ibw-research brief

issue No. 13 | March 2005

KURT SCHMID

Teacher salary structures in an international comparison

n most OECD countries, teachers are paid according to standardised salary categories, with the actual pay depending both on their qualification (formal degree) and their work experience (how long they have been in the job). The vast majority of the countries adjust the increase of teacher pay in the course of their career according to a grade system. Between the respective countries, there are eye-catching differences with respect to the dynamics of increase of teacher salaries in the course of the teachers' professional life. Austrian teachers draw relatively low salaries at the beginning of their career; their maximum salaries are, however, in the top region in the OECD. Thus, they display one of the highest income dynamics. Nearly all the teachers in OECD countries can draw extra allowances – yet, this component is only of marginal importance in Austria. Performance-related pay ('performance bonuses') is being discussed in many countries, but this has not spread very much yet. In the countries that have variable salary components, these

tries, but this has not spread very much yet. In the countries that have variable salary components, these usually make up only a small part of the total pay. As for regulations of working hours of teachers, there can be seen an international trend towards annual working time models, as well as a tendency towards regulating the mandatory physical presence of teachers.

Results of the international comparison

In most OECD countries, teachers are paid according to standardised **salary categories** – which happens much in the same way in Austria. The actual pay depends both on their qualification (formal degree) and their work experience (how long they have been in the job). These salary groups are usually fixed on a central or regional level. Exceptions can be found in Finland, Sweden, The USA and the United Kingdom, where teacher pay is agreed on o a local level, or to a certain degree even on school level (cf. Klös and Weiss, 2003).

In nearly all countries, a **salary grade system** determines the increase in pay for the teachers in the course of their professional career. Linear grade systems are preferred, only some Eastern European countries resort to so-called matrix systems (in these systems, the total salary of each teacher is made up of a combination of several components which do not correlate/are not interdependent). Moreover, teachers can draw extra pay and 'other financial benefits'¹ in almost all OECD countries. Performance-related salary components ('performance bonuses') are not very widely spread. In the countries that have variable salary components, these usually make up only a small part of the total pay.

The base salary

Pay is an important variable that determines how attractive a profession is (income as a positional good). Here, both the starting salary is important, as well as the dynamics of development of pay in the course of one's career. There can be found significant differences between the respective countries as regards both aspects mentioned above.

In most countries, **starting salaries** of teachers are below the average starting salary of the population (the indicator used here is the GDP per capita). Only in Australia, Belgium (upper secondary level), Denmark, Germany, Greece, Korea, Mexico, Portugal, Spain, Switzerland and Turkey they are higher. This is worth noting because teachers seem to be more highly qualified than the average of the overall population.

As for the **dynamics of increase of teacher pay in the course of their career**, the respective countries display significant differences (the indicator being the relation between the maximum salary related to the starting salary). Austria can be found among the countries whose salary systems are based on the highest implicit income dynamics (roughly doubling the overall pay).

In addition to this, table 1 shows the number of years in the job it takes for a teacher to draw maximum pay. Here, Austria is among the countries where teachers arrive at their maximum pay only very late (after 34 years). From the combination of income increase (maximum pay in relation to one's first pay) and the point when teachers draw the highest income in their professional career, we can generate **'hypothetical' basic salary profiles**. These do not show the actual salary development (due to the salaries changing as a result of inflation and adaptation to it), but 'merely' show up the income dynamics that lie beneath the pay patterns (and the monetary incentives caused thereby).

From figure 1 one can easily see that the pay systems of the various countries are structured rather differently. Apart from Germany and Switzerland, the annual starting salaries of teachers on lower secondary level are between 20,000 and 30,000 US\$.

Switzerland has the highest starting salaries (together with Germany) and the second highest maximum salary – being surpassed only by Korea.

Austria boasts relatively low salaries for beginners, but in terms of maximum salaries it is positioned in the upper regions; moreover, it displays one of the highest dynamics on income. Only in Japan and Korea does the annual income increase more with time. In Switzerland, one can find income dynamics that are similarly pronounced – yet, teachers receive more pay there in general.

Table 1:	relation between	maximu	im pay and	d starting
	pay of teachers			
	Primary	Lower	Upper	Years un

	Primary	Lower	Upper	Years until
	level	Secondary	Secondary	maximum salary
Australia	1,4	1,4	1,4	10
Austria	2,0	2,1	2,1	34
Belgium (flm.)	1,6	1,7	1,7	27
Belgium (fr.)	1,6	1,7	1,8	27
Czech Republic	1,7	1,7	1,7	32
Denmark	1,1	1,1	1,4	8
England	1,6	1,6	1,6	8
Finland	1,4	1,5	1,5	20
France	2,0	1,9	1,9	34
Germany	1,3	1,3	1,3	28
Greece	1,5	1,5	1,5	33
Hungary	1,9	1,9	1,9	40
Iceland	1,1	1,1	1,4	18
Ireland	1,8	1,8	1,8	22
Italy	1,5	1,5	1,6	35
Japan	2,4	2,4	2,5	31
Corea	2,7	2,7	2,7	37
Mexico	2,2	2,2		14
Netherlands	1,4	1,5	2,0	22
New Zealand	1,9	1,9	1,9	7
Norway	1,2	1,2	1,2	28
Portugal	2,7	2,7	2,7	26
Scottland	1,6	1,6	1,6	11
Slovak Republic	1,4	1,6	1,7	27
Spain	1,5	1,4	1,4	39
Sweden	1,3	1,3	1,3	n.a.
Switzerland	1,6	1,6	1,5	24
Turkey	1,7		1,8	27
USA	1,8	1,7	1,7	n.a.
Country Average	1,66	1,67	1,70	25

Source: OECD 2003, *ibw*'s own calculations

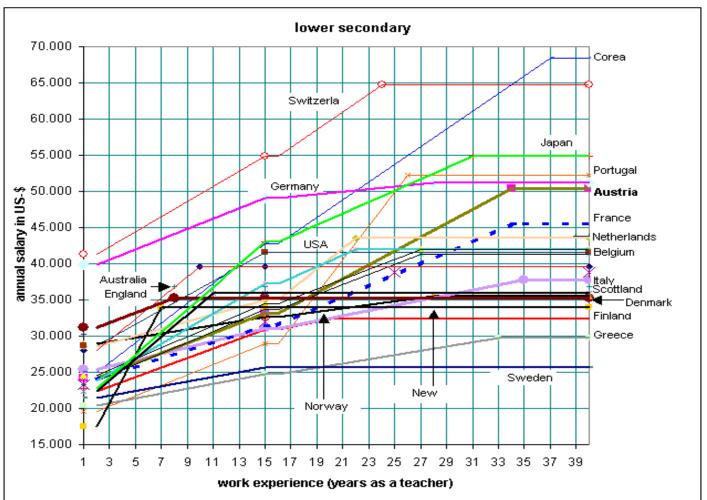


Figure 1: Hypothetical base salary profiles of teachers

All statements up to now were related to the legal and contractual salary tables. In all OECD countries, however, the salary of teachers is influenced by other components, too; These are independent of the teachers' time in the system.

Extra benefits that add to the base salary²

Teachers can draw extra allowances in almost every country of the OECD (cf. table 2). The most common ones are additional salaries for administrative functions additional to teaching³. In some cases, salary increases are based on fixed criteria that are defined higher up in the hierarchy; in other cases, the school has a certain leeway too. What is interesting is that all countries that did well in PISA 2000, grant extra pay for special activities.

Table 2: possible bonuses adding to the base salary

Country	amount of possible bonuses	amount of pedagogical performance bonuses
Finland	12	6
USA	9	5
New Zealand	10	5
Portugal	8	5
Denmark	7	4
Switzerland	7	3
UK	9	3
Japan	8	2
Australia	6	2
Spain	5	2
France	6	2
Italy	7	2
Ireland	5	1
Norway	6	1
Sweden	3	1
Germany	4	-
Netherlands	1	-
Belgium	1	-
Austria	1	-
Country average	7	3

Source: according to Klös and Weiss, 2003.

Performance-related salary components

Only few countries offer financial rewards for outstanding teaching performance (such as in the United Kingdom and in some Swiss provinces). Yet, this aspect of 'performance-related and up-to-performance pay' has been discussed more frequently in Europe lately. Such propositions are based on the assumption that a school's quality (or, the quality of the learning processes of pupils and students, as well as the thus achieved level of performance) is largely dependent on the performance of the teachers. Therefore, a teacher's motivation and commitment ought to add to her salary by way of accounting for her teaching performance. We now address two elements that are interconnected: on the one hand, incentive earnings are intended to motivate teachers; on the other hand, the aspect of justice comes into play - dedicated teachers draw higher pay.

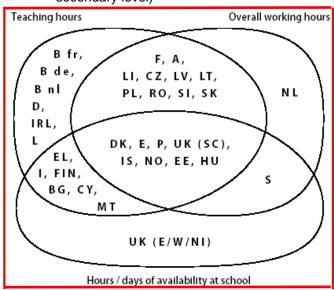
Critics of performance-related teacher salaries, however, point to specific aspects of the teaching profession which, according to them, do not allow for an adequate assessment of a teacher's performance⁴.

For these reasons, scientific literature prefers bonus systems and, which is the latest trend, also team and group compensation systems. Bonus payments on a school level as well as so-called 'pay-at-risk' salary components⁵ appear regularly in the scientific discussion, as well as in the actual design of salary systems.

Working hours of teachers

The guidelines regarding the teachers' working hours differ greatly from country to country. In most countries, teachers have to work a fixed number of hours per week to be eligible for full time pay. These contain both teaching hours as well as hours outside the classroom (preparation, correction of student work, as well as tests, etc.). Within this framework, however, the countries display differing further regulations (compare figure 2).

Figure 2: working hours regulations of teachers (lower secondary level)



Source: EURYDICE 2003

Internationally speaking, there can be identified three working hour models for teachers as a rough guideline:

Working hours model for teachers that is based on mandatory teaching hours:

Traditionally, the teachers' working hours have been counted on the basis of their teaching hours. Today, this system is only still at work in Belgium, Germany, Ireland, and Luxembourg. Austria's federal teachers are still paid according to that system – teachers employed by the respective provinces are now part of an annual working hour model.

Extended teaching hour model:

Teaching hours plus mandatory physical presence at school:

Many countries have extended the working-hours model for teachers that works on the basis of teaching hours. In

addition to the number of lessons taught, hours of physical presence have been introduced. Teachers have to be present at school to take over non-teaching tasks such as administrative work, teamwork, etc. Countries that are grouped among this category are Denmark, Spain, Portugal, the United Kingdom (Scotland), Iceland, Norway, Estonia, Hungary, Greece, Italy, Finland, Bulgaria, Cyprus, Malta, Turkey, Australia, New Zealand, and the United States. Often, the total annual working time of the teachers is also determined by these models.

Teaching hours plus total yearly working hours:

In addition to the number of lessons taught, the total yearly working time of the teachers is determined, too. This model is at work in France, Belgium (in the Fleming community), Austria (provincial teachers), Liechtenstein, the Czech Republic, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

Special forms':

Three European countries have been cutting their own path which is completely different. In the Netherlands, only the annual working time is set out. The same goes for Sweden; yet, in addition to this, three quarters of this time has to be done at the school. In the United Kingdom (not in Scotland, though), only school presence is set out.

Holiday regulations

In most countries, statutory holidays of teachers are adapted to the school calendar. This means that school recess means holidays for the teachers; thereby, practically all leave entitlement of the teachers falls into this time⁶. During the school year, teachers may thus only take single days off in justified and reasonable cases. In some countries, teachers are not 'on holidays' for the whole time of the school recess. They are present at their school at the beginning and at the end of the school holidays to do administrative work (in Spain and Portugal, for example). Much in the same way, further training of teachers takes place in the weeks when there is no school (as in Spain, Ireland, Portugal, the Czech Republic, and Slovakia).

The Austrian teacher salary system

In an international comparison, the Austrian teacher salary system corresponds in its fundamental conception to the ones of most other countries. Still, it is highly complex in its concrete structures, it is marked by many rules and regulations and also by bureaucracy. This mirrors the bureaucratic controlling system of Austria's school governance. The effectiveness of bonuses does not really show up the teachers' performance and dedication. Individual, performance-based (output-oriented) salary components ('performance bonuses') are hardly ever used. The following approaches to the further development of the Austrian teacher salary system can be drawn from international experiences and transparency; these have to be seen in terms of system transparency and system efficiency (New Public Management):

• Reducing the complexity by means of setting up uniform structures of labour laws and employment laws. There should be uniform employment laws for all teachers (as regards working hours, layoff laws and legislations, pay structures).

• Reducing the depth of regulations, and the bureaucracy involved. This can be achieved by means of devolution of the decision making competences, which in turn leads to structuring competences. The headword here is an increase in school autonomy (questions of teacher recruitment, staff assignment, staff development and further training for teachers, as well as creating some creative headroom regarding performance-related pay components).

Linking up salary increases with the readiness to do further training. Approaches like this one also aim at a tighter interconnection between formal teacher training and on-the-job training.

The full text of this study that deals with the topics outlined above can was published in 2005 under the following heading: *ibw*-research report No. 127 – "School governance in an international comparison. School autonomy and administration, teacher salaries and on-the-job training for teachers."

Further reading

Eurydice: "The Teaching Profession in Europe: Profile, Trends and Concerns. Report III: Working Conditions and Pay – General Lower Secondary Education" - Brussels, 2003.

Eurydice: "The Teaching Profession in Europe: Profile, Trends and Concerns. Report IV: The Attractiveness of the Teaching Profession in the 21st Century – General Lower Secondary Education" – Brussels, 2004.

Klös Hans-Peter, Weiß Reinhold (Hrsg.): "Bildungs-Benchmarking Deutschland. Was macht ein effizientes Bildungssystem aus?"; DIV Verlag, Köln 2003.

Editor

ibw - Institute for Research on Qualification and Training for the Austrian Economy

Rainergasse 38, A-1050 Vienna Tel.: +43/1/545 16 71-0, Fax: +43/1/545 16 71-22 E-Mail: info@ibw.at, Homepage: www.ibw.at

¹ Extra pay to compensate for travel costs, living costs, study material, etc.

² Regulations concerning extra hours, further education, as well as credits for preliminary employment may also influence teacher pay. These are not referred to here.

³ The sheer number of possible bonuses does, however, not express their monetary importance (their percentage of the overall pay). Unfortunately, there is only little information available on this.

⁴ The *ibw* research report No. 127 among other things explicitly refers to these critical positions.

⁵ Being entitled to full pay, however, depends on certain conditions (further training, student performance, etc.).

⁶ Compared to other employees, teachers cannot decide when they want to take their annual time off. Yet, they have a big advantage over other people as regards their overall number of days off per year. The latter are seen to compensate for the weekly working hours of teachers being at times higher than those of other people.