



# Teacher and Principal Compensation

An International Review

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#### TEACHER AND PRINCIPAL COMPENSATION: AN INTERNATIONAL REVIEW

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October 2006





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## **Executive Summary**

Education policy in America is one of the hottest topics in communities across the country. Stories abound concerning the quality of teachers, the poor quality of teacher preparation, the rate at which teachers are leaving the profession, worsening shortages of teachers and the inability of states to meet the Federal government's minimum requirement for having certified teachers in front of school children.

The United States, however, is hardly alone in its increasing concern about getting and keeping the quality teachers it needs to remain economically competitive in the 21st century. Shortages of qualified teachers are pervasive in all advanced industrial countries today. Like us, these countries are finding it especially difficult to recruit teachers in mathematics, sciences, technology and computer science, and foreign languages.

The fact that most of the advanced industrial countries are encountering many of the same problems recruiting and keeping well qualified teachers in public school classrooms is directly attributable to the fundamental changes taking place in the global economy. Most workers in advanced industrial societies need a far higher level of education—the kind needed to do what Peter Drucker dubbed 'knowledge work' some years ago—to be able to cope with ideas in a way that was certainly not needed even recently by most workers.

That, we believe, is what has transformed the demand for teachers and created the shortages now so prevalent in the advanced industrial nations. The United States and its peers elsewhere are only beginning to realize the depth of the problem. So it is no surprise that the relatively tentative measures being taken by most nations are no match for the severity of the challenge.

No longer is a primary and secondary mass education system that relies on teachers to simply "keep school" at all adequate, yet that's the basic educational structure in place in advanced industrial societies today. Primary and secondary education systems in these countries took shape in the first quarter of the 20th century, when the overall objective of national primary and secondary mass education systems was to provide an eighth grade level of literacy to the vast majority of secondary school graduates.

Four-year college graduates were rare in those days, and those that were available were needed for the high priority technical and professional jobs available then. Teaching was not on that list, which meant that teachers were recruited from the bottom end of the distribution of those entering college and then trained to provide a modest level of literacy to the vast majority of school children. That approach is wholly inadequate in a rapidly integrating global economy that requires highly trained teachers to educate workers to levels well beyond an eighth grade level of literacy.





Now that more and more work is knowledge work (and low-cost countries can supply vary large numbers of relatively well-educated workers to global employers), most high school graduates in the advanced industrial nations will have to be prepared to do college level work. Inevitably, this will mean that the schools will have to recruit and retain teachers from the upper ranks of high school graduates going on to college.

To address these challenges, advanced industrial countries in Europe and elsewhere are trying many of the same remedies that the United States is experimenting with, such as across-the-board salary adjustments for teachers, and incentives targeted at attracting individuals to particular shortage areas. Though many of these actions roughly parallel developments in the United States, there are interesting and important variations on these themes that some countries have tried that could potentially be very interesting to American policymakers. And there are some points of substantial difference.

Consider some of the reforms now in use in other advanced, high-cost countries:

- Signing bonuses and forgiveness of college and university tuition fees in order to draw individuals into the teaching profession. In the United Kingdom, for example, teachers who agree to teach in shortage areas are forgiven their entire college tuition cost after they have served as teachers for ten years.
- Higher compensation in the early years in order to attract people who are concerned about their initial pay and are much less interested in the benefits they will receive as they get older. This is happening in Australia, Denmark, England, Finland, Norway, and Scotland.
- Escalating pay in the later years in an attempt to retain experienced teachers who might otherwise leave. Britain and other English-speaking countries are developing career ladder systems for their teachers.
- Extra pay and benefits to attract teachers of shortage subjects or to challenging schools.
   Singaporean teachers receive salary supplements to teach in shortage areas, higher ones to teach deaf students and even higher ones if they agree to teach students with mental disabilities. Danish teachers who agree to teach in remote areas are eligible for free accommodations, a home personal computer, and access to wholesale shopping
- Bonuses based on teachers' contributions to improved student performance. Chile provides a bonus to teachers who teach in the top-performing 25 percent of schools in each socioeconomic band.
- Salaries based on agreements teachers work out with their principals to respond to the principal's priorities for the school. In Sweden, teacher salaries are individually negotiated based on the subject taught, the demographics of the school, the needs of the school, and the individual teacher's background, skills and performance.

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How do all these types of reforms boost teacher compensation abroad compared to the U.S.? Well, teachers' compensation in the United States is higher in terms of Purchasing Power Parity dollars, but is lower in terms of the more valid measure of Gross Domestic Product per capita than in any of the other eight largest industrial nations. A study by the National Center for Education Statistics of US and other G-8 countries found that average entry level salary of American primary teachers was higher in 2001 PPP than every other country except Germany, but lower than all in GDP per capita. A more recent UNESCO report found that after 15 years of teaching American teachers average a higher salary GDP per capita than teachers in France and Italy but lower than Scotland, England, Japan, and Germany.

Another striking difference relates to the tradeoffs among teachers' compensation, class size and time spent with students in classes. Some nations with teacher-student ratios much like those in the United States have much larger class sizes, but expect their teachers to spend much less time during the school day teaching their students in classes. Teachers in these countries, among them Japan, typically have more time to plan, to confer with other teachers, to build curriculum and to work with their students individually.

Other countries, such as Switzerland offer higher pay and still expect their teachers to put up with long hours in the classroom, but provide smaller class sizes. Austria and Denmark have lower salaries, but also lower teacher hours and class sizes..

On the whole, however, these financial and professional incentives for teachers both here and abroad are well below the level of the comparable incentives being offered in the private sector for the achievement of comparable goals. Not surprisingly, then, these new teacher compensation efforts appear to be having relatively weak effects.

We should not be surprised that relatively modest financial incentives are not working very well in this country or any other country. Researchers speculate that the effects will not be larger unless the incentives approach those in the private sector as a proportion of base pay. What's more, highly qualified young people today are less interested in a fair day's pay for a fair day's work than they are in an outstanding day's pay for an outstanding performance during that day. And they are much less interested in a career than they are in doing something next that is interesting and personally rewarding.

These same challenges are facing countries struggling to attract and retain principals who are willing and able to deal with the new challenges of leading school reform and meeting community expectations for high performance of all students. In most countries studied, principals are paid more than teachers, but many argue that this is not enough to compensate for the long workday and workweek they experience or the constituencies with whom they work to build consensus for change. Many countries are calling for additional training and performance-based contracts for their principals.





Complicating the reform picture is the role of unions, which differs across countries. Many countries boast high levels of membership, such as in Europe, where unions are seen as social partners who are involved in policy making on many issues beyond just wages, hours and working conditions. In most countries, unions are trying to figure out what their role should be in times of changing expectations for teachers and schools.

In this paper, we take a key feature of teaching policy—teachers' compensation—and examine it from the perspective of the way policies on that topic are evolving in a variety of countries and, as well, what researchers are reporting about both the problems and the effects of the policy approaches that other nations have been trying. Our purpose is to enrich the information available to American policy makers with the experience and reflections available from other countries faced with much the same problems as we.

In the report that follows several detailed aspects of teacher and principal compensation are examined, including:

- Teacher compensation levels among countries
- Incentives for teaching in challenging schools or in shortage subject areas
- Performance-related salary systems
- School leader (principal) compensation systems
- Relationship of teacher salary levels and class size
- Influence of teacher unions on compensation Issues

For each section, there is an appendix that provides further detail about individual country systems as well as the ways in which they are addressing the specific topic. As you'll see, we've done an exhaustive review of the data available on teacher compensation abroad.

So what did we learn from this research effort? As you'll see, our analysis points to some surprising conclusions, even though our research reveals a fundamental fact: Teachers respond to the same incentives that professionals in a wide variety of other fields respond to. Specifically:

- Teacher compensation works best to attract and retain quality candidates when teachers' pay is high relative to compensation in other professions.
- Capable young people entering the profession prefer a compensation system based on the
  quality of their work to one that compensates everyone without respect to the quality of
  their teaching.
- The use of many "objective" criteria to determine teachers' merit, and thus some component of teachers' pay, improves teacher performance.
- Given a chance, teachers would prefer to negotiate their compensation with their principal rather than have their union negotiate their salary on their behalf.





Similarly, the expectations of principals rest on compensation and professional rewards that reflect higher career aspirations. When educators were only expected to "keep school," what mattered most to an ambitious school administrator was subordinates (that is, teachers) who were loyal. Teachers knew this. To the extent that principals had discretion in handing out rewards of all kinds to teachers, they would do so on the basis of personal loyalty, not merit as defined by the quality of their teaching.

Punishments were meted out on the same basis. A preference for uniform salary schedules and strong union intervention in personnel disputes was a natural reaction to these conditions. Now, however, the tide is turning. Today, school systems in the industrialized world want principals that:

- Lead their schools to higher performance. As they do so, loyalty will recede as the principal determinant of how the rewards are handed out and the ability of the teacher to improve student performance will rise to the top.
- Align those performance goals with teachers' career expectations. As they do so, teachers
  will be much more willing to let their own rewards depend on the judgments of what their
  school systems need to improve.

In short, teachers and principals respond to the same incentives that all other professionals respond to. Yet our analysis also shows that those incentives have to be structured properly. Understanding how other industrialized nations go about reforming their school systems to meet these goals requires complex analysis and exhaustive research. As you'll see, the United States has a lot to learn from their reform experiments—lessons we can put to good use to ensure our economy remains competitive in the 21st century.





## Introduction

Any casual reader of the education professional press will quickly conclude that teaching policy is a central issue in American education. Stories abound concerning the quality of teachers, the poor quality of teacher preparation, the rate at which teachers are leaving the profession, worsening shortages of teachers and the inability of states to meet the federal government's minimum requirement regarding having certified teachers in front of school children. Those readers would be forgiven for assuming that these problems are unique to the United States, but that is not the case. They are endemic among the advanced industrial countries.

In this paper, we take a key feature of teaching policy—teachers' compensation—and examine it from the perspective of the way policies on that topic are evolving in a variety of countries and what researchers are reporting about both the problems and the effects of the policy approaches that other nations have been trying. Our purpose is to enrich the information available to American policy makers with the experience and reflections available from other countries faced with much the same problems as us. While the evidence from other countries must be used judiciously—it is rarely the case that a solution that works perfectly in some other country will work just the same way here—it is equally true that we have a great deal to learn from other countries if we would only pay attention.

A 2004 OECD report on teacher quality found that the problem of teacher shortages is pervasive throughout OECD countries and that the lack of quality teachers is having a negative impact on student learning. In particular, schools are finding it increasingly difficult to recruit teachers in mathematics, sciences, technology and computer science, and foreign languages. The report notes that across-the-board salary adjustments, targeted incentives and alternative employment measures are typical approaches that most countries adopt to alleviate teacher shortages, but that policies must address other critical aspects such as "working conditions, professionalism, flexibility, job security, education requirements and job satisfaction from working with students." This litany will no doubt sound very familiar to the American education professional, but, as the reader will see, what has been tried varies widely as do the results. But some of the things that have been tried have consistent common elements, which may be quite instructive to American readers.

#### A Reflection on Underlying Causes of the Shortages of Quality Teachers

The fact that most of the advanced industrial countries are encountering many of the same problems with respect to policy on teachers is in itself important. While we cannot be sure why virtually all of these countries are experiencing the same problems at the same time, it might be worth speculating on the reasons that is so because it cannot be an accident. If the solutions are to work, they must be reasonably related to the underlying causes.

We suggest that the underlying problem lies in the fundamental changes taking place in the global economy. The general form of the primary and secondary education systems in the advanced industrial countries took shape in the first quarter of the 20th century, when the overall objective of the





framers of national primary and secondary mass education systems was to provide an eighth-grade level of literacy to the vast majority of secondary school graduates. Four-year college graduates were rare in those days, and those that were available were needed for the high priority technical and professional jobs of the time. Teaching was not on that list. The practical problem that the framers confronted was to attract people from the bottom end of the distribution of those entering college and train them to provide a modest level of literacy to the vast majority of school children.

Now, however, recent developments in the rapidly integrating global economy have made an eighth-grade level of literacy grossly insufficient for most workers in high cost countries. Instead, most workers in those societies will need to have a far higher level of education—the kind needed to do what Peter Drucker dubbed 'knowledge work' some years ago³—and to be able to cope with ideas in a way that was certainly not needed even recently by most workers. That, we believe, is what has transformed the demand for teachers and created the shortages now so prevalent in the advanced industrial nations. It seems as though the United States and its peers elsewhere are only beginning to realize the depth of the problem. Thus it is no surprise that the relatively tentative measures being taken by most nations are no match for the severity of the challenge.

This analysis is shared by our colleagues at OECD. Based on their analysis of the PISA data, Andreas Schleicher and his associates have also concluded that those nations that succeed in finding and keeping the kinds of teachers they need will have decided to look for teachers who can prepare their students for economies driven by advancing knowledge and ideas and who themselves are adept knowledge workers, in the sense in which that term was first used by Drucker.<sup>4</sup> Thus the issues of teacher compensation fit into a larger picture, beyond the scope of this paper, that have to do with the way teachers will have to be recruited, incented, compensated, and managed to produce the kinds of graduates from secondary schools that will be successful.

#### What You Might Expect to Get From This Report

In the following sections, we summarize detailed information on aspects of teacher compensation. You will find that the countries we describe have implemented a broad array of policies—ranging from across-the-board salary increases to more targeted strategies like housing subsidies, performance-based pay and various non-financial incentives—to attract and retain greater numbers of high-quality teachers. In some cases, the reader will find that some of these innovations have been carefully studied and analyzed, with very instructive findings for Americans thinking about implementing similar policies. Even where there is not yet enough hard evidence to justify substantial conclusions about their effectiveness, the reader will find some very interesting and innovative ideas to ponder. We hope that our general overview and analysis of teacher compensation systems in OECD countries and beyond will provoke ideas, and help to broaden and inform the discourse among policymakers and education officials in the United States seeking to address the chronic problems of teacher shortages and substandard performance.





It is important to bear in mind that each of the nations reported is facing problems that are unique in certain important respects and that the solutions that might work well in one nation might not work as well in another because of differences in culture, values, the historical situation or larger political factors. Sometimes, too much is made of these differences ("Nothing invented outside my state has any application here") and sometimes not enough ("It worked there, darn it, and there is no reason it cannot work here"). The truth, as it so often does, lies somewhere in between. Accordingly, we urge the reader to consider those factors that might make some solutions inapplicable in particular states or situations in the United States, but also to be receptive to those solutions that appear to work across national boundaries or have a strong potential for doing so.

Responsible policymakers recognize that similar policies may produce very different outcomes depending upon the setting. OECD analyzed studies of teacher salary increases in different countries and found different results based on the country setting. A study in the United Kingdom by Dolton found that graduates were less likely to become teachers when salaries were lower than those in other professions, but a modest increase in salary did result in more teachers entering the profession. Wolter and Denzler found the same general result in Switzerland, but concluded that the amount of salary increase would have to be very large to induce graduates to become teachers because of the already high salaries offered to teachers in that country.<sup>5</sup>

In the following sections of this paper, we look across the countries to develop a clearer picture of the options available to leverage teacher compensation systems to meet the needs of today's schools. To provide context for understanding the systems that countries have adopted, we have included basic information about the education systems in these countries in Appendix A.





## Section I: Comparing Teacher Compensation Levels among Countries

In a 2005 study comparing education indicators in the United States and other G-8 countries, the National Center for Education Statistics found that the average entry-level salary of American primary school teachers was higher (\$28,681 in 2001 in Purchasing Power Parity Dollars, \$ PPP) than every other country besides Germany (\$38,412).<sup>6</sup> But Purchasing Power Parity is a tool used to enable economists to compare what salaries will actually buy in different countries. So it is no surprise that American teachers' salaries will buy more than teachers' salaries will buy elsewhere, because American salaries generally are very high relative to other countries.

The real issue in teaching is not how large a basket of groceries a teacher in the U.S. can buy with her paycheck relative to teachers in some other country, but rather how a teachers' salary in one country compares with other professionals' salaries in the same country. This—not purchasing power parity—is the basis on which young people actually base their career choices. Here we find a very different picture.

One way to make valid comparisons among countries on this point is to look at how the pay in a particular profession is related to the gross domestic product of a country on a per capita basis. In this case, we would compare the value of an average teacher's pay to the average value of what every worker in that country produces. Then we can look at what members of other professions make relative to the same index and thus evaluate professions, without having to take the value of different currencies into account. When we compare teachers' compensation against GDP per capita, the average starting salary of American teachers with the minimum teaching qualifications was the lowest among all of the G-8 countries.

One must also consider the levels of salary increases during a career. The study also revealed that, after accumulating fifteen years of experience, teachers in each country earned a salary that exceeded their respective country's GDP per capita. In the United States, the ratio of average teacher salary to GDP per capita after fifteen years of experience (1.19) surpassed those of France (1.14) and Italy (1.07), but compared quite unfavorably with Scotland (1.42), England (1.46), Japan (1.63), and Germany (1.75). Beginning teachers in Japan receive the lowest average salary of the group (both in Purchasing Power Parity Dollars (\$ PPP), and as a ratio of Gross Domestic Product (GDP per capita), but after fifteen years of teaching experience they rank second behind only Germany in each category. In Thailand, an experienced teacher who has attained the maximum salary earns almost five times as much as a teacher at the beginning of the career. Other countries with large increases in salaries during service include Brazil, France, Indonesia, Jordan, the Republic of Korea, and Portugal. However, the number of years required to reach the top of the salary scale from the starting salary varies considerably, from eight years in Australia, Denmark, and New Zealand to 35 years or more in Hungary, Italy, Jordan, the Republic of Korea, Spain, and Thailand.<sup>7</sup>





Countries have responded to specific needs for recruitment or retention by targeting salary increases at groups of teachers with very different amounts of experience. For example, Australia, Denmark, England, Finland, Norway, and Scotland focused their increases on starting salaries to encourage teachers to enter the field. Austria, Japan, and Portugal focused on mid-career teachers to retain them, while Greece, Hungary, and New Zealand rewarded experienced teachers with the largest increases.<sup>8</sup>

Any comparison of teacher compensation levels across countries must also take into account the disparities that exist in terms of the number of hours that teachers are working in a year. The National Center for Education Statistics study reveals that primary and secondary teachers in the United States, on average, work substantially more hours per year than do their counterparts in the other countries. As we will see in a moment, though, official hours required do not necessarily reflect the hours that teachers are actually expected to be in school. This is partly a reflection of cultural norms and traditions.

Average teacher compensation and time spent in the classroom vary widely across countries. Relative to GDP per capita, teachers in some countries receive on average more than twice as much as teachers in other countries. The same disparity holds true for average annual teaching hours throughout OECD countries. While some countries regulate hours in the classroom such as Japan and Germany, many countries focus instead on the total number of hours teachers spend in school—not the same thing. For example, teachers in Japan spend about 535 hours per year in the classroom, whereas teachers in the United States and Mexico average more than 1,000 hours of teacher time each year. That does not mean that Japanese teachers spend less time at school than American teachers; in fact, most Japanese teachers are at school from before 8:00 am and leave after 5:00 pm. However, it is their official teaching hours that are required in their contracts.

The following chart from UNESCO provides a comparison of working hours per week in 2001.<sup>11</sup> It demonstrates the variety of systems that have been established, from those which specify total time and the place where it is to be completed, to those that simply designate the hours a teacher must be at school conducting classes.





Table 1: Hours per week specified in teacher contract systems and where the hours must be spent

Country	Pre-primary	Primary	Lower Secondary	Upper Secondary General	Upper Secondary Vocational
Australia	m	36.3	36.3	36.3	m
Austria	40.0	40.0	40.0	40.0	40.0
Czech Republic	42.5	42.5	42.5	42.5	42.5
Denmark	37.0	37.0	37.0	37.0	a
England	32.5	32.5	32.5	32.5	32.5
Germany	38.5-40	38.5-40	38.5-40	38.5-40	38.5-40
Greece	37.5	37.5	37.5	37.5	37.5
Hungary	40.0	40.0	40.0	40.0	40.0
Iceland	40.0	45.8	45.8	44.7	44.7
Korea, Rep of	a	44.0	44.0	44.0	44.0
Mexico	20.0	25.0	25.0	m	m
Netherlands	36.9	36.9	36.9	36.9	38.0
Norway	a	44.0	44.0	44.0	44.0
Portugal	35.0	35.0	35.0	35.0	35.0
Scotland	a	27.5	27.5	27.5	a
Spain	37.5	37.5	37.5	37.5	37.5
Sweden	40.0	40.0	40.0	40.0	40.0
1b. Both teachin	g and non-teaching	activities are	completed at school o	nly	'
Country	Pre-primary	Primary	Lower Secondary	Upper secondary general	Upper secondary vocational
Australia	m	34.7	34.9	34.9	m
England	32.5	32.5	32.5	32.5	32.5
Greece	37.5	37.5	37.5	37.5	37.5
Ireland	23.4	28.4	а	a	a
Scotland	a	27.5	27.5	27.5	a
Spain	30.0	30.0	30.0	30.0	30.0
	ichers are only required in the contraction in the			number of teaching hours. There is	no requirement for how much tim
Country	Pre-primary	Primary	Lower Secondary	Upper secondary general	Upper secondary vocational
Belgium (Fr.)	23.3	23.3	20.0	18.3	27.5
Finland	17.3	17.3	17.3	16.5	m
France	27.0	27.0	15-20	15-20	18-23
Ireland	a	a	22.0	22.0	a
Portugal	25.0	25.0	18.3	18.3	16.7
Turkey	25.0	20.0	16.0	14.0	26.7
3. Teachers' w	orking hours are se	et at the local	or school level. It is po	ossible to calculate an average acre	oss these decision-making units
Country	Pre-primary	Primary	Lower Secondary	Upper secondary general	Upper secondary vocational
		, ,		, ,	
New Zealand	22.5	25.0	25.0	23.0	a

Notes m = data not available. a = data not applicable because the category does not apply. Source: OECD, 2001

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However, Siniscalco pointed out that one cannot look only at salary levels or numbers of hours worked because these provide an incomplete picture. There are four factors that make up the salary and working conditions: the number of teacher hours worked per year, the size of classes, the number of classes taught each day, and the number of hours of instruction each student is expected to receive in a year. It is the way in which countries combine these four factors that not only determines the costs per student of education, but more importantly, creates the working conditions that attract or deter teacher recruitment and retention.

For example, though the Japanese teacher is expected to put in much less time actually teaching, he or she is expected to be in school at least as long as the American teacher. The real difference is in class size. Class sizes in Japan are much larger than in the United States, though teacher-student ratios are very similar. The Japanese teacher has chosen to trade larger class sizes for more prep time, more time planning and diagnosing student problems with other teachers, and more time to give students individual attention outside of regular class time. This shows quite concretely why it is important to look at all these variables together.

New Zealand and Korea spend similar amounts per student per year, approximately US\$1700 using PPP, which is slightly above average for the countries in Siniscalco's study. However, their choices are again very different. New Zealand teachers work more than 900 hours per year, but have below average class sizes, while Korea chose to have its teachers work less than 600 hours per year, and made up for that cost by raising class size ranges to from 37-50 students, much above the country average of 24.

Siniscalco also considered countries with different costs per student: Switzerland at US\$4,315, as compared to Austria at US\$2,857, and Denmark at US\$2,814. Switzerland balances its high salaries with a high teaching load of 860 hours per year, while Austria and Denmark have lower salaries but also lower teacher loads: 658 and 644 hours per year. All three have relatively small class sizes. On the other hand, the Philippines keeps costs per student down while providing the highest number of student hours of instruction in her study. It does this by combining higher teacher work hours with larger than average class sizes and lower than average salaries. This of course exacerbates the issue of working conditions.<sup>12</sup>

The OECD study, "Teachers Matter," noted that reducing class size, while it may improve education for targeted groups of students, such as young children or disadvantaged students, is expensive and has not been proven to increase student achievement when class sizes were reduced across the board for all students. As the United States found in California, class-size reduction efforts may in fact reduce student learning when qualified teachers are not available to poor or urban districts. OECD suggested that it might be better to keep class sizes constant, raise teacher salaries, and increase the support staff available to assist teachers. It has found evidence that more OECD countries are raising salaries than reducing class sizes. However, some countries have teacher surpluses and average teacher salaries, and the study suggests that they would do well to reduce class sizes and bring more teachers into the schools.<sup>13</sup>





In addition to class size and the amount of time that teachers are expected to teach, there are other differences in working conditions that need to be taken into account when considering teachers' compensation. One of the most important is the difference in the duties teachers are expected to perform. The following chart from the Eurydice database identifies the various duties required of teachers in Europe within the school day, week and year.<sup>14</sup>

Figure 2.9

Specific tasks that may be required of teachers by law or other binding regulations, without any additional remuneration or reduction in teaching time, in general lower secondary education (isced 2a), 2000/01

																	U	K															
	B fr	ap g	Bnl	DK	Q	E	E	F	IRL		1	N	A	Ь	FIN	S	E/W/NI	SC	SI	П	N0	BG	Z	33	λ)	ΓΛ	11	유	MT	Ы	RO	IS	X
A1				•		•	•		•	•	•	(•)	•		(•)	•	(•)			•	•		•	•	(:)	•	•	•		•	•	•	•
A2							•		•		•	(•)					(•)				•	•			(:)			•		•	•	•	•
А3	•	•	(•)	(:)	•	•	•		•	•		(•)	(•)	•	(•)	•	•	•		•		•			(:)				•		(•)	•	•
<b>A</b> 4				(:)			•			•	•	•	(•)			•	•	•		•					(:)							•	•
B1	•	(•)	(•)	•	•	•	•			(•)	•	•	•	•	•	•	•	•	•	(:)	•	•	•	•	(:)	•	•	•	•	•	•	•	
B2	•	•	(•)		(•)	•	•	(•)		•		(•)	(•)	•	•	•	•	•	•	(:)	•	•		•	(:)	•			•	•		•	•

- A1 Supervision between lessons (except during lunch breaks)
- **A2** Supervisions after school hours
- **A3** Standing in for absent colleagues
- **A4** Support to future teachers and new entrants

- **B1** Teamwork on the school plan, cross-curricular work, drawing up the curriculum
- **B2** Teamwork on the internal evaluation of the school
- (•) Special cases, see the notes

Source: Eurydice

#### **Additional Notes**

Belgium: B1 (B de); A3, B1, B2 (B nl): Tasks which are not officially required but which are carried out by teachers in practice.

**Denmark**, **Ireland**, and Liechtenstein: Information not verified at national level.

Germany: Teachers may temporarily stand in for absent colleagues, although usually for a very short period of time (around 1-5 weeks). Regulations vary from one Land to another.

Supervision between lessons and the provision of support to future teachers are infrequent: teachers are involved in internal evaluations in only six Länder.

France: In addition to their teaching activities, teaches have to spend time on pupil assessment (including marking, and staff discussion in the conseil de classe) and in contact with the parents of pupils.

Italy: The teachers' council defines the curricular plan of the school

Netherlands: Precise formulation and interpretation of the collective agreement in decentralized resulting in many local agreements. A1, A2, and A3 may not be required by law, but schools have to regulate this themselves.

Austria: Standing in for absent colleagues does not result in extra pay if it involves 10 hours a year or less. Teamwork on internal evaluation is recommended.

Portugal: Teachers are statutorily required to replace colleagues absent for short periods whenever necessary.

Finland: A1 is normally determined at the discretion of the employer/school head; A3 is locally regulated; B1 is defined in the collective agreement on salaries; B2 is specified as a lead obligation.

**Sweden:** All tasks can be required of the teachers in accordance with the terms of collective agreements.

United Kingdom: A1, A2: Teachers are required to maintain good order and discipline among pupils and safeguard their health and safety, both when they are authorized to be on the school premises and when they are engaged in authorized school activities elsewhere.

Latvia: Figure 2.9 represents just the minimum set of tasks that teachers may be required to carry out.

Romania: A3 is usually determined at school level by the head. Teachers commonly pay a colleague for the hours entailed or have an ongoing arrangement in which they stand in for each other whenever necessary. A4 will be included in forthcoming regulations.

#### Explanatory note

The Figure shows tasks that may be required of teachers as part of their normal work. It does not include tasks for which there is additional remuneration. B2: Participation in internal evaluation via the school board is not considered.





In the United States, some of these activities receive additional salary stipends, but some do not. For example, assuming responsibility for an activity after school, such as yearbook or sports is compensated with additional stipends, but the supervision of students between classes is not. In addition, some of these activities receive additional salary in some US states and districts but not in others. In collective-bargaining states, additional salary stipends for specific additional activities depend upon the conditions of the contract.

Many OECD countries also provide additional salary for teachers for teaching conditions and responsibilities, teacher qualifications, training and performance, and demography. The chart on page12 was prepared by OECD in 2004 to summarize the various criteria. Just as in the United States, many other countries are providing various forms of incentive compensation to attract competent teachers, in and out of shortage subjects, to schools serving low-income children and remote communities. They too are trying loan forgiveness, signing bonuses, and the full panoply of other such instruments now widely used in the United States. OECD noted, however, that most of the differences from average compensation reflect differences in qualifications, in school level (primary, lower secondary or upper secondary), and years of experience, just as in the United States. The report also observed that, just as in the United States, the incentives provided are often not well-targeted and are much smaller in relation to total compensation than is the case in the private sector, where they seem to work better. The report also points out there is little research evidence that incentive strategies of this sort and at this level work.

Comparisons of compensation systems may suggest ways in which U.S. states could rethink their current systems. However, it is critical to look at the details of the systems that different countries have put in place to see what they hoped to accomplish. In the following sections we look at specific areas of compensation.





Table 6.4 Adjustments to base salary for teacher in public institutions, 2002—Types of critera to adjust base salary awarded to teacher in public institutions

		Criteria ba	Criteria based on teaching	ing conditions/responsibilities	ponsibilities			Critera related to teacher's qualification, training and performance	s qualificatio mance	n, training,	Critera demo	Critera based on demography
Country	Management responsibilities in addition to teaching duties	Teaching more classes or hours than required by full-time contract	Special tasks (career guidance or counseling)	Teaching in a disadvantage, remote, or high-cost area (location allowance)	Special activities (sports and drama clubs, homework clubs, summer school)	Teaching students with special educational needs (in regular schools)	Teaching in a particular field	Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession	Outstanding performance in teaching	Successful completion of development activities	Family status (married, number of children)	Age (independent of years of teaching experience)
Australia	•		•	•		•		•				
Austria	•	•	•		•						•	•
Belgium (Fl.)		•										
Belgium (Fr.)												
Czech Republic	•	•	•			•			•			•
Denmark	•	•	•		•		•	•	•	•		
England	•	•		•	•	•	•	•	•			
Finland	•	•	•	•	•			•				
France	•		•	•	•	•					•	
Germany	•	•									•	•
Greece		•	•	•				•			•	
Hungary	•	•	•	•	•	•	•	•	•	•		•
Iceland	•	•	•	•	•	•	•	•		•		•
Ireland	•			•				•				
Italy		•	•	•	•						•	•
Japan	•	•		•	•	•					•	
Korea	•	•		•		•					•	
Mexico	•	•	•	•			•	•	•	•		
Netherlands						•						
New Zealand	•		•	•	•	•	•		•			
Norway	•	•	•	•			•	•	•			
Portugal	•	•	•		•	•		•	•	•	•	
Scotland	•			•				•			•	
Slovak Republic		•		•					•			
Spain	•			•						•	•	
Sweden	•	•	•	•	•	•	•	•	•	•		
Switzerland	•	•	•		•	•					•	
Turkey		•	•		•				•	•	•	
United States	•	•	•	•	•	•	•	•		•		

Source: Derived from Table D3.2a of OECD (2004a). See Annex of OECD (2004a) for notes.





# Section II: Incentives for Teaching in Challenging Schools or in Shortage Subject Areas

It is common for countries to provide financial incentives to encourage teachers to work in isolated, rural, or challenging schools. Benefits may include subsidization of housing and public transportation, preferential tax arrangements and other income adjusting entitlements.<sup>17</sup> However, due to budget constraints at local, state, and national levels and public calls for governments to provide more services for less money, countries find themselves under greater pressure to identify new and innovative strategies—beyond simply raising salaries or providing other financial incentives—to recruit teachers to challenging schools. Further complicating efforts to address teacher shortages in isolated regions is the reality that many teachers prefer lower salaries, or even unemployment, in urban areas to working in remote parts of the country.

Given the difficulty of recruiting, Australia has looked to different approaches, both financial incentives to prepare to teach in isolated areas, as the Western Australian Department of Education has done, to a program started by the Catholic Education Office in Western Australia to attract students with a specific calling to service. The Nanavut Province of Canada provides sizable additional salary allowances for teachers in its remote areas according to the degree of isolation of the specific community, while Chile varies its allowance based on the distance from an urban area and the level of isolation. Ireland provides a stipend of €1,321 for teaching on a remote island, while Denmark provides free accommodations in its remote areas. Korea and China provide incentives in the form of credit toward future promotions for those teachers who spend time in isolated areas.

Some countries have started to use financial incentives to attract teachers to schools serving disadvantaged students. However, OECD found that these are not sufficient to attract teachers to work in challenging schools or difficult locations. <sup>18</sup> For example, France established a program to attract teachers to schools serving disadvantaged students in the suburbs of Paris, but found that the majority of the teachers who applied were teachers with fewer years of experience. It has also started a program to specially prepare new teachers for teaching students from disadvantaged and immigrant backgrounds and placing them in teams in such schools. While this system has had some effect on teacher shortages, its effect is described as limited by Cros and Obin. <sup>19</sup>

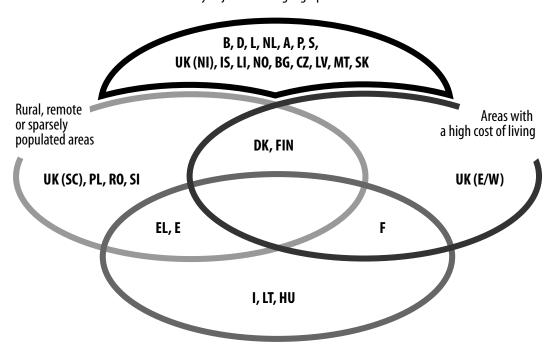
The figure below provides a view of salary adjustments based on geographic conditions for countries in Europe, specifically those that provide salary differentials for rural, remote, or sparsely populated areas; high cost of living areas; or socially/economically disadvantaged areas. While many western European countries do not provide allowances for any of the three bases, Denmark and Finland provide them for all three bases.<sup>20</sup>





Figure 3.14
Eligibility criteria for salary adjustments related to the geographical location of teachers in general lower secondary education (ISCED 2a), 2000/01

No salary adjustment to geographical location



(:): **IRL, CY, EE** Source: Eurydice

Socially or economically disadvantaged areas

#### **Additional Notes**

Denmark: Only teachers on permanent contracts

Denmark and Liechtenstein: Information not verified at national level

**Spain:** Provided that teachers have been working in the area for at least a month

France: Two types of residential location have been identified for determining cost of living allowances. They correspond to 1% and 3% of gross salary respectively Italy: Provided that teachers agree to remain in the area for a certain period

**Netherlands:** Schools in disadvantaged regions receive supplementary financial resources which may be used for salary adjustments

Portugal: The career status of teachers provides for salary bonuses in the case of those who work in rural or remote areas, but there are no regulations for administering them.

Finland: Teachers with public servant status, solely when they work in remote or sparsely populated areas; all teachers in the case of areas with an above average cost of living.

United Kingdom (E/W): Only teachers who work in or around London.

**Hungary:** Solely teachers in schools supported by local authorities.





#### **Shortage Areas**

Offering additional stipends to teachers of shortage subject areas has been tried in some cities in the United States as well as internationally. For example, 43 percent of districts in Texas offer signing bonuses of \$500-\$2,000 to new teachers of mathematics, science, special education, and bilingual education. Signing bonuses and annual stipends are recommended as a market response to supply and demand. Programs differ between those that attract people to teaching and those that hope to retain them. England and Wales have the most options to increase both the number of prospective teachers preparing to teach subjects facing shortages and the number who actually enter teaching. There are loan forgiveness programs for teachers in shortage areas that can forgive an entire loan over ten years of teaching. They allow students to take out loans of £4,000 per year, and the loan forgiveness is estimated to be equal to a five percent increase in salary. In addition, for students in the Secondary Shortage Subject Scheme, the program provides up to £5,000 in direct aid during the last year of study, while the Golden Hello program offers £4,000 for entering and successfully completing the induction phase. In Wales, the payment is made at the end of the first year of teaching.

Another shortage area in some countries is related to teachers who are fluent in a specific language. In Belgium, the need is for French speakers for Brussels' schools, while in Ireland it is speakers of the Irish language, who receive an additional €1,135.

#### **Other Benefits**

Additional accommodations are offered to teachers in certain European countries. These include health benefits over and above the usual social services accorded to all citizens, moving costs to initial job placement, housing or housing allowances for rural areas, and preferential rates for mortgages at the discretion of the local school authorities (as in Denmark), or for those teachers with five years experience accepting a post in a difficult area for a minimum of three years (as in Greece). In addition, nearly half of the European countries offer luncheon vouchers or subsidized cafeterias.<sup>23</sup>

Despite these benefits and stipends, teacher shortages remain a major issue in most OECD countries. A major challenge in OECD is that few countries collect data on teacher shortages in ways that would enable them to determine whether the vacant positions have been filled by qualified teachers or just the best person available at the time. Therefore the responses to the OECD International Survey of Upper Secondary Schools in 2003 provide the best information available. In this survey, principals reported shortages in the following areas, expressed as the percent of students in schools identifying the shortage as a problem: 49 percent in computer science/information technology, 33 percent in mathematics, 33 percent in technology, 32 percent in foreign languages, and 30 percent in science. The PISA 2000 principal surveys also indicated major concerns about shortages, with principals in half of the countries indicating that a majority of students in their secondary schools had their academic learning compromised by teacher shortages or the use of under-qualified teachers. It was true for more than two-thirds of the students in Germany, Greece, the United Kingdom, Mexico, Sweden, Finland, Norway, and Iceland and for less than one third in Spain, Austria, Switzerland, Chile, France, Poland, the Czech Republic, and Hungary.<sup>24</sup>





In general, the shortages OECD countries set out to address are still acute, and we don't have any good data that would allow us to judge the effectiveness of any specific set of incentives with respect to the shortages it was meant to address. Given the data we have, it would appear that both we and the other countries for which we have data appear to be using incentives that only marginally affect the outcomes we are trying to achieve, but we need better data to say that conclusively. Therefore, the obvious course of action is to try more powerful incentives, and do a better job of tracking their effects on the variables of interest.





## Section III: Performance-related Salary Systems

Rewarding the accomplishments of teachers has been both difficult and controversial in the United States as well as in OECD countries. Odden and many others argue that the single-salary schedule cannot take education to the levels of productivity currently needed.<sup>25</sup> However, the question is how to replace it with a system that connects contributions to compensation in meaningful ways and that could be embraced by employers and teachers alike. The issue may be less contentious in the US than it used to be as unions in Denver and other cities develop new systems. As the Democratic Leadership Council points out in one of its model initiatives "Innovating With Competitive Pay:" "[u]ltimately, the goal should be to make teaching just like other professions, with an opportunity for a truly professional career path and exceptional pay for demonstrated excellence."<sup>26</sup>

Many OECD countries have been working with performance-related salary systems in the governmental sector since the 1970s as they tried to use private-sector compensation practices to motivate workers and make them accountable for higher levels of productivity. As the OECD report "Performance-related Pay for Government Employees" found, the systems were used first for managerial employees, but now that countries are decentralizing decisions to lower levels of the organization, they have expanded performance-related pay systems to more categories of staff. The systems are based on three assumptions: "i) organizations can accurately measure individual, team/unit or organization outputs; ii) individual and team/unit outputs contribute to organizational performance; iii) pay can be administered in a way that capitalizes on its expected incentive value for potential recipients."<sup>27</sup> Two-thirds of OECD countries have implemented performance-related salary systems in their public sectors, but most have limited their use to particular agencies or to management staff, and few have used them in education. It is still true that few countries have formalized a robust system of performance-related pay in any sector.<sup>28</sup>

Many OECD countries are now looking at various types of performance-based teacher compensation systems as a way to positively transform the teaching profession. Odden divides reward systems into three major categories: merit pay, which rewards teachers for their performance and that of their students; knowledge and skills-based pay, which bases increased pay on additional qualifications and demonstrated skills; and team or group-based salary incentives, which provide extra pay for the accomplishments of the school, grade-level teams or schools within schools.<sup>29</sup> Strong concerns have been expressed not only in the United States, but also in other countries by many people who have considered such schemes. They include the question as to whether it is possible to design fair evaluation systems that accurately measure teachers' contributions to the education of students, whether it is possible to separate the contribution of previous teachers from those of the current teacher, the fear that the collegiality of teachers will be sacrificed to the competition for higher salaries, and the concern that the use of assessments in certain subjects for teacher salary growth will lead to a narrowing of the curriculum taught.





These concerns are hardly surprising and not without merit. What is surprising, and well worth noting, is the difference between the attitudes expressed on these issues for a long time by experienced teachers and the younger people now entering the profession. As the head of the teachers' union in Victoria State in Australia recently put it, "They're not typically unionized, they're keen to progress rapidly and they're looking for rewards based on performance." Ballou and Podgursky noted a Public Agenda poll in the United States in 2001 that indicated that 69 percent of new teachers agreed that highly effective teachers should receive higher salaries than other teachers. We will return to this point in our concluding remarks in this report.

#### Research on Performance-related Salary Systems

Ballou and Podgursky argue that if merit pay is used effectively in 90 percent of large public and private organizations, as well as in private schools, there is no reason why it should not work in public schools. However, given the opposition to merit pay, they suggest that the reform more likely to receive support from teachers and unions is knowledge and skills-based pay, even though there is less evidence of its effectiveness in either the private or public sector, which probably accounts for the fact that only 54 out of 19,016 North American companies surveyed in 1996 used competency-based pay.<sup>32</sup>

Odden has researched teacher compensation systems for the last twenty years, and he believes that the single-salary schedule, developed to end inequities for women and minority teachers, should now change. Instead, he recommends a system based on teachers' knowledge and skills and group-based incentives for improved school performance. The key to successful knowledge and skills-based systems is a set of standards for teacher performance that states or districts agree on and measurement tools that both teachers and administrators agree will fairly evaluate teachers against the standards. He does not recommend merit pay given to teachers based on the performance of each teacher's students, because, at least until recently, merit pay proved to be so divisive that such systems did not last very long. On the other hand, incentive payments to entire faculties based on better-than-predicted student achievement in their schools has the effect of providing strong incentives to teachers to work closely with each other, to support new and weaker teachers, and to weed out poor teachers whose performance does not improve. Odden believes that the amount of the incentive is also important, and he argues for incentives at the level of corporate bonuses, which are five to eight percent of annual salary. For teachers that would be far more than the average bonuses used in programs in Kentucky, Maryland, North Carolina, and Texas where the bonus averaged about \$1,000.<sup>33</sup>

The evaluation of an innovative pay-for-performance pilot in Denver, Colorado from 1999-2003 emphatically supports the idea of linking teacher compensation to student achievement. The evidence from the pilot program strongly suggested that the pay for performance program was a "catalyst for change that benefits all students and teachers."<sup>34</sup> Student performance improved when the teachers' compensation was directly linked to student achievement. Student test scores were significantly higher for elementary and middle school students in classrooms with teachers who had been in the pilot for two or more years. The study showed that student achievement was positively correlated with teachers who set clear objectives for classroom performance, suggesting

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that the measures by which their compensation would be determined focused their teaching on the outcomes of interest to the district. But the student achievement gains took time to develop. One reason may have been the role played by greater access to student data. Teachers surveyed said that greater access to student achievement data allowed them to better address key needs, set more appropriate targets for student achievement, and more closely monitor student progress. Following the pilot, the teachers in Denver were offered and subsequently voted for a program based on the pilot known as the Professional Compensation System for Teachers. The program provides increments in compensation based on increased knowledge and skills, professional evaluation, willingness to fill hard-to-staff positions or teach in hard-to-serve schools, and reaching specified student growth objectives, including performance on the state exams, and other incentives related to school-wide distinguished performance.

Odden and Kelly's research confirms the Denver finding that pay for performance schemes and other incentives for teachers and principals can have positive effects on student achievement. These methods are most effective when they are accompanied by professional development programs, the support of school leadership, accurate and reliable reporting of student achievement, and strong feedback mechanisms.<sup>35</sup> Other studies suggest that teachers who do not receive any pay based on merit often do not understand what they might have done to improve their performance. As a result, they have little incentive to change behaviors and are more likely to reduce their efforts over time.<sup>36</sup> A 2004 Israeli study found that pay for performance initiatives had a positive impact on student achievement partly because they led to improved teaching methods, increased after-school tutoring, and better responsiveness to students' needs on the part of teachers.<sup>37</sup> The point here appears to be that tying increases in teacher compensation to student achievement appears to provide incentives to teachers to look actively for ways to improve their performance that might have been available before the incentives were offered, and that their interest in actively taking advantage of such opportunities increases.

Some argue that schools serving poor students have faculties that are disproportionately inexperienced and underqualified and that this fact will overwhelm the effects of the modest incentives that have thus far been tried. This may well be true, but would argue that stronger incentives should be tried, and the data from Denver would suggest that well-structured plans with pay-for-performance components will in fact affect student performance. Others note that since compensation is generally not the primary reason teachers enter their profession, policies to enhance teacher quality and retention must address a multitude of factors, including "preparation, recruitment, selection, professional development, working conditions, and evaluation." Here, too, one wonders whether what we have come to believe about what motivates teachers has much bearing on the young people now making their decisions as to what profession to choose, based on the findings reported above from Victoria state in Australia and the polling data we reported above.

According to Lazear's 2003 comparative study of teacher incentive systems in the United States and Sweden—both countries are characterized by relatively low teacher pay, salary scale compression, and a general aversion to performance-based pay—"payment on the basis of student performance provides forceful signals...about what is valued and what is not."<sup>39</sup> However, problems may

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arise if stakeholders cannot agree on what outcomes are desired or how to accurately measure those outcomes. Lazear also cautions that output-based pay, if it is tied only to certain areas like math and science, may contribute to the neglect of other subjects. Outcome-based measurements of teacher quality are further complicated if results cannot be reliably observed until years after the course is completed. Short term priorities—i.e., improving immediately observable outcomes—may undermine more desirable long-term strategies.

Overall, Lazear concludes that making teacher salaries more competitive vis-à-vis other professions will clearly raise the size and quality of teacher applicant pools. But, to ensure that increased pay translates to better teacher quality, it is essential that schools and education systems are equipped to efficiently identify the best teachers from a larger list of applicants. He argues that a general reduction in pay compression would provide systemic incentives to remain in the teaching profession, which would make teachers less likely to seek other career opportunities. Lazear's analysis of the effectiveness of output-based pay suggests that performance-based mechanisms can be effective if they are carefully designed and tied to appropriate metrics.<sup>40</sup>

One of the most intriguing studies of performance-based pay is an evaluation of the Chilean school-based National Performance Evaluation System, which provides stipends to all teachers at the 25 percent of the highest performing schools within socio-economic groups on the state exam. The researchers concluded that the new approach to compensation increased the scores obtained in the state exam by between four and 18 points. They found that the effects were greater among those schools with more favorable external conditions.<sup>41</sup>

Strath evaluated the Swedish individualized salary system in 2004 and found that it had accomplished many of its objectives. It is important to note that the individualized salary system provides a variety of ways in which salaries can be affected, including recruitment and pay for improved productivity and performance. Its major objective had been to recruit and retain teachers and improve productivity, performance, and quality of education. The system was initiated at the same time as the economy improved in the nation as a whole, and this made recruitment and retention, especially of teachers of mathematics and science, more difficult. Strath suggested that the new system enabled the districts in large urban and suburban areas with greater shortages to raise initial salaries 50 percent higher than districts at the lowest salary scale.<sup>42</sup> In some cases, this left districts with less money with which to raise salaries for more experienced teachers. However, the unions indicated in the long run that this would raise salaries of all teachers as local authorities created financial incentives to maintain current teachers of quality.

The second area Strath found improved by the system was the ability to use the evaluation criteria established to differentiate salaries to clarify the goals and objectives of teachers and the important role of the teacher in improving the quality of education provided to students. Principals were able to reward the teachers most eager to participate in school improvement efforts and decline to reward teachers who were not displaying improved productivity or improved outcomes. In many cases it was the younger, less experienced teachers who received the rewards. Some teachers rethought their career choices after not receiving salary increases and left the profession. Such new





vacancies were not a problem in municipalities that were considered the best places to work since they could easily replace them. However, in areas that served more disadvantaged youth, the need to raise initial salaries within constrained budgets meant that the best teachers, often those with 10-15 years of experience, were not being rewarded as they should be.

The Swedish Teachers Union surveyed teachers over time and found that the negative view of the process at the initiation of the system had changed to a 30 percent approval rating in 1999 and a 60 percent approval rating in 2004. The approval rate was over 70 percent for teachers below the age of 40, but still more than 50 percent for those over 50. The survey also found that teachers preferred to negotiate their salaries directly with the headmaster, rather than involving the local union in the negotiations. Strath concluded that there were no real losers in the initiation of individualized salaries. While the rising initial salaries seemed to favor younger teachers, more experienced teachers have benefited as well. Under the original salary system, teachers topped out on the salary schedule by their early forties, with only inflation increases available for the rest of their careers. The new system gave them the opportunity to increase their efforts and productivity and receive salary increases on that basis for the future.

A recent study in England reported in The Times found that performance-related pay awards "inspired teachers to raise their game and achieve better results for GCSE (General Certificate of Secondary Education) pupils, according to a study of the scheme."44 The study, titled, "Paying Teachers by Results" by Simon Burgess and Carol Propper of the Centre for Market and Public Organisation found that the students scored on average half a GCSE point more than equivalent pupils taught by the same teachers before the system was put in place. The study involved 181 teachers at 25 schools from the Midlands to Bristol, and it followed progress of their 14-year-old pupils at Key Stage 3 and later at GCSE level, before and after the reform. They compared teachers who were and who were not eligible for the rewards and found that those who were eligible saw higher performance from their students. They observed greater gains for students who were lower achievers.

#### **Knowledge and Skills-based Salary Systems**

Both Australia and the United Kingdom have established a new category of teachers, Advanced Skills Teachers (ASTs). These are teachers who have the knowledge and skills to help other teachers do an exemplary job in educating students to high levels. This was done to establish an opportunity for teachers to have a career path while remaining in the classroom. As in most other countries, teachers saw administration as the only chance for a promotion. New South Wales and Queensland adopted the category and use applications and assessment of specific criteria to select their ASTs. The UK requires a portfolio that demonstrates that the teacher meets the criteria. Its program differs from the Australian one in that teachers spend 20 percent of their time helping teachers in other schools, rather than remaining at their own school. Both countries refer to the AST system as a way to recognize outstanding teachers, rather than as a pay-for-performance system. One could, of course, construct a career ladder system in which teachers are selected for promotion up the career ladder not on the bases of measured skills but rather on the bases of proven teaching ability as measured by better-than-predicted performance of their students.





New Zealand is currently piloting a similar system known as the Specialist Classroom Teacher for Secondary Schools. Teachers must apply for the program and, if accepted, spend four hours each week mentoring and assisting teachers in their building.

Evaluations are the basis for many of the countries that have knowledge and skills-based salary systems. The UK established a separate upper pay scale that teachers may enter only by establishing the quality of their teaching through an evaluation by their principal and an external assessor. Chile's Pedagogical Excellence Award was developed with the teacher association and requires teachers to pass a written assessment of pedagogical and content knowledge and submit a portfolio of their classroom teaching. Finland established a new program in the 2003-04 collective agreement that established an evaluation of standards of teacher work that could lead to salary increases, while Germany's states of Baden Wurttemberg and North Rhine-Westphalia have started to use evaluations to speed up or slow down teachers' progress along the salary schedule. This is in contrast to the lack of serious attention that has been given to teacher evaluations in the past. The Country Note team found that while it is difficult to become a teacher in Germany, which has a long preparation process, difficult assessments, and a longer probationary period than in most countries, once teachers are in full-time positions, very little or no evaluation is made of their work.<sup>45</sup>

In the Netherlands, evaluations at the school level are used to determine which teachers move to the higher levels of the salary schedules, while Singapore provides performance bonuses based on the evaluation of work done the previous year. New Zealand uses evaluations to determine whether or not teachers receive an additional step on the salary schedule. Sweden's individualized pay system allows for additional salary based on the principal's evaluation of the teacher's performance as one component of the total compensation package. Some cantons in Switzerland use self-evaluations and external evaluations by representatives of the school board to determine whether teachers can move from one stage of the salary schedule to another, while steps within stages are fairly automatic.

#### **Individual Performance-related Bonuses**

Only a few countries do performance bonuses, and no national criteria are used to determine who receives them. In Denmark and the Netherlands, the awards are done at the school level with discretionary funds made available by the government. In Denmark, the criteria are teamwork and further training, while in the Netherlands, the criteria are established at the school level. Chile has created a National Teaching Excellence Award to recognize the 50 best teachers in the country. The process starts with local nominations and moves up to a national level, but there is little information available about the criteria. The program is intended to provide greater social awareness of good teaching and improve the image of teachers.





#### **Group-based Performance Systems**

Only Chile has established a group-based system for performance pay: the Performance Evaluation System is based on state exam scores achieved by schools. Schools are grouped by social-economic conditions and then the top 25 percent within each group are rewarded for their performance. All teachers within the school receive approximately US \$430 for being recognized in this program.

The examples given and those in Appendix C provide a variety of options for states to consider. The major obstacle is the lack of evaluations of most of the programs. The initial evaluation of Sweden's individualized pay provides food for thought. As in the United States, most of the programs have been negotiated and used without plans for rigorous evaluation. The majority of articles cited in international papers are those that have been done in the United States, and many of them are surveys rather than evaluations that attempt to connect outcomes to the performance-related system in place. This is an area ripe for additional work.





## Section IV: School Leader (Principal) Compensation Systems

The overwhelming trend across countries is for school leader (headteacher or principal) compensation systems to differ from those of teachers. In some instances, highly qualified expert teachers may receive a salary that is comparable to school administrators, as in Belgium, but by and large school leaders appear to be much better paid than teachers. The extent to which the compensation of school leaders exceeds that of teachers varies depending upon country, region, and school. On the other hand, figuring principals' salaries on an hourly basis would lead the observer to the opposite conclusion, namely that the typical school head in the United States and often elsewhere is actually paid less than teachers in the same school. According to Phillips, Raham, and Reniham, the number of duties expected means that most principals in the US, Canada, Australia, and New Zealand report working on average from 59-62 hours per week rather than the 35-40 hours required for teachers, and, in many countries, principals and school heads work more weeks in the year.<sup>46</sup>

The role of the principal is changing as countries move to decentralized systems that focus on the school as the unit of improvement and accountability. Thus school heads in the most advanced industrial countries find themselves caught in a vise. Their compensation is sometimes declining relative to classroom teachers, while at the same time they are being held increasingly accountable for improving student outcomes and school performance generally. In Denmark, Germany, and Japan, their role is still "head" teacher who does the administrative functions and mediates the environment for teachers. However, in most other OECD countries, the role has become more complex, with principals responsible for recruitment of staff, financial management, evaluation and development of teachers, development of the school culture, improvement of student achievement, and maintenance of relationships with parents and the community. Whereas the United States typically requires candidates for the principalship to have a substantial number of courses in school administration, that is not true in most other countries, where schools are typically much smaller and the principal has teaching responsibilities. But that is changing, albeit slowly. The OECD Report "Teachers Matter" notes that a number of countries have recognized that simply placing a person in the job is not enough; formal training programs for school heads are necessary and are being established in a number of countries, such as Australia, England, and Sweden.<sup>47</sup>

Mulford described the changed environment for leadership in OECD countries in what he terms the New Public Management (NPM) system. As opposed to "old public administration" that focused on rules and bureaucracy, the NPM system recognizes the changes needed in an era of decentralization, accountability and markets, and community involvement. The new leadership roles required include building a culture of collaboration and group problem solving, entrepreneurial skills to meet market expectations, performance management skills to achieve the accountability outcomes required, and performance-related compensation management skills to accompany it.<sup>48</sup> Importantly, this does not include the responsibilities of facility planning and maintenance, supervision of meals and transportation, or the other administrative duties that principals regularly undertake. Phillips et al note that surveys of principals indicate that the breadth of responsibilities and the lack of time in which to achieve them are major factors in their increasing dissatisfaction with the job.<sup>49</sup>

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With these new expectations, many countries have recognized the need to recruit and retain school leaders as well as teachers. However, countries have addressed this issue in different ways. The role of principals in Australia has changed most in Victoria where they have established a system to define and assess the specific competencies required in the role of principal. Salaries range from AU\$95,000-100,000 for large high schools, nearly twice the salary of teachers. Principals are on performance management contracts that can result in additional bonuses of 15 percent of salary. In England and Wales, principals have similar roles and are also eligible for performance pay above their annual salaries of £37,600 -93,200. Salaries depend on the size of the school and its demographics. At the other end of the spectrum, there is Belgium. Although the role of the principal has expanded through decentralization efforts there, principals receive little more than teachers in compensation—€150 more per month, despite the added workload and responsibilities. The OECD Country Note team recommended that principals receive specific training and annual evaluations to assist them in their leadership roles. They also recommended better compensation linked to performance outcomes and renewable fixed term contracts.<sup>50</sup>

As mentioned above, Denmark does not have a strong principal leadership role because the school is run by councils of teachers and students at the folkeskole level and by governors councils made up of teachers, students, parents, and staff and city council representatives at the gymnasium or upper secondary level. Principals earn from 16 to 67 percent higher salaries than teachers with eight years of experience, depending on the size of the school. In addition, local negotiations can add to the salary of the principal.<sup>51</sup> Germany and Japan have weak principal roles with little compensation above the teachers' salaries, although Germany is rethinking the role of the principal in response to the need for strong leaders to lead school reform. In Japan, leadership in the schools is accomplished through teacher committees, and principals are moved to a new school every five to seven years, making a strong leadership role less likely.<sup>52</sup>

Korea has a very strong principal role. Only one percent of teachers ever get to be vice-principals or principals, so it is a very competitive and esteemed role. Promotions are based on points, and since 45 percent of the points are based on length of service, most principals have had long careers before entering the principalship and are usually between 50-55 years old.<sup>53</sup> Accordingly, their salaries are higher than for any other role in the school. School councils, similar to our site-based decision-making committees, were introduced in 1996 and though they have changed the principal's role to some degree, he or she still determines the extent of the advisory council's influence.<sup>54</sup>

Salaries in the Netherlands are higher than teachers' salaries, starting at the step above the individual's salary as a teacher and rising to a maximum of 2.18 times GDP per capita as opposed to 1.2 to 1.75 for primary and upper secondary teachers with 15 years of experience. The principals' salary depends in part on the size of the school. New Zealand principals also earn more than teachers, receiving between NZ \$70,000-130,0000 and access to additional salary stipends for extra work, such as recruiting or running an early childhood center on site. Sweden has implemented individualized salaries for principals as well as teachers.





In many ways, it is easier to observe the nascent transformation in the education labor force when looking at school heads than at teachers. That, we think, is because the pressures from the accountability movement to produce much higher student achievement are falling more immediately on principals than on teachers, they are less prepared by virtue of training or experience than teachers to respond to those challenges, and their compensation (on an hourly basis) is so poor compared to teachers or to other similarly demanding jobs in the private economy. Of all the countries on which we have data, Sweden appears to be most interesting in terms of its policy responses to these issues because its response is most like that of the private sector to much the same set of pressures. Whether or not the specific measures introduced by Sweden work there and find favor elsewhere, it seems likely that the most successful advanced industrialized countries will move toward a conception of the job that emphasizes leading the school toward higher student performance rather than smooth relations among the adults; more specialized and extensive training for school heads that focuses on both the instructional dimensions of the job and its leadership and management dimensions; and compensation that increasingly mimics the private sector with respect to the level of compensation and the incentives provided for raising student performance.

Appendix D contains descriptions of the principal compensation systems in a variety of OECD countries.





## Section V: Relationship of Teacher Salary Levels and Class Size

The interrelationships among teacher salaries, class size, teacher/student ratios, and the number of classes taught each week in terms of overall costs of education are exceedingly complex. So it is hardly surprising that different countries have made very different policy choices with respect to these matters. One would have hoped that the resulting variation in practices would have produced an environment in which researchers could have produced definitive evidence with respect to the most effective set of policies in this arena, but that is not the case. This is partly because many countries do not collect data on class size; instead they focus on teacher/student ratios. While the teacher/student ratio is a factor in class size, it is not the same as class size, because it does not take into account the number of classes that each teacher teaches or the total number of hours of instruction for each student each year.

Nevertheless, many studies have been done on these issues. Among the most comprehensive recent reviews of this literature was done by Hanushek, who argues that there is no clear evidence of the value of across the board class-size reduction efforts, but does agree that class-size reduction can be effective for certain groups of students, specific subject areas, and certain teachers. He uses the Tennessee STAR Study to show that the smaller class size in Kindergarten (13-17 students as opposed to 21-25) does have an impact. However, he argues that it is the only grade where there was one. The improvement over the control group was created in Kindergarten; it did not increase when the experimental group experienced smaller classes in grades one-three, nor did it decrease when students in the experimental group returned to larger classes in grades four-six. Hanushek argues that the impact of the quality of the teacher on student performance is far greater than the impact of small class sizes.

Santiago's review for OECD on teacher demand and supply includes a review of the US research. He suggests that class size may impact achievement by improving the classroom environment, allowing for more opportunities for individual attention that can lead to improved interventions for individual students and creating an environment of fewer disruptions and higher levels of engagement. However, class size reduction requires more teachers, and increased demand in a competitive market may lead to lower quality teachers in the smaller classes of those less competitive districts with lower-income and more disadvantaged students.<sup>58</sup> This is what happened to Los Angeles students in the California Class-Size Reduction Initiative. He concludes that the expense of across-the-board class-size reductions is not justified by their impact, and so class-size reductions should be limited to special circumstances where they are targeted to those students who would benefit most from them.

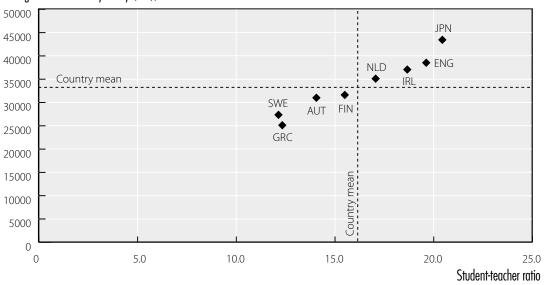
In a study by Hanushek and Luque, the relationship between salary and class size was analyzed for its effect on teacher labor markets. The question was whether there was a relationship between salary and class size. They found that lowering class size by one student generally decreases teacher salaries between one and two percent, with differences in disparate areas of the country, locations of districts, and levels of teacher experience. However, while this means that a small part of the cost of a class-size reduction effort could be recouped through lower salaries, they also found that larger class sizes did not lead to higher turnover rates.<sup>59</sup>



In "Teachers Matter" OECD analyzed the teacher/student ratio versus teacher salaries for a group of countries that spent a similar amount for teacher costs per student. Japan, England, and Ireland have relatively high salaries and high student/teacher ratios, as compared to Greece and Sweden that have relatively low teacher salaries and low student/teacher ratios, and to Austria, Finland, and the Netherlands which have average teacher salaries and average student/teacher ratios.<sup>60</sup>

Figure 3.13
Student-teacher ratio versus average salary of teachers (with 15 years of experience)
Primary schools, 2002, selected group of countries with similar expenditures on teachers per student





Note: Salary of teachers refers to annual statutory salary in public institutions after 15 years of experience. The ratio of students to teaching staff is for public and private institutions and is based on full-time equivalents. Given that the trade-off between the student-teacher ratio and the average salary of teachers is meaningful only for a given expenditure on teachers per student, this analysis considers a set of eight countries with a similar level of expenditure on teachers per student. The eight countries form the largest set of countries with expenditure levels within a range of US\$ 250 per year (in this case between US\$ 1,950 and US\$ 2,200). The estimated annual expenditure on teachers per student is the product of the statutory salary of teachers with 15 years of experience and the inverse of the student-teacher ratio. The student-teacher ratio used for England is that of the United Kingdom.

Source: Derived from data in OECD (2004a.)

The OECD report also noted that from 1996-2002, most of the OECD countries in the study raised salaries and most lowered class-size, but in the 13 countries that did both, eight of the 13 raised salaries more than they reduced class sizes. This may be the result of teacher shortages, or the desire to attract and retain high quality teachers in a more competitive economic market.

Given that there is no clear-cut relationship between class size and student achievement, countries continue to make trade-offs that fit their needs. On page 33 is a chart that gives another comparison of teacher salaries with class sizes, pupil/teacher ratios, teacher work hours and costs per student.<sup>61</sup> Looking at the individual decisions that other countries have made may give the states in the US new insights into their own choices. As stated earlier, however, we must be careful not to confuse the official hours required in teacher contracts with the number of hours that teachers actually work. In schools that do not have facilities for teacher planning and class preparation, those activities occur at home, but still occur.

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The issue, from our perspective, is not whether class size reduction works (that is, produces significant improvements in student performance) but whether it is a cost-effective approach to improving student achievement when compared to other strategies that might be used to produce the same outcome. On this score, the meta-studies appear to be in very broad agreement that class size reduction is among the least cost-effective approaches to improving student achievement available to policymakers, with the possible exception of the education of very young students and certain other special student populations. If that is so, then why all the controversy? Because smaller class sizes are very popular with both parents and teachers. Parents intuitively believe that smaller classes will translate into better learning, and teachers find it easier to teach smaller classes than large ones, so it becomes an important item with respect to their working conditions. The evidence, especially from Asia, is that it is possible to produce very high levels of student achievement in schools with very large class sizes. As we pointed out above, the ratios of students to teachers in many Asian countries are very similar to those in the United States, but, because class sizes are much larger, there is much more time available to Asian teachers for planning, conferencing with other teachers about the challenges facing individual students, and meeting with individual students than is true in the United States. These are huge advantages for those systems and may help explain why student performance is so high in many of those countries though expenditures are lower. It is important to recognize it is easier to organize large classes in nations where respect for teachers' authority in the classroom is much higher than in the United States. Still, the evidence strongly suggests that, in most cases, lowering class size is not a very attractive strategy if the aim of policy is to raise student achievement as much as possible.





Country	Starting salary/minimum fs, PPP)	Salary after 15 years of experience / minimum training (5, PPP)	Average dass Size	Compensation per student, per year, starting salary (S, PPP)	Compensation per student, per year, after 15 years (S, PPP)	Teaching Hours per year	Compensation per hour, starting salary (5, PPP)	Compensation per hour, after 15 years (S, PPP)
Australia	28,642	42,057	22.7	1,261.7	1,852.6	885	32.37	47.53
Austria	24,475	32,384	20.0	1,221.6	1,616.4	792	30.90	40.89
Belgium (Fl.)	27,070	37,128	14.1	6.919,1	2,633.2	197	33.99	46.61
Belgium (Fr.)	25,684	35,474	19.9	1,290.6	1,782.5	717	35.82	49.47
Czech Republic	13,808	18,265	20.8	662.6	876.4	772	17.89	23.66
Denmark	32,939	37,076	19.7	1,671.3	1,881.3	640	51.47	57.93
England	28,608	41,807	26.0	1,100.8	1,608.7	950	30.11	44.01
Finland	27,023	31,785	n/avail			684	39.51	46.47
France	23,106	31,082	22.3	1,035.1	1,392.4	006	25.67	34.54
Germany	38,216	46,223	22.0	1,736.5	2,100.4	782	48.85	59.09
Greece	22,990	28,006	17.1	1,344.3	1,637.6	780	29.47	35.91
Hungary	11,701	14,923	20.5	571.6	729.0	111	15.06	19.21
Iceland	18,742	21,692	18.2	1,032.4	1,194.9	653	28.71	33.23
Ireland	24,458	40,514	24.0	1,018.7	1,687.4	915	26.73	44.28
Italy	23,751	28,731	18.0	1,317.6	1,593.9	792	29.99	36.28
Japan	24,514	45,515	28.6	857.3	1,591.7	648	37.83	70.24
Korea	27,214	46,640	34.7	784.9	1,345.1	809	33.65	57.66
Luxembourg	44,712	61,574	15.5	2,888.3	3,977.6	774	57.74	79.51
Mexico	12,688	16,720	20.0	635.0	836.8	800	15.86	20.90
Netherlands	30,071	39,108	22.2	1,354.5	1,761.6	930	32.33	42.04
New Zealand	18,132	35,078	n/avail			586	18.41	35.61
Norway	29,719	35,541	n/applic			741	40.11	47.96
Poland	6,257	9,462	20.8	301.3	455.7	637	9.82	14.85
Portugal	20,150	33,815	18.6	1,084.0	1,819.1	783	25.73	43.19
Slovak Republic	5,771	7,309	20.2	285.1	361.1	959	8.80	11.15
Spain	29,973	34,890	19.4	1,545.3	1,798.8	880	34.06	39.65
Sweden	24,488	28,743	n/avail			624	39.24	46.06
Switzerland	37,544	49,932	19.5	1,930.2	2,567.0	871	43.10	57.33
Turkey	12,903	14,580	26.9	1.974	541.3	639	20.19	22.82
United States	30,339	43,999	22.0	1,379.0	1,999.9	1139	26.63	38.62

Sources: Table D3.1. Teachers' salaries (2003) Table D4.2. Number of teaching hours per year (1996 and 2003), Net contact time in hours per year in public institutions Table D2.1. Average class size, by type of institution and level of education (2003), Number of students per class, calculations based on number of students and number of dasses





## Section VI: Influence of Teacher Unions on Compensation Issues

The influence of unions has been studied to a much greater extent in the United States than in other countries. In most other countries, negotiations with the labor unions are done at the central government level on major wage, hours, and working condition issues, with local units negotiating details of local implementation with school authorities; this is different from negotiations strictly at the state or local district level so common in the United States. However, there are no collective negotiations on wages, hours, and working conditions in France, Germany, Korea, and Japan, where teachers are "career-based" public servants. <sup>62</sup> In European countries, teacher unions are described as social partners and have an ongoing role in the development of policies affecting teachers' hours, wages, and working conditions. They also sponsor research, professional development activities, and policy development in other areas, such as teacher ethics, school development and improvement, curriculum and instruction, and evaluation and assessment.

While most European countries describe themselves as highly unionized, data is not readily available. It appears that there is variation in the level of unionization, ranging from less than 40 percent membership in the Netherlands to over 90 percent in Denmark and Finland and nearly 100 percent membership in Norway.<sup>63</sup> On the other hand, Korea only legalized teacher unions in 1999, yet unions claim to have membership of 82 percent of teachers, <sup>64</sup> as opposed to Japan, which has seen the level of membership decline over the last two decades, perhaps because the unions did such a good job of improving working conditions.<sup>65</sup>

In some countries, such as Denmark, centralized negotiations are required statutorily. England and Wales, on the other hand, have stopped centralized negotiation in favor of establishing a separate, independent advisory body that recommends or responds to governmental proposals regarding national decisions on wages, hours, and working conditions. In Sweden, government and union discussions lead to an agreed-upon framework that is then refined at the local level. In Italy the government and unions negotiate a national agreement every four years and define the process through which decisions will be made at the decentralized levels.

Unions are vigorous defenders of the rights of teachers and other school employees. All European countries report that teacher unions actively defend teachers' employment rights, whether the teachers are public servants or hold private sector-like contracts. In 2000, the union in Portugal was responsible for the government adopting unemployment benefits for teachers affected by a reduction in force after a certain length of time teaching. <sup>66</sup> It is true in Korea as well—the National Teachers Union of Korea played a powerful role in overturning governmental attempts to provide performance-related salaries. (See Section III, Performance Related Salary Systems.)

The question of union strength is harder to analyze. There are the successes of unions in Korea and Portugal noted above. If membership levels were a measure, then the Nordic countries would be seen as the strongest. However, the Swedish government was able to develop consensus for abolishing salary schedules and moving to individualized salary negotiations, despite initial vigorous opposition from the unions. The government refused to increase teacher salaries until the salary





schedule was abolished. The unions recognized that the only way to end the deadlock with the association of local authorities was to unite the two major teachers unions, agree to the measures they had seen occurring in other areas of public employment in Sweden, and focus on school development.<sup>67</sup>

Sir Michael Barber, British education expert and the architect of the Blair education reforms, noted the relative strength of unions in the US as compared to unions in England as a major factor in the difficulty in implementing education reform in the US.<sup>68</sup> Ray Marshall, the former Secretary of Labor and one of the United State' leading labor economists, points out that some of the jurisdictions most identified with successful education reform and strong education performance are also the homes of strong unions. The same can be said of the range of countries reviewed for this essay. Overall, we did not find any evidence from the international scene that we would regard as definitive that the presence or absence of strong unions is consistently correlated with high student performance or low student performance.





## **Conclusions**

For a long time in the United States, it was said that young people entered teaching not as an occupation but as a vocation or calling and therefore would not respond to the same incentives that other members of the workforce did. What they wanted and needed, this argument went, was a level of compensation commensurate with the dignity of the work and a high level of security. Beyond that, they were, it was said, determined not to compete with each other in the workplace, but rather to collaborate, and the best way to foster a climate consistent with this ethic was the single-salary schedule.

The policies that we have described are nothing if not varied, and the research we have identified is fragmentary. Nonetheless, we believe that certain patterns have emerged that directly contradict the conventional wisdom just described, and suggest that teachers respond to the same incentives in the same manner as professionals in a wide variety of other fields.

It shows, we believe, that when teachers' pay is high relative to compensation in other professions, it is easier to attract and retain quality teachers. It shows that capable young people entering the profession would prefer a compensation system based on the quality of their work to one that compensates everyone without respect to the quality of their teaching. And it shows that, given a chance, teachers would prefer to negotiate their compensation with their principal than have their union negotiate their salary on their behalf.

How can we reconcile these findings with the conventional wisdom? We think that the answer might lie in a great transition taking place in teaching from an occupation to a true profession. That transition is messy and full of contradictory eddies and currents. But its outlines are emerging nonetheless.

For a long time, the public expected school people "to keep school" and was relatively satisfied with what it took to be the normal distribution of results. That is no longer the case. As we said above, economic outcomes for both individuals and nations are now much more closely tied to acquired knowledge and skill than ever before. That is why the public is no longer satisfied with the normal distribution of outcomes

When educators were only expected to "keep school," what mattered most to an ambitious school administrator was subordinates (that is, teachers) who were loyal. Teachers knew this and they knew that, to the extent that principals had discretion in handing out rewards of all kinds, they would do so on the basis of personal loyalty, not merit as defined by the quality of their teaching. Punishments were meted out on the same basis. A preference for uniform salary schedules and strong union intervention in personnel disputes was a natural reaction to these conditions.

However, now the tide is turning. We reported above that nations are now looking for principals who can lead their schools to higher performance. As they do so, loyalty will recede as the principal determinant of how the rewards are handed out and the ability of the teacher to improve student performance will rise to the top. In those circumstances, teachers have much less to fear from com-

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pensation systems based on skill needs and teacher performance. In schools, as in most other professional environments, the people who do the work of the organization will see their interests and needs as being much more aligned with those of the leaders and managers of the organization and they will be much more willing to let their own rewards depend on the judgments that those leaders and managers make about what the organization needs in its staff, rather than having those decisions made on the basis of a set of rules designed to limit the discretion of leaders and managers.

Early on, this trajectory will be marked by the use of many "objective" criteria to be used to determine merit, and this will lead, for example, to some component of teachers' pay being determined by student performance on tests of literacy and mathematics, to the exclusion of many other no less important areas of learning. But, if we are right about the trend, and the reasons for it, the use of such measures will decrease as teachers become more comfortable with the basis on which school leaders make their decisions as to who should be hired, who should be fired, and who should be promoted up the new teachers' career ladders.

These developments will spell the end of the conventional wisdom we described above. Some years ago, New Zealand instituted lump-sum budgeting for their schools. Virtually all of the school's total proportional share of the national schools budget was deposited in a local bank account, and the board of that school, working with the staff, decided how it was to be spent. In many schools, the teachers, who had spent much of their professional lives fighting for lower class sizes, realized that if there were fewer teachers in the school, each of those teachers could earn more money than would be possible if there were more teachers. So they opted for larger class sizes, knowing that it meant more work for them.

We conclude from the data we have analyzed that teachers respond to the same incentives as everyone else. But we have also concluded that those incentives have to be structured properly. Signing
bonuses may get more applicants if they are large enough, but they won't keep a teacher in the job
once that teachers signs up. Performance bonuses based on student performance on low level literacy tests in math and English won't produce high level performance in any subject. Performance
bonuses that are a fraction of what they are in private industry (expressed as a proportion of base
salary) cannot be expected to produce the same results that those bonuses would have produced
had they been substantially larger.

And, lastly, we have also concluded, as have so many before us, that money is not everything. The data suggest that teachers, like professionals everywhere, have an overwhelming need to feel competent, effective, and admired. That point takes us way beyond teacher compensation—the topic of this paper. But perhaps not. Surely it is true that the knowledge that one is affecting, one by one, the lives of many young people, opening up opportunities they might never otherwise have had, is the greatest form of compensation a teacher can have. But, it must be said, what is beyond the scope of this paper is how to create schools and systems of schools in which teachers can routinely expect to have that sense of efficacy and accomplishment.





## APPENDIX A: Teacher Education and Compensation Systems

#### Australia

Australian states and territories exercise a considerable amount of autonomy over education policy and practice. However, there is cooperation and dialogue among the states, territories, and the Commonwealth. Along with New Zealand, they formed in 1999 the Ministerial Council for Education, Employment, Training, and Youth Affairs, which has since 2002 been working on a joint statement of teacher and leadership quality and standards. Approximately 68.4 percent of Australian students attend government schools, 20.2 percent Catholic schools, and 11.4 percent independent schools. Non-government schools receive Commonwealth grants to subsidize costs. <sup>69</sup>

For teachers with a bachelor's degree, starting salaries in government schools range from AUD \$35,000-41,000, and an average of AUD \$36,000. At the top end of the salary schedule, teachers earn from AUD\$47,500-58,000. (See Section III: Pay for Performance for a description of additional salary options for top performers.) The salary schedule in most states has 11 levels with teachers placement dependent on four versus five-year degrees and the quality of college performance. For example, an honors graduate with a double major would be placed on level four and would get to the top of the salary schedule in seven years. Teachers do not receive salary credit for additional professional development or degrees earned after their initial education.<sup>70</sup>

Beginning teacher salary is quite competitive with other professions which average AUD \$35,000 for beginners in pharmacy, nursing, accounting, social work, law, medicine, and dental.<sup>71</sup> However, compensation levels become less attractive the longer teachers remain in the classroom. Classroom teachers fall far behind lawyers, accountants, health workers, and other professionals within ten years of starting work.<sup>72</sup>

Most education authorities provide allowances that subsidize or offset costs (moving, rental, etc.) for teachers in remote and isolated areas. (See Section II) Other typical teacher allowances include additional salary for higher duties, leave, meal, practice teaching supervision, special payments, special school, and travel and personal expenses.

#### Belgium-Flemish-speaking Community (About 60 percent of the population)

The education system in Flemish Belgium is made up of three kinds of schools organized into separate networks: community schools, run by the Flemish government for about 15 percent of the students; subsidized public-authority schools run by provincial or municipal authorities and serving 22 percent of the primary and 8 percent of the secondary students; and subsidized private-authority schools that are run by private and religious (largely Catholic) authorities and serve 64 percent of primary and 76 percent of secondary students as of 2001. All schools are funded by the Flemish government, and the Ministry of Education inspects and approves schools of all three types, including approval of their curricula as meeting the Ministry benchmarks for student attainment.<sup>73</sup> While teachers are paid centrally, they are recruited and hired by the local organizing authorities. Schools





are local and small, averaging fewer than 200 students in primary and 450 students in secondary. In addition, student/teacher ratios are quite small, 13.8 for primary and 9.8 for secondary, as compared to OECD averages of 17.0 for primary and 13.9 for secondary. Primary teachers are responsible for 27 hours of lessons per week, while secondary teachers teach between 22 and 24 fifty-minute lessons in lower secondary and between 20 and 22 fifty-minute lessons in upper secondary. This is just a portion of the 833 hours per year that they work in total, which also includes preparation, meetings, and parent conferences. To

Salaries in Flemish Belgium are above average compared to EU averages, ranking fifth for starting salaries for primary and lower secondary, and third for upper secondary. Mid-career salaries are third among EU countries for all levels, and the highest salary is average for primary, fifth for lower secondary, and second for upper secondary. While comparisons of actual salaries are lower for teachers than for those in the private sector, the total compensation package for teachers is at the average. This takes into account that teachers get 29 more days of vacation than private sector people and receive more generous pensions.<sup>76</sup>

Teachers work different hours and receive different salaries depending upon the level of the school. Primary teachers work 831 hours in classroom teaching and earned in 2001 US \$24,618 to begin and US\$39,127 at the top of the salary schedule after 27 years. For lower-secondary teachers, it is 716 hours in the classroom for salaries that range from 2001 US \$24,618 to US\$42,028, and for upper secondary, 671 hours of teaching for salaries of 2001 US \$30,554 to US\$52,990. Looking at salaries compared to GDP, teacher ratios after 15 years of teaching ranged from 1.23 to 1.29 to 1.63 for the different school levels.<sup>77</sup>

#### Belgium–French speaking (covering around 40% of the total population)

Education in French Community of Belgium is organized in a manner similar to the Flemish community with three types of schools all supported financially by the government and requiring approval and inspection of curricula, minimum class sizes, and school plans. To increase standardization of achievement, the 1997 Missions Decree called for competence thresholds for primary and lower secondary and final competencies and training profiles for upper secondary. Commissions have been established to develop these as well as accreditation and evaluation measures.<sup>78</sup>

As in Flemish Belgium, teacher salaries are competitive with OECD averages particularly in upper secondary schools. Comparing total compensation packages, teachers are similar to positions in the private sector. While there is not a career ladder for teachers (other than leaving the classroom for an administrative position), teachers can take on additional duties such as running the media resource centre or coordinating school/community links. Initial teacher salaries are based on three criteria: qualifications, level of schooling, and length of service.<sup>79</sup>





Compared with other OECD countries, teachers' pay in the FCB is fairly high, particularly in upper secondary schools. Although pay is often lower than in the private sector, other benefits such as more vacation days and greater job security for teachers with permanent status keep the teaching profession competitive. Careers remain very flat but there are opportunities to assume other duties within the school or more responsibility.

The factors shaping teachers' pay are limited to qualifications, level of schooling, and length of service. Salaries do not take into account teaching performance, other duties, skills acquired after initial education, or the school conditions in which teachers work. Salary tables are divided into 14 or 15 levels: there are three annual salary increases (of around 3.2%) and 12 salary increases every two years (initially of 5% and later of 3%), until the highest salary level is reached. For teachers in upper secondary and high schools, there are 11 bi-annual increases instead of 12. The following is taken into account when calculating the salary:

- all services performed in the education structure, regardless of which system;
- all services performed in the public sector;
- a maximum of 3 or 6 years job experience outside the education sector (only valid for articular posts in technical and vocational education);
- the extent of the weekly work load.

After 27 years of service (or 25 years in the upper level of a secondary school or high school) the highest possible salary level is reached and held until retirement.<sup>80</sup>

#### Canada

Canada represents a decentralized system, similar to the United States, in which decisions about education are made in each province. In fact, there is not even a federal department of education, but rather a Council of Ministers which brings together the Ministers of Education from each of the provinces for dialogue. Thus there is no national salary schedule, and the salaries of teachers not only differ from province to province but also from district to district within the province based on the district's history of collective bargaining for wages, hours, and working conditions. Phillips suggested in 2002 that differences in salary for two teachers with the same education and experience could differ by as much as 45 percent.<sup>81</sup> Therefore it is important to look at compensation patterns by province.





#### Saskatchewan, Canada

Salary and grid system

Teachers work 190 days in a 10-month period in Saskatchewan, with salaries set by the Saskatchewan Provincial Bargaining Agreement. Salaries of teachers are determined by a 10 step grid system with 10 steps and 7 different classes. The same type of grid system is used to determine pension payments. The Classes are determined by a combination of education and service; Class C is for a teacher with a probationary teacher's certificate but less than two years of postsecondary education. Class I is for teachers with two years of postsecondary education and a probationary teacher's certificate. To reach Class VI, a teacher must have completed six years of postsecondary education and hold a Professional "A" Teacher's Certification and have a second bachelor's degree plus one year of graduate study, a Masters of Education degree or a Vocational Teacher's Certificate or Technical Teacher's Certificate, along with a Bachelor's degree and a year of graduate study. Earning an Additional Qualification Certificate can move teachers in Class IV or V to the next class. A teacher with no or little experience starts at step 1. A teacher just coming into the system with prior experience will be on the same step as other teachers with the same amount of experience.

Salary for Step one, Class I begins at C\$32,273 which is just below the GDP per capita of C\$34,000. Teachers at Step 10, Class VI earn C \$66,765, nearly twice the average GDP per capita. As of September 2006, teachers starting their fifteenth year of teaching will receive an increase of nearly C \$1500. All teachers receive an annual adjustment that ranges from C\$1328 for Class I, Step1 to C\$2718 for Class VI, Step 15. This is considered as salary for pension purposes.<sup>82</sup> In addition a full time teacher receives a total of 20 days of sick leave, a dental and health plan, as well as accidental death and dismemberment benefits.<sup>83</sup>

#### Alberta, Canada

Alberta teachers are the highest paid on average among the provinces of Canada. The teachers' salaries are determined by negotiations between the local school board and the local affiliate of the Alberta Teachers' Association (ATA). The school board uses the money from its general budget provided by the provincial government in order to pay its teachers; therefore they have a great amount of flexibility. A teacher's salary rises as the number of years of experience increases until it maxes out at 11 years. After 11 years, teachers can get a raise if their union negotiates one. In 2002-2003, the union negotiations resulted in an arbitrated raise of 14 percent over two years. The government notes in its "Alberta Government, Facts on Teacher Salaries in Alberta" that Alberta teachers who started teaching 11 years ago with four years of postsecondary education have seen their salaries rise from C\$29,865 to C \$70,823 currently. Teachers with 11 years of experience will earn C\$80,402 in 2006-07.84





#### Nunavut, Canada

Teachers in Nunavut work 195 days over a ten-month period. The salary schedule has seven levels and 10 steps. Teachers who hold Aboriginal Language and Cultural Specialists certification are in Level A. Teachers enter Levels 1-6 based on the number of years of teacher education with Levels 4-6 requiring a degree as well. The salary amount in each step and class goes up each year according to the Collective Agreement Document. In addition, teachers are paid \$20.00 per day for each student teacher under their direction bi-weekly.

Full time teachers receive 15 full days of sick leave. Teachers are also entitled to a dental plan, health insurance, and indemnity for accidental death and dismemberment plan. Through academic year 2008-2009, teachers will receive an allowance of C\$800.00 at the beginning of each school year as part of the collective bargaining agreement. In addition teachers receive a Nunavut Northern Allowance; the monetary sum depends on the community in which the teacher is employed and ranges from C\$12,109 to C \$28,346.87

Teachers who speak Inuktitut and Inuinnaqtun in activities related to their teaching have the ability to receive an allowance based upon the level of language proficiency. Teachers at level 1 receive C\$1,200 per year, level 2 C\$2,400 per year, and level 3 C\$5,000 per year.<sup>88</sup>

#### Chile

Chile's education system has been undergoing significant reforms over the last fifteen years since restoration of the democratic government. The focus has been on creating a more highly qualified teacher force by offering college scholarships to outstanding students interested in teaching as a profession. This is to ensure that Chile will have a completely university-educated teaching force in the future

Education in Chile has been decentralized to three types of institutions: public schools managed by local municipalities, private subsidized schools managed by private entities but subsidized by the government, and private, non-subsidized schools, managed by private entities. Teachers in municipal schools have standard teachers contracts, while those in private schools have private sector contracts that can be ended at the end of the first or second year, but thereafter only for cause. Municipal teachers may be terminated for two consecutive poor evaluations, protracted illness, or elimination of the job. Although the Teacher Act including this provision was enacted in 1991, the individual evaluation system was not implemented until 2003 because of union concerns.

Teachers receive a minimum basic national pay of Ch \$5.927 per hour for primary and Ch \$6.238 per hour for secondary teachers in 2001. This is increased by years of experience, with a 6.76 percent increase for the first two years, and a 6.67 percent increase each succeeding two years to a maximum of 100 percent after 30 years. Teachers who complete additional training can receive an increase up to 40 percent for graduate degrees. Although class size is set at 45 students per class, the actual level in 1998 was 33 at the primary level and 29 at the secondary level. 90





#### Denmark

Schools providing compulsory education in grades 1-9 are owned and financed by the municipalities, with the city council hiring school staff along with the board of governors of the school. Under the Act on the Folkeskole, schools are to provide students with not only academic skills but also preparation for their roles as citizens in a democracy. It requires that schools differentiate instruction to meet individual needs to enable all students to succeed. Teachers work 1924 hours per year divided into individual time of 375 hours for preparation of lessons, meetings, professional development, and meetings with parents, with the rest for school time for teaching, counseling, and work with parents and other teachers. School time includes 155 hours for extra preparation, school development and teacher collaboration, and 75 hours for work as a homeroom teacher who monitors both academic and social development for his or her students. Teachers also receive 28 days of paid vacation leave. New teachers often are required to teach fewer classes to give them time to develop their skills. After two one-year contracts, teachers receive a permanent contract.

Salaries in Denmark are based on the collective agreement and increases beyond the eight-step salary schedule are negotiated through the collective agreement. For example, teachers received a 5.6 percent increase in basic salary between April 2005 and March 2008. In 2001, teachers earned €2620 per month when they started as a teacher and moved up to €2799 after 4 years and €3045 after eight years. There are two additional categories of pay that make up the total compensation: functional allowances and qualifications. Functional allowances are also part of the centralized agreement and are provided for additional teaching, an additional €3 per hour for teaching an additional 301-750 hours per year and €11 per hour above 750 hours. For qualifications, additional funding may be negotiated in the local agreements. For example, one municipality offers €202 per year for an additional 200 hours of training, and another offers €323 per year to all teachers to encourage teamwork and cooperation. In addition, salaries are increased five percent in the most expensive region of the country. 91

#### **Finland**

Education in Finland is the responsibility of the Ministry of Education but is implemented at the municipality level, with decentralization of decision-making a hallmark of the last fifteen years. Schools may be run by local authorities, joint municipal boards, or association or foundations that have been approved by the Ministry, with funding coming from local taxes and national budgets for the public schools and designated funds held by the private entities or foundations. The curriculum is highly specified by subject area with objectives, standards, and specific recommendations for instructional practices. This is done to ensure uniform educational opportunities across the country. Local authorities use this framework to develop local curriculum, and teachers have a significant role. In fact, teachers in Finland describe much greater participation in decision-making (over 80% had significant influence) than teachers in other OECD countries (32% had significant influence).





Teachers are hired locally but their qualifications are set out in the national education reform statute in terms of ability, skills, and proven civic merit. Their salaries are agreed-upon nationally as part of collective agreements for state and municipal civil servants for the educational sector, which is negotiated every one-three years. A teacher's position on the salary scale is determined according to the individual's duties and qualification. The basic salary increases with seniority increments and periodic increments, granted on the basis of years in service. If teachers give more lessons than the number included as part of their normal teaching duties, as specified in their collective agreement, they receive overtime payments for extra teaching hours. One extra lesson per week is estimated to increase a teacher's salary by about 3-4 percent. On average, teachers work just under 40 hours per week, although they are required to be at school for teaching duties of about 17 hours per week.

The initial salary of class teachers in 2001 was approximately  $\[mathcal{\in}\]$ 1,750 per month for the obligatory number of lessons. The maximum salary with the same number of teaching hours is about  $\[mathcal{\in}\]$ 2,400. The initial salary of general upper secondary school lecturers without extra lessons ranged from  $\[mathcal{\in}\]$ 2,001 per month to a maximum salary of  $\[mathcal{\in}\]$ 2,842. Other teachers' salaries more or less fell between the salaries of class teachers and upper secondary school lecturers. Teachers' salaries are lower than those in the private sector and lower than the average for civil servants with similar educational backgrounds.

#### France

Education in France is divided between public and private schools, with 15 percent of primary students and 20 percent of secondary students attending private schools. The education structure is highly decentralized for primary schools and centralized for secondary schools. Primary school teachers are hired by the départment, the third level of hierarchy (state, regional department, municipalities), while secondary teachers are hired by the Ministry of Education. Teachers in private schools that hold agreements with the State—most catholic secondary schools—must follow the same education, qualifications, recruitment, and hiring practices as public school teachers. Their ongoing training is the responsibility of the organization running the school. Students attend primary schools from age 6-11, four years of lower secondary school, known as the college, and then move either to the lycée for general or technological education or to the lycée for professional education leading to short studies certification or the professional baccalaureate for further technical training.

While France has mandated many reforms over the last two decades to deal with the changes in the acceptance of authority in society, the changes in the make-up of families and the increase in immigrant students have not caused schools to change their practices.<sup>95</sup>

Since 1990, all teachers must complete a "licence" at the university, usually taking three years, followed by two years of teacher training at the regional teacher training institution. Those two years include a year spent preparing for the admissions exam and a year of study. Facher salaries are relatively high, starting at 1.02 average GDP per capita and at maximum at 1.9 average GDP per capita. They work approximately 900 hours per year. They work approximately 900 hours per year.





#### Germany

Teachers in Germany are primarily civil servants without the right to collective bargaining or strike. In the East German states the majority of teachers are salaried employees with contracts guaranteed after 15 years and the age of 40, although there is movement to change to civil service status. Teachers are recruited from a state candidate list that depends primarily on the teacher's performance on the two state exams required for teachers, taken before and after the two-year student teaching internship, and in part on the teacher's performance in the student teaching phase. Teachers are then assigned to positions within the state with some consideration given to their geographic preferences. Some German states are increasing their use of open recruitment polices which allow teachers to apply directly to a school opening and be interviewed, although the employment decision is still made at the state or regional level.

Compared to other countries in OECD, teacher salaries in Germany rank first for primary teachers for initial as well as 15-year experience levels, and are 1.75 times GDP per capita. For lower and upper secondary teachers, German salaries are second in OECD at initial salary levels and after 15 years of experience, and they are 1.84 times GDP per capita for lower secondary and 1.99 times GDP per capita for upper secondary. Salary levels for civil servants are set in federal legislation, which included the option to consider teacher performance in promotion decisions as well as seniority. Salary schedules have 12 steps, with step increases every two years for the first five steps, every three years through step nine, and every four years for the rest of the steps. However, some states are using performance evaluations to move teachers more quickly through the steps. For salaried employees, the salary schedule is negotiated between the employers and the trade unions, and movement along the salary steps is determined entirely by age of the teacher. All teachers receive a family allowance based on the size of the family and the salary level of the teacher, a Christmas bonus, and a holiday allowance.

Teachers in Germany work a set number of teaching hours each year, ranging from 784 hours at primary to 735 at lower secondary and 684 at upper secondary. That means that they are not required to be at school or participate in school-wide activities at other times, although the lack of staff support means they must take responsibility for administrative duties and for maintaining science and computer labs. Although there is a move to extend all schools to full day, most schools are not, so teachers leave by 2:00 pm to work at home on lesson preparation. They receive a 30-day holiday allowance that is used during school holidays, with the rest of the school holiday time reserved for professional development, lesson preparation, or other duties. Civil servant teachers have very secure careers with few causes for dismissal, while salaried employees may be terminated for unsatisfactory performance or redundancy with due notice. They also have high levels of autonomy in their classrooms. The OECD Country Background Report noted that over a third of German teachers suffer from stress and burnout, and only 6 percent of them work to full retirement at age 65. In addition, absenteeism is high. Principals of schools educating 26 percent of the students aged 15 in the country reported on the PISA survey that student achievement suffers from the level of teacher absenteeism.





#### **Ireland**

Ireland's Department of Education and Science is responsible for setting the regulations for employing primary school teachers and, along with the Registration Council for Secondary Teachers, is responsible for setting standards for the hiring of secondary school teachers. Teachers are employed directly by school boards in community schools and comprehensive schools based on the national regulations and standards. There is a single-salary schedule for all teachers at primary and secondary schools. Extra pay is available for additional responsibilities and qualifications, teaching in the Irish language, and service on off-shore islands, but not for any other purpose. The unions have been instrumental in keeping a uniform salary scale throughout Ireland that does not recognize performance-based pay or incentives for teaching in schools in disadvantaged areas. However, the additional pay for responsibilities and qualifications is significant as described in Appendix III.

Teachers in Ireland work longer hours than the OECD averages. In primary schools it is 915 hours per year spread over 183 days, as compared to the OECD average of 792 hours. In post-primary it is 775 hours spread over 179 days, as compared to the OECD average for lower secondary of 720 or for upper secondary of 648 hours.<sup>101</sup>

The salary scale provides for 25 steps, with regular 3.7 percent increases for the first 12 annual steps and additions at steps 17, 21, and 25. Salaries ranged in 2002 from €24,315 to €44,485 for primary and an additional step for post-primary teachers. <sup>102</sup> Comparisons with OECD averages show that the average salary in Ireland is near the OECD average, but the salary of teachers with 15 years of experience compared to GDP per capita is below the OECD average and declined steadily from 1994-1999. However, this was a time of rapid growth in the GDP in Ireland. A national study in 2002 comparing teaching to similar jobs in the private sector led to a recommendation for a direct 13% increase in teacher pay, which the government agreed to phase in over time. <sup>103</sup>

#### Japan

In Japan, teachers enter the profession after receiving a bachelor's degree from a teachers university for primary teachers or a regular university for secondary teachers. They must then pass a difficult exam at the prefecture level before becoming eligible for a position. There is a national salary schedule with specific salaries dependent on the level of the school, type of position, and years of teaching. Teachers receive bonuses three times a year that add up to approximately five months pay. On the OECD comparison of average salary to GDP per capita for teachers with 15 years of experience, Japan is at 1.60 times GDP per capita for all levels of education. That places it eighth in ranking from the top in 2002. Despite that, teacher salaries at the secondary level are at least 10 percent lower than those of civil engineers or university lecturers.

Teachers in Japan work from 8-10 hours per day for 240 days each year although many of these days are for field days, curriculum development and professional development. In their first year, teachers are mentored by a master teacher who visits the classroom frequently and counsels the new teacher on strengths and weaknesses of performance. The first year teacher also attends teacher





resource centers for additional professional development with other teachers. The Japanese education system places a great focus on teachers working together to improve their teaching craft, and this happens at the school level as well as above the school.

#### Korea

The Korean education system is managed at the national level through the Ministry of Education and Human Resources (MOEHR). Over the past several decades, Korea has enacted eight five-year plans to develop its education system. Throughout Korea's history, the education system has been largely centralized. It was not until the early 1990s that provisions were adopted for increased local autonomy.

Most teachers are trained in the many higher education institutions in Korea. Currently candidates are screened and hired by their city or provincial education offices. However, teacher salaries and compensation are set at the local level. Under the flexible work-hour system, teachers work the equivalent of eight-hour days during the week and four hours on Saturday mornings with some flexibility about the time actually spent at school. In addition they have about 100 days of vacation in which they can study or travel. <sup>105</sup> In comparing teacher work hours, Siniscalco uses Korea as an example of a country that has lower required hours of teaching (507) than other OECD countries, yet has higher class sizes that are well above the OECD average. <sup>106</sup>

The salary scale for teachers is based on a unitary salary step across the country. There are significant increases in salary corresponding to the number of years a teacher has been teaching. Compared to the average GDP per capita for teachers with 15 years of experience, Korean teachers were paid at a higher ratio of GDP per capita (2.42) than any other OECD country in 2002.<sup>107</sup> However, salaries are not competitive with the private sector, so the government agreed in 2004 to work to raise teachers' salaries to comparable levels to private sector jobs. Since promotions are currently available only by leaving the teacher ranks, there has been discussion of establishing a promotional ladder for teachers who remain in the classroom that would include head teachers and department chairs.<sup>108</sup>

#### **Netherlands**

In the Netherlands, students attend either state-run schools or private schools, which may be denominational or non-denominational. All schools are funded by the government, and all teachers follow the same education and pay regulations. Teacher pay scales are set at national level and are based on tenure and seniority, but schools and municipalities can increasingly exercise authority over promotion and performance rewards. Since 2000-2001, schools have received an additional decentralized budget, which enables schools to exercise greater autonomy over staffing organization and additional compensation. Schools in disadvantaged regions receive supplementary financial resources that may be used for salary adjustments.<sup>109</sup>

Over the last 15 years, the salary steps have decreased from 26 steps in 1990 to 18 steps in 2002, with a plan to move to 15 steps. Salary levels for teachers are relatively high compared to social service professions in the Netherlands, but low compared to the private sector and other countries.





Salaries range from 1.2 to 1.75 of GDP per capita for teachers with 15 years of experience at the primary to upper secondary levels. Teachers work 1710-1790 hours per year for primary and lower secondary, and 868 teaching hours for upper secondary teachers over the 40 weeks of the school year. The combination of salary and hours has led to serious teacher shortages and a reliance on less well-prepared teachers, especially in the four largest cities where it is estimated that nearly half of the teachers are unqualified or under-qualified. The combination of the teachers are unqualified or under-qualified.

Teacher evaluation is the responsibility of school boards and involves job performance interviews, in which teachers discuss their performance with the head teacher and plan for future goals, and assessment interviews in which the focus is on discussing and assessing the teacher's performance in the previous evaluation period. Assessment criteria include attitude towards colleagues, professional development, and "measurable indicators of the performance of individual teachers." Many head teachers develop competence profiles to assess less experienced teachers.

#### New Zealand

In New Zealand, teachers are paid on a 14-step salary scale, progressing one step along the salary scale each year, with a satisfactory evaluation by the school. Movement can be deferred if the teacher does not receive a satisfactory evaluation. Teachers' schools must ensure that the teacher has achieved the appropriate professional standard of 'quality classroom teaching,' with separate sets of standards in place for new and experienced teachers. Specific leadership, pastoral, administrative, or task-related responsibilities are taken into account as part of a teacher's pay progression. Teachers can apply for 'service increment' payments, if they have completed three years of teaching at the maximum point of their pay scale and have approved extra qualifications.

Academic and vocational qualifications are used to determine scale entry points, as are prior teaching service (in New Zealand and abroad) and non-teaching work experience directly relevant to the subject area the teacher will cover. Teachers completing recognized courses of teacher education start two steps higher on the pay scale than those without such qualifications. Teachers completing graduate degrees (e.g. master's and PhDs) start higher on the pay scale than teachers with (full or partly completed) bachelor's degrees. 'Middle Management Allowances' can be allocated to teachers with curriculum or pastoral management responsibilities. Annual allowances are paid to "specialist classroom teachers," who provide guidance, coaching, and mentoring to other teaching staff. 'Maori Immersion Teacher Allowances' are paid to teachers required to use 'Te Reo Maori' programs for at least 31 percent of their teaching time.<sup>113</sup>

#### **Singapore**

Teachers are recruited out of the top quartile of their college classes and paid a monthly stipend while they complete one to three years of teacher study at the National Institute of Education. Salaries for all teachers are set by the Ministry of Education, with higher beginning salaries for teachers with an honors degree from college and for teachers who have completed national service. These range from S\$2409 with a degree or S\$2762-2939 with an honors degree and no national service to





S\$2762 to S \$3,115- S\$3,292 with national service. There are a number of bonuses available to all teachers, including a annual allowance equal to a month's pay that does not apply to the pension and an annual variable component paid at the end of the year in an amount determined by the nation's economic performance. A Special Bonus (SB) may also be given, depending on Singapore's overall economic performance. Several non-monetary incentives are also offered to teachers depending on level of service and the types of subjects they are teaching: English teachers are offered different incentives, as are expatriate teachers in general. However, all teachers are eligible for benefits offered through the Ministry of Education, including health, dental, 12 days of paid personal leave, use of government chalets at low rates, leave for urgent personal matters, and school holidays.

#### Sweden

Education in Sweden is the joint responsibility of central and local governments, with the major share of funding coming from local governments. The central Ministry of Education and Science puts forth policies aligned to the Parliament's commitment that "the overall objective of education policy is for Sweden to be a leading knowledge nation with high-quality education and lifelong learning for growth and justice." In the last decade, the government, working in collaboration with teacher unions and representatives of the local authorities, has created major changes in the system, including decentralization of decision-making about implementation of the national guidelines to the local and school levels and greater collaboration among different levels of schools. Independent schools financed by local authorities were established in the 1990s and follow the same rules and curricular requirements as other schools. It is the responsibility of the National Agency for Education to monitor and evaluate schools and to establish syllabuses, time schedules, and grading standards for the nation. The national steering documents are then implemented at the local level. In 2001 the National Agency for Education was divided into an arm for evaluation and supervision and a second arm, the Swedish Agency for School Improvement, which focuses on providing school improvement support to schools and professional development for teachers and principals.

As part of the sweeping changes in the education system in the mid-1990s, the government of Sweden committed itself to significantly increase teacher compensation over a five-year period on the condition that not all teachers would be eligible for the same raises. As a result, the representatives of the local school committees, the Swedish Association of Local Authorities, and the representatives of the teacher unions developed a new agreement. The agreement established a minimum starting salary for teachers that is negotiated centrally and required that teachers individually negotiate personal salaries with the local authorities. There is no salary schedule with fixed increments based on experience, but rather an individual conference that determines the teacher's salary each year. (See Section III, Pay for Performance, for further information.)

In addition, the agreement identified two categories of teacher work time: regulated and unregulated time. Teachers work approximately seven hours per day of regulated time at the school and two hours of unregulated for 194 days per year. Regulated time includes 104 hours per year for professional development. Unregulated time is used for preparation, meetings with parents, and personal development and does not require the teacher to be at school or at the school's disposal.<sup>117</sup>





The purpose of the decentralization of pay scales was to ensure that teachers were more actively engaged and willing to accept responsibility for the outcomes of student learning. As professionals, teachers have a major role in determining how best to meet the centrally established objectives in their individual schools. The agreements were also seen as a joint effort to improve working conditions that would have a positive impact on teacher recruitment and retention. However, OECD data for 2002 indicated that Swedish teachers with 15 years of experience earned salaries that were at 105 percent of the GDP per capita in the country. That is much lower than levels in countries such as Korea (2.73), Switzerland, Germany, and Finland, though higher than Norway. In equivalent US dollars, Swedish teachers' salaries are lower than any developed European country except Greece. In addition, teachers' salaries are the same as social workers and librarians, but lower than those paid to other Swedish professionals with the same level of education. 118

#### **Switzerland**

Education in Switzerland is the joint responsibility of the national Confederation and the cantons. The Confederation is responsible for setting standards for vocational education, and the cantons are responsible for primary and lower secondary schools and for setting standards for diplomas from upper secondary schools. Day to day operations of primary and lower secondary schools are run by local communes. Teachers are no longer civil servants in many of the cantons; they have become salaried employees who can be removed from their positions for poor performance, failure to follow regulations, or redundancy. They work 1900-2000 hours per year with approximately 50 percent of the time set aside for teaching, 23 percent for preparation, 11 percent for planning and evaluation, 5 percent for administration, 2 percent for counseling, 4 percent for continuing education, and 4 percent for joint activities. Teachers have three-week vacations during school holidays but are expected to work 10-15 hours per week during the rest of the school holidays. Switzerland has higher proportions of part-time teachers than other countries, with over 45 percent part time in primary and lower secondary and over 60 percent in upper secondary; however part-time teaching is defined as 50 to 90 percent of a full position.

Salaries for teachers in Switzerland are higher than in almost every other OECD country, with Switzerland ranking first to third depending upon the level of schooling and initial versus highest salary. Using OECD comparisons between GDP per capita and teachers' salaries, salaries in Switzerland range from 1.5 to 2.1 times GDP per capita for primary, lower, and upper secondary school teachers' at the maximum pay level on the salary schedule. Salary is determined by a salary schedule that requires 24 years to move from the first to the last step, and that takes into account the size of the teacher's family. Swiss teachers have a very generous pension package with full retirement at 65, yielding 75 percent of the teacher's last pay level. While salaries are set within a canton, they may vary by 20 percent above and below the mean in different cantons. There are no other salary allowances except for additional duties assumed, such as administrative, extracurricular, additional classes taught, or teaching students with special needs. Zurich and St. Gallen have introduced a connection between teacher evaluation and compensation, rather than relying solely on seniority.





#### **United Kingdom**

Education in England and Wales is under the authority of the Department of Education and Skills and decentralized in many ways to local schools. Schools can be community schools, run by the local education authority; foundation schools, run by a foundation governing body, with the land and buildings owned by the governing board or a charitable foundation; voluntary-aided schools, run by a religious denomination's governing body, with the land and buildings owned by the governing board or a charitable foundation and with some support for the buildings; or voluntary-controlled schools, staffed and with students selected by the local education authority, with the land and buildings owned by the governing board or a charitable foundation. All four types of schools receive funding from the national government and educate about 94 percent of the students. The remaining students attend private schools.

Teachers in England work 32.5 hours per week at all levels, pre-primary through upper secondary. They receive automatic, incremental movement through the main pay scale in the first five years of their career as long as they meet minimum standards of satisfactory performance. Pay ranges from £19,161-28,055 from the first to the sixth step in 2005. After that, progression along the upper pay scale is only justified by performance or promotion. The upper pay scale ranges from £30,339-35,082. Teachers identified as Advanced Skill Teachers can earn from £33,249-93,297. Decisions on pay scales and eligibility for advancement from one stage to the next are made by national education authorities. However, schools can use their own budgets to modify staffing and compensation allowances for different positions. In this way, schools can pay teachers differently than they might be paid for similar duties in another school. 122

The English teacher training and accreditation system is considered relatively flexible. As a result of the education reforms in the early 1990s, the teacher-training system was opened to any university, school, or other organization to apply for official accreditation as an initial training provider. Since 1992, all teacher education providers have been required to work in close partnership with schools and actively involve them in the training process. However, there is no corresponding obligation for schools to be involved in teacher-training programs so incentives are provided to participating schools by teacher education providers with resources provided by the Teacher Training Agency (TTA), now known as the Training and Development Agency for Schools (TDA). The final stage of initial teacher education includes a standards-based certification exam. 124

The Fast Track Teaching program, first launched in 2000, is an accelerated career development program designed for highly motivated and promising new teachers. Designed as a mechanism to identify and support newly qualified teachers with leadership potential, the Fast Track program provides a program of coaching, mentoring, and development activities to support individual teachers in developing the skills required to take on a leadership role in education. Participants start one point higher on the main salary scale than other teachers and also receive a £2,000 annual recruitment or retention incentive for every year they are on the Fast-Track program (which is fully funded by government). 125





## **APPENDIX B: Incentives in Specific Countries**

#### Australia

Australia faces chronic teacher shortages in rural, isolated, and lower socioeconomic regions. State and territories have taken a variety of measures and provided incentives to address these problems. The New South Wales Government's Beyond the (Great Dividing) Line initiative promotes rural teaching opportunities to pre-service teacher education students and provides opportunities to teach in those areas during their pre-service education. The Western Australian Department of Education and Training provides AUD S10,000 scholarships to final-year teacher education students to teach in areas of need (including science, technology, and math) in exchange for two-year commitments to a rural school. At the local level, individual schools are able to offer additional incentives to attract teachers. Other policy measures that have been adopted in various part of Australia include the targeted recruitment and training of more indigenous teachers; strategic location of teacher education campuses; and explicit decisions by education authorities to mandate a period of rural/isolated service as a normal part of the teaching career. 126

In Queensland, teachers in remote areas and rural schools are compensated under the Queensland Remote Area Incentive Scheme. They receive:

- From AUDS \$1,000-5,000 per year plus additional funds for dependents to travel from the remote area to Brisbane or a coastal area.
- Incentives of AUDS \$2,000-5,000 to remain at the school. These include stipends for schools in extremely hot or extremely cold climates.
- Additional leave of 5-8 days to conduct personal business or medical or dental appointments in major population areas.
- Special induction programs to ease the transition to the remote area rural school. 127

In Western Australia, the Catholic Education Office has established the Kimberly Calling program to identify teacher candidates with a serious calling to service in remote areas. Teachers participate in a strong induction program and cultural awareness training, and most remain for a number of years. The program provides some financial incentives, but the emphasis is on a calling to service. <sup>128</sup>

#### **Belgium**

In Belgium, beginning in September of 2002, Dutch-speaking teachers and administrators working in Brussels with comprehensive knowledge of French receive additional salary. This scheme was specifically introduced to address teacher shortages in the capital. Teachers and staff must pass a language exam in order to receive the salary upgrade. 129





#### Canada

Nunavut

Since Nunavit is a remote area, teachers receive additional allowances, such as C\$800 per year for being a teacher. In addition teachers in remote areas receive a Nunavut Northern Allowance; the monetary sum depends on the community in which the teacher is employed and ranges from C\$12,109 to C\$28,346. Teachers who are relocating in Nunavut receive an accommodation of C\$75.00 per day and C\$5.00 for their dependents if they are staying in a private home in Nunavut. If they are staying in a private home outside of Nunavut they will receive C\$50.00 per day and C\$5.00 per dependent. Food and transportation assistance is also provided to the teachers of Nunavut while they are awaiting the arrival of their furniture and belongings. 130

#### Chile

Teachers in Chile can receive a geographic incentive for working in areas far from urban areas. The amount varies based on the distance. In addition, teachers can receive a reward for working in difficult conditions, such as geographic isolation, extreme poverty, difficult access, and difficult performance. The reward may be up to 30 percent of the minimum basic national pay.<sup>131</sup>

#### China

To address teacher shortages in isolated and rural areas, the Chinese government is offering promises of future job promotions to urban college graduates in exchange for a commitment to work for a given period as a teacher in rural communities.<sup>132</sup>

#### Denmark

Teachers in Denmark earn additional allowances for their willingness to serve in schools in remote and sparsely populated areas. These include: free accommodations, a home personal computer, and access to wholesale shopping clubs. In addition, salaries in the most expensive areas of the country include a five percent increase.<sup>133</sup>

#### France

France has recently enacted incentives to encourage experienced teachers to move to priority schools with lower performing students or in difficulty areas. In addition, teachers are specially recruited for their particular skills to work in schools in suburban Paris which enroll a majority of minority immigrant students. These teachers have access to benefits regarding placement, training, and career progression. Although the program received 2,000 applications for 700 positions, only 40 percent of the teachers were experienced. Beginning teachers who have completed their training with special courses that focus on school improvement strategies can apply as a team to spend five years in a priority school.<sup>134</sup>





#### **Ireland**

Teachers who teach on remote islands are paid an additional €1,321, and teachers who are fluent in the Irish language receive an additional €1,135.<sup>135</sup>

#### Korea

Teachers in Korea who teach in special schools for students with disabilities or schools in remote areas of the country do not earn additional salary, but they do receive bonus points that apply to promotions to vice-principal or principal positions. However, the maximum points for this category count for only about five percent of the total points toward promotion.<sup>136</sup>

#### **Netherlands**

Schools in disadvantaged areas receive supplemental financial resources above the decentralized additional funding available to all schools. These schools can use the supplemental funding to attract teachers through higher salaries.<sup>137</sup> In addition, teachers at age 52 can reduce their teaching hours 10 percent for a 2.5 percent reduction in pay or, at 56, reduce hours by 20 percent for a 5 percent reduction in pay. Over 40 percent of eligible teachers had utilized this system in 2002.<sup>138</sup>

#### New Zealand

Schools designated by the Secretary of Education as having serious staffing difficulty can offer teachers a NZ\$1,000 Staffing Incentive Allowance for at least three years. In fact, teachers receive the stipend for three years even if the school is removed from the eligibility list. In addition, the government offers High Priority Teacher Supply Allowances of up to NZ\$2,500 for designated schools that are having recruitment and retention difficulties. In addition, teachers in special schools, health camps, or hospital classes receive an additional stipend of NZ\$995 per year. 139

#### **Singapore**

Teachers receive incentives to work in challenging schools or shortage areas as well as slightly higher salaries to teach deaf students and even higher salaries to teach mentally handicapped students.<sup>140</sup>

#### Sweden

Sweden has an individualized salary system that is negotiated at the local level. It includes criteria for additional pay for locations and for subjects taught, as well as for quality of outcomes. See the criteria for Sweden in Section III, Pay for Performance.





#### **Switzerland**

To date, St. Gallen is the only canton that provides salary allowances for teaching subjects facing shortages. There are no other categories in which teachers receive additional salary allowances.<sup>141</sup>

#### **United Kingdom**

New teachers covering shortage subjects can have their student loans from teacher training reduced, with teachers remaining in the profession for ten years having to make no student loan repayments at all if they teach in priority areas. This is estimated to be equivalent to a 5% increase to their salary. Teachers in training receive up to £5,000 for preparing to teach in shortage subjects under the Secondary Shortage Subject Scheme. Once they finish, they can receive the Golden Hello one-time stipend of £4,000 for successfully completing the induction period. Teachers are also offered incentives to teach in socially or economically disadvantaged areas. For example, teachers working in inner-city London receive a stipend of £3,105, with smaller amounts for outer London and the areas on the fringes of London. 143





## APPENDIX C: Performance-related Salary Systems

#### Australia

Teacher compensation is primarily based on longevity of service and experience. However, there is growing interest in the introduction of performance-based pay for teachers as a way to deal with problems of teacher retention and teacher shortages. In Australia, about one quarter of teachers quit the profession within the first five years of working in schools, and only 60 percent of graduates who have trained as teachers are employed in schools one year after graduation. He a 2005 newspaper article about the Australian premier's call for performance-based pay, Professor Terry Lovat, president of the Australian Council of Deans of Education, said the teacher attrition rate was high because the system of annual salary increments for the first eight years of teaching and low pay compared to other professions offered teachers little incentive to stay. In Victorian government schools, a four-year trained teacher starts at a salary of about A\$43,000 but hits a salary ceiling of A\$62,000 unless he or she chooses to take on a school leadership position in curriculum or administration. Dr. Lawrence Ingvarson, director of the Australian Council for Educational Research's teaching and learning division, compared minimum to maximum salaries in Korea and Japan, noting that in those countries the ratio is nearly three times the starting pay, while in Australia it is only 1.4 times.

According to Fred Ackerman, president of the Victoria Principals Association, younger generations of teachers in Australia are less accepting of the traditional pay structures and increasingly frustrated by the limited opportunities for rapid advancement up the pay scale. A recent study of teachers in their first ten years of service in Australia came to similar conclusions. Skillbeck and Connell noted that these teachers are going to be attracted to teaching as a field if policies make the career both personally and professionally rewarding. That means that they are able commit their talents and skills to teaching as a career and particularly to work in specific shortage subject areas and with students with learning disabilities. 147

As a result of the concerns about teacher quality and retention, in 1990 the Schools Council for the National Board of Employment, Education and Training recommended the creation of a national classification, Advanced Skills Teacher. However, not all states in Australia established the Advanced Skills Teachers (AST) program. As an example, New South Wales began the program in 1992. There ASTs were selected based on their contributions to professional development of other teachers, curriculum development, student progress and involvement in improving the educational outcomes of students, and supporting beginning teachers with classroom performance. The ASTs were required to operate under the same workload parameters as all other teachers, as well as taking on a number of added activities and responsibilities. The term of the AST status was one-year and the stipend was approximately AU\$1200.<sup>148</sup>





ASTs in New South Wales are expected to teach students in an exemplary manner and model and promote such teaching practices and skills to other teachers. ASTs are also required to make contributions to the development of their schools at large. This includes developing, implementing, and evaluating curriculum programs; assisting in school improvement planning; supporting underperforming school staff, less experienced teachers, and student teachers; and supervising student teachers as required. Only in some circumstances are ASTs required to go beyond their own schools to assist in other schools or districts in similar matters.<sup>149</sup>

In South Australia, AST1s are compensated for their appointments in addition to the salary they receive on an incremental scale. AST1s are currently paid for a fixed period of five years, at AU\$64,829.00 annually. This payment requires success on a formal assessment and approval as an AST1. The criteria for assessment indicate that the "AST1 must be able to demonstrate the possession of high level skills which enable them to demonstrate that they can:

- Apply a range of effective classroom teaching approaches and methods of evaluating and reporting student's progress
- Generate positive relationships with individual students and the class group
- Develop ideas gained from their own teaching practice and apply ideas gained from professional development activities to enhance students' learning
- Apply to their teaching the knowledge of current trends and developments in education
- Work collaboratively with other teachers
- Communicate and work effectively with other teachers, parents, and the wider school community
- Contribute to the organization, planning, and development of the school's curriculum
- Assist other teachers in their professional development and supervise, instruct, and counsel beginning and student teachers
- Provide professional and personal support to less experienced staff and poorly performing staff to facilitate performance improvements."<sup>150</sup>

AST1s are also regularly evaluated. If an AST1 does not perform adequately, the principal may request a reassessment by a trained two-person assessment panel made up of a peer evaluator and a peer panelist. Based on a portfolio of evidence prepared by the AST1 and an interview with the principal, the panel makes its recommendation to the district office. If the AST1 is not successful in the reassessment, he or she returns to the regular salary schedule.<sup>151</sup>

#### Belgium

There is no performance-based pay in Belgium, although evaluations of secondary school teacher performance can be used to reduce pay or lead to dismissal.<sup>152</sup>





#### Chile

Three kinds of incentives have been created for teaching excellence in Chile, one at the school-wide level and two at the individual level. The National Performance Evaluation System provides additional money, approximately US\$430 in 2002-03, to all teachers at the schools that are identified as the best performing (top 25 percent) within socio-economic groupings. Schools are selected every two years. An evaluation indicated that this incentive system added points to scores on the state exam, and it had its greatest impact on those schools with positive external conditions.

A second incentive is the National Teaching Excellence Award that provides awards for 50 teachers that were nominated at the school level and made it through the national qualifications to the reward level. Based on the 2002 negotiations between the Ministry and the Teachers Association of Chile, Chile created the third performance incentive program, the Pedagogical Excellence Reward, to recognize excellent teachers. Teachers can volunteer for an evaluation twice within each of four strands of years of experience. The evaluation made up of two parts (a written test of pedagogical and content knowledge, and a portfolio of classroom teaching including a video observation), can result in additional salary for excellence. A quota is established each year based on budgets. Once teachers receive the reward they keep it as long as their evaluations are satisfactory and they are in the same strand of experience. The first group to be considered in 2002 were teachers in grades one through four. It moved up in the next two years to include both primary and secondary teachers.<sup>153</sup>

#### Denmark

In addition to basic salary, teachers may receive functional and qualifications allowances. Functional allowances are also part of the centralized agreement and are provided for additional teaching, an additional €3 per hour for teaching an additional 301-750 hours per year and €11 per hour above 750 hours. For qualifications, additional funding may be negotiated in the local agreements. For example, one municipality offers €202 per year for an additional 200 hours of training, and another offers €323 per year to all teachers to encourage teamwork and cooperation. In addition, salaries are increased five percent in the most expensive region of the country.<sup>154</sup>

#### **Finland**

In Finland the collective bargaining negotiations of 2003-04 provided for the evaluation of the standards of teachers' work with the opportunity to provide salary bonuses for individual professional proficiency and performance. The awards are made at the school level.





#### Germany

Pay for performance is a new concept in Germany. In some states, teachers are able to advance faster along the salary schedule if they are identified as outstanding performers. In Baden-Wuertemberg, 10 percent of the teachers each year in each school can move up a step on the salary schedule for outstanding performance. In addition, poor evaluations can delay movement to the next step. In North-Rhine Westphalia, the step increases are no longer automatic; teachers advance a step dependent upon the evaluation of their performance each two to four years.<sup>155</sup>

#### **Ireland**

Teachers in Ireland receive additional salary allotments based on the quality of education they bring to the job. Teachers with an honors degree receive an additional €3,527, those with a higher diploma in education €3,866, and those with a masters degree in education receive an additional €3,941. Teachers may receive two of the additions. To provide career opportunities for teachers, a set of promotion opportunities was established that combines teaching with instructional or administrative duties. These include Deputy Principal, Assistant Principal, and Special Duties Post, with specific duties attached to each one. These provide significant increases in salaries for teachers. In primary schools, nearly 25 percent of teachers are designated as principals or deputy principals and receive allowances as deputy principals of €2,703 to €13,092. Another 25 percent are identified as assistant principals or special post teachers who receive smaller allowances than the deputy principals. The deputy principal position in large schools provides some reduction in teaching hours and is advertised in open competition like the principalship. The other two positions are filled internally by the principal at the school based on a combination of merit and seniority.  $^{156}$ 

#### **Israel**

An experiment among mathematics and English teachers in Israel found that cash bonus incentives led to overall improvement in students' test-taking performance. The study determined that student achievement gains were connected to the experimental tournament's emphasis on relative performance, as opposed to absolute performance, which encouraged greater competition among teachers vying for the fixed set of rewards. The study indicated that improvements in student performance were likely the result of "changes in teaching methods, enhanced after-school teaching, and increased responsiveness to students' needs". 157

#### Korea

Unions in Korea are against performance-related pay because of their strong belief in uniformity among all teachers and their fear of perceived pay inequality. They also believe that they would reduce collegiality among teachers. In 2001, the Ministry attempted to introduce merit pay for teachers who taught "excellent educational activities." It was supposed to be distributed based on placement into one of three categories of teachers' work performance, with about 70 percent of teachers receiving merit bonuses of 50 to 100 percent of the teachers' current monthly salary.





However, in response to negative union and teacher reactions, the Ministry put forth a compromise proposal to distribute 90 percent equally and only 10 percent differentially. Teachers were afraid that schools would simply allot these merit bonuses based on seniority and that the merit bonuses would allow for greater administrative and bureaucratic control in schools, decreasing school-level autonomy and reinforcing central control over the school system. A 2001 survey conducted by a leading teachers union (KFTA) reported that 86 percent of teachers surveyed were against merit bonuses. Unions organized teachers to return the merit bonuses to the government and the program became tied up in court when a teacher sued, claiming that his honor had been damaged by his score in the lowest differential category. No compromise has been reached.<sup>159</sup>

#### **Netherlands**

While salary is based on tenure/seniority, schools decide whether teachers move to higher pay scales. Most teachers follow a salary scale throughout their career, with annual increments. Schools can also decide to reward teachers with promotion to higher maximum scales, subject to budget constraints, based on their annual evaluations. School-based personnel budgets give schools greater discretion to give teachers a performance-related allowance or bonus. Schools decide the conditions under which bonuses or allowances will be granted, and how much money they are prepared to spend on them.<sup>160</sup>

#### New Zealand

Performance-related pay has been in place in terms of evaluations used to determine progress along the salary schedule. In addition, the Ministry recently introduced a 2006 pilot program naming a Specialist Classroom Teacher in secondary schools. This is an opportunity to establish a career ladder for highly skilled teachers and to enable them to provide mentoring and support to other teachers in their buildings. In addition to their teaching duties, they are assigned four hours per week to work with teachers and receive a NZ\$6,500 supplement to their salaries. They must have at least six years of experience and have received at least three successful evaluations against the experienced teacher standards. Since this is a one-year pilot for the 2006 school year, teachers are guaranteed to return to any other management duties they may have received prior to the pilot. If the program is continued they will be allowed to apply for continued service.<sup>161</sup>

Difficulty measuring teacher quality and potential divisions resulting among teachers are cited as reasons against merit-pay systems in New Zealand. When setting annual performance and development objectives, appraisers and the teachers concerned consider the number of years of teaching experience and the subjects, class levels, and nature of the classes taught. If a teacher does not meet the standards for the experience level, he or she may have salary steps withheld until progress is demonstrated. He





#### Singapore

According to the Singapore Ministry of Education Careers Website, trained teachers may also receive a Performance Bonus, an additional bonus awarded in March each year for the work done during the previous calendar year.

#### Sweden

The Swedish educational system began to shift from a fixed pay structure to an individualized pay system beginning in 1996. Changes to the teacher compensation system were motivated by a desire to give employers more responsibility to determine pay scales and enhance both teacher quality and retention rates. In the estimation of policymakers, local school administrators were in the best position to evaluate teacher performance but they required the assistance of local unions and municipality officials to ensure that the decision-making process was rigorous and objective. Initially, teachers unions opposed the reforms because of the shift in power that they would entail, but gradually the unions came to view the new policies as an opportunity to narrow the gaps in teacher pay scales and improve working conditions for primary school teachers. By developing criteria to govern the new compensation structure, teachers had a better understanding of what was expected of them. Moreover, hiring officials became more selective due to the increased scrutiny and accountability that accompanied the new pay scheme.<sup>164</sup> The criteria for salary decisions are:

- Teacher's qualification areas: teachers in upper secondary have higher salaries than teachers in compulsory schools or teachers in pre-schools.
- The labor market situation: in regions where teacher shortages are more acute, teachers get higher salaries; the same occurs for certain subjects like mathematics or science.
- The performance of the teacher: the collective central agreement requires that pay raises be linked to improved performance, allowing schools to differentiate the pay of teachers with similar tasks.
- Range of responsibilities of teachers: principals can reward teachers if they work harder and take up more tasks than what is generally expected. 165

To determine the long-term effectiveness of the new system, the teacher unions and the organization representing local authorities established a joint national Council for the Attainment of Objectives and Future Development of School Education. In addition, each group is conducting its own evaluation. The unions are focused on the level of implementation of the six areas of the agreement: working time, the work environment, work organization, skills development for teachers, induction programs for new staff, and pupil influence. <sup>166</sup> This study will form the basis for negotiations of the next agreement. At the same time, the organization representing local authorities developed a support system for local authorities to implement the agreement and an evaluation of the impact of the central and local agreements on the local achievement.





#### **Switzerland**

In some regions of Switzerland, teachers must successfully complete self and external evaluations before advancing to the next stage of the salary scale. The external assessments use a broad range of criteria to determine teacher eligibility. <sup>167</sup> Zurich established the "salary-effective qualification system" in 1999, which applies to teachers in the middle phase of their career. It is not available to beginning teachers, nor to those at the end of their careers, except in cases of truly outstanding assessments. In the middle phase teachers are assessed and, if the assessment is positive, the teacher may receive a 1-3 percent increase in salary for each of the next four years. The assessment is conducted by a specially-trained team of representatives of the school committee. The team observes the teacher in the classroom, interviews the teacher, and reviews a report prepared by the teacher of pedagogical approaches employed in the classroom. If the assessment decision is negative, the teacher may apply again after a year of work on the areas of identified weakness, but receives no promotion to higher salary until a successful assessment is achieved.

St. Gallen initiated the "systematic salary-effective qualification" in 2000. In St. Gallen, the salary schedule has four grades with steps within each grade. Salary increases from step to step are automatic, but not from grade to grade. When a teacher has completed a grade, he or she is assessed for promotion to the next grade. Without a successful assessment, the teacher cannot be promoted to the next grade or receive a salary increase. The teacher meets with an evaluator from the school committee to agree upon the criteria for the assessment, which includes both self-assessment and external assessment. These include three areas: "organization and delivery of lessons; interactions with students, teachers and parents; and participation in in-service training." <sup>168</sup>

#### **United Kingdom**

The United Kingdom has four mechanisms for rewarding excellent teachers and encouraging them to remain in the classroom: the Senior Teacher pay plan, the Advanced Skills Teacher program, the Fast Track Plan, and the Excellent Teacher Scheme.

In the UK, the top of the salary scale can be reached in five steps, considerably less time than in many other countries. It accepted the government's eight nationally-agreed teaching standards for determining whether teachers move from the main salary schedule to the upper schedule.

Since 2000, teachers at the top of the main pay scale have been able to apply to be assessed against the eight standards to pass beyond "the threshold" to the upper pay scale. The eight standards are divided into five groups: knowledge and understanding (1 standard); teaching and assessment (3 standards); pupil progress (1 standard); wider professional effectiveness (2 standards); and professional characteristics (1 standard). Head teachers in England and Wales were trained to complete the assessment, with the results confirmed by an external assessor. If successful, teachers move from the main pay scale to the upper pay scale (around 95% of teachers applying to move forward did so in 2002). <sup>169</sup> On the upper pay scales, teachers earn from £28,668-33,150



Teachers normally progress along the upper pay scale every two years although progression is not automatic. Post-threshold teachers must display sustained and substantial performance and contribution to the school before a performance point is awarded. There was resistance from teachers and their professional associations, but over 80 percent of those eligible applied for the assessment in the first year.

In 1998, the government of England and Wales created the Advanced Skills Teacher (AST) program to provide a career path for excellent teachers who did not want to leave the classroom to take management positions. It was envisioned that three to five percent of teachers would receive this designation. Candidates for AST submit a portfolio demonstrating they have met the standards for the position. The portfolio must be successfully evaluated by an external assessor in order for the teacher to be appointed to an AST post. In that role, they share their skills in teaching practices through outreach work in many schools. Normally they are required to spend 80 percent of their time teaching in their own classes and 20 percent of their time sharing good teaching practices in other schools. AST posts are funded by local authorities in the UK or by specific individual schools. There is a separate salary scale for ASTs, and upon appointment as an AST, one can move to the bottom of a five-point range of pay. Pay also varies according to geographic boundaries, defined as: England and Wales (excluding London), Inner London Area, Outer London Area, and Fringe Area. Teachers at the top of the AST salary scale can earn 43 percent more than senior teachers at the top of their salary schedule.<sup>170</sup>

A 2003 survey of AST pay found that most teachers who had succeeded in becoming ASTs were on the lower pay levels. Very few had gone above to higher ranges, and no one was at the highest level. Schools were given discretion for moving teachers along the pay range so that the salary truly represented the specific responsibilities of the position in the specific school and the skills and experience of the individual selected to complete those responsibilities.<sup>171</sup>

The Excellent Teacher (ET) Scheme started in 2006, with the first teachers accepted in the role in September 2006. This new category lies between the Senior Teacher and the Advanced Skills teacher. ETs are to help other teachers improve their performance and their ability to raise the level of student performance at their schools. They work with new teachers, support other teachers in their lesson planning and teaching, share best practices through demonstration lessons, observe classes, and participate in the performance management system at the school. For these duties they are compensated at a level beyond the upper salary schedule. ET selection starts with the creation of an ET position by the principal and his or her approval of the individual's application, agreeing that the teacher meets the standards and should be assessed by an external evaluator against the ET standards. The external evaluation includes a classroom observation, interview with the candidate, evaluation of evidence of qualifications provided by the candidate including the above-average performance of students with past learning challenges, and an interview with the principal.<sup>172</sup>



Up until September 2005, Fast Track teachers were either new to the profession or current young teachers who demonstrated the potential to become outstanding school leaders in an AST, assistant heads, deputy heads, or headteachers. Of the 110 Fast Track teachers in 2002, 20 percent were current teachers who qualified for the program.<sup>173</sup> These teachers receive one additional step on the salary schedule and receive £2,000 stipend per year for up to five years or until they enter a leadership role, whichever comes sooner. In addition, they participate in online professional communities that provide knowledge of current educational issues and strategies. The school must commit to having a Fast Track teacher by providing a mentor, opportunities for the teacher to pursue a school-level project that provides management and leadership experience, and development activities aligned to their individual career progression plan. The program has now shifted to focus entirely on current teachers in their early years of teaching. While in the program, they are expected to teach in two different schools to gain a more varied background.<sup>174</sup>





# **APPENDIX D: Principal Compensation Systems**

#### Australia

As in other countries, the opportunities for increased remuneration in the Australian education system are in management positions. It is not surprising that disparities between the administrator and teacher pay structures have the effect of pulling experienced and qualified teachers out of the classroom. <sup>175</sup> In fact, principals in large government secondary schools can earn between AUD\$95,000-100,000, as compared to the top regular salary schedule of teachers as AUD\$47,500-58,000. This was one of the factors that led to the creation of the Advanced Skills Teacher designation in some states in Australia. <sup>176</sup> (See Section III, Pay for Performance).

In 1995, the Victoria government established a performance management system for principals that is based on specifications of competencies. There are two components of evaluation: accreditation and assessment. First-year principals or assistant principals participate in a year-long professional development program, and, upon completion, they go through an accreditation center process, which certifies that they have demonstrated the key competencies. Over 90 percent of principals in Victoria are accredited. The assessment component evaluates whether principals have met their agreed-upon goals. All principals are appointed on five-year performance management contract. Successful completion of the evaluation, including self assessment, peer review, and review by the regional manager, can result in a performance bonus of up to 15%. <sup>177</sup>

#### Belgium French-Speaking

Principals do play a major role in the current school system. Since schools have traditionally had a great deal of autonomy, a principal has considerable influence on teacher appointments, the pedagogical program, and the future development of a school. The principal decides how to use the teacher periods assigned by the organizing authority to the school. That allows them to determine which classes to offer, how to establish additional assistance for underperforming students, and creating differentiated teaching opportunities. In addition, principals are the primary support to teachers who are encountering difficulties in their teaching. However, the financial and other rewards given to principals are lower than those in positions of similar responsibility in the private sector. The salary difference between a regular experienced teacher and the principal may be €150 per month, which is not much considering the differences in workload and responsibility.<sup>178</sup>

#### Belgium-German-speaking Community

The role of the principal is similar to that in the French Community. The average principal's wage is between 191% and 240% of the National Average GDP per capita. National per capita GDP is taken into account (instead of per capita GDP by Communities).





## **Belgium–Dutch-speaking Community**

The role of the principal is similar to that in the French Community. The principal plays a greater role in the recruitment of teachers and through the interview process can select those teachers who fit the needs of the school. However, here too the financial and other rewards given to principals in Flanders are lower than those in positions of similar responsibility in the private sector. The salary difference between a regular experienced teacher and the principal may be €150 per month, which is not much considering this does not reflect the differences in workload and responsibility.<sup>179</sup> The average principal's wage is between 153% and 243% of the National Average GDP per capita.<sup>180</sup>

Denmark: Each school has a headteacher, who is accountable to the county council, the school governors, and the Ministry of Education. Otherwise schools are run on a rather non-hierarchical basis with a limited number of assistants to the head. Teachers' councils are statutory, and teachers as well as students take an active part in the decision-making at all levels. At the gymnasium level, the board of governors, made up of student, teacher, staff and city council representatives, as well as parent representatives, determines the school budget, decides on the size of classes and makes decisions about the subjects to be offered by the school. The maximum salary depends on additional payments received by the school head. These payments are negotiated at local level. Appointment of personnel is the role of the headteacher, with those nominations formally endorsed by the county council. Headteacher salaries range from 195% to 205% of Gross GDP per capita. <sup>181</sup> Compared to teacher salaries of €3045 per month for a teacher with eight years of experience, a headteacher earns from €3,521 to €5,047 per month depending on the size of the school. <sup>182</sup>

Interestingly, headteachers are not required by the Folkeskole Act to be trained as teachers, but they are by the collective agreement. Even so, some municipalities are hiring headteachers who have general leadership backgrounds, rather than teaching credentials.<sup>183</sup>

#### **Finland**

Principals' salaries vary according to the type and size of the institution. The initial salary in 2003 varies between €2,500 and €3,635, and the final salary between €3,298 and €4,940. Salaries may be even higher if the specific school gives extra credit for a higher academic degree, Licentiate, or Doctor's degree. In practical terms, principals never start on the initial salary, because teachers elected as principals generally have extensive previous work experience.<sup>184</sup>

## Germany

The role of the principal in Germany is primarily a head teacher who is paid a small additional stipend to do administrative duties for the school. That does not include visiting teachers' classrooms to observe their teaching, planning professional development for the teachers, or leading school improvement efforts. However, with a new emphasis on the school as the focus of decentralized authority, the country reviewers recommended that Germany take a closer look at the development of school principals who can lead school reform efforts. There is a school principals association that conducts professional conferences, but many principals remain as members of the teachers' organizations.





#### Japan

There is not a system of merit-based pay for performance in Japan, and there is also not a wide discrepancy in pay between school teachers and university professors. Salaries throughout the education sector are based on length of service to the school district. Principals are often recruited from successful teachers. However, because teachers and administrators are required to change schools every five to seven years, it is difficult for principals to establish firm control over a school. In addition, principals are recruited after successful careers as teachers which means that most principals do not assume this position until quite late in their careers, and therefore have brief tenure in this position. The major administrative tasks in Japanese schools are the responsibility of very extensive sets of committees. The role of principal is not like western counterparts, but more a mediator. 186

#### Korea

Teacher promotions to the post of vice principal or principal in Korea are highly competitive due to the esteem and social status accorded to teachers and educators in the country. Fewer than one percent of teachers are promoted to the rank of vice principal or principal. Promotions are determined using various sources of evaluation—length of service, performance scores, achievements in research, and bonus points for other educational activities. Promotion points are awarded on strict scale—leaves of absences can detract points; however, bonus points can also be earned for teaching in remote areas, rural schools, and even in special education schools. Those teachers willing to work in any of these areas, or in some provinces, as homeroom teachers, can earn necessary bonus points to facilitate promotions. Other ways to accumulate points come from participating in educational research conferences, taking graduate school classes, or through in-service training programs. <sup>187</sup> School councils, similar to our site-based decision-making committees, were introduced in 1996 and have changed the principal's role to some degree, though he or she still determines the extent of the advisory council's influence. <sup>188</sup>

In Korea, a single-salary grade system is applied to all public and private K, elementary, secondary schools including heads. Service of principals is limited to five years and decisions are made on the basis of seniority/experience, performance, and licensure. Training is provided by the Teacher Training Instruction of the Ministry of Education by the Korea Teachers' University and Seoul National University. New principals can be invited to secure an appointment by local education agencies or the Ministry of Education. This has led to stronger community relations, more enthusiasm on the part of the head, and new energy at the school.<sup>189</sup>

#### The Netherlands

In the Netherlands, salary packages for head teachers are separate from the teachers' pay schedules and depend in part on the size of the school. This is also true of schools educating special needs students, where salary is based on the number of full-time staff at the school. In primary schools that cannot find head teachers who are qualified as teachers and head teachers, the school may hire individuals who do not have full qualifications, but cannot allow them to teach without appropriate teacher credentials.<sup>190</sup>





Candidates seeking appointment as head or deputy head of a primary school must hold a certificate of good conduct and a teaching certificate. Candidates for head or deputy head positions at a secondary school need a certificate of good conduct, a teaching certificate for the subject at that type of school, and a certificate of education. No candidate can have been banned from teaching by judgment of a court. The local school authority has flexibility in these requirements for up to half of the members of the school management team. The starting salary and salary schedule for head teachers and deputy heads depend on the salary earned prior to promotion. The minimum salary of school heads corresponds to the level on the salary scale immediately above the one they had previously reached as teachers. Maximum Salary is 218% of GDP/Capita.<sup>191</sup>

#### New Zealand

School principals in New Zealand earn between NZ\$70,000-130,000 per year. They can earn additional salary stipends for extra duties, such as leading early childhood centers, arts centers, or units serving special needs students. They can also receive extra payments for recruiting international students, leading the secondary teachers union, or suggesting in a local newspaper that principals were being paid to be marketers rather than school leaders. The article also noted that principals could receive up to NZ\$20,000 in performance bonuses and listed one principal as having received that amount for the last two years. 192

Even with these salaries, about 34% of principals interviewed in 1996 were considering retirement or changing careers, with another 20% uncertain of their plans. Workloads were a major deterrent for prospective principals considering the job. A survey commissioned by the New Zealand Education Institute (the elementary teachers' union), found only nine percent of assistant and deputy principals were interested in becoming principals. The most recent national survey reported found an improvement in principal morale. <sup>193</sup>

#### Sweden

The role of the headmaster (principal) has changed dramatically with decentralization and the individualized salary system. Headmasters are now responsible for both education and administration in their schools; they are responsible not only to the local school committee, but also to the central government in terms of meetings the objectives set for schools. The new individualized salary system applies to headmasters as well as teachers. It also requires headmasters to hold individual conferences and assessments with teachers, negotiate salary levels for the next year, and develop plans for professional development. In large schools, the headmaster may conduct these activities with up to 60 staff members, which both the teachers unions and the headmasters' union believe is too many. The Swedish Association of School Principals and Education Directors recommends that the headmaster be responsible for no more than 25 staff members.<sup>194</sup>





#### **Switzerland**

The role of the principal has been given a new emphasis as cantons and communes have adopted the policy of greater decentralization of authority to the school level. Principals, along with school leadership teams of deputy principals and lead teachers, are responsible for teacher recruitment, evaluation, development, pedagogical planning, parent and community relations, and school improvement, but budgets are still managed by school committees in local communes, as are curricular and school scheduling decisions. Most principals learn on the job although specific leadership training programs are being established in many of the cantons, and private organizations are seeking accreditation of their programs from the Swiss Conference of Cantonal Ministers of Education (EDK/CDIP). Principals receive additional compensation over teacher salaries, and many maintain teaching responsibilities as well as management responsibilities

### **United Kingdom**

The head teacher role is management of the day-to-day operations of the school and enjoys greater autonomy and authority than many North American principals. The head teacher is employed by, advises, and reports to the school's governing body. The pay range is dependent upon "school-group" size (a function of pupil numbers and ages), although governing bodies may pay more where necessary to recruit and retain head teachers of the most challenging and largest schools. The socio-economic background of pupils at the school is also taken into account when deciding a head teacher's salary. Salaries for head teachers in England and Wales (excluding London and the Fringe, which receive higher salaries) range from £per annum 37,617-93,297 in 2006. The head teacher can receive performance pay based on sustained high quality of performance, leadership, management, and student progress at the school. About 65 percent of principals interviewed in 2003 were over the age of 46 and 40 percent were considering retirement.





# APPENDIX E: The Influence of Unions on Compensation

#### Australia

The Australian Education Union represents over 90 percent of all full-time teachers as well as teachers in the technical and Further Education Colleges. As a result, it is the fourth largest union in the Australian Council of Trade Unions, and plays a major role in national education policy. Teachers in Catholic or independent schools are represented by the Independent Education Union which has lower membership levels.<sup>199</sup> The unions have worked with government on issues related to teacher professionalism as well as the usual wages, hours, and working conditions.

#### **Belgium–Flemish Community**

In the Flemish Belgium, teacher unions have a statutory right to consultation that is based on the 1974 act on the unions. The government must negotiate in advance with the trade unions before any action is taken regarding wages or working conditions of staff. Examples of negotiated issues include: determination of the annual staffing for levels of education, changes to the performance system of teachers, and statutory changes such as the method of appointments and promotions. The Government of Flanders' decisions are influenced by the discussions and negotiations with the union, starting with extended informal dialogue between the unions and the government to determine the issues on which they can work together. Those are the issues brought to the formal negotiations.<sup>200</sup> However, when issues are not brought to negotiations first—such as the decision to increase retirement age from 55 to 58—the unions are very unhappy. In this case, it was put into regulation by the Minister of Education after discussions with the government as a means to address teacher shortages.<sup>201</sup>

In addition, there is not unanimity among the unions on issues. Regarding a salary increase in 2001, one of the unions preferred additional assistance for teachers to a three percent salary increase, but determined that a united front of all the unions on salaries was more important. While there is much discussion about differentiation of the role of teachers to make teaching more attractive and create a career ladder, there is disagreement about its value. The large catholic union active in primary education (and only this union) is in favor of differentiated pay for positions with more responsibilities, yet all of the unions are agreed that differentiated salaries based on the skills or performance of teachers would create divisions among the staff. They are also against differentiation based on the difficulty of the working conditions, which they feel should be improved through smaller classes or additional assistance.<sup>202</sup>

#### Belgium-French-speaking Community

As in Flemish Belgium, negotiations with the unions go on at the central level on wages, hours and working conditions, and on local conditions with the organizing authorities. In November 2003, the unions were demanding a 10% pay raise over the next seven years. The trade unions were threaten-





ing action if the agreement was not accepted because teacher salaries had not been reviewed for ten years. The issue of parity with Flemish Belgium's teacher salaries was raised by the Minister for Early-Years Education, Jean-Marc Nollet, noting that teachers' pay in French Community is 7-8 percent lower than in the Flemish Community (2004-10).<sup>203</sup>

#### Denmark

The Danish Union of Teachers (DFL) consists of more than 80,000 members and focuses on protecting the interests of its members in terms of both trade union policy and school policy. "In other words, there is a union leg and an educational leg and they are equally strong." <sup>204</sup>

In 1999 the Danish Union of Teachers (DFL) held its congress on a proposed change to a collective agreement on working hours that had the government pushing for more flexibility in the school's discretion over the way in which teachers spent their 1924 hours per year. Prior to 1999, there was a rigid delineation of the hours to be spent in teaching, versus meetings and conferences, professional development, and lesson preparation. The new proposal was still far more detailed than in most European countries and called for 375 hours for individual preparation, including individual preparation for lessons and meetings, professional development, and meetings or communications with parents. The remaining time, 1549 hours, was defined as school time, including teaching, counseling, group activities, and working with parents. A specific set aside of 150 hours is dedicated to additional time for preparing lessons and school-wide planning activities, and another 75 hours set aside for the role of homeroom teacher.<sup>205</sup>

In her report to its Congress, the union president accused the Danish government of neglecting the primary and secondary school systems and voiced her concern that increasing numbers of parents were sending their children to private schools. When a compromise with the National Association for Local Authorities (KL) and the DFL was reached regarding working hours for teachers, it nearly split the union membership. However, through some conciliation, the new agreement on hours was adopted by a narrow majority of teachers. The agreement left implementation details to local school authorities, which the school authorities as well as many of the teachers believed would improve the quality of teaching. However, many delegates at the congress thought that the DLF played into the hands of the KL by leaving the implementation details of the agreement to the advantage of the local authorities, although it could have stood firm for a stronger agreement.<sup>206</sup>

#### France

In France, the unions are not only participants in the national and local negotiations regarding wages, hours, and working conditions, they are also participants in the annual evaluation of teachers. A committee of administration representatives and teacher representatives selected by the union submits to the appropriate authorities proposals for the career advancement of teachers up for assessment.<sup>207</sup>





#### **Finland**

In Finland, 95 percent of the teachers are members of the Trade Union of Education in Finland (OAJ). The union represents teachers at various school levels and institutes of learning, ranging from day-care center teachers to lecturers in universities and vocational school teachers, and it also works together with the Finnish Teacher Student Association (SOOL) and veteran teachers. OAJ is a member of the Confederation of Unions for Academic Professionals in Finland (AKAVA) as its largest member union. The membership of AKAVA is 448,000.

Through negotiations at the central level, salaries are set and then a municipal collective agreement for teachers (OVTES) is negotiated between the OAJ and the Commission for Local Authority Employers. OAJ believes that current teacher salaries are not commensurate with those of similarly educated people in other sectors. The union works to encourage local authorities to set salaries higher than the minimums required by the central agreement. 209

#### Germany

Trade unions and teacher organizations play a role in the discussion of education policy at the federal and state levels. However, since teachers are civil servants in Germany with no right to collective bargaining in the western states, there is no role for unions in determining salaries or working conditions. Unions do play a role with the state governments in the newer eastern states where teachers are salaried employees and have collective bargaining rights. The Standing Council of the Ministers of Education and Cultural Affairs of the Laender (States) includes dialogue with the unions before coming to consensus on policies affecting the states.

#### **Ireland**

There are three teachers unions in Ireland, the Irish National Teachers Organization, (representing primary teachers), the Association of Secondary Teachers, and the Teachers Union of Ireland (representing post-primary teachers). The teachers unions are highly organized and participate actively with the Department of Education and Science in discussions of education policy as well as wages, hours, and working conditions. The engagement in education policy began in the 1990s when education became one of the focus areas for national policy and the government began a highly consultative process including all stakeholders. The Education Act of 1998 included the policy changes developed over the decade and had widespread support among all stakeholder groups because of their involvement in the process.<sup>210</sup>

The teachers unions also participate actively in the National Council for Curriculum and Assessment, the National Education Convention, the National Forum on Early Childhood Education, and the National Consultative Conferences on Adult Education. The unions were instrumental in securing agreement to provide a 13 percent increase in pay to bring teachers' salaries in line with other professions phased in starting in 2004 and a seven percent national salary increase to come in the following year. However, they were disappointed that the Government did not agree to shorten the 25-year salary schedule. They were also instrumental in securing extra pay for teachers who





worked with students beyond the regular teaching times or substituted for absent teachers. It is very important to the unions to maintain a single-salary schedule and avoid any payments based on performance quality.<sup>211</sup>

#### Japan

There are five major teachers unions in Japan: the Japan Teachers' Union (JTU), All Japan Teachers' Union, Japan Senior High School Teachers' Unions, Japan Teachers' Federation, and the Japan Educational Administrators Association. The unions have a right to negotiate with central and local public authorities regarding teachers' working conditions. The greatest contribution of the JTU has been an improvement in the quality of working conditions. Through collective bargaining, teachers were able to negotiate with local boards of education for better working conditions, such as gender equity in status and compensation.

In 1958, 86.3 percent of all teachers were members of the JTU. Because of illegal strikes and other protests in the 1960s and 70s that led to teacher reprimands, teachers determined that it was better not to join a union. That led to reduced membership of 35.7 percent in 1990 and 35.2 percent in 1991, when 59.3 percent of all public school teachers were members of one of the teachers groups. During these same periods, the percentages of teachers enrolled in no union increased, from 5.7 percent (1958), to 39.8 percent (1990), and to 40.7 percent (1991). This is also reflected in the decreased number of new teachers joining some form of a teachers' organization (19.6 percent in 1990-the lowest percentage in history). The JTU has since 1990 worked in more productive ways with the government so that they could be included in the decision-making process.<sup>212</sup>

#### Korea

The Korean Federation of Teachers' Associations (KFTA) is the central organization of the unions, with local chapters in each city and province. Established in 1947 it has about 180,000 teachers in kindergartens, primary, middle and high schools, and universities as members. KFTA works on a variety of issues: school facilities, improved welfare benefits, educational research on teaching and professional development, and publication of educational books. Since 1992, it has consulted with the Ministry of Education and Human Resources Development twice a year on issues related to teachers, including professional ethics and teacher welfare. Their talks in 1999 focused on improving teachers' salaries, benefits, and working conditions.<sup>213</sup>

It is important to note that unions were illegal in Korea until 1999 when the Law on Establishment and Operation of Labor Unions for Teachers was enacted. Initially formed in 1988, the Korean Teachers' Union (KTU) functioned illegally until 1999. Members must be teachers in kindergarten, primary, or high school. The KTU works with the Democratic Labor Union and other civic organizations on educational and social issues. There are roughly 87,000 members. KTU focuses on improving the educational environment, budgetary issues, and ensuring the autonomy of education. Key projects of the union entail improving work conditions, enhancing the socioeconomic status of teachers, protecting the rights of union members, improving their welfare, and conducting promo-





tional and public relations affairs. It can negotiate with the Ministry, school boards in provinces and cities, or operators of private schools on issues of economic and social status, including wages for members of the union, working conditions, and general welfare.<sup>214</sup>

The Korean Union of Teachers and Educational Workers (KUTE) was also established in 1999. Members must be a teacher in kindergarten, primary, middle or high school. KUTE is also a member of the Korea Labor Union. According to KUTE's website, it has more than 400,000 members. Its major projects include improving the fundamental rights of teachers, heightening the social and economic position of teachers, and developing educational issues.

#### The Netherlands

The level of union membership in the education sector is relatively high, estimated at about 40 percent, much higher than in other sectors in the Netherlands. Since 2001, teachers in primary schools have followed a formal collective labor agreement between the Ministry of Education and the social partners, both employer and employee organizations; they are secondary teachers for the most part. The main conditions of employment are still negotiated between the Ministry and the social partners, but some issues have been devolved to the local level with decentralized funds. Teachers in secondary education can also join Subject Guilds that are more concerned with education policies and innovation than conditions of employment.

At the request of the Ministry of Education, the social partners have created three entities: the Replacement Fund to fund substitute teachers, the Participation Fund to fund unemployment benefits, and the Sector Management Employment in Education, which analyzes the labor market, provides information useful in collective bargaining, and directs labor market projects.<sup>215</sup>

#### New Zealand

Unions are of the view that performance-related pay would be ineffective, with "union claims... rooted in an ideology of uniformity and fear of perceived pay inequality."<sup>216</sup> They also believe that flexible pay schemes would create or exaggerate existing pay inequality, and that performance pay would also reduce collegiality amongst teachers. The current collective agreement awards extra money to teachers earning responsibility.

### Norway

In 2002, two education unions merged to create the second largest trade union in Norway, the Union of Education Norway. While the two unions, the Norwegian Union of Teachers (NORSK LÆRERLAG) and the Teachers' Union Norway (LÆRERFORBUNDET)<sup>217</sup> had focused on different educational levels, together they represent over 130,000 pre-school, primary, and lower secondary personnel as well as upper secondary, college, university, and adult education personnel. The two unions recognized that their different approaches to pay and working conditions—centralized salary setting and equity vs. localized salary setting—were less important in light of a more uniform national education system as a result of educational reforms since the 1960s."<sup>218</sup>





The Union's size and expertise enable it to exercise considerable influence. It participates actively in the public political debate and is also heavily involved in international work. It focuses its attention on pay and working conditions, as well as education policy. According to its website:

"Union of Education Norway prioritises the work to increase the salary levels of its members. The Union believes that salaries should be based on education, skills and responsibility. At the same time both female and male dominated professions should be entitled to equal pay. In addition, study financing needs to be improved. The education sector needs salary levels which are designed to facilitate recruitment and to retain good, qualified employees. During the last few years the union has achieved better salaries, but the wages battle must continue—it is in no way over yet". <sup>219</sup>

#### Sweden

The underlying philosophy for work between unions and both central and local authorities is consensus. They work together on issues of education policy, improving working conditions, recruitment and retention of teachers, and the development of improved skills for teachers and headmasters. While consensus is not always possible, decisions are only made after extensive discussions and consultations. The groups involved include the Ministry for Schools and Adult Education; representatives of the local authorities, the Swedish Association of Local Authorities (SALA); two unions, the Swedish Teachers Union (STU), with its affiliate the Association of Principals, Headmasters and Educational Administrators; and two professional associations, the National Union of Teachers in Sweden (NUTS), and the Swedish Association of School Principals and Directors of Education. The STU and the NUTS have established a joint Teachers' Liaison Council to work with local authorities. Over 90 percent of teachers in Sweden belong to a union.

As a result of negative media coverage of schools, teachers and their unions along with government identified a need to improve the status of the teaching profession in Sweden. To professionalize the teaching profession, the STU drafted a professional code of ethics for teachers. Another area emphasized both by the trade unions and the employer organization is the need to improve the teachers' work environment by reducing the teacher's workload through lower pupil/teacher ratios and employment of more teachers.<sup>220</sup>

All of the constituent groups worked together with the Ministry to develop the two Central School Improvement Agreements which governed work from 1995-2000 and 2000-2005, involving cooperation on development and renewal of school practices. The package included:

- Skills development projects for teachers and headmasters
- Proposals for a more flexible work organization
- Research exchanges with business at the local and regional levels
- Mentoring arrangements for teachers<sup>221</sup>

Through these agreements, teachers assume a greater role in determining how they can best meet both centrally and locally established objectives for the school.<sup>222</sup>





#### **Switzerland**

Over two-thirds of Swiss teachers are members of one of three major trade unions, which provide many services beyond salary negotiations, such as the development of policy papers, counseling services to members, and professional development. Trade unions are active participants in all education reform initiatives in Switzerland. The OECD country reviewers noted that the role of the unions is a major strength of the Swiss education system:

"Teacher associations/unions play a particularly important role, beyond formal participation in consultative processes. Teacher unions initiate activities of research and reflection on education issues and approaches, engage teachers in discussions on the matters raised, and contribute findings and views in the wider arena. In short, consultation is thorough, inclusive and on our brief review, thoughtful; the agreements reached are solid; and the ground is laid for follow-through and engagement from all parties." <sup>223</sup>

### **United Kingdom**

Union membership in the teaching profession is high, as it is in many public sector occupations in England and Wales, primarily for the legal protections offered to members. The main unions—the National Union of Teachers (NUT) and the National Association of Schoolmasters/Union of Women Teachers (NASUWT)—no longer negotiate with the government about pay raises for teachers although they do lobby for those.<sup>224</sup> In 1991 the government abolished collective bargaining for salaries and established the School Teachers Review Body (STRB), an independent advisory group that studies wages, responsibilities, and working conditions; gathers evidence from major stakeholders; and reports its findings to the government. The government usually follows its advice.

Major issues over the last decade have been the changes in the salary schedule and the teachers' workload. The pay scale initial schedule has been reduced to six steps, followed by an upper pay scale, and the opportunity to become an advanced skills teacher. In January 2004, teacher unions reached an agreement with the government to remove quotas on the number of teachers that could progress along the upper pay scale in any given year, as well as the opportunity to have an upper scale with steps for continued teacher salary progression. Marsden believes that the collaboration between the union and the government on improvements in the performance-related salary system has given teachers confidence in the fairness of the system. The changes included the increased numbers of teachers on the upper pay scale, the elimination of the requirement that movement along the upper pay scale be harder to achieve, and the inclusion of measures other than test scores in the assessment of student progress. In surveys, teachers attributed these changes to the work of their unions. 226

As for workloads, the STRB commissioned a study by PricewaterhouseCoopers that agreed that more attention needed to be paid to the need for additional support staff to take on non-teaching duties, and the impact of new initiatives and programs on teachers' workloads.<sup>227</sup>





## About the Authors

**Dr. Susan Sclafani** recently retired as Assistant Secretary of Education for Vocational and Adult Education and joined Chartwell Education Group, a new consulting organization formed by Rod Paige, former U.S. Secretary of Education. As part of that work, Dr. Sclafani is co-directing a new project at the National Center for Education and the Economy that will benefit from her domestic and international background. The State Alliance for High Performance will help states benchmark their educational practices and structures against the high-performing nations of the world in an effort to take the state's education system to world-class performance levels. She also served as Counselor to the Secretary of Education, where she was the United States representative to OECD, the Organization for Economic Cooperation and Development, and APEC, the Asia-Pacific Economic Cooperation. Dr. Sclafani's passion for the task of promoting and ensuring the highest standards in education was well demonstrated during her tenure at the United States Department of Education. Among the highlights of her term at the Department was her leadership in the creation of the Mathematics and Science Initiative (MSI). The scheme focused attention on the importance of these subjects in the education of all students, emphasizing the need for knowledgeable math and science teachers at every level of schooling, and the importance of further research in both areas. Her global work led to her leadership of the joint E-Language Learning Project with the Chinese Ministry of Education. She also led the Department's High School Initiative to better prepare students for 21st Century education, training, and the workplace. Prior to serving at the Department, Dr. Sclafani was Chief Academic Officer of one of the nation's largest urban school districts, and in that capacity perfected her diverse skills focusing on technology, curriculum development, and construction management. She also has extensive state education and business experience.

Marc S. Tucker is President of the National Center on Education and the Economy, a Washington, DC-based organization providing policy guidance and technical assistance to government and educational institutions in the United States and abroad. A leader of the movement for standards-based education reform in the United States, Mr. Tucker authored the 1986 Carnegie Report, A Nation Prepared: Teachers for the 21st Century, which called for a restructuring of America's schools based on standards; created the National Board for Professional Teaching Standards; created the Commission on the Skills of the American Workforce and co-authored its 1990 report, America's Choice: high skills or low wages!; was instrumental in creating the National Skill Standards Board and served as the chairman of its committee on standards and assessment policy; with Lauren Resnick, created the New Standards consortium, which pioneered the development of performance standards in the United States and created a set of examinations matched to the standards and with Judy Codding, created America's Choice, a comprehensive school reform program that has served more than a million American students nationwide. With Ray Marshall, Mr. Tucker co-authored *Thinking* for a Living: Education and the Wealth of Nations, selected by Business Week as one of the 10 best business books of 1992, and with Judy Codding, co-authored Standards for Our Schools: How to Set Them, Measure Them and Reach Them, published in 1998. Mr. Tucker has written widely for professional journals and leading American newspapers and has frequently testified on education, training, and economic development issues before the US Congress and state legislatures.





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