Percent		%Diff	2010 - No. / Percent		2011 - No. / Percent		%Diff
K	17	213	68.5%	253	76.0%	7.5%	229	73.6%	272	81.7%	8.1%
1		424	58.5%	447	66.6%	8.1%	533	73.5%	533	79.4%	5.9%
2		384	73.0%	397	78.0%	5.0%	425	80.8%	425	83.5%	2.7%
3		389	73.1%	389	78.6%	5.5%	450	84.6%	440	88.9%	4.3%
4	23	222	34.4%	258	40.8%	6.4%	441	68.4%	424	67.0%	-1.4%
5		239	40.8%	277	47.4%	6.6%	403	68.8%	427	73.0%	4.2%
6		172	39.5%	240	53.2%	13.7%	296	68.0%	328	72.7%	4.7%
7	25	468	41.7%	456	43.2%	1.5%	849	75.7%	796	75.4%	-0.3%
8		396	42.4%	516	58.4%	16.0%	689	73.8%	695	78.6%	4.8%
9		509	52.5%	460	53.3%	0.8%	694	71.6%	647	75.0%	3.4%
10	27	422	45.9%	418	47.9%	2.0%	645	70.2%	633	72.6%	2.4%
11		325	52.6%	317	54.3%	1.7%	400	64.7%	387	66.3%	1.6%
12		208	51.9%	248	59.2%	7.3%	250	62.3%	276	65.9%	3.6%
Total		4,371	50.1%	4,676	56.0%	5.9%	6,304	72.3%	6,283	75.2%	2.9%

**Tables 2 and 3** contain summarized data broken down by Division over the last five-year period with the 2002 “low” and 2003 “high” years for comparison. *Table 2 is our benchmark of OVER 30 STUDENTS. Table 3 shows those classes OVER the ACOL recommended class sizes. Note that the percentages remain very large. COMMENT: For the next four charts only the last five years of data are now shown. However it is important to maintain a perspective of the entire 10 years; therefore, data from 2002 LO (white) and 2003 HI (black) will be maintained as a benchmark of typical class sizes before and after the layoff of about 457 Edmonton Public Teachers in 2003. Note that while K-3 and Gr. 4-6 class sizes are comparable to the more acceptable 2002 levels, the Gr. 7-9 and Gr. 10-12 class sizes are still well above 2002 levels. The high school class size has been OVER the 2003 HIGH benchmark for five of the last five years.*

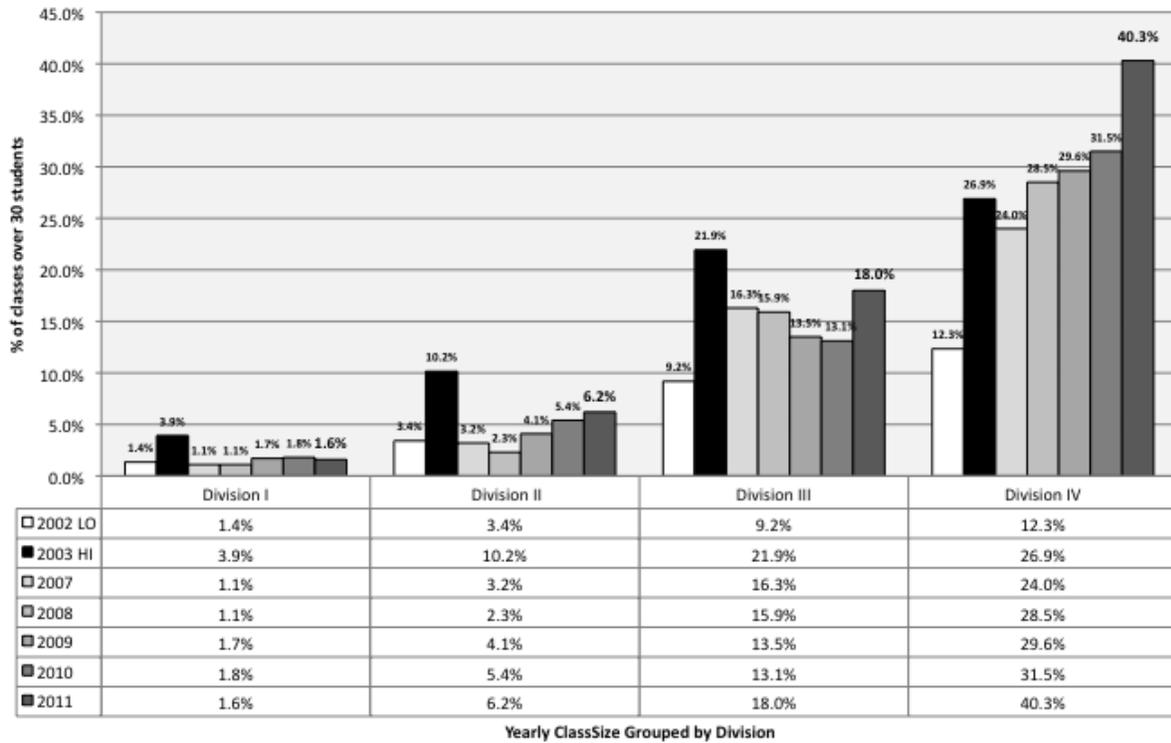
**Table 2: SUMMARY DATA By Division For Classes Over 30 Students (2007 -- 2011 with LOW and HI years for comparison) - see Graphs 2a and 2b on page 3**

3 yr Trend	LOW		HI		Straight Count					LOW		HI		Weighted Count				
	2002	2003			2007	2008	2009	2010	2011	2002	2003			2007	2008	2009	2010	2011
⇒ Division I	1.4%	3.9%	>>>>		1.1%	1.1%	1.7%	1.8%	1.6%	9.0%	13.0%	>>>>		8.8%	10.9%	11.1%	8.8%	8.6%
⇧ Division II	3.4%	10.2%	>>>>		3.2%	2.3%	4.1%	5.4%	6.2%	15.6%	26.2%	>>>>		15.4%	24.1%	23.6%	26.1%	26.3%
⇧ Division III	9.2%	21.9%	>>>>		16.3%	15.9%	13.5%	13.1%	18.0%	27.7%	43.1%	>>>>		40.1%	45.0%	39.7%	42.3%	45.2%
⇧ Division IV	12.3%	26.9%	>>>>		24.0%	28.5%	29.6%	31.5%	40.3%	26.3%	40.4%	>>>>		38.9%	51.1%	48.6%	53.3%	57.0%

**Table 3 - SUMMARY DATA By Division For Classes Exceeding Alberta Commission on Learning (ACOL) Recommendations (2007 – 2011 with LOW and HI years for comparison) – see Graphs 3a and 3b on page 4**

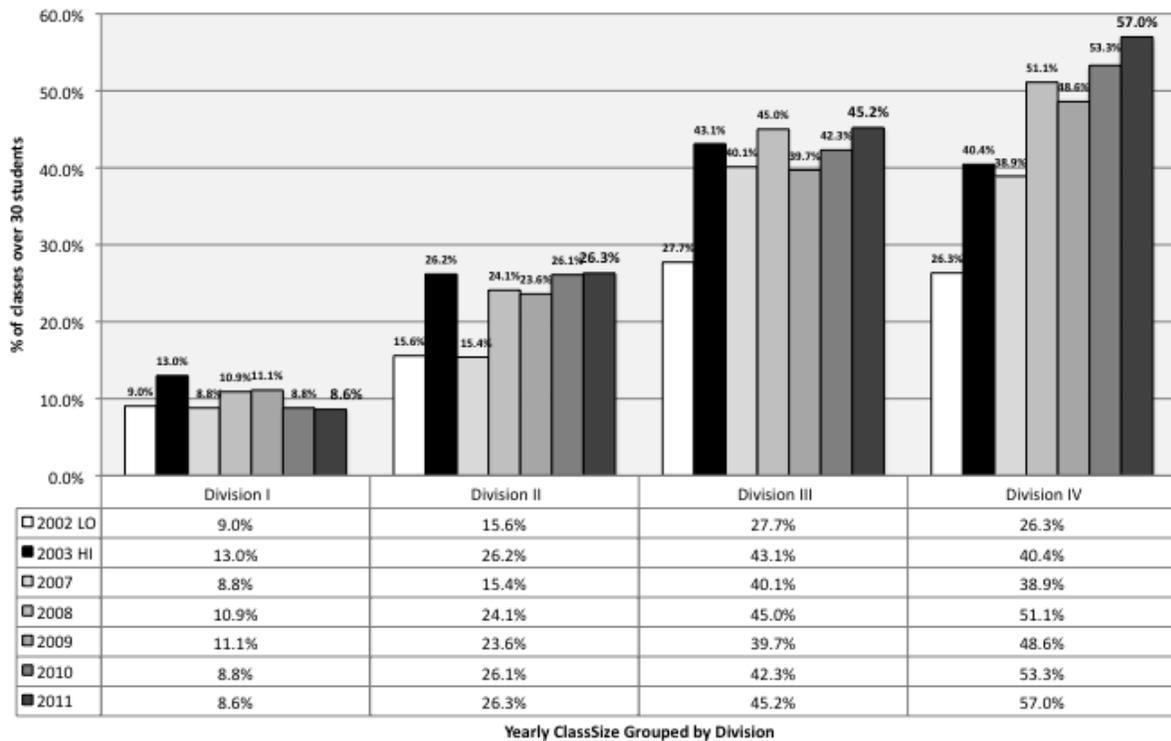
3 yr Trend	LOW		HI		Straight Count					LOW		HI		Weighted Count				
	2002	2003			2007	2008	2009	2010	2011	2002	2003			2007	2008	2009	2010	2011
⇒ Division I (17)	70.0%	74.8%	>>>>		65.8%	66.9%	71.0%	67.3%	74.0%	79.6%	83.6%	>>>>		78.2%	81.4%	82.9%	78.2%	83.2%
⇧ Division II (23)	50.6%	61.1%	>>>>		37.4%	43.1%	39.6%	38.0%	46.4%	71.3%	75.5%	>>>>		60.1%	69.3%	66.4%	68.4%	70.6%
⇧ Division III(25)	51.7%	62.1%	>>>>		53.7%	51.8%	49.5%	45.4%	51.1%	65.4%	75.2%	>>>>		73.0%	73.0%	70.8%	73.8%	76.3%
⇧ Division IV(27)	34.0%	45.2%	>>>>		42.2%	48.9%	41.5%	49.3%	52.4%	47.4%	57.9%	>>>>		56.6%	66.4%	62.6%	66.8%	69.1%

**Chart 2a - Classes Over 30 students (straight count) 2011**

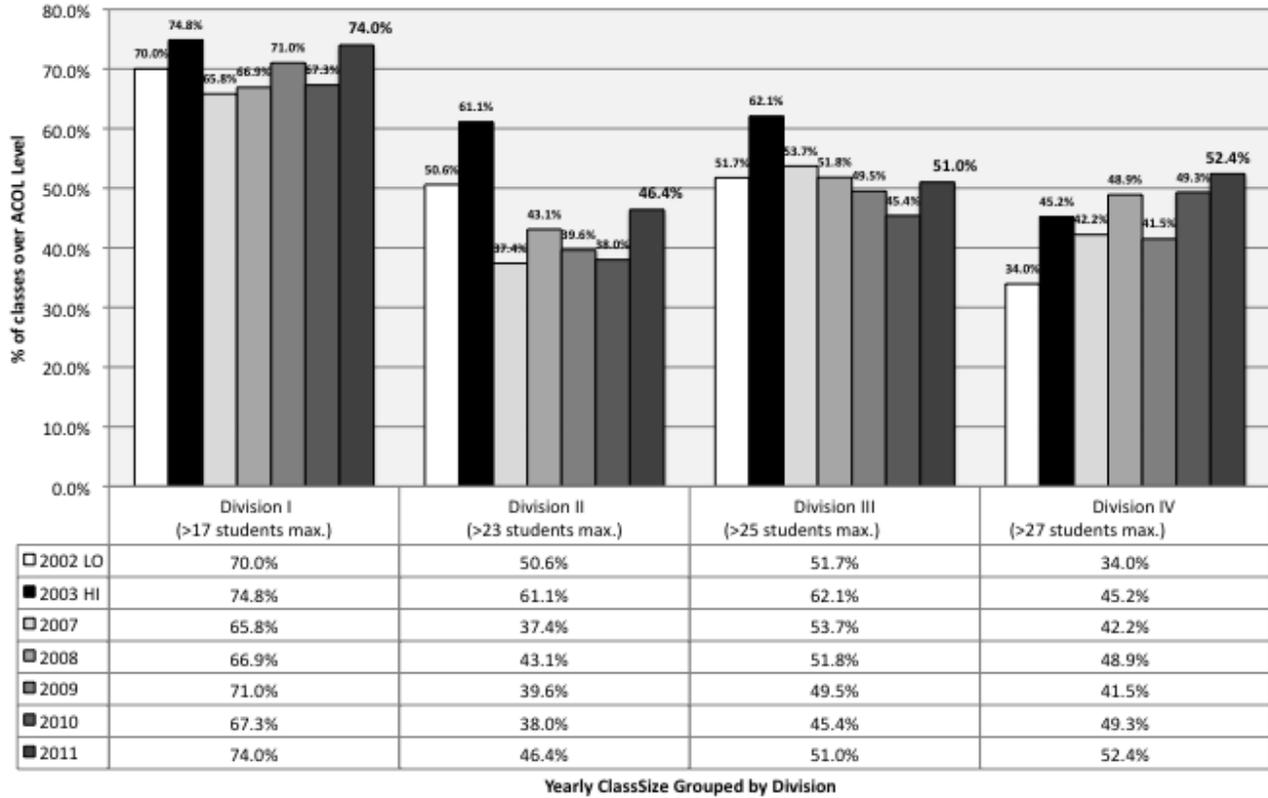


**(NOTE: the vertical scale of the graph below is double that of the one above making the data for the weighted classes APPEAR less striking. Consider the percentages.)**

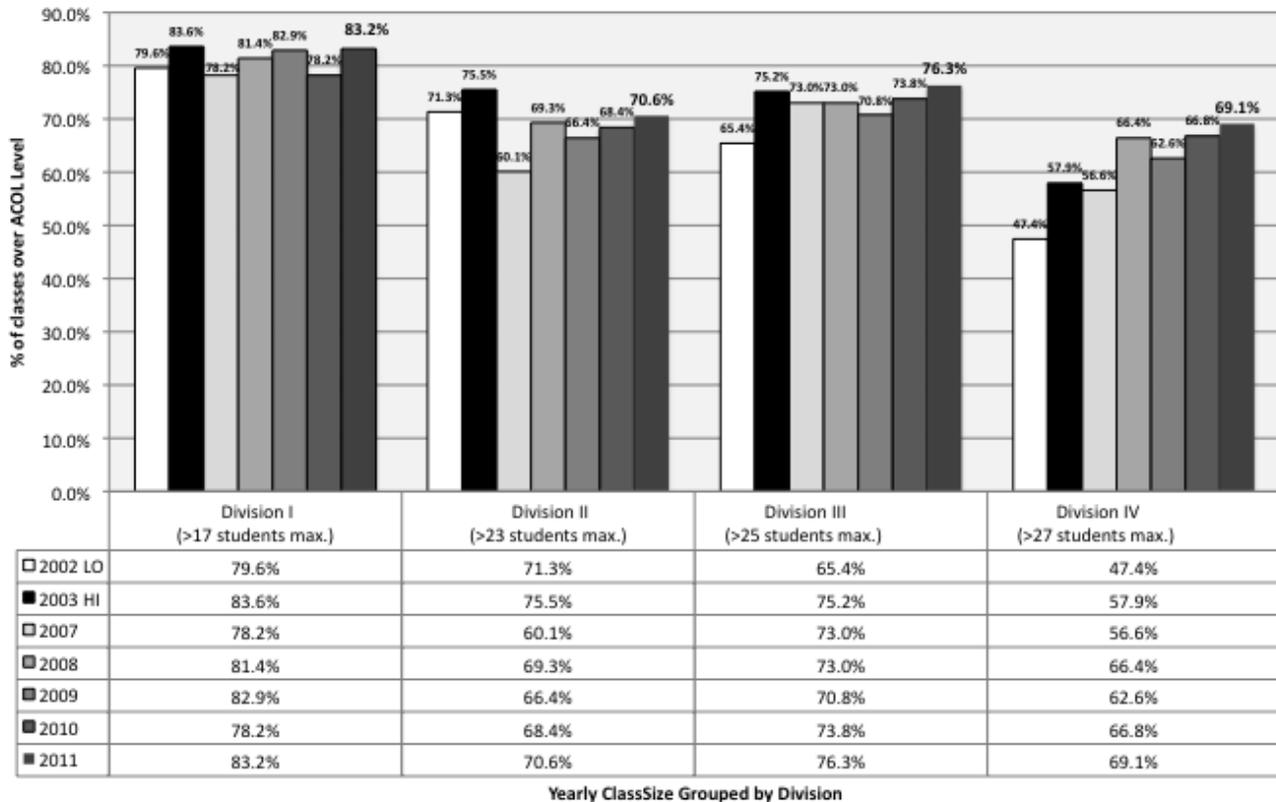
**Chart 2b - Classes Over 30 students (weighted count) 2011**



**Chart 3a - Classes Over ACOL Levels (straight count) 2011**



**Chart 3b - Classes Over ACOL Levels (weighted count) 2011**



## Multi-Grade Classes

**Table 4** summarizes and compares by division the last two years of data for the number of multi-grade (“split”) classes in the District. A *multi-grade class* is one in which more than one grade level exists. Data for such classes was included with that of the lowest grade level of the group within the class. While there may be exceptions, multi-grade classes may represent a compromised learning environment where it is more difficult for a teacher to meet individual student needs.

<b>Table 4: Classes with Multiple Grades 2011 (with 2010 for comparison)</b>					
Division	2010		2011		%Diff
Division I	484	23.1%	<b>445</b>	<b>22.2%</b>	<b>-0.9%</b>
Division II	415	26.1%	<b>381</b>	<b>22.8%</b>	<b>-3.3%</b>
Division III	271	9.0%	<b>260</b>	<b>9.3%</b>	<b>0.3%</b>
Division IV	432	22.3%	<b>491</b>	<b>26.2%</b>	<b>3.9%</b>
Total/Percent, Classes	1,602	19.2%	<b>1,577</b>	<b>18.9%</b>	<b>-0.3%</b>

*COMMENT: This year’s census indicates only a slight overall decrease in the percentage of split classes (Table 4) but fortunately a larger decrease in split classes for Gr. 4-6. The increase in split classes Gr. 10-12 is of no consequence since senior high classes often have mixed grades within a given class. However, it still means that **in the elementary grades, about one in every four to five classes has students at two or more grade levels**. It has been noted in past years that the number of split classes varies inversely as the number of classes above the ACOL recommended level, under the assumption that classes are split and combined between grades in order to try to balance class sizes and qualify for the extra funding. **This year there was an Increase of about 6.7% in the number of classes over the ACOL level for Div I (Table 1) and the expected Decrease in the number of split classes occurred (-0.9%)**. The same is true for Div II. There is no doubt that this inverse relationship exists. The decreasing number of split-classes in the early grades is a favorable trend.*

## Classes with Students with Special Needs/Weighted Ratios

For students, this diversity of needs, coupled with large class sizes represents more challenges to their learning. **Table 5** shows the number of classes that include students with special needs. The bulk of resources allocated to schools in the District is based on Student Resource Allocation Levels, Categories, and Rates found in the Edmonton Public Schools document entitled *Budget Planning Manual*. There are eight levels for student allocations to schools. For the purposes of determining a “weighted count” the District’s funding ratios were used. These ratios change very little from year to year and therefore have only a slight effect on the calculated “weighted count” for comparisons from year to year. (See Appendix 1)

<b>Table 5: Classes with Special Needs Students 2011 (with 2010 for comparison)</b>					
Division	2010		2011		% Diff
Division I	1007	48.1%	<b>999</b>	<b>49.8%</b>	<b>1.7%</b>
Division II	1489	89.4%	<b>1534</b>	<b>91.9%</b>	<b>2.5%</b>
Division III	2739	90.6%	<b>2555</b>	<b>91.2%</b>	<b>0.6%</b>
Division IV	1442	74.4%	<b>1462</b>	<b>78.0%</b>	<b>3.6%</b>
Total/Percent, all Classes	6,677	76.6%	<b>6,550</b>	<b>78.4%</b>	<b>1.8%</b>

COMMENT: In 2011 it remains that three out of every four of the classes in the District have some students who are funded at a higher rate because of their special needs. **The high “weighted” percentages in this table are due to increased numbers of integrated special needs students. The ACOL report states that these classes should be smaller and should be adjusted for the extra load; however, this does not appear to be occurring.** The spread between the straight count and weighted count continues to be of grave concern especially for Grades 4-9 where about 90% of classes have integrated students. The recommendation to adjust the size of classes with integrated special needs students arises from the increased workload of writing of IPPs and preparing for differentiated learning which has a great impact on teachers’ ability to address the needs of all students effectively.

## Quick Facts...

- This year, 1397 of 8,355 or 16.7% of all classes reported were over 30 students. In 2010 it was 944 of 8,722 or 12.5%. That’s a 4.2% increase in just one year.
- In 2011, the number of classes over 30 students has increased 1.5 to 2.0 times the 2002 LOW (in parenthesis). The number of classes over 30:  
Div I – 32 (23)                      Div II – 104 (48)                      Div III – 505 (312)                      Div IV – 756 (306)
- 136 elementary classes reported are still over 30 students (compared to 128 in 2010; 91 in 2009 and 56 in 2008). The trend is clear.
- It remains that over 3 out of 4 of the classes in the district contain students with special needs (78.4%).
- Almost 25% of elementary classes are multi-grade or “split-grade” classes.
- The trend continues towards more Grade 1 classes exceeding the ACOL suggested class size of 17 students for optimal learning. This year, 447 Grade 1 classes were reported exceeding 17 (compared to 424 in 2010, 379 in 2009 and 340 in 2008).

## Observations

The annual Class Size Census continues to closely track the emerging trends. The data continues to reinforce the anecdotal feedback from our members that:

- class sizes are AGAIN exceptionally large for Div III and IV (junior/senior high-school).
- classes with integrated special needs and ESL students either are not being adjusted downward in size or the adjustments are not sufficient, nor does it appear that care is being taken to ensure that there are not unmanageable “clusters” of these high needs students in a single class.
- K-3 class sizes are still well above the ACOL recommendation of 17 students.
- many teachers are being asked to teach multi-grades classes to try to balance class sizes.

For the second year in a row, the most striking revelation in the data was **the number of senior high classes over 30 students; this year peaking at 40.3%, which is 8.8% higher than in 2010 (see Graph 2a). This means that for all five (5) of the last five (5) years these class sizes have exceeded the “peak” 2003 levels of 26.9% and is a far cry from the 12.5% in 2002, the year before the staff cuts.**

We are presently witnessing the continued result of the “re-allocation of funding” for class size as specified in a document on the *Alberta Education* website titled *Class Size Is Important*. In 2011 it stated the program was going to be limited to K-6 and now in 2012 it has been restricted further to only level K-3:

To better address student needs, Class Size Initiative funding is being refocused. The distribution of funds will change to a per student grant with a focus on setting a good foundation in the early years. The adjusted Class Size Initiative funding formula will focus on reducing class sizes in Kindergarten to Grade 3. - Alberta Education  
(<http://www.education.alberta.ca/department/ipr/classsize.aspx>)

To which James Gerun, the Chair of our Economic Policy Committee responds:

To have smaller class sizes in elementary, it is not fair to put the effects of huge class sizes on the backs of the high school students who are in an intense competition for scholarships and desperate to gain entrance into post secondary. We shouldn't be sacrificing these young people. ALL students deserve decently sized classes and adequate funding from Alberta Education and, if 'Class Size Is Important', it should be available for all grade levels.

-paraphrased from a meeting with James Gerun

The spike in class size for 2003 occurred when 457 teachers had to be laid off because of funding cuts. The provincial ACOL funding to reduce class size appears insufficient to keep even elementary classes at 2002 levels since they too are starting to increase. Elementary class sizes appear to have been kept small at the expense of senior high classrooms. While smaller class size in the lower grades is agreed to be most crucial, reallocation of funds to accomplish this has perhaps reached the point of crisis for the high schools and their students, whose learning experience is certainly affected.

It is of great interest and worth noting that the classes we surveyed from Edmonton Public Schools indicate that 4,676 or 56.0% (straight count) of our classes surveyed are above the *Alberta Commission on Learning* (ACOL) guidelines, yet our school system meets the criteria for even for the average class size only for Gr. 4-6 and Gr. 7-9. At the K-3 level the AVERAGE class size is 20.7 rather than the recommended 17 students. For Gr. 10-12 the AVERAGE class size is 27.2 rather than the recommended 27 students. It is obvious that a considerable number of our classes have too many students and may not be educationally optimized for learning. Also, the difference between our overall "straight count" (56.0%) and "weighted count" (74.2%) clearly shows that there are few adjustments being made to the class size to accommodate the special needs students as was recommended by the Alberta Commission On Learning:

Class composition should be considered by schools in setting class size. Generally, classes with special needs students, students whose first language is not English, and vulnerable and at-risk students should be smaller than the suggested guideline.

- ACOL Report from Alberta Education

## Excerpt From the Alberta Commission On Learning Report

- Establish and implement province-wide guidelines for average class sizes across school jurisdictions.
- Rather than set legislated limits or hard and fast rules, there should be flexibility in the size of classes. School jurisdictions should be expected to meet the guidelines on average class sizes across their school jurisdiction. That means the guidelines would not necessarily be met in each and every classroom but should be met on average across the school jurisdiction.
- The suggested provincial guidelines should be:
  - K to grade 3 17 students
  - Grades 4 to 6 23 students
  - Grades 7 to 9 25 students
  - Grades 10 to 12 27 students.
- Class composition should be considered by schools in setting class size. **Generally, classes with special needs students, students whose first language is not English, and vulnerable and at-risk students should be smaller than the suggested guideline.** Classes should also be smaller in cases where there are safety considerations such as vocational classes.
- School jurisdictions and the province should **be required to report annually on average class sizes** and should be accountable for explaining whether or not the guidelines have been met.
- **The province should provide adequate funding to enable school jurisdictions to meet the class size guidelines.** Information on average class sizes should be included in school jurisdiction profiles and used to determine provincial funding levels.

## Notes and Assumptions of This Report

- **Teacher participation** was calculated with the following assumptions: This year we have 3,962 full-time/919 part-time positions with our Local. Part-time was estimated to be 0.5 for purposes of arriving at the number of FTE equivalents of about 4,422 FTE equivalents (60 less than last year). Of these, there are about 1,000 advertised non-teaching positions giving about 3,422 “classroom teacher” positions. The survey indicates that we had 2,921 different classroom teachers submit results... so **85.5% teacher participation.**
- A **Class/Block/Session** was considered to be a regularly scheduled class. Most elementary teachers filled out the survey for one class because generally they teach one group of children all day. However, if a regularly scheduled class had other students enter it, a separate **Class/Block/Session** was recorded. For example, a Grade 2 class that had some students come from another class every day for a math session constituted a new **Class/Block/Session**. However, if students left for a music class and then returned to their regular class, another **Class/Block/Session** was not recorded. Also, if an aide that came into the class for the afternoon only, that would be considered a “new” class with that person recorded as “Other staff”. **The general rule was that if the class dynamic significantly changed, it was considered a “new” class.**
- **In-School Outreach Programs** (in senior high schools) are becoming common-place and are being treated as non-conventional “classes” in the same way as are music classes, phys-ed classes, team-taught classes etc. These have large numbers of students but there were only 18 of these classes out of 1092 classes over 30 students which is insignificant (<2%) and the large numbers of students do not skew results this report since we don’t report average class-size.
- **Weighted students** refer to the funding levels for special needs students. It has been assumed that the funding ratios in the budget documents each year are somewhat indicative of the “load” on teachers and have been used to calculate the *weighted class size*. The table from the *Student Resource Allocation Levels, Categories, and Rates* shows the ratios for this report.

**CONCERN: Funding levels for special needs were reduced significantly in 2008 (in parenthesis) but figures for 2011 are only reduced slightly from 2010.**

Level 0 or 1 - 1.00x (1.00x)	Level 2 - 1.003x (1.03x)	Level 3 - 1.108x (1.26x)	Level 4 - 1.204x (1.27x)
Level 5 - 1.842x (2.02x)	Level 6 - 2.057x (2.26x)	Level 7 - 3.585x (3.99x)	Level 8 - 5.1024x (5.61x)

**NUMBER of Classes Compared to the Total Surveyed (n=8 355) That Are Over The Various Recommended Levels.**

For those who prefer to know the actual numbers rather than percents; e.g., there are 32 “straight count” Kindergarten to Grade 3 classes out of the 2,008 surveyed that are still over 30 students; and 1,486 classes over the recommended class size of 17 students maximum.

Class Size Census 2009	# 2011	% 2011	% 2010	% Diff.
TOTAL Division I Classes Surveyed	2,008			
Division I Classes over 30 (Straight Count)	32	1.6%	1.8%	-0.2%
Division I Classes over 30 (Weighted Count)	172	8.6%	8.8%	-0.3%
Combined Division I Classes	445	22.2%	23.1%	-1.0%
Division I Classes over 17 (Straight Count)	1,486	74.0%	67.3%	6.7%
Division I Classes over 17 (Weighted Count)	1,670	83.2%	78.2%	5.0%

Class Size Census 2009	# 2011	% 2011	% 2010	% Diff.
TOTAL Division II Classes Surveyed	1,669			
Division II Classes over 30 (Straight Count)	104	6.2%	5.4%	0.8%
Division II Classes over 30 (Weighted Count)	439	26.3%	26.1%	0.3%
Combined Division II Classes	381	22.8%	24.9%	-2.1%
Division II Classes over 23 (Straight Count)	775	46.4%	38.0%	8.4%
Division II Classes over 23 (Weighted Count)	1,179	70.6%	68.4%	2.2%

Class Size Census 2009	# 2011	% 2011	% 2010	% Diff.
TOTAL Junior High Classes Surveyed	2,803			
Junior High Classes over 30 (Straight Count)	505	18.0%	13.1%	4.9%
Junior High classes over 30 (Weighted Count)	1,268	45.2%	42.3%	2.9%
Combined Junior High Classes	260	9.3%	9.0%	0.3%
Junior High Classes over 25 (Straight Count)	1,432	51.1%	45.4%	5.7%
Junior High classes over 25 (Weighted Count)	2,138	76.3%	73.8%	2.5%

Class Size Census 2009	# 2011	% 2011	% 2010	% Diff.
TOTAL Senior High Classes Surveyed	1,875			
Senior High Classes over 30 (Straight Count)	756	40.3%	31.5%	8.8%
Senior High classes over 30 (Weighted Count)	1,068	57.0%	53.3%	3.7%
Combined Senior High Classes	491	26.2%	22.3%	3.9%
Senior High Classes over 27 (Straight Count)	983	52.4%	49.3%	3.1%
Senior High classes over 27 (Weighted Count)	1,296	69.1%	66.8%	2.3%