Ministère de l'Éducation

http://www.meq.gouv.qc.ca N° 15 – May 2000

Québec **Carticles Education Statistics** 234567890123456789012345**Bulletin**

School Administrators in Québec School Boards

ISSN: 1480-364X Code : 28-2718A

School administrators in Québec school boards experienced several significant changes in the 1990s. In addition to a shift in their demographic make-up - including the ageing and feminization of the work force and the accelerated replacement of personnel - administrators faced cutbacks in the public sector and a heavier workload. As a result, it is necessary to examine the renewal and evolution of this category of personnel.

To find out the make-up of this population, a databank¹ was created containing data on everyone who held an administrative position at one time or another in a school board. This bulletin uses this data to produce a statistical profile for the period extending from 1989-1990 to September 1998, and to establish projections for 1999-2000 to 2010-2011.

Population Studied

Personnel Distribution (%) Table 1 Average Under 50 and Year School administrators in 35 over Total Men Women Men Women age school boards from 1989 3 7 5 6 2 7 0 9 1 0 4 7 72.1% 27.9% 46.6 2.3% 27.0% 1989-1990 to 1998 1990 3 785 2 6 9 0 1 0 9 5 71.1% 28.9% 47.0 2.2% 28.7% 1991 3 762 2 6 3 4 1 1 2 8 70.0% 30.0% 47.5 1.5% 31.3% 1992 3713 2 5 4 9 1 1 6 4 68.7% 31.3% 47.8 1.5% 34.7% 1993 3 6 6 4 2 477 1 187 67.6% 32.4% 48.3 1.3% 38.6% 1994 3 5 9 6 2 3 9 8 1 198 66.7% 33.3% 48.7 1.4% 41.9% 1995 3 5 5 4 2 308 1 2 4 6 64.9% 35.1% 49.0 2.2% 37.6% 1996 3 4 7 9 2 2 1 5 1 264 63.7% 36.3% 49.4 2.4% 41.6% 1997 3 385 2 0 7 5 1 310 61.3% 38.7% 49.3 2.3% 53.0% 1998^a 3 2 7 4 1 933 1 341 59.0% 41.0% 49.0 2.8% 52.7%

a. Data is annual except for 1998, where data is as of September 30.

The number of school administrators has been on the decline since 1989-1990, dropping from 3 756 at the beginning of this period to 3 274 nine years later, for a compound average annual decrease of 1.3 per cent. Two major changes characterize this period: the feminization and the ageing of the administrative force.

More and more women have joined the administrative profession. Women held barely 28 per cent of school administration positions in 1989-1990 but held 41 per cent as of September 30, 1998. Other data, not shown here, reveals that women constituted the majority among personnel under 45 years of age in 1998. Our projections show this trend will continue.

^{1.} Characteristics of the database on school administrators in school boards:

Data is annual (from July 1 to June 30) for 1989-1990 to 1996-1997 and as of September 30 for 1998;

The databank includes anyone whose principal function during these years was related to an administrative position;

The data comes from the corresponding PERCOS records;

A dozen or so different variables are available for each year, such as function codes, arrival and departure codes, experience and education level (for processing as a teacher), age and sex.

This study takes into account only people who worked as school principals or vice-principals in a school board. The 300-some directors and assistant directors of adult education centres are excluded from the study.

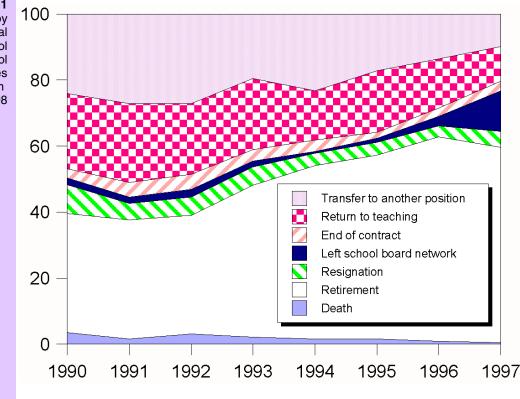
The administrative force is also ageing. Although the average age went up by only 2.4 per cent from 1989-1990 to September 1998, the proportion of people aged 50 or over more than doubled, going from 27 per cent to nearly 53 per cent during this period. However, this ageing phenomenon has reached its peak: while the proportion of people under 35 years of age will increase slightly, that of people 50 or over will stabilize around 44 per cent toward the year 2008¹.

Mobility of School Administrators

In order to predict the evolution of school administration positions, we must study personnel mobility, that is, the departures and arrivals. We can then take into account the ageing of personnel, calculate the departures and estimate their replacements according to the number of people needed to manage the schools.

Departures

From 1989-1990 to 1997-1998, the proportion of people who left their positions as school administrators went from 7.5 per cent of annual personnel to nearly 14 per cent, increasing constantly. This translates into an increase from slightly less than 300 people to nearly 500 annually.



Graph 1 shows the distribution of motives for departure. The four causes of personnel leaving the school boards are, as indicated in the legend, death, retirement, resignation and departures from the school board network. These represented about half of all departures at the beginning of the period, but more than three quarters of those in 1997. Retirements alone now account for 60 per cent of departures. The strong increase in departures from the school board network in 1997 most likely conceals unofficial retirements or early retirements.

Graph 1

Distribution by percentage of annual departures of school administrators in school boards according to types of departure, from 1990-1991 to 1997-1998

1. See Table 3.

English translation of Bulletin statistique de l'éducation nº 15 Le personnel de direction des écoles des commissions scolaires

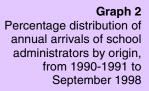
Transfers to another position (taking on a senior staff or professional position in a school board, for example) or returns to teaching no longer account for as large a percentage of departures. These categories have dropped from 50 per cent to 25 per cent of causes of departure in the last decade. While about 50 people a year once changed positions to become senior staff, this number has dropped to not much more than 20 since 1995. Only about ten people leave school administrations to take on a professional position. Finally, about 50 people a year return to teaching.

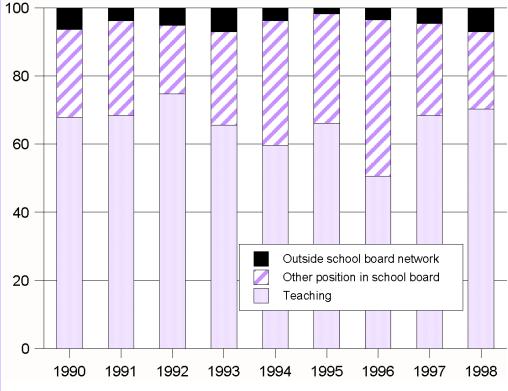
The average age of people who leave their position went from 50 in 1989-1990 to slightly over 53 in 1997-1998; however, as of September 30, the average age for people going into retirement has changed very little, remaining at around 56 for this same observation period.

Given the acceleration in the ageing of the school administration force in the 1990s, and the fact that more than half of administrators currently working in schools are over 50, there will be a need to renew a substantial number of positions in the medium term.

Arrivals

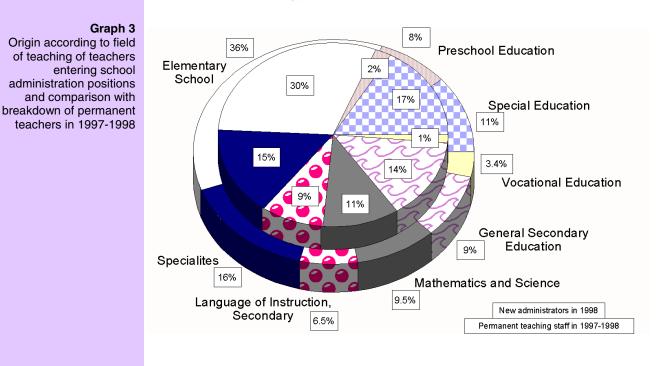
Renewing the work force requires new people. But where do these new school principals and vice-principals come from? The following graph shows the distribution of origin according to whether or not these people came from within the school board network. Some were teachers while others held a senior staff, professional or other position unrelated to school administration.





Of the number of annual arrivals to school administration positions, about two thirds were teachers in the school board network, about one quarter held a school board position not related to school administration, and 5 to 8 per cent came from outside the school board network. Since 1990, about half of new arrivals were men and half, women (which explains the feminization of the profession), and the average age was 44. It should be noted, however, that this data concerns less than 375 people annually.

This means that more than 9 out of 10 people who took on a school administration position were already working in a school board the preceding year. More than two thirds were in teaching, and their origin according to their field of teaching¹ coincides with the actual breakdown of teachers by field of teaching. Graph 3 therefore refutes the impression that there is a concentration of certain types of teachers among people who enter school administration positions. It is a double pie chart, where the lower pie represents permanent teachers in 1997-1998 and the upper pie represents the 250 or so people who were teaching in 1997-1998 and took on a school administration position the following year.



Among teachers who became school administrators, Graph 3 shows a slight under-representation of primary and preschool teachers and a slight over-representation of special education teachers. Variations for the other fields of teaching are negligible. Other data, not detailed here, shows that slightly over 8 per cent of people who taught before holding a school administration position were previously assigned to physical education (the "specialities" mentioned in Graph 3 include music, the arts, second language and physical education).

^{1.} A field of teaching is a grouping of positions in a certain number of areas of activity or specialty. In Graph 3, teaching staff is broken down into eight fields: special education, preschool education, elementary education, specialties, mathematics and science, language of instruction, other areas in general education, and vocational education. Specialties at the secondary level are second language, physical education, music, and the arts.

"Survival" in an Administrative Position

The data allows us to examine the "survival" rate of school administrators. Out of 100 people who held a school administration position in 1989-1990, how many are still there eight years later?

4 0 0 0 100 3 500 93 87 3 000 81 76 2 500 69 63 57 2 000 50 1 500 1 000 500 0 1989 1990 1991 1992 1993 1994 1995 1996 1997

In eight years, half the people who held school administration positions in 1989-1990 left their job. In Graph 4, the darkened area of each year represents the new arrivals (without distinction) since 1990-1991. Therefore, out of the 100 people present in 1989-1990, we must subtract an average of slightly over 6 per cent annually to arrive at the 50 people still present, eight years later. It would be ideal if we could follow the path of one person, that is, his or her path as a school administrator; unfortunately, the only people for whom we have data on the number of years in a school administration are those who became administrators after 1988-1989, and even then, the data represents experience accumulated since 1989-1990 only.

According to the collective agreements, in order to become a school administrator, you must hold a permanent teaching licence¹. Using Table 2, let us examine the teaching experience of all those in our databank who have held a teaching position in a school board at some point since 1988-1989.

Page 5

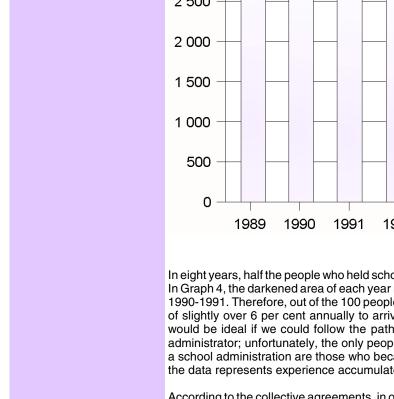
Graph 4

Evolution of school administrators in school

boards and survival of

1989-1990 personnel

over a period of 8 years



According to Appendix 1 of the collective agreement for public school administrators, the required minimum qualifications for a school principal are to hold either an undergraduate degree in a relative field of study or a senior executive or senior staff position (excluding that of manager) in a board, to have five to eight years of relevant experience in a school (depending on whether or not the school had a vice-principal), and to hold a permanent teaching licence issued by the Minister.

Page 6

Table 2

Average teaching experience of school administrators according to years of experience in a school administration position and number of people for whom this data exists, from 1989-1990 to September 1998

Administration experience (years)	Number of people	Average teaching experience	Average age as of September 30	Theoretical age at time of entry into teaching ^a
1	488	11.6	44.8	33.2
2	355	11.8	45.4	32.6
3	165	12.1	45.8	31.7
4	189	14.8	47.5	29.7
5	167	14.9	47.8	28.9
6	166	15.5	48.2	27.7
7	155	16.2	48.9	26.7
8	131	15.7	48.7	26.0
9	134	17.0	49.7	24.7
10 and more	1592	N/A	51.6	N/A

a. Calculated as follows: average age as of September 30 minus average teaching experience minus years gone by in administration experience. To obtain the years gone by, one year must be subtracted from the number in the "administration experience" column. For example, the 355 people on the second line are in their second year of administration; therefore, they have one complete year of administration experience (or one year gone by).

Data on teaching experience is available for about 29% of the administrators in our databank, that is, for those who are in their ninth year of experience or less in school administration. As shown in Table 2, those who have the most experience in an administrative position are also those who have the most teaching experience. If we include adult education, then more than 70 per cent of those who entered an administrative position since 1989-1990 have teaching experience. Others who enter an administrative position and who come from a professional or senior staff position in a school board or from outside the school board network are between 46 and 48 years old on average. In all these aspects, we can presume that the data in Table 2 is most likely representative of school administrators as a whole.

The last column is a theoretical exercise that describes the experience of school administrators, both current and future: their teaching experience before entering an administrative position will be increasingly shorter. Of course, subtracting from their average age only the average number of years in teaching and the average number of years in administration does not take into account any other functions they may have occupied or paths that were less direct. However, the outcome is sufficiently significant for us to state that, although the most common path to administrative positions is through teaching, this passage is becoming shorter and shorter, given that the theoretical age at the time of entry into teaching has increased from 25 to about 33.

The generation of staff members who are in their tenth year or more in an administrative position were therefore born around 1947; they would have started teaching around 1971 and entered the school administration in 1988. The youngest generation of school administrators, i.e. those in their first year in an administrative position, were born around 1954; they would have started teaching around 1987 and entered the school administration around 1998. All this is purely theoretical, but the trend is here to stay: people are becoming permanent teachers much later than in the 60s to 80s. On the other hand, the average age for new school administrators remains around 44 or 45. This means that new school administrators have less teaching experience than their predecessors.

We have seen that the average age of people leaving school administration positions has increased from 50 to 53 and that the average retirement age (representing 60 per cent of departures) has varied little, remaining around 56; therefore, the average career duration in a school administration position is between 9 and 12 years.

In order to make projections up to 2010 based on the number of school administrators in 1998 (our last year of observation), we had to calculate the rates of retirement and of other departures, determine a stable number of personnel from one year to the next and add new arrivals according to the trends observed in recent years. This calculation method is very similar to that used for the projections of teaching staff¹ made by our department.

The greatest difficulty was in determining the number of administrators that will be required to meet the needs of the future school population. The difficulty lies in the fact that the number of principals and vice-principals (counted together in this study) depends not only on the size and type of school, but also on the type of students (student needs). Therefore, based on detailed projections of the student population, we calculated the number of schools where these students will study and then deduced the number of administrators that will be required². Table 3 summarizes the results of the projection.

Table 3 administrators in boards expected for 1999-2000 to 2010-2011	Veere		Personnel		Proportions		Average	Under	50 and
	Years	Total	Men	Women	Men	Women	age	35	over
	1999	3 196	1 841	1 355	57.6%	42.4%	49.0	3.4%	53.9%
	2000	3 214	1 796	1 418	55.9%	44.1%	48.9	3.8%	53.1%
	2001	3 208	1 737	1 471	54.1%	45.9%	48.7	4.1%	51.4%
	2002	3 190	1 673	1 517	52.4%	47.6%	48.5	4.3%	49.4%
	2003	3 159	1 610	1 549	51.0%	49.0%	48.3	4.4%	47.3%
	2004	3 127	1 555	1 572	49.7%	50.3%	48.2	4.3%	46.3%
	2005	3 099	1 512	1 587	48.8%	51.2%	48.1	4.3%	45.1%
	2006	3 067	1 474	1 593	48.1%	51.9%	48.0	4.2%	44.8%
	2007	3 021	1 433	1 588	47.4%	52.6%	48.0	4.0%	44.5%
	2008	2 968	1 394	1 574	47.0%	53.0%	48.0	3.9%	44.4%
	2009	2 909	1 354	1 555	46.5%	53.5%	48.1	3.8%	44.3%
	2010	2 852	1 318	1 534	46.2%	53.8%	48.1	3.7%	44.2%

From 1999 to 2010, the number of students in school boards will drop from 1 022 139 to an estimated 902 000, a decrease of nearly 12 per cent. The number of administrators will therefore follow the same trend, decreasing by 10.8 per cent during these 11 years of projection. Beginning in 2004-2005, it is expected that there will be more female than male principals and vice-principals; by 2010-2011, women will make up the majority, forming a proportion of about 54 per cent.

The ageing of the administrative force can be considered as having reached its peak this year. The proportion of people aged 50 and over is expected to start decreasing slowly, dropping to about 44 per cent at the end of the projection period. The proportion of school administrators under 35 years of age should remain marginal, as seen earlier. About 50 people³ under 35 enter an administrative position each year; almost all come from the teaching profession and have an average teaching experience of slightly over one year.

School a school b

^{1.} This topic was the focus of the Education Statistics Bulletin No. 9 - Projections of Teaching Staff in Québec School Boards: 1996-97 to 2008-09.

Because there will be fewer and fewer students over the next few years, the size and number of schools will be affected. Closures will be inevitable. However, we can assume that budget cuts over the last few years have already led to a rationalization of the number of schools and an optimization of school size. After studying the average number of principals and vice-principals according to the three types of schools (primary, secondary, and primary and secondary combined) from 1989 to 1999, averages were determined for the 1999-2010 projection period.

^{3.} The latest observations were made between 1997-1998 and September 1998.

More attractive retirement conditions and a significant proportion of administrators aged 50 and over are accelerating the rate of replacement of personnel. While in the 1990s half the personnel had to be replaced in eight years, during the next decade the same proportion will have to be replaced over a period of five years.

Training Future School Administrators

By further detailing the projections of school administrators, we can determine the gross recruitment needs. These needs correspond to the number of people who must actually be replaced, that is, retirements plus the portion of other departures that are not followed by returns. Our databank indicates that since 1990-1991, roughly 15 per cent of people who left an administrative position in a given year returned shortly thereafter.

Table 4

Projection of school administrators in school boards and calculation of gross needs, from 1999-2000 to 2010-2011

	1999	2000	2001	2002	2003	2004
Principals	2 157	2 169	2 165	2 153	2 132	2 110
Vice-principals	1 039	1 045	1 043	1 037	1 027	1 016
Total	3 196	3 214	3 208	3 190	3 159	3 127
Job creation	-78	18	-6	-18	-31	-32
Retirements	232	251	260	257	245	232
Other departures	159	166	168	168	168	166
Attrition ^a	367	391	403	400	388	373
Gross needs ^b	289	409	397	382	357	341
	2005	2006	2007	2008	2009	2010
Principals	2 092	2 070	2 039	2 003	1 963	1 925
Vice-principals	1 007	997	982	965	945	927
Total	3 099	3 067	3 021	2 968	2 909	2 852
Job creation	-28	-32	-46	-53	-59	-57
Retirements	219	209	202	198	194	190
Other departures	164	161	159	156	152	149
Attrition ^a	359	347	338	330	323	316
Gross needs [♭]	331	315	292	277	264	259

a. Attrition is the sum of the number of retirements and the number of departures not followed by returns, which is 85 per cent (the remaining 15 per cent returned to a school administration position).

b. Gross needs are the sum of attrition and job creation; job creation is the difference in the number of school administrators from one year to the next.

The need for school administrators will be greatest in 2000, having grown substantially since 1999. It will then decrease gradually, returning to 1999 levels in 2007.

Even though graduates of training programs for school administrators do not generally obtain a position immediately upon finishing their studies (as can be inferred from the average age of new arrivals), it is still desirable to harmonize training needs with recruitment needs. Our department has calculated training needs and has determined, as shown in Table 5, the ideal number of people that should be enrolled in training programs for school administrators.

Table 5Ideal number of peoplethat should be enrolled inschool administrator		1999	2000	2001	2002	2003	2004		
	Gross needs	289	409	397	382	357	341		
	Effect ^a of other schools	337	476	463	445	416	397		
training programs	Effect ^b of selection	404	571	556	534	499	476		
	Effet ^c of success rate (65%)	851	814	763	730	707	670		
		2005	2006	2007	2008	2009	2010		
	Gross needs	331	315	292	277	264	259		
	Effect ^a of other schools	386	367	340	323	308	302		
	Effect ^b of selection	463	440	408	388	370	362		
	Effet ^c of success rate (65%)	623	593	558	515	500	500		
	 a. 0.165: the impact of the private sector and of government schools is determined by calculating the ratio of private and government schools to schools in the school boards. b. 1.2: it is estimated that a certain number of graduates will never enter a school administration position. This proportion is arbitrary, as the extent of this phenomenon is unknown. c. Based on the average success rate for a Master's degree in Québec; the total duration of studies is 6.9 school terms on average, which is equal to roughly 2.6 years. 								
	gradually.								
	Conclusion								
	School administrators in Québec school boards have experienced several significant changes since 1989-1990. The most prominent have been a feminization of the profession, an acceleration in the replacement of personnel and an ageing of the work force. The latter phenomenon is expected to taper off within the next decade.								
	Generally, a person's career in school administration lasts for 9 to 12 years, following a teaching career of 11 or 12 years. Few people become school administrators before the age of 35, and this trend is expected to continue. If the number of students was not expected to decline in the coming years, training needs for school principals would have been much more urgent; as well, there would have been concern for the ability to fill the vacant positions.								
For further information:	Raymond Ouellette Direction des statistiques et des études quantitatives Tel.: (418) 644-3956								
Other <u>Education</u> <u>Statistics Bulletins</u> available:	 Lespérance, André. Level of Graduation Upon Leaving the Education System, No. 1, November 1997. 								
	 Demers, Marius. Statutory Salaries and Teaching Time of Teachers in Public Elementary and Lower Secondary Schools: A Comparison of Québec and OECD Countries, No. 2, November 1997. 								
	 Demers, Marius. Educational Expenditure Relative to the GDP: A Comparison of Québec and OECD Countries, No. 3, June 1998. 								
	 Maheu, Robert. Graduation from Secondary School, College and University in 1995: A Comparison of Québec and OECD Countries, No. 4, June 1998. 								

Page 10

- Beauchesne, Luc. Secondary Schools and College Graduates: A Sociodemographic Analysis, No. 5, June 1998.
- St-Germain, Claude. Québec Student Achievement in Mathematics and Science: An International Comparison, No. 6, June 1998.
- Foucault, Diane. The Aboriginal School Population of Québec, No. 7, September 1998.
- Demers, Marius. The Return on Investment in Education, No. 8, November 1998.
- Ouellette, Raymond. *Projections of Teaching Staff in Québec School Boards: 1996-97 to 2008-09*, No. 9, February 1999.
- St-Germain, Claude. *The Linguistic Situation in the Education Sector, 1997-98*, No. 10, March 1999.
- St-Germain, Claude. Education Level of the Adult Populations of the Principal Cultural Communities of Québec in 1996, No. 11, May 1999.
- DUFORT, Jean-Pierre. Secondary School Vocational Education, No 12, september 1999.
- St-Germain, Claude. *The Linguistic Situation in the Education Sector, 1997-98*, No. 13, March 1999.
- Lespérance, André, Pierre Ducharme and Diane Foucault. *Dropping Out of School*, No. 14, March 2000.