



Statutory Salaries and Teaching Time of Teachers in Public Elementary and Lower Secondary Schools: A Comparison of Québec and OECD Countries

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Introduction

In December 1996, the Organisation for Economic Co-operation and Development (OECD) published its fourth edition of *Education at a Glance: OECD Indicators*. In this publication, different aspects of teaching in the member countries of the OECD are presented. In spite of problems in comparing data, this publication provides the best international statistics on education currently available.

In the context of international comparison, it is interesting to situate Québec in relation to the OECD countries. This information bulletin will be principally concerned with the issue of statutory salaries and teaching time for public elementary and lower secondary teachers, according to the classification established by the OECD in 1993-94. In Québec, elementary school comprises six years and secondary school (Cycle One) corresponds to the first two years of lower secondary school. International data for upper secondary school are not available.

In particular, this bulletin will provide a vantage point for comparing the salary conditions of teachers in Québec school boards. The main indicators that have been selected for this purpose are: the annual statutory salary of teachers, teaching time and salary per teaching hour. The last indicator is derived by dividing the annual statutory salary by teachers' annual teaching time.¹ Salaries will also be examined relative to the per capita Gross Domestic Product (GDP).

The salaries taken into account are starting salaries (beginning of career), salaries after 15 years of experience and maximum salaries (top of the payscale).

In Québec, the statutory salaries of teachers in school boards and their tasks are specified in collective agreements. Salaries are established as a function of teachers' level of education and experience. Common payscales are established for teachers at all levels of instruction (preschool, elementary and secondary education) and for all types of education.

For purposes of comparison with OECD countries, we have considered the payscale for teachers who have 16 years of education (the normal level of education in Québec, before the reform of teacher education programs.²) This scale comprises 15 levels, corresponding to teachers' years of experience. The data on teachers' salaries are expressed in Canadian dollars adjusted for relative purchasing power based on PPPs

1. Annual statutory salary refers to teachers' entire workload, while the salary per teaching hour is an indicator of the cost per hour of instruction in the classroom. (See the definition of teaching time below, and the glossary.)
2. Under the reform of teacher education programs, the normal length of studies increased to 17 years. In 1993-94, the average level of education for teachers in Québec school boards was 16.8 years.

established by the OECD.¹ In 1993-94, the starting salary for Québec teachers with 16 years of education recognized for salary purposes was \$29 627. The salary after 15 years was \$44 498. This was also the maximum salary for a teacher with 16 years of education, since the top of the payscale was reached in the fifteenth year of experience recognized for salary purposes.

The reader can compare Québec with OECD countries by considering the data presented in Tables 1 to 4 below.

It is important to note that Canada did not provide data to the OECD for these indicators and this explains the absence of Canadian data in this bulletin. We do know, however, that the average salary of teachers in Québec school boards is lower than that of their counterparts in most other Canadian provinces.²

Teaching Time

Teaching time is calculated on the annual number of hours that a teacher devotes to classroom teaching. For the purposes of this indicator, the time teachers spend on other tasks is not considered. This may include time allotted to course preparation, individual work with students, professional development and staff meetings. It is not, therefore, an indicator of teachers' total workload.³ Tables 1 and 2 indicate teachers' number of teaching hours per year for elementary education and lower secondary education.

In 1993-94, the annual number of teaching hours for elementary school teachers was 10% lower in Québec (738) than for the OECD country mean (818). Only 4 countries had an annual number of teaching hours lower than Québec: Austria, Greece, Norway and Sweden (Table 1).

In lower secondary school, the annual number of teaching hours was also lower in Québec (615) than for the OECD country mean (760), for a difference of 19%. Here also, 4 countries had an annual number of teaching hours lower than that of Québec: Greece, Italy, Norway and Sweden (Table 2).

Starting Salary

The starting salary for Québec teachers (\$29 627) was 25% higher than the average starting salaries for elementary teachers in OECD countries (\$23 620) and 19% higher than those for lower secondary teachers (\$24 862). Only teachers in Germany and Switzerland had higher starting salaries than Québec teachers. Teachers in 16 other countries had, on average, a lower starting salary than teachers in Québec school boards (Tables 3 and 4).

By dividing teachers' starting salary by the number of teaching hours, we obtain the salary cost per hour of teaching. The starting salary per teaching hour for Québec teachers in elementary schools in 1993-94 (\$40) was 38% higher than the average starting salary for elementary teachers in OECD countries (\$29). Only Germany had a higher starting salary per teaching hour than Québec (Table 1).

1. In the OECD publication, *Education at a Glance: OECD Indicators*, the data are expressed in American dollars. In this document, we have presented the data in Canadian dollars, in order to provide data more relevant to the reader. This does not affect the relative classification of countries.
2. See the document *Inter-Provincial Education Statistics Project* produced by British Columbia's Ministry of Education, as well as the *Education Indicators* published by the Ministère de l'Éducation du Québec.
3. See the glossary provided further on in this document.

In lower secondary school, the gap was 45% (\$48 in Québec compared to \$33 for the OECD country mean). Here, as well, only Germany had a higher starting salary per teaching hour than Québec (Table 2).

Salary after 15 Years of Experience

If we consider teachers with 15 years of experience, the salary of Québec teachers (\$44 498) was 42% higher than the average salary of elementary school teachers in OECD countries (\$31 252) and 33% higher than that of lower secondary school teachers (\$33 419). Only Swiss elementary and lower secondary school teachers and German lower secondary school teachers had salaries higher than those of Québec teachers (Tables 3 and 4).

Based on salary per teaching hour, elementary school teachers in Québec with 15 years of experience earned an hourly rate (\$60) that was 58% higher than the average rate for elementary school teachers in OECD countries (\$38). None of the 17 OECD countries for which we have data had an average salary per teaching hour higher than teachers in Québec (Table 1).

In lower secondary school, the gap was 60% in favour of Québec teachers (\$72 in Québec compared to \$45 for the OECD country mean). In this case also, there was no country in which teachers earned an average salary per teaching hour higher than Québec teachers (Table 2).

This significant difference between Québec and the OECD country mean may be explained by the following factors: a lower number of annual teaching hours in Québec, a higher annual statutory salary in Québec and the fact that Québec teachers reach the top of their payscale in the fifteenth year of experience recognized for salary purposes.

In OECD countries, the number of years between starting salary and maximum salary varies a great deal. The average was 25 years for elementary and lower secondary school teachers. Only teachers in Denmark, Norway and New Zealand reached the top of their payscales in less time than Québec teachers. Teachers in the other 15 countries had to wait a greater number of years to reach the top of their payscales (Tables 3 and 4).

The following indicator allows us to measure the progress of salaries in the payscales for different countries, after 15 years of experience.

The Ratio of Salaries after 15 Years of Experience to Starting Salaries

If the salary of teachers with 15 years of experience is compared with their starting salary, an average ratio of 1.3 was obtained for elementary and lower secondary teachers in the OECD countries. This means that the average statutory salary for teachers with 15 years of experience was about 30% higher than that for teachers at the beginning of their careers.

In Québec, this ratio was 1.5 (indicating a variance of 50%) and 4 countries had a ratio equal to or higher than that of Québec for elementary education: Ireland, New Zealand, the Netherlands and Portugal. The other 14 countries all had lower ratios. When we look at lower secondary school, 3 countries had a ratio equal to or higher than that of Québec: Ireland, the Netherlands and Portugal.

Maximum Salary

The maximum salary for Québec teachers with 16 years of education (\$44 498) was 18% higher than the average maximum salaries for elementary school teachers in the OECD countries (\$37 822) and 11% higher than those for lower secondary school teachers (\$40 185). Elementary school teachers in Germany, the United States, Ireland, Portugal and Switzerland had a higher maximum salary than those in Québec, while the teachers in the other 13 countries had a lower maximum salary (Table 3). As for lower secondary school teachers, 8 countries had a higher maximum salary than Québec—the 5 countries mentioned above, as well as Austria, France and the Netherlands.

The maximum salary per teaching hour for Québec elementary teachers (\$60) was 30% higher than that for the average maximum salaries per teaching hour for elementary teachers in the OECD countries (\$46). Elementary teachers in Germany, Austria and Portugal had a maximum salary per teaching hour equal to or higher than those in Québec, while teachers in 14 other countries had a lower maximum salary per teaching hour (Table 1).

In lower secondary school, the difference was 33% (\$72 in Québec compared to \$54 for the OECD country mean). Only Austria and Portugal had a maximum salary per teaching hour higher than Québec. It should be pointed out, however, that in Germany and France, the maximum salary per teaching hour was almost the same as in Québec (\$71), as indicated in Table 2.

The Ratio of Starting Salaries to Per Capita GDP

By calculating the ratio of teacher salaries to the per capita GDP, we can gain an idea of the standard of living supported by the teaching profession. If we consider first of all the starting salary for teachers as the numerator in this ratio, the OECD country mean was 1.1 for elementary school and for lower secondary school. This means that on average, the starting salary for teachers in the OECD countries was slightly higher than the per capita GDP.

In Québec, this ratio was 1.3, indicating that the starting salary for Québec teachers was about 30% higher than the per capita GDP. In comparison, 6 OECD countries had a ratio equal to or higher than that of Québec: Germany, Spain, Ireland, Portugal, Switzerland and Turkey. The 12 other countries all had lower ratios (Tables 3 and 4).

The Ratio of Salaries after 15 Years of Experience to Per Capita GDP

If we now consider salaries after 15 years of experience as the numerator of the ratio, the OECD country mean was 1.4 for elementary education and 1.5 for lower secondary school. In Québec, this ratio was 2.0, indicating that the salaries for Québec teachers after 15 years of experience was about double the per capita GDP. By comparison, 3 OECD countries had a ratio equal to or higher than that of Québec for elementary education: Spain, Ireland and Portugal. The other 15 countries all had lower ratios. When we consider lower secondary school, 4 countries had ratios equal to or greater than that of Québec: the 3 countries mentioned above and Switzerland.

Conclusion

These indicators reveal the pattern of certain aspects of the condition of teachers in Québec in 1993-94. They show that the salaries of teachers in Québec school boards were relatively higher in Québec than for OECD country mean. Whether we look at the annual statutory salary, the salary per teaching hour or salaries relative to per capita GDP, all the indicators point in the same direction.

The salary per teaching hour of Québec teachers is particularly high in relation to the OECD country mean. This can be explained by a lower number of annual teaching hours in Québec (the gap is especially high in lower secondary school) and by higher salaries in Québec.

The above facts are true for starting salaries, salaries after 15 years of experience and maximum salaries. The differences are especially significant for the salaries of teachers with 15 years of experience, because Québec teachers have reached the top of their payscale at that point, while teachers in other countries on average only reach the top of their payscales after 25 years.

For Further Information:

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Other [Education
Statistics Bulletins](#)
available:

- Lespérance, André, *Level of Graduation Upon Leaving the Education System*, No. 1, November 1997.

Glossary Teaching Time:

“Teaching time is defined as the total number of hours per year (1 hour = 60 minutes) during which a full-time classroom teacher is responsible for teaching a group or class of students, according to the formal policy of the country in question.

Teaching hours per year are calculated on the basis of average teaching hours per day multiplied by the number of teaching days per year, or on the basis of teaching hours per week multiplied by the number of weeks per year that the school is open for teaching. This excludes the number of hours per year accounted for by days when the school is closed for festivities and celebrations.”

“. . . It is important to bear in mind that these figures include neither non-teaching hours within the school nor work in the community or at home, such as the preparation of lessons or professional development activities and general school tasks, for example staff meetings, or the support of students. The indicator can thus not be interpreted as a measure of the total workload of teachers.”

Source: *Education at a Glance: OECD Indicators 1996*.

The concept most closely corresponding to this indicator in Québec is the “presentation of classes and lessons,” as defined in section 8-6.03 A of the current collective agreement for teachers. The concept is defined as follows: “the average time to be devoted to the presentation of classes and lessons, and to student activities in the student timetable will not exceed: 1) twenty (20) hours and thirty (30) minutes for all full time teachers at the elementary level; 2) seventeen (17) hours and five (5) minutes for all full time teachers at the secondary level.”

Source: Bousquet, Jean-Claude. *L'indicateur temps d'enseignement des indicateurs de l'OCDE pour le Québec et l'Ontario*. Direction des statistiques et des études quantitatives, Ministère de l'Éducation du Québec. Note of February 21, 1997. [Translation]

Statutory Salaries:

“The starting salaries reported refer to the average scheduled gross salary per year for a full-time teacher with the minimum level of training necessary to be fully qualified at the beginning of his or her teaching career. Reported salaries are defined as the sum of wages (total sum of money paid by the employer for the labour supplied minus the employer's contribution to social security and pension funding). Bonuses that constitute a *regular* part of the salary such as a 13th month, or holiday or regional bonuses, are included in the figures. Additional bonuses, for example remuneration for teachers in educational priority areas, for participating in school improvement projects or special activities, or for exceptional performance, are excluded from the reported gross salaries . . .

Salaries at 15 years of experience refer to the scheduled salary per year of a full-time classroom teacher with the minimum level of training necessary to be fully qualified and with 15 years of experience. The maximum salaries reported refer to the scheduled maximum salary (top of the salary scale) per year of a full-time classroom teacher with the minimum level of training to be fully qualified for his or her job. Salary data are reported in accordance with formal policies for public institutions.”

Source: *Education at a Glance: OECD Indicators 1996*.

In Québec, the statutory salaries of teachers working for school boards is determined by collective agreements. These agreements specify salaries according to level of education and years of experience. Common payscales are established for teachers in all levels of education (preschool, elementary and secondary education).

For the purposes of comparison with OECD countries, we have considered a payscale reflecting the situation of teachers with 16 years of education. This scale contains 15 levels, corresponding to teachers' years of experience.

Purchasing Power Parities (PPP):

In the OECD publication, *Education at a Glance: OECD Indicators*, the data on teachers' salaries is expressed in American dollars converted into PPPs. In this bulletin, we have quoted the data in Canadian dollars, likewise converted into PPPs, using the PPP rates established by the OECD.

“Purchasing Power Parity exchange rates (PPP) are the currency exchange rates that equalize the purchasing power of different currencies. This means that a given sum of money, when converted into different currencies at the PPP rates, will buy the same basket of goods and services in all countries. In other words, PPPs are the rates of currency conversion which eliminate the differences in price levels among countries.”

Source: *Education at a Glance: OECD Indicators 1996*.

Table 1 Teaching hours per year for teachers in public elementary schools and salary per teaching hour for elementary teachers, 1993-94: OECD countries and Québec

	Teaching hours per year	Salary per teaching hour (\$)		
		Starting	After 15 years	Maximum
Austria	709	33	42	61
Belgium	832	29	40	47
Denmark	750	37	47	47
Finland	na	na	na	na
France	923	25	34	47
Germany	760	44	55	60
Greece	696	22	27	34
Ireland	915	29	45	53
Italy	748	30	36	46
Netherlands	1 000	22	33	41
New Zealand	788	24	35	35
Norway	686	33	40	41
Portugal	828	24	37	61
Spain	900	32	38	46
Sweden	624	30	38	44
Switzerland	1 085	36	48	55
Turkey	830	13	13	20
United States	958	30	40	50
OECD country mean	818	29	38	46
Québec	738	40	60	60
Difference (Québec - OECD countries)				
Absolute	-80	11	22	14
%	-10	38	58	30

Sources: OECD. *Education at a Glance: OECD Indicators 1996*
 Direction des statistiques et des études quantitatives, Ministère de l'Éducation du Québec

N.B. In the OECD publication, the data on average salaries are in American dollars. For the purposes of the above table, the data are expressed in Canadian dollars based on the Purchasing Power Parity exchange rates (PPPs) between Canada and the United States, as calculated by the OECD.

Table 2 Teaching hours per year for teachers in public lower secondary schools and salary per teaching hour for lower secondary teachers, 1993-94: OECD countries and Québec

	Teaching hours per year ¹	Salary per Teaching Hour (\$)		
		Starting	After 15 years	Maximum
Austria	651	38	50	80
Belgium	720	35	49	60
Denmark	750	37	47	47
Finland	na	na	na	na
France	660	41	53	71
Germany	712	51	64	71
Greece	569	27	33	42
Ireland	735	38	59	66
Italy	612	39	48	62
Netherlands	954	24	37	47
New Zealand	869	23	33	33
Norway	611	37	45	46
Portugal	681	29	56	75
Spain	900	32	38	46
Sweden	576	36	45	48
Switzerland	1 056	43	59	66
Turkey	996	9	9	14
United States	964	29	39	51
OECD country mean	760	33	45	54
Québec	615	48	72	72
Difference (Québec - OECD countries)				
Absolute	-145	15	27	18
%	-19	45	60	33

Sources: OECD. *Education at a Glance: OECD Indicators 1996*
 Direction des statistiques et des études quantitatives, Ministère de l'Éducation du Québec

N.B. In the OECD publication, the data on average salaries are in American dollars. For the purposes of the above table, the data are expressed in Canadian dollars based on the Purchasing Power Parity exchange rates (PPPs) between Canada and the United States, as calculated by the OECD.

1. The Québec figure indicates teaching hours per year for general education in the youth sector.

Table 3 Annual statutory salaries for teachers in public elementary schools, 1993-94: OECD countries and Québec

	Starting salary (in \$)	Salary after 15 years of experience (in \$)	Maximum salary (in \$)	Ratio of salaries after 15 years of experience to starting salaries	Number of years from starting salary to maximum salary	Ratio of starting salaries to per capita GDP	Ratio of salaries after 15 years of experience to per capita GDP
Austria	23 294	29 804	43 114	1.3	34	0.9	1.2
Belgium	24 503	33 150	39 493	1.4	27	1.0	1.3
Denmark	27 520	35 485	35 485	1.3	14	1.1	1.4
Finland	20 913	26 244	27 885	1.3	20	1.0	1.3
France	23 360	31 545	43 673	1.4	32	1.0	1.3
Germany	33 110	42 084	45 450	1.3	22	1.3	1.7
Greece	15 256	18 877	23 651	1.2	32	1.1	1.3
Ireland	26 667	40 856	48 231	1.5	25	1.4	2.1
Italy	22 235	26 831	34 101	1.2	40	0.9	1.1
Netherlands	22 416	33 029	41 275	1.5	25	1.0	1.4
New Zealand	18 652	27 257	27 257	1.5	9	0.9	1.3
Norway	22 529	27 541	27 831	1.2	14	0.8	1.0
Portugal	19 621	30 637	50 870	1.6	29	1.3	2.0
Spain	28 860	34 044	41 251	1.2	42	1.7	2.0
Sweden	18 461	23 681	27 501	1.3	23	0.8	1.1
Switzerland	38 611	51 722	59 361	1.3	23	1.3	1.7
Turkey	10 416	10 959	16 201	1.1	27	1.6	1.6
United States	28 737	38 794	48 173	1.3	16	0.9	1.2
OECD country mean	23 620	31 252	37 822	1.3	25	1.1	1.4
Québec	29 627	44 498	44 498	1.5	15	1.3	2.0
Difference (Québec - OECD countries)							
Absolute	6 007	13 246	6 676				
%	25	42	18				

Sources: OECD. *Education at a Glance: OECD Indicators 1996*
 Direction des statistiques et des études quantitatives, Ministère de l'Éducation du Québec

N.B. In the OECD publication, the data on average salaries are in American dollars. For the purposes of the above table, the data are expressed in Canadian dollars based on the Purchasing Power Parity exchange rates (PPPs) between Canada and the United States, as calculated by the OECD.

Table 4 Annual statutory salaries for teachers in public lower secondary schools, 1993-94: OECD countries and Québec

	Starting salary (in \$)	Salary after 15 years of experience (in \$)	Maximum salary (in \$)	Ratio of salaries after 15 years of experience	Number of years from starting salary to maximum salary	Ratio of starting salaries to per capita GDP	Ratio of salaries after 15 years of experience to per capita GDP
Austria	24 690	32 248	51 826	1.3	34	1.0	1.3
Belgium	25 073	35 360	43 239	1.4	27	1.0	1.4
Denmark	27 520	35 485	35 485	1.3	14	1.1	1.4
Finland	23 579	28 704	30 755	1.2	20	1.2	1.4
France	26 808	34 842	47 174	1.3	32	1.1	1.4
Germany	36 324	45 737	50 366	1.3	22	1.5	1.8
Greece	15 256	18 877	23 651	1.2	32	1.1	1.3
Ireland	27 958	43 255	48 681	1.5	25	1.5	2.3
Italy	24 130	29 217	37 865	1.2	40	1.0	1.2
Netherlands	22 466	35 605	44 591	1.6	25	1.0	1.5
New Zealand	19 916	28 431	28 431	1.4	9	1.0	1.4
Norway	22 529	27 541	27 831	1.2	14	0.8	1.0
Portugal	19 621	37 990	50 870	1.9	29	1.3	2.4
Spain	28 860	34 044	41 251	1.2	42	1.7	2.0
Sweden	20 562	25 782	27 501	1.3	23	0.9	1.2
Switzerland	45 588	62 007	69 886	1.4	23	1.5	2.1
Turkey	8 515	9 058	14 300	1.1	27	1.3	1.4
United States	28 121	37 356	49 626	1.3	16	0.9	1.2
OECD country mean	24 862	33 419	40 185	1.3	25	1.1	1.5
Québec	29 627	44 498	44 498	1.5	15	1.3	2
Difference (Québec - OECD countries)							
Absolute	4 765	11 079	4 313				
%	19	33	11				

Sources: OECD. *Education at a Glance: OECD Indicators 1996*

Direction des statistiques et des études quantitatives, Ministère de l'Éducation du Québec

N.B. In the OECD publication, the data on average salaries are in American dollars. For the purposes of the above table, the data are expressed in Canadian dollars based on the Purchasing Power Parity exchange rates (PPPs) between Canada and the United States, as calculated by the OECD.