The Experience of New Teachers

RESULTS FROM TALIS 2008

Teaching And Learning International Survey

OECD

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Foreword

As the factors linked to improvements in student outcomes become more apparent, governments around the world are looking at the quality of their teaching workforce. Teacher practice is at the heart of many discussions while efforts to develop and support teachers are continually being implemented and studied.

One segment of the teaching workforce that may need particular attention and support comprises teachers who are new to the profession. In some countries, up to half of new teachers leave the profession in their early years of teaching due to a variety of factors such as classroom climate and feelings of low self-efficacy. These high levels of attrition carry costs in the areas of initial teacher training, recruiting and filling vacant positions.

The OECD's Teaching and Learning International Survey (TALIS) is the first and only international survey on the conditions of teaching and learning. In TALIS 2008, teachers from 23 countries participated, providing powerful insights into the working conditions of teachers as well as teaching and learning practices in schools. Cross-country analyses provide the opportunity to compare countries facing similar challenges and to learn about different policy approaches and their impact on the learning environment in schools.

This report, "The Experience of New Teachers: Results from TALIS 2008", uses data from the TALIS 2008 survey, in which eight percent of the respondents were teachers with two years or less of teaching experience. Teachers and their principals reported on the teaching and learning environment of their schools and classrooms, focussing on issues such as classroom climate, the amount of time spent on classroom management as compared to actual teaching and learning, the kinds of early support new teachers receive, as well as the ongoing professional development opportunities offered. Teachers also provided information on their own feelings of self-efficacy as a teacher and on areas in which they felt they lacked skills and could benefit from additional professional development.

Data such as these enable the comparison of the experience of new teachers to that of more experienced teachers and shed some light on the learning experience of students in both kinds of classrooms. This report examines not only the differences between new and more experienced teachers, but provides a context within which these differences – and any similarities – can be better interpreted. Finally, the report highlights the policy implications that might be considered as a result of this data analysis.

This report was drafted by Ben Jensen, Andrés Sandoval-Hernández, Steffen Knoll and Eugenio J. Gonzalez. The preparation of this report was managed at the OECD Secretariat by Julie Bélanger. Members of the TALIS Board of Participating Countries provided valuable feedback on the contents. Additional advice as well as editorial support was provided by Dirk Van Damme, Kristen Weatherby, Sarah Gielen, and Alys Barber. Lynda Hawe prepared the report for publication while Isabelle Moulherat provided administrative support.

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Director for Education, OECD

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Executive Summary

This report examines the working lives of new teachers through the TALIS 2008 survey of lower-secondary teachers and schools. New teachers are defined as having two years or less of teaching experience.

In most countries, new teachers assume virtually the same teaching responsibilities as more experienced teachers, but they report that they often lack the necessary classroom management skills for effective teaching and learning. Their classrooms often have insufficient time devoted to teaching and learning and poorer disciplinary climate.

COMPARISONS BETWEEN TEACHERS

Comparisons are made between new and more experienced teachers. Differences are highlighted and policy implications discussed. An important issue to consider is: how should differences between new and more experienced teachers be interpreted? Is a smaller difference preferable to a large one? For example, new teachers report lower levels of self-efficacy and classroom teaching time. On average across TALIS 2008 countries, 73% of new teachers' classroom time was spent on actual teaching and learning compared to 79% of more experienced teachers' classes. While any reduction in actual teaching and learning surely has a negative impact on students, the difference between new and more experienced teachers can be interpreted in numerous ways. On the one hand, a minimal difference in self-efficacy or teaching time between new and more experienced teachers could show that the quality of graduates and initial teacher education are effectively preparing new teachers for the rigours of classroom teaching. On the other hand, a minimal difference could highlight a lack of effective professional learning and constructive appraisal and feedback received by more experienced teachers. If teachers are truly working in schools that are 'learning organisations' then should we expect a large difference in self-efficacy and teaching time between new and more experienced teachers? If so, how large should these differences be? This report does not make assumptions about these questions but does attempt to highlight the multiple policy implications that can be drawn from the data.

TIME SPENT TEACHING

New teachers spent a smaller proportion of their time on actual teaching than their more experienced peers: On average[1], less than three-quarters of new teachers' classroom time was spent on actual teaching and learning. The main reason for this is the greater percentage of class time that new teachers spent on keeping order in the classroom. On average, 18% of new teachers' class time was spent trying to keep order in classrooms compared to 13% for more experienced teachers. Unfortunately, some new teachers are clearly struggling to provide

effective instruction in their classrooms. On average, one-quarter of new teachers spent one-quarter of class time keeping order amongst their students. In addition, 10% of new teachers spent at least 40% of their class time keeping order in the classroom. Obviously, this results in significant reductions in effective teaching and learning for students.

DEVELOPMENT NEEDS

New teachers are aware of their shortcomings and reported that they had strong developmental needs in these areas. In general, new teachers had greater developmental needs compared with more experienced teachers, particularly to develop skills to create more teaching and learning time in class. On average, nearly one-third of new teachers reported that they had a high level of need for professional development for effectively addressing student discipline and behaviour problems. In addition, 25% of new teachers reported that they had a high level of need for professional development to improve their classroom management skills, compared to 12% of more experienced teachers.

Despite these differences, in most countries, new teachers assumed virtually the same responsibilities as more experienced teachers in schools. On average, new teachers spent slightly more time on lesson planning and slightly less time teaching students and performing administrative duties, but the magnitude of these differences is, in most countries, small.

The small size of these differences in teaching duties is important considering that new teachers report lower levels of self-efficacy and actual teaching and learning in their classes. If a school (or a school system) is trying to maximise the effectiveness of its teaching, it would have its more effective teachers spending more time teaching. Instead, there is little job differentiation between new and more experienced teachers. In most countries, teachers were likely to have spent similar amounts of time teaching in the first year of their careers as they were in the last. If addressed, this small difference could offer significant opportunities for improved school effectiveness.

In general, new teachers were less likely to have undertaken professional development in the 18 months prior to the TALIS survey. This may be partly due to the fact that a number of new teachers had not yet been in their jobs for the 18 months prior to the TALIS 2008 survey. However, of those teachers who participated in professional development, the intensity of participation was slightly greater for those who were newer to the profession.

Importantly, new teachers considered their professional development to have a large impact on their development as a teacher. This is encouraging news for the resources invested in professional development and provides a rationale for further investments in the development of new teachers.

Problems with classroom management did not appear to result in substantially different teaching practices. As with more experienced teachers, structured teaching practices were used more frequently by new teachers than student-oriented and activity enhanced teaching practices. There were few differences between new and more experienced teachers in their use of these practices in any TALIS 2008 country.

Greater differences were found in the teaching beliefs of new compared to more experienced teachers. The endorsement of constructivist (e.g. emphasis on teacher's role as a facilitator of

active learning by students who seek out solutions for themselves) over direct transmission beliefs (e.g. emphasis on teachers' role in transmitting knowledge and providing correct solutions) about effective instruction is, in most TALIS 2008 countries, more pronounced amongst new teachers.

Most new teachers worked in schools with mentoring or induction programmes. This may be a valuable source of professional learning for some new teachers who report lower levels of self-efficacy and reduced effective teaching time in their classes.

However, these programmes may not be providing new teachers with the support and feedback they require. New teachers who worked in schools with induction or mentoring programmes were not more likely to receive more frequent appraisal and feedback than other new teachers. In fact, of the new teachers who work in schools with such programmes, on average, nearly half report that the programmes do not facilitate regular feedback. Overall, there was little relationship between whether or not new teachers worked in schools with induction or mentoring programmes and various aspects of the appraisal and feedback they received.

APPRAISAL AND FEEDBACK

Given the benefits to teachers of constructive feedback based on an accurate appraisal of classroom teaching to improve teaching, it may be a concern for some countries that there is no relationship between mentoring and induction programmes and the amount of appraisal and feedback received by new teachers. Both mentoring and induction programmes can take many forms. Some will provide continual feedback and professional learning for new teachers, while others will focus more on 'introductory sessions' that explain the operation and layout of the school. Some may also focus more on professional development. Similarly, mentoring programmes may include one or just a few meetings, while others will provide continual engagement that helps new teachers succeed in their roles. The data indicate that most mentoring and induction programmes do not provide the regular feedback that can improve classroom teaching that new teachers consider beneficial.

Nearly nine in ten new teachers considered the appraisal and feedback they received to be a fair assessment of their work and helpful in their development as a teacher. This is encouraging for countries looking to further develop the effectiveness of new teachers and provide support for them in the beginning of their careers.

In addition, over one-quarter of new teachers strongly agreed that their appraisal and feedback was helpful in the development of their work compared to only 16% of more experienced teachers. Taking a school-wide perspective, nearly two-thirds of new teachers reported that a development or training plan is established to improve the work of teachers in their school.

It is also encouraging that new teachers considered that the appraisal and feedback they received had a positive impact on their job security and job satisfaction. While this was also true for more experienced teachers, the impact is larger for new teachers. Fifty-eight per cent of new teachers reported that the appraisal and feedback they received increased their job satisfaction (compared to 51% for more experienced teachers), and 43% reported that it increased their job security (compared to 33% for more experienced teachers).

This may also explain why more new teachers, particularly in some TALIS 2008 countries, considered that their school principal used effective methods to assess teachers' performances in their school.

New teachers were generally more favourable about their own appraisal and feedback. However, their perceptions of the significance and consequences (both positive and negative) stemming from appraisal and feedback in their school more generally were very different. Like all teachers, new teachers considered that there were substantial problems with the lack of recognition of effective and quality teaching, and there were few consequences for under-performing teachers. In a number of TALIS 2008 countries, new teachers had significantly poorer perceptions of the role of appraisal and feedback in their schools. New teachers were often more likely to report that teachers in their school would not be dismissed because of sustained poor performance. In addition, only just over a quarter of new teachers believed that they would receive any recognition if they improved the quality of their teaching or were more innovative in their classroom practices.

NOTE

1. Throughout this report, the average refers to the average across TALIS 2008 countries.

Chapter 1

Why are New Teachers Important?

The first chapter summarises the key policy issues around which this report is centred. These include discussions of new teachers and the schools in which they work, the support and development that new teachers receive and the work and the efficacy of new teachers. This introduction also describes the key features of the TALIS 2008 dataset, including the sampling used in TALIS and how this affects the analysis of new teachers that is discussed throughout the report. The background information provided in this chapter is particularly important given the implications for comparisons made between new and experienced teachers.

The quality of teaching received by students has the greatest impact on their education outcomes outside the impact of individual and family characteristics (Hanushek, 1992; Wright, Horn and Sanders 1997; Hanushek, Kain, and Rivkin, 1998; Hanushek, et al., 2005; Leigh, 2010). From a policy perspective, improving the quality of teachers and their teaching in schools is the most effective method to improve student outcomes (Leigh, 2010).

The effectiveness of teachers new to the profession is an important policy issue given the impact of teachers on student learning. However, greater experience in front of a classroom is often considered important to develop the skills required for effective teaching (OECD, 2005). Nevertheless, an effective school education system requires new teachers to provide high-quality education to students (OECD, 2009).

This report utilises the TALIS 2008 dataset to analyse key aspects of new teachers' work to inform policy development aimed at increasing the effectiveness of new teachers. The report is structured around four key policy issues:

1. New teachers and the schools in which they work
2. Support and development initiatives for new teachers
3. The work of new teachers
4. The efficacy of new teachers

These areas have been analysed because they are important to policy makers and are suitable issues to be analysed with the TALIS 2008 dataset.

Box 1.1 Technical notes on the analysis

TALIS average

The TALIS average presented in some tables of this report is calculated as the simple average of the individual estimates of the countries included in the table.

Construction of indices

This report uses several indices that were computed by combining questions from the TALIS 2008 background questionnaires. These indices were computed using factor analysis or item response theory. For example, to assess direct transmission beliefs about teaching, TALIS asked teachers to indicate how strongly they agreed with four statements (e.g. "Effective/good teachers demonstrate the correct way to solve a problem" or "A quiet classroom is generally needed for effective learning"). The response options were on a 4-point Likert scale, ranging from 1 = "strongly disagree" to 4 = "strongly agree". Then, a statistical factor analysis of the results revealed that responses to these statements were correlated in each country so that it was possible to summarise teachers' beliefs about direct transmission teaching in one index: Direct transmission beliefs. Unless otherwise specified, each index was calculated with equal contributions from all the participating countries. In order to make their interpretation easier, indices were standardised in such a way that the international mean equals zero and the international standard deviation equals one. In this way, negative scores indicate values below the international average and positive scores values above the international average.

…

For a detailed description of the methods used to construct and test the reliability of the specific indices used in this report, please see the TALIS 2008 Technical Report (OECD, 2010).

Use of sampling and replicate weights

Because of its complex sampling design, analyses on TALIS data must make use of sampling weights to produce estimates that can be generalised to the population they come from. Estimates presented in this report were calculated using the corresponding sampling weights included in the TALIS 2008 dataset. The sampling weight is the inverse of the probability of selection for the corresponding unit of analysis (teacher or school) and – *informally* – corresponds to the number of individuals in the population represented by each sample unit. Sampling weights are used so the weight of each unit can be expanded to represent as many units as necessary to obtain representative estimates. Teacher level statistics were calculated using the final teacher weights, and school level statistics were calculated using the final school weights. Final weights are calculated as the product of the inverse of the probability of selection of the corresponding unit, and the corresponding adjustment factors associated with each level. Detailed information on the procedures followed for the estimation of sampling weights can be consulted in the TALIS 2008 Technical Report (OECD, 2010).

TALIS 2008 followed a stratified two-stage sampling probability design. This means that teachers (second stage units) were randomly selected from the list of in-scope teachers within each of the randomly selected schools (first stage units). To account for the sampling error arising from this complex design, the Balanced Repeated Replication (BRR) method was used to estimate the sampling error of the estimates. Detailed information on the procedures followed for the calculation of BRR weights and their use to calculate sampling variance can be consulted in the TALIS 2008 Technical Report (OECD, 2010).

Rounding figures

All calculations performed for this report were conducted using maximum precision available. But because results presented are rounded, some totals may appear inconsistent. Standard errors in this publication have been rounded to two decimal places. Where the value 0.00 is shown, this only indicates that the actual unrounded value is smaller than 0.005.

Accuracy of estimations

In order to provide a measure of the accuracy of the information presented in this document, the coefficient of variation (CV) was calculated for each estimate. The CV is normally used to describe the precision of an estimate. It is calculated as the standard error of the estimate divided by the value of the parameter being estimated, and it is normally presented as the given ratio multiplied by 100. Lower CV's are associated with higher levels of precision. For the purpose of this report, CV cut-off points were established as follows: for CV's equal to 0.0 to 16.5%, estimates can be considered for unrestricted interpretation; for CV's greater than 16.5% and up to 33.3%, estimates can be considered for unrestricted interpretation, but with caution because of the high sampling variability associated with the estimates (in this report, values in this range are presented in shaded cells); for CV's greater than 33.3%, estimates should not be interpreted (in this report, the cells for estimates with such high CV are left blank).

Further documentation

For further information on TALIS 2008 documentation, instruments and methods see the TALIS Technical Report (OECD, 2010) and the TALIS website (*www.oecd.org/edu/TALIS*).

This first chapter discusses the key features of this dataset, the sampling used in TALIS and how this affects the analysis of new teachers discussed in this report. This is particularly important given the implications for comparisons made between groups of teachers.

Chapter 2 examines new teachers and where they work. This focuses on three key areas that affect the working lives of teachers and their ability to provide effective instruction. First, the socio-economic characteristics of students in the schools where new teachers work are examined. It should be noted, that these data were collected from teachers and school principals rather than administrative data or from the students themselves. Related results should therefore be treated with some caution in this report.

School resources can impact new teachers' ability to provide effective teaching to their students and represent the second key area discussed in Chapter 2. A particular focus is given to the materials available to schools and any shortages of personnel that can hinder instruction. These factors can be linked to school and classroom climate which is the third key area discussed in Chapter 2. This includes an analysis of teacher-student relationships, and teachers' morale and co-operation.

Support and development for new teachers is examined in Chapter 3. It is a central policy issue for many countries and covers various aspects of both more traditional professional development and school-based teacher development. This chapter analyses the appraisal and feedback received by new teachers. This includes the frequency of teacher appraisal and feedback, its focus, and its impact on the teaching of new teachers. A discussion is also presented of new teachers' impressions of appraisal and feedback mechanisms in their school. Mentoring and induction programmes in schools are then discussed with an emphasis on their possible impact on new teachers.

The professional development undertaken by new teachers is also discussed in Chapter 3. Analysis is presented on the amount and type of professional development undertaken. The impact of this professional development is then discussed. Considerable discussion is also devoted to new teachers' professional development needs. This is an important aspect of this policy issue given the resources devoted to the provision of professional development in many countries. As with all of these policy issues, considerable analysis is devoted to the reports of new teachers compared to more experienced teachers.

The work of new teachers is presented in Chapter 4. The teaching practices of new teachers are also examined along with the intensity of their professional collaboration. This discussion is followed by analysis of new teachers' professional collaboration. A discussion of the teaching beliefs of new teachers is also presented in Chapter 4. Again, important comparisons with more experienced teachers are emphasised. The work and teaching load of new teachers is then presented, along with an analysis of new teachers' contractual status and job satisfaction. These are important policy issues in a number of countries where there is concern about the negative impacts of fixed-term contracts for new teachers (OECD, 2005).

The efficacy of new teachers is discussed in Chapter 5. Efficacy is measured only in terms of teachers' self-reports. Self-efficacy reports encompass a number of aspects of teaching such as teachers' reports of their success with their students. The TALIS survey programme includes no external judgement of individual teachers' effectiveness.

An important aspect of effective classroom teaching is time-on-task. The amount of classroom time spent on teaching and learning is also discussed in Chapter 5. Again, comparisons between new and more experienced teachers are emphasised. The percentage of time new teachers spent on effective teaching and learning in their classes is contrasted with the time devoted to administrative duties and keeping order in the classroom.

Finally, policy implications derived from the analyses presented in previous chapters are outlined in Chapter 6.

Much of the analyses presented in this report compare the experiences, beliefs and reports of new teachers compared to more experienced teachers. These comparisons are made in all sections of this report to better illustrate the specific circumstances that confront new teachers and how this impacts their teaching. Some caution should be taken in interpreting comparisons of the reports of new and more experienced teachers as these often reflect differences in teachers' perception or expectations and may not reflect actual differences in the classroom. However, these differences remain important and worthy of attention because teachers' perceptions exert an important influence on their work in the classroom.

THE TALIS PROGRAMME

The OECD's Teaching and Learning International Survey (TALIS) is an international survey focused on the working conditions of teachers and the learning environment in schools. Its main objective is to help countries to review and develop policies that foster the conditions for effective schooling.

TALIS focuses on lower secondary education (level 2 of the 1997 revision of the International Standard Classification of Education, ISCED 97) teachers and the principals of their schools and seeks to provide data relevant to policy on the role and functioning of school leadership; how teachers' work is appraised and the feedback they receive; teachers' professional development; and teachers' beliefs and attitudes about teaching and their pedagogical practices.

Box 1.2 TALIS 2008 international sampling and operational parameters

- **International target population:** lower secondary education teachers and the principals of their schools.
- **Sample size:** 200 schools per country, 20 teachers in each school.
- **Within school samples:** representative samples of schools and teachers within schools.
- **Target response rates:** 75% of the sampled schools (school considered responding if 50% of sampled teachers respond), aiming for a 75% response from all sampled teachers in the country.
- **Questionnaires:** separate questionnaires for teachers and principals, each requiring around 45 minutes to complete.
- **Mode of data capture:** questionnaires filled in on paper or on line.
- **Survey windows:** October-December 2007 for Southern Hemisphere countries and March-May 2008 for Northern Hemisphere countries.

TALIS is a collaborative effort by member and partner countries of the OECD. This thematic report is based on the results from the first cycle of TALIS, which was implemented in 2007-08. The following 23 countries participated in TALIS 2008: Australia, Austria, Belgium (Fl.), Brazil, Bulgaria, Denmark, Estonia, Hungary, Iceland, Ireland, Italy, Republic of Korea, Lithuania, Malaysia, Malta, Mexico, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain and Turkey.[1]

The international sampling and operational parameters are shown in Box 1.2. Further details about the population surveyed and sampling options, including teacher and school participation rates by country can be consulted in the TALIS 2008 International Report (OECD, 2009).

The definition of teachers of ISCED level 2 adopted by TALIS 2008 is "...those who, as part of their regular duties, provide instruction in programmes at ISCED level 2" (OECD, 2009:20). Teachers in the schools sampled who teach a mixture of programmes at different levels, including ISCED 2 programmes, were included in the target population.

TALIS 2008 provides representative samples of teachers in ISCED Level 2 in each country; therefore the sample size of new teachers in each country reflects the number of new teachers teaching ISCED level 2 students. Finally, even when the survey does not consider teachers' length of tenure as a stratification variable in the sample design, the number of new teachers in each country (see Table 1.1 and Table 1.A.1 in Annex 1.A) allows for meaningful comparisons between new and experienced teachers. However, in particular countries these results should be interpreted with some caution.

Table 1.1

Percentage of new teachers, with two years or less of work experience, and experienced teachers

	New teachers			Experienced teachers		
	n	%	(S.E.)	n	%	(S.E.)
Australia	237	11.3	0.85	2 010	88.7	0.85
Austria	192	4.4	0.40	4 021	95.6	0.40
Belgium (Fl.)	317	8.5	0.76	3 133	91.5	0.76
Brazil	429	9.6	0.77	5 366	90.4	0.77
Bulgaria	142	5.9	0.69	3 641	94.1	0.69
Denmark	154	9.5	0.84	1 558	90.5	0.84
Estonia	200	6.4	0.51	2 922	93.6	0.51
Hungary	99	5.7	1.76	2 826	94.3	1.76
Iceland	227	16.7	0.99	1 135	83.3	0.99
Ireland	156	7.1	0.60	2 056	92.9	0.60
Italy	300	5.9	0.51	4 913	94.1	0.51
Korea	191	6.5	0.70	2 763	93.5	0.70
Lithuania	163	4.8	0.48	3 331	95.2	0.48
Malaysia	417	9.7	0.63	3 811	90.3	0.63
Malta	157	12.8	1.00	985	87.2	1.00
Mexico	225	8.7	1.05	3 096	91.3	1.05
Norway	194	7.8	0.80	2 219	92.2	0.80
Poland	253	7.8	0.64	2 908	92.2	0.64
Portugal	130	3.7	0.34	2 910	96.3	0.34
Slovak Republic	218	7.7	0.82	2 912	92.3	0.82
Slovenia	193	6.2	0.45	2 855	93.8	0.45
Spain	187	5.8	0.49	3 153	94.2	0.49
Turkey	372	18.0	1.85	2 824	82.0	1.85
TALIS average		8.3	0.18		91.7	0.18

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932577935

WHO ARE NEW TEACHERS?

Teachers with two years or less of teaching experience have been categorised as new teachers in this report. This provides the most comprehensive analysis possible of the issues facing teachers at the early stages of their careers.

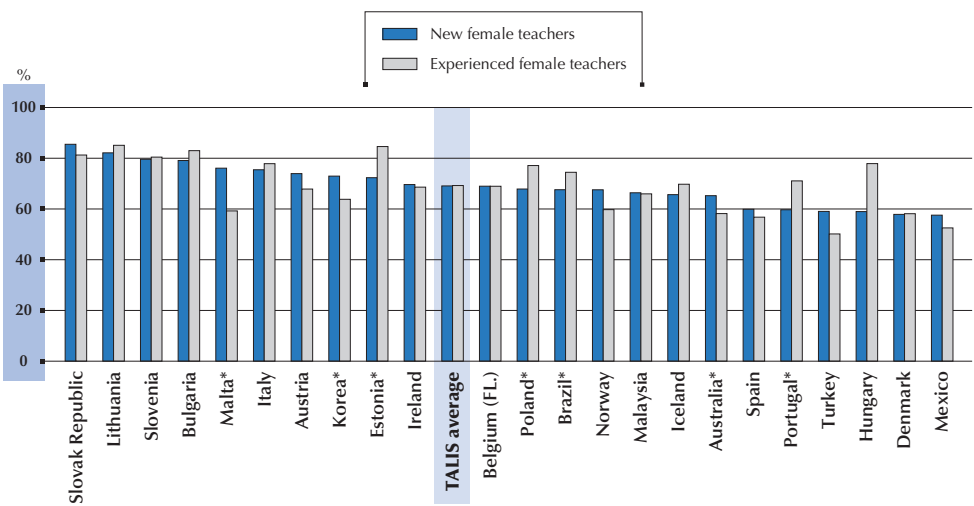
In deciding on this categorisation, it was important to consider the issues and policy focus of an analysis of new teachers (this is discussed further in Chapter 2), and the various sample size issues required for quantitative analysis of international survey data.

The TALIS dataset distinguishes between teachers in their first year of teaching, and those with experience of 1-2 years, 3-5 years and additional categories leading up to teaching experience of 20+ years.

In many respects, it would be most interesting to focus on teachers in their first year of teaching, particularly if the policy focus was on the preparedness of teachers after their initial education. However, an insufficient sample size prevents meaningful analysis of teachers in their first year of teaching. On average across TALIS 2008 countries, only 3% of teachers were in their first year of teaching.

Figure 1.1

Percentage of new and experienced female teachers



Countries are ranked in descending order based on the percentage of female new teachers.
Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577631

A focus on teachers with two years or less of teaching permits greater analysis of the impact of development initiatives in schools to assist new teachers. On average, eight percent of teachers had two years or less of teaching. The sample size could have been increased further if teachers with 3-5 years of experience were included in the analysis. However, it was considered that

teachers with this much experience should not be considered "new" teachers (see Gordon, Kane and Staiger, 2006). Moreover, the objective of this report is to focus on issues specific to new teachers such as their development and how they manage the new challenges of classroom teaching. It was considered that these challenges would be different for teachers with two years or less of teaching compared with teachers who have five years of experience of classroom teaching.

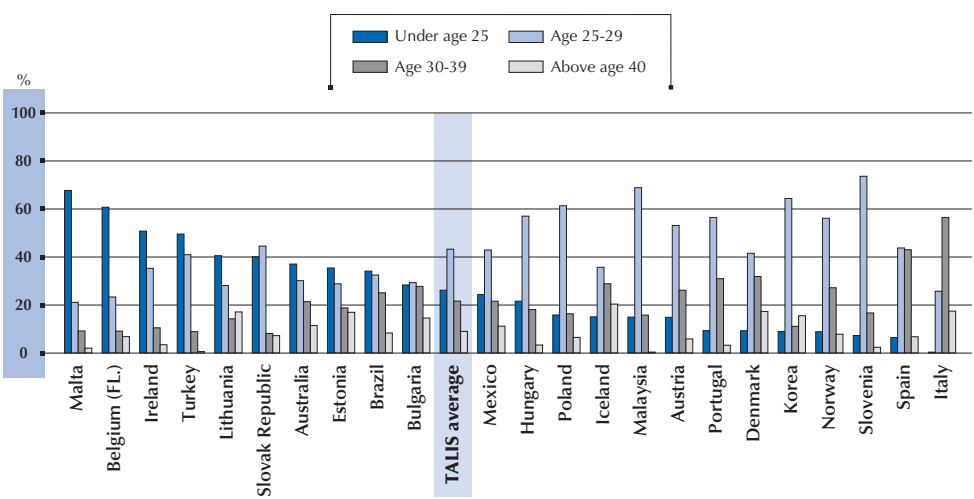
The sample size of new teachers, particularly in some countries, is an important issue to consider in the analysis of new teachers, particularly when compared with more experienced teachers. As mentioned previously, some caution must be taken in drawing conclusions about the data, and the impact such conclusions would have on school education in a country.

Like more experienced teachers, new teachers are predominantly female (Figure 1.1 and Table 1.A.2). On average, 69% of new teachers were female. This gender disparity is most pronounced in the Slovak Republic where 85% of new teachers were female. Given that concerns over gender inequality in the teaching professions have existed for some time (OECD, 2005), it is a concern that there is no gender equality across new teachers in any TALIS 2008 country. There has been, however, a notable reduction in the gender inequality between more experienced teachers and new teachers in Brazil, Estonia, Poland and Portugal.

On average, one-quarter of new teachers were under 25 years of age and 69% are under 30 years of age. But there is substantial variation across countries. In Belgium (Fl.), Ireland, Malta, and Turkey at least 50% of new teachers were under 25 years of age, while in Iceland 20% of new teachers were at least 40 years of age (Figure 1.2 and Table 1.A.3).

Figure 1.2

Percentage of new teachers by age groups



Countries are ranked in descending order based on the percentage of new teachers under 25 years of age.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577650

THE IMPORTANCE OF NEW TEACHERS

Most of us who have been through school education can remember the teacher who made the biggest impact upon us, the teacher that inspired us and those who were fundamental to our learning and development. It should come as no surprise then, that the biggest influence on student outcomes (outside of family and background characteristics) is the effectiveness of teaching that students receive (OECD, 2005).

Various education policies and programmes can influence student outcomes, but improving teacher effectiveness will have the largest influence on student achievement. In the context of this report, the policy focus is on improving the working lives and effectiveness of new career teachers.

There is considerable evidence that what teachers know and do both have a large impact on students (Aaronson, Barrow and Sander, 2007; Hanushek, 1992; Hanushek, et al., 1998; Hanushek, et al., 2005; Murnane, 1975; Nye, Konstantopoulos, and Hedges, 2004; Rockoff, 2004; Wright, et al., 1997). In Australia, Leigh (2010) found that a student with a highly effective teacher (as measured by a value-added metric[2]) could achieve in three-quarters of a year what a student with a less effective teacher could in a full year. Similar studies found that a student who spent a semester with a teacher who had been rated two standard deviations higher in quality could add 0.3 to 0.5 grade equivalents (or between 25% to 45 % of an average school year) to the student's maths scores (Aaronson, et al., 2007). Similar findings are evident in Rockoff (2004) and Hanushek, et al. (2005).

An effective school education system requires new teachers to provide high-quality education to students (OECD, 2009). However, in some instances more experienced teachers have been found to be more successful at raising student achievement. But this varies with the length of tenure and the circumstances in which new and experienced teachers work (see Rockoff, 2004; Rivkin, Hanushek and Kain, 2005; or Clotfelter, Ladd and Vigdor, 2007).

Policy makers in all countries are concerned that new teachers are able to provide the quality of teaching required for an effective school education system (OECD, 2005).

Greater experience in front of a classroom is often considered important to develop the skills required for effective teaching (OECD, 2005). However, the number of months or years required to achieve higher quality teaching is not well known, nor is the point at which diminishing returns become a factor. For example, a teacher with two years of experience may be more effective than a teacher on his or her first day of school but less effective than a teacher with four years of experience. However, some research has shown that teachers with extensive tenure may be less effective as they become less interested and somewhat jaded with their careers (OECD, 2005). Therefore, a teacher with four years of experience may be more effective than teachers at the end of their careers (*e.g.* a teacher of 60+ years of age with 30+ years of experience).

Research into teachers' effectiveness in the early years of their careers emphasises the importance of teachers' initial year of teaching. Gordon, et al. (2006) showed that there are much larger increases in teachers' effectiveness between the first and second year of their careers than increases between teachers' second and third years of teaching. The gains made in these years

are larger than subsequent years. Moreover, it appears that differences in teachers' effectiveness do not reduce over time. Teachers who are less effective don't appear to catch-up to their more effective counterparts as they progress through their careers. In fact, Gordon, et al. (2006) show that teachers who are more effective in their first year of teaching tend to progress at a faster rate than their less effective colleagues. The early experience of teachers therefore shapes their development, not only influencing their effectiveness in their initial years but their effectiveness throughout their careers.

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NOTES

1. TALIS 2008 was also conducted in the Netherlands but as the required sampling standards were not achieved, their data are not included in the international comparisons.

2. The value-added metric is a measure of a school or teacher's impact on students' yearly academic growth (i.e. test score increase). The value-added metric attempts to account for factors outside of a school's control that might be having an impact on student performance (e.g. student's prior level of performance or family socio-economic status) in order to isolate the school or teacher's impact on student academic growth.

Annex 1.A
Key Tables on Teacher Characteristics

Table 1.A.1

Working experience as a teacher in years

Percentage of teachers of lower secondary education with the following characteristics

	This is my first year			1-2 years			3-5 years			6-10 years		
	n	%	(S.E.)	n	%	(S.E.)	n	%	(S.E.)	n	%	(S.E.)
Australia	109	5.2	0.57	128	6.1	0.66	312	13.1	0.79	355	15.3	0.93
Austria	82	1.9	0.23	110	2.5	0.29	258	5.8	0.42	424	9.4	0.59
Belgium (Fl.)	141	3.6	0.55	176	4.9	0.48	506	14.8	0.77	688	20.2	1.02
Brazil	150	3.9	0.46	279	5.7	0.49	820	15.7	0.77	1 304	22.9	1.03
Bulgaria	61	2.7	0.52	81	3.2	0.33	266	7.5	0.51	406	9.7	0.74
Denmark	51	2.9	0.47	103	6.6	0.65	272	16.1	1.00	307	19.0	1.22
Estonia	86	2.7	0.29	114	3.6	0.39	293	9.1	0.59	358	11.6	0.60
Hungary	42	2.4	0.54	57	3.4	1.46	211	8.7	0.72	355	13.2	1.31
Iceland	123	9.1	0.79	104	7.7	0.68	221	16.3	0.94	265	19.2	0.98
Ireland	78	3.5	0.43	78	3.6	0.38	288	13.2	0.82	417	19.8	0.84
Italy	115	2.3	0.32	185	3.6	0.32	369	7.3	0.55	676	12.5	0.59
Korea	51	1.8	0.27	140	4.7	0.58	365	12.8	0.84	408	13.4	0.80
Lithuania	65	2.0	0.29	98	2.8	0.33	219	6.3	0.54	430	11.3	0.64
Malaysia	215	5.3	0.49	202	4.4	0.37	639	14.9	0.66	966	22.1	0.75
Malta	76	6.1	0.79	81	6.7	0.83	158	13.4	1.23	306	27.8	1.51
Mexico	69	2.8	0.36	156	6.0	0.83	374	11.1	0.88	558	16.6	0.83
Norway	78	3.1	0.49	116	4.7	0.47	242	9.7	0.68	526	22.0	0.73
Poland	98	3.1	0.39	155	4.7	0.47	371	11.7	0.67	654	20.3	0.95
Portugal	36	1.1	0.25	94	2.6	0.28	238	6.4	0.58	582	17.2	0.95
Slovak Republic	97	3.5	0.42	121	4.2	0.57	377	12.6	0.91	509	16.5	0.88
Slovenia	56	1.9	0.30	137	4.4	0.37	361	11.4	0.63	455	15.5	0.84
Spain	59	1.9	0.37	128	3.9	0.31	321	10.5	0.49	590	17.9	0.87
Turkey	171	6.9	0.91	201	11.0	1.63	641	23.1	2.32	884	27.6	1.84
TALIS average		3.5	0.10		4.8	0.14		11.8	0.18		17.4	0.20

	11-15 years			16-20 years			More than 20 years		
	n	%	(S.E.)	n	%	(S.E.)	n	%	(S.E.)
Australia	270	11.6	0.79	289	13.3	0.82	784	35.4	1.33
Austria	441	10.3	0.61	554	13.0	0.55	2 344	57.2	1.17
Belgium (Fl.)	491	14.2	0.83	261	8.2	0.58	1 187	34.0	1.09
Brazil	1 139	17.8	0.84	864	14.6	0.76	1 239	19.3	1.00
Bulgaria	547	15.0	0.88	512	13.8	1.20	1 910	48.0	1.53
Denmark	207	11.9	0.95	91	5.0	0.58	681	38.5	1.38
Estonia	405	12.7	0.65	460	14.6	0.80	1 406	45.6	1.09
Hungary	351	12.2	0.72	419	12.9	0.75	1 490	47.4	1.41
Iceland	193	14.1	1.03	144	10.5	0.80	312	23.2	1.06
Ireland	280	13.1	0.79	263	11.5	0.80	808	35.3	1.35
Italy	480	9.7	0.52	577	11.3	0.67	2 811	53.4	1.10
Korea	337	11.1	0.60	662	22.4	0.90	991	33.9	1.12
Lithuania	542	14.9	0.68	499	13.9	0.69	1 641	48.8	1.22
Malaysia	917	22.2	0.74	590	15.0	0.68	699	16.1	0.68
Malta	209	19.5	1.28	103	9.2	0.76	209	17.4	1.29
Mexico	508	14.5	0.84	516	14.9	1.05	1 140	34.2	1.63
Norway	320	13.2	0.79	187	8.2	0.64	944	39.1	1.49
Poland	478	14.4	0.72	475	15.2	0.62	930	30.7	0.97
Portugal	803	27.1	1.12	561	19.5	0.79	726	26.1	1.60
Slovak Republic	404	12.0	0.70	324	9.7	0.74	1 298	41.5	1.41
Slovenia	349	11.2	0.68	310	10.1	0.62	1 380	45.4	1.13
Spain	474	14.4	0.56	551	16.2	0.74	1 217	35.2	1.36
Turkey	516	12.3	1.02	257	7.1	0.61	526	12.0	1.26
TALIS average		14.3	0.17		12.6	0.16		35.5	0.26

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577954

Table 1.A.2

Percentage of new and experienced female teachers

	New female teachers		Experienced female teachers	
	%	(S.E.)	%	(S.E.)
Australia	65.2	3.23	58.2	1.21
Austria	73.9	3.45	67.8	0.76
Belgium (FL.)	69.0	2.83	69.0	1.60
Brazil	**67.6**	2.53	**74.5**	1.07
Bulgaria	79.1	4.06	83.0	1.13
Denmark	57.9	3.53	58.1	1.33
Estonia	**72.3**	2.90	**84.6**	0.56
Hungary	59.0	11.26	77.9	0.83
Iceland	65.7	3.26	69.8	1.55
Ireland	69.6	3.71	68.6	1.25
Italy	75.5	2.55	77.9	0.70
Korea	**72.9**	3.75	**63.8**	1.42
Lithuania	82.1	3.57	85.1	0.64
Malaysia	66.4	2.44	66.0	1.03
Malta	**76.1**	3.32	**59.2**	1.86
Mexico	57.6	3.76	52.5	1.30
Norway	67.6	4.27	59.7	1.02
Poland	**67.9**	3.19	**77.1**	0.68
Portugal	**59.7**	5.03	**71.1**	0.98
Slovak Republic	85.5	2.47	81.3	0.86
Slovenia	79.6	3.20	80.4	0.68
Spain	59.9	4.07	56.8	1.09
Turkey	59.0	5.28	50.2	2.50
TALIS average	69.1	0.87	69.2	0.25

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932577973

Table 1.A.3

Percentage of new teachers by age groups

	Under 25		25 - 29		30 - 39		40 +	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	37.0	3.31	30.1	3.60	21.4	3.27	11.4	2.23
Austria	14.9	2.46	53.1	3.61	26.2	3.31	5.9	1.94
Belgium (FL.)	60.7	3.48	23.3	2.72	9.1	1.55	6.8	1.43
Brazil	34.1	3.82	32.5	3.24	25.1	2.92	8.3	1.42
Bulgaria	28.4	8.60	29.3	7.95	27.8	10.16	14.6	5.99
Denmark	9.3	2.38	41.5	3.85	31.9	4.12	17.3	3.01
Estonia	35.4	4.24	28.8	3.31	18.8	2.88	17.0	2.80
Hungary	21.6	3.59	57.0	3.75	18.1	2.95	3.3	2.35
Iceland	15.1	2.59	35.7	3.17	28.9	2.86	20.4	2.79
Ireland	50.8	4.18	35.3	3.36	10.5	2.61	3.5	1.57
Italy	0.4	0.37	25.7	2.59	56.5	2.62	17.4	2.48
Korea	9.0	2.08	64.4	3.26	11.1	2.38	15.5	2.49
Lithuania	40.5	4.62	28.1	3.92	14.2	3.30	17.1	3.44
Malaysia	15.0	2.64	68.8	2.37	15.8	2.42	0.4	0.29
Malta	67.7	4.29	21.1	3.14	9.2	2.90	2.0	1.00
Mexico	24.3	4.33	42.9	4.00	21.6	2.69	11.2	3.01
Norway	8.9	2.24	56.1	3.94	27.2	3.86	7.8	1.72
Poland	15.8	2.69	61.3	3.35	16.3	3.33	6.5	1.65
Portugal	9.3	3.18	56.4	4.52	31.0	4.66	3.3	1.91
Slovak Republic	40.1	4.06	44.5	4.20	8.1	2.18	7.3	2.65
Slovenia	7.3	2.01	73.6	3.59	16.7	3.05	2.4	1.28
Spain	6.5	2.55	43.8	3.47	43.0	3.32	6.8	1.81
Turkey	49.5	6.88	40.9	5.43	8.9	2.78	0.6	0.57
TALIS average	26.2	0.81	43.2	0.82	21.6	0.77	9.0	0.51

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932577992

CHAPTER 2

The Schools where New Teachers Work

The conditions in which new teachers are working and the schools in which new teachers work have an impact on teachers' ability to provide effective instruction. This chapter examines issues such as classroom climate, the socio-economic characteristics of students in these schools, as well as the materials and personnel resources available to these schools. The socio-economic characteristics of students in these schools are also discussed as well as the materials and personnel resources available to these schools. Comparisons are made between the school conditions facing new teachers and the schools in which more experienced teachers are working.

Highlights

- **New and more experienced teachers work in similar schools**
  Despite some research leading to a widespread belief that new teachers work in harder conditions (or harder-to-staff schools), on average across TALIS 2008 countries, new teachers report that their students have similar language and socio-economic backgrounds to the students of more experienced teachers.

  New teachers also work in schools with similar material and personnel resources, measured by their impact on teaching and learning.

- **New teachers have poorer classroom climate**
  Although new teachers are more likely to have slightly smaller classes than more experienced teachers, in all but four countries new teachers reported significantly poorer levels of classroom climate than more experienced teachers. This may reflect general problems in classroom teaching incurred by new teachers, who also reported a greater need for professional development in classroom management and more class time being lost to factors such as student disruptions.

New teachers are confronted with additional challenges and demands when appointed to schools that have limited resources, show a problematic school climate or where the number of students that have a disadvantaged background is relatively high.

This chapter describes selected aspects of schools in which new teachers work. These aspects include measures of the socio-economic background of students and information on school resources and school climate.

A key issue in many countries is the distribution of teachers across different schools and parts of the school education system. Two areas of research show that there can be substantial consequences for equity in school education if new teachers are less effective. First, new teachers have been found to be more likely to be working in low-SES (socio-economic status) schools or schools considered to be more challenging for teachers (Krei, 1998; Lankford, Loeb and Wyckoff, 2002; OECD, 2005). In addition, teacher effectiveness has been found to vary more in schools with greater proportions of students from low socio-economic backgrounds (Nye, et al., 2007). Schools with high proportions of low-SES students often struggle to recruit and retain high quality teachers attracted by higher salaries and better conditions in high-SES schools (Krei, 1998; Lankford, et al., 2002). To counter this, some education systems have offered incentives to attract teachers – and often more effective teachers – to low-performing or low-SES schools (OECD, 2005).

Second, more effective teachers can have a greater impact on low-SES and low-performing students compared to their impact on high-SES and high-performing students (Aaronson, et al., 2007). Therefore, the distribution of teachers may result in a less effective school education system if new teachers are working in the most challenging schools.

SCHOOL RESOURCES AND THE SOCIO-ECONOMIC BACKGROUND OF STUDENTS

TALIS 2008 asked school principals to indicate the extent to which the school's capacity to provide instruction was hindered by various resource issues. The responses were summarised into two indices measuring the extent to which instruction was hindered by a lack of resources: *index of lack of personnel* and *index of lack of materials* (OECD, 2009). The questionnaire items comprising these indices are as follows:

- *index of lack of materials:* Shortage or inadequacy of instructional materials (e.g. textbooks), shortage or inadequacy of computers for instruction, shortage or inadequacy of other equipment, and shortage or inadequacy of library materials;
- *index of lack of personnel:* lack of qualified teachers, lack of laboratory technicians, and lack of instructional support personnel.

Each index was calculated with an international mean of zero and a standard deviation of one (see OECD, 2010 for full details about the construction of indices).

TALIS 2008 data do not support the contention that new teachers work in more challenging or harder-to-staff schools. On average, there is no significant difference between new and more experienced teachers in terms of their principal's reported lack of school's materials or personnel resources (Table 2.A.1).

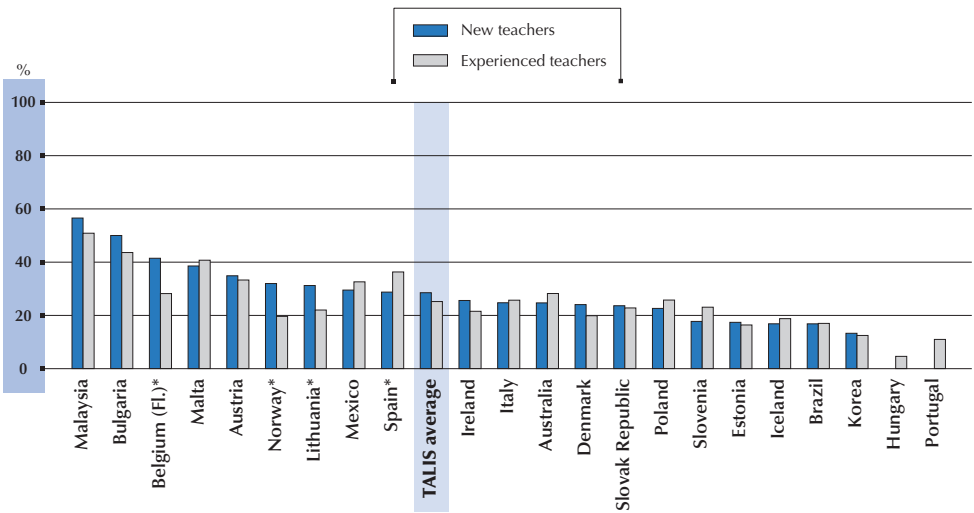
To help describe the socio-economic background of students in schools where new teachers work, TALIS collected self-reported data on the diversity of students' language backgrounds. Teachers reported the number of ISCED level 2 students with migration background – as indicated by students' first language other than the language of instruction – in a particular class (Table 2.A.2).

On average, there was no significant difference in the language background of the students of new and more experienced teachers. In all but four countries, new and more experienced teachers were teaching students with similar variations in language backgrounds (Figure 2.1).

However, new teachers in Belgium (Fl.), Lithuania, and Norway were significantly more likely to teach classes with greater variation in students' first language than more experienced teachers. In Spain, experienced teachers were significantly more likely to teach these classes.

Figure 2.1

Percentage of teachers who report that the first language of more than 10% of their students is different from the language of instruction



Countries are ranked in descending order based on the percentage of new teachers who report that the first language of more than 10% of their students is different from the language of instruction.
Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

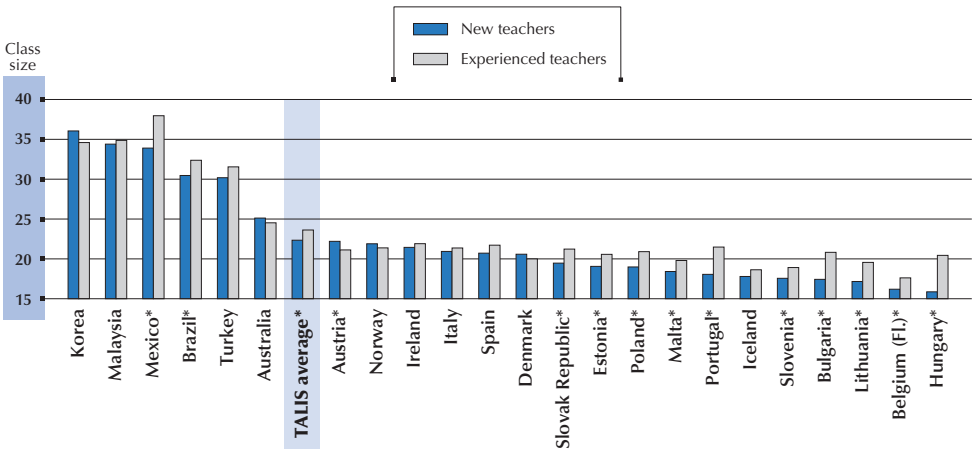
StatLink http://dx.doi.org/10.1787/888932577669

Small differences were also evident in the reports of new and experienced teachers regarding their students' parental education background. On average, new teachers were slightly more likely than experienced teachers to report that their students have higher educated parents (Table 2.A.3). However, this difference is not quantitatively large. There were some larger differences in particular countries (*e.g.* Ireland and Mexico) but in general, new teachers were teaching students with similar levels of familial human-capital to more experienced teachers.

Similarly, the results displayed in Figure 2.2 suggest that experienced teachers tend to teach in larger classes, but the amount of this disparity is not quantitatively large in most cases. Countries with the largest differences are Hungary and Mexico. In Hungary, new teachers report class sizes of 16 compared to 20 students for more experienced teachers and in Mexico, new teachers report class sizes of 34 compared to 38 for more experienced teachers (Table 2.A.4).

Figure 2.2

Average class size of a randomly selected class taught by new and experienced teachers



Countries are ranked in descending order based on new teachers' class size.
Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577688

These are interesting findings in the context of previous research that has highlighted that new teachers were often more likely to teach in low-SES schools and those that have difficulty attracting experienced teachers (OECD, 2005). It should be borne in mind that this is not administrative data, nor is it collected from students or their parents. Instead, teachers were asked to make their own estimations, which may have introduced some measurement error to the data.

CLASSROOM CLIMATE

It is known from research on the effectiveness of schools (Teddlie and Reynolds, 2000; Townsend, 2007), that the quality of the learning environment is the factor affecting student learning and outcomes that is most readily modified. For this reason it was interesting to examine the differences between the school and classroom climate in which new and experienced teachers work. To describe the classroom level environment, TALIS 2008 created the *index of classroom disciplinary climate*. This index is formed by items such as "When the lesson begins, I have to wait quite a long time for students to quieten down", or "Students in this class take care to create a pleasant learning atmosphere".[1]

In all but four countries, new teachers reported significantly poorer levels of classroom climate than more experienced teachers (Table 2.A.5). This may reflect general problems in classroom teaching incurred by new teachers, who also reported a greater need for professional development in classroom management and more class time being lost to factors such as student disruptions. These differences may be due to new teachers teaching classes with more disruptive students. TALIS data does not identify the number of disruptive students in a class. However, TALIS has some data on the SES of students that has been shown to be correlated with disruptive behaviour (Ma and Wilms, 2004). The TALIS data shows that new and more experienced teachers report similar levels of the socio-economic background of their students (Table 2.A.2 and Table 2.A.3[2]).

It is plausible that the lower levels of classroom climate, combined with the greater losses in time spent on effective teaching and learning reflect the greater need for new teachers to develop these skills. If so, it would indicate that these practical skills are not developed sufficiently in teachers' initial education. This would also help explain the higher reported level of need for professional development in classroom management practices of new teachers. It may also spur policy makers to examine whether initial education institutions have correctly emphasised both the theoretical and practical classroom practices required for effective teaching

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NOTES

1. When necessary, items were inverted for scaling, so that high scores indicate a positive classroom disciplinary climate and low scores a negative climate.

2. It should be noted that the student background data in TALIS are teachers' reports of student characteristics and may differ from the actual student characteristics.

Annex 2.A
Key Tables on School Environments

Table 2.A.1

Reported lack of materials and personnel by principals of schools where new and experienced teachers work

	Lack of materials				Lack of personnel			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)
Australia	-0.5	0.11	-0.5	0.09	-0.11	0.14	-0.2	0.09
Austria	**-0.3**	0.10	**-0.6**	0.06	0.47	0.10	0.5	0.05
Belgium (Fl.)	-0.5	0.08	-0.5	0.08	-0.34	0.09	-0.4	0.07
Brazil	0.4	0.09	0.3	0.06	0.49	0.13	0.4	0.07
Bulgaria	0.5	0.21	0.2	0.10	-0.67	0.11	-0.8	0.06
Denmark	**-0.7**	0.11	**-0.4**	0.10	-0.75	0.08	-0.7	0.06
Estonia	0.0	0.10	0.0	0.07	0.18	0.10	0.0	0.07
Hungary	0.3	0.30	-0.1	0.10	-0.17	0.35	-0.3	0.10
Iceland	-0.6	0.06	-0.6	0.01	-0.03	0.06	-0.1	0.01
Ireland	0.4	0.20	0.4	0.10	0.61	0.14	0.6	0.09
Italy	0.0	0.09	0.0	0.06	**0.26**	0.07	**0.4**	0.06
Korea	-0.1	0.11	-0.2	0.07	0.08	0.12	0.0	0.07
Lithuania	0.6	0.08	0.5	0.07	**0.43**	0.13	**0.1**	0.08
Malaysia	0.1	0.11	-0.1	0.06	-0.05	0.11	-0.2	0.08
Malta	-0.1	0.08	-0.2	0.01	-0.09	0.07	-0.2	0.01
Mexico	0.6	0.18	0.7	0.07	**0.59**	0.13	**0.8**	0.07
Norway	**-0.2**	0.12	**0.1**	0.08	-0.13	0.12	0.0	0.08
Poland	0.2	0.09	0.1	0.08	-0.68	0.09	-0.8	0.06
Portugal	0.2	0.08	0.3	0.06	0.57	0.09	0.5	0.05
Slovak Republic	0.2	0.11	0.2	0.08	-0.46	0.15	-0.5	0.10
Slovenia	-0.6	0.08	-0.5	0.06	-0.38	0.09	-0.4	0.07
Spain	0.0	0.11	-0.1	0.07	0.35	0.09	0.3	0.06
Turkey	0.6	0.21	0.5	0.12	0.69	0.25	0.9	0.11
TALIS average	0.0	0.03	0.0	0.02	0.04	0.03	0.0	0.02

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578011

Table 2.A.2

Percentage of teachers who report that the first language of more than 10% of their students is different from the language of instruction

	New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)
Australia	24.7	3.80	28.2	2.16
Austria	34.9	4.50	33.3	1.82
Belgium (Fl.)	**41.4**	4.32	**28.2**	2.30
Brazil	16.8	2.72	17.0	1.02
Bulgaria	50.0	13.06	43.6	3.29
Denmark	24.0	5.85	19.9	2.76
Estonia	17.4	3.08	16.4	1.44
Hungary			4.6	0.78
Iceland	16.8	2.81	18.8	1.14
Ireland	25.6	3.18	21.5	1.26
Italy	24.7	2.88	25.7	1.09
Korea	13.3	3.00	12.4	0.72
Lithuania	**31.2**	4.38	**22.0**	1.59
Malaysia	56.5	5.13	50.8	2.15
Malta	38.5	4.36	40.7	1.92
Mexico	29.5	3.58	32.6	1.15
Norway	**31.9**	4.90	**19.6**	1.87
Poland	22.6	2.93	25.7	1.27
Portugal			11.0	1.30
Slovak Republic	23.6	4.79	22.8	2.34
Slovenia	17.7	2.75	23.1	1.65
Spain	**28.7**	3.59	**36.3**	1.34
TALIS average	28.5	1.08	25.2	0.38

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Turkey is not included in this table because this variable was not administered in Turkey.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578030

Table 2.A.3

Level of education among students' parents

	60% or more students with parents with ISCED 3 or over				40% or more students with parents with ISCED 5 or over			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**36.7**	4.11	**47.0**	1.82	41.4	4.10	43.8	1.96
Austria	68.8	4.12	66.6	1.13	**35.8**	4.43	**18.8**	1.04
Belgium (Fl.)	55.0	3.61	51.2	2.14	46.6	3.86	45.7	2.19
Brazil	7.6	1.58	7.1	0.55	7.8	1.79	7.5	0.65
Bulgaria	**23.5**	4.02	**42.1**	1.43			22.9	1.76
Denmark	32.3	3.57	34.4	2.11	44.7	4.52	43.8	1.91
Estonia	33.0	3.83	37.2	1.05	28.4	4.62	26.0	1.61
Hungary			21.8	1.42			18.5	1.70
Iceland	28.1	3.51	27.4	1.30	32.5	3.60	31.0	1.49
Ireland	54.6	5.31	60.6	2.06	**45.5**	4.61	**33.9**	2.02
Italy	27.5	4.21	21.2	1.13	16.7	2.87	11.8	0.96
Korea	**53.1**	4.08	**64.4**	1.39	44.4	4.14	45.8	2.05
Lithuania	29.8	5.28	30.2	1.31	20.8	4.67	24.8	1.38
Malaysia	17.5	2.68	21.1	1.54	18.9	2.49	15.7	1.18
Malta	15.2	3.99	11.3	1.14	14.8	3.16	11.0	0.98
Mexico	**22.1**	4.27	**12.7**	1.44	**29.7**	5.44	**16.2**	1.41
Norway	44.6	5.81	40.4	1.95	44.2	6.00	35.6	2.29
Poland	12.0	2.84	14.5	1.07	12.2	2.79	9.5	1.05
Portugal			6.2	1.22	8.2	2.43	7.2	1.31
Slovak Republic	15.5	2.97	19.5	1.25	16.2	3.26	16.3	1.34
Slovenia	**38.6**	4.21	**27.7**	1.38	17.7	2.61	15.4	1.11
Spain	7.7	1.91	10.8	0.94	11.8	2.55	13.5	1.15
Turkey	**8.5**	2.30	**13.9**	1.62	**5.8**	1.58	**11.6**	1.38
TALIS average	30.1	0.84	30.0	0.30	**25.9**	0.82	**22.9**	0.32

Notes: Statistically significant differences are marked in bold.
The information presented in this table was reported by teachers.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578049

Table 2.A.4

Average class size of a randomly selected class taught by new and experienced teachers

	New teachers		Experienced teachers	
	Mean	(S.E.)	Mean	(S.E.)
Australia	25.1	0.80	24.5	0.21
Austria	**22.2**	0.55	**21.1**	0.14
Belgium (Fl.)	**16.2**	0.42	**17.6**	0.28
Brazil	**30.5**	0.93	**32.4**	0.37
Bulgaria	**17.4**	1.21	**20.8**	0.35
Denmark	20.6	0.72	20.0	0.21
Estonia	**19.1**	0.70	**20.6**	0.33
Hungary	**15.9**	2.09	**20.4**	0.45
Iceland	17.8	0.71	18.6	0.33
Ireland	21.4	0.67	21.9	0.19
Italy	20.9	0.64	21.4	0.15
Korea	36.1	0.80	34.6	0.43
Lithuania	**17.2**	1.07	**19.6**	0.22
Malaysia	34.4	0.72	34.9	0.28
Malta	**18.4**	0.63	**19.8**	0.27
Mexico	**33.9**	1.64	**38.0**	0.56
Norway	21.9	0.63	21.4	0.31
Poland	**19.0**	0.60	**20.9**	0.25
Portugal	**18.1**	0.65	**21.5**	0.20
Slovak Republic	**19.5**	0.98	**21.2**	0.22
Slovenia	**17.6**	0.66	**18.9**	0.18
Spain	20.7	0.76	21.7	0.25
Turkey	30.2	1.57	31.5	0.75
TALIS average	**22.3**	0.20	**23.6**	0.07

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578068

Table 2.A.5

School climate characterised by classroom climate

	New teachers		Experienced teachers	
	Mean	(S.E.)	Mean	(S.E.)
Australia	**-0.4**	0.09	**0.1**	0.03
Austria	**-0.1**	0.09	**0.3**	0.02
Belgium (Fl.)	**-0.2**	0.07	**0.1**	0.03
Brazil	**-0.5**	0.06	**-0.2**	0.02
Bulgaria	-0.1	0.26	0.2	0.04
Denmark	**-0.6**	0.08	**0.0**	0.04
Estonia	**-0.1**	0.08	**0.5**	0.02
Hungary	**-0.4**	0.24	**0.2**	0.03
Iceland	**-0.6**	0.07	**-0.3**	0.03
Ireland	**-0.2**	0.10	**0.2**	0.03
Italy	**-0.4**	0.07	**0.1**	0.02
Korea	-0.2	0.07	-0.1	0.02
Lithuania	**-0.2**	0.08	**0.2**	0.02
Malaysia	**-0.3**	0.07	**0.0**	0.03
Malta	**-0.7**	0.08	**-0.1**	0.03
Mexico	0.1	0.07	0.3	0.02
Norway	**-0.8**	0.11	**-0.1**	0.04
Poland	**-0.2**	0.06	**0.2**	0.03
Portugal	**-0.7**	0.10	**-0.4**	0.03
Slovak Republic	**-0.6**	0.09	**-0.1**	0.03
Slovenia	**-0.1**	0.08	**0.3**	0.03
Spain	**-0.7**	0.11	**-0.5**	0.03
Turkey	-0.2	0.14	0.0	0.06
TALIS average	**-0.4**	0.02	**0.0**	0.01

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578087

CHAPTER 3

Support and Development Initiatives for New Teachers

A central policy issue for many countries is the support and development available for new teachers. This chapter analyses the appraisal and feedback received by new teachers and looks at the impact it has on the teaching of new teachers. Issue such as the frequency of teacher appraisal and feedback and its focus are discussed. Chapter 3 also studies the professional development undertaken by new teachers and analyses the amount and type of professional development undertaken. Attention is given both to the professional development needs expressed by new teachers, which is an important issue to policymakers. Considerable analysis is devoted to the reports of new teachers compared to more experience teachers.

Highlights

- **New teachers are more positive than more experienced teachers about the appraisal and feedback they receive.**
  More new teachers compared to more experienced teachers considered the appraisal and feedback they received to be fair and helpful in their development as a teacher. It also had a positive impact on their job satisfaction and job security.

- **But more than 1 in 6 new teachers have never received appraisal or feedback on their work.**
  In some countries, there are more new teachers than experienced teachers that have not received appraisal and feedback on their work. In Italy 60% of new teachers had not received appraisal and feedback. Nearly one-third had not received appraisal or feedback in Spain and Portugal, and around one-quarter had not in Iceland.

- **New teachers have a poor impression of the importance and use of appraisal and feedback in their school.**
  Only just over one-quarter of new teachers believed the most effective teachers in their school received the most recognition or that they would receive any recognition for being more innovative or for improving the quality of their teaching.

- **Mentoring and induction programmes are not providing additional feedback to new teachers.**
  New teachers that worked in schools with induction or mentoring programmes were not substantially more likely to receive more frequent appraisal and feedback than other new teachers. In fact, of the new teachers who work in schools with induction or mentoring programmes, nearly half reported that the programmes did not facilitate regular feedback.

- **New teachers considered their professional development to have a large impact on their development as a teacher.**
  Considering the resources devoted to professional development, it is very encouraging that over 70% of new teachers considered each type of professional development (e.g. workshops, observation visits) to have had a large impact on their development as a teacher.

- **New teachers had greater professional development needs than experienced teachers, particularly for addressing student discipline and behaviour and classroom management problems.**
  Nearly one-third of new teachers reported that they had a high level of need for professional development to address student discipline and behaviour problems, compared to only 20% of more experienced teachers.

Given the concerns of new teachers about their classroom teaching and the difficulties they encounter with classroom management issues, greater importance should be placed on the support and development they receive. This chapter explores these issues by examining the appraisal and feedback new teachers receive in their schools, the mentoring and induction programmes their schools offer, and new teachers' professional development.

In the first part of this chapter, new teachers' appraisal and feedback on their work in schools is examined. It is encouraging that most new teachers received some form of appraisal and feedback from both the school principal and other teachers.

Importantly, new teachers reported a more positive impression of the appraisal of their work and the feedback they received compared to their more experienced counterparts. More new teachers than experienced teachers considered the appraisal and feedback they received to be fair and helpful in their development as a teacher. They also reported that the appraisal and feedback they received had a positive impact on their job satisfaction and job security.

This may also explain why more new teachers, particularly in some TALIS 2008 countries, consider that their school principal uses effective methods to determine whether teachers are performing well or badly in their school. This is encouraging for countries looking to develop further the effectiveness of new teachers and provide support for them in the beginning of their careers.

Induction and mentoring programmes in schools are discussed in the following section of this chapter. Most new teachers work in schools with either mentoring or induction programmes operating. These programmes may not, however, be providing new teachers with the support and feedback they require. New teachers who work in schools with induction or mentoring programmes are not substantially more likely to receive more frequent appraisal and feedback than other new teachers. In fact, of the new teachers who work in schools with induction or mentoring programmes, nearly half reported that the programmes do not facilitate regular feedback. Overall, there was little relationship between whether or not new teachers work in schools with induction or mentoring programmes and various aspects of the appraisal and feedback new teachers receive in schools.

The professional development of new teachers is discussed in the final section of this chapter. This includes a discussion of the quantity and format of new teachers' professional development and its impact on their teaching. The section concludes with an examination of the professional development needs of new teachers.

In general, new teachers were slightly less likely to have undertaken professional development in the 18 months prior to the TALIS 2008 survey. This may be due, at least in part, to some new teachers being in their jobs for fewer than 18 months. However, of those teachers who participated in professional development, the intensity of the professional development was greater for new teachers rather than for those who were more experienced.

Importantly, new teachers considered their professional development to have a large impact on their development as a teacher. This justifies the resources invested into professional development and provides a rationale for further investments in the development of new teachers.

In general, new teachers stated greater developmental needs compared to more experienced teachers, particularly in the areas of student discipline and behaviour problems, and classroom management. On average, nearly one-third of new teachers reported that they had a high level of need for professional development aimed at student discipline and behaviour problems. In addition, on average, 22% of new teachers reported that they had a high level of need for professional development to improve their classroom management skills compared to 13% of teachers with more experience.

APPRAISAL AND FEEDBACK

Given the importance of evaluating and developing the effectiveness of new teachers, it is relevant to consider the appraisal and feedback they receive in their schools (Hattie, 2009). Aspects of appraisal and feedback should also be considered a form of support for new teachers as they seek to develop their teaching.

In most instances, TALIS 2008 does not distinguish between teacher appraisal and the feedback provided to teachers. In general, the survey instruments considered them to operate in unison. It is important to keep this in mind when interpreting the data, particularly as appraisal and feedback can have different objectives. A common distinction is between appraisal and feedback that is summative and that which is formative. Appraisal of teachers' work is required for both, but feedback can be more associated with a formative or developmental approach. While feedback can also be summative (e.g. feedback on overall performance following a summative appraisal) it has been shown to have a large impact on teacher effectiveness and student performance when it is formative and directly linked to an appraisal of classroom learning (Jensen and Reichl, 2011). In his meta-analysis of factors relating to student achievement, Hattie (2009) shows that this constructive feedback has the greatest impact on student performance of any government or school programme or practice.

This section examines the frequency with which new teachers received appraisal and feedback on their work and the source of that feedback. It then discusses the focus of that appraisal and feedback and its impact on new teachers. This includes a discussion of new teachers' perceptions of their own appraisal and feedback and its role in their school.

TALIS 2008 asked teachers about the frequency with which they received appraisal and feedback and from which source (the school principal; other teachers or members of the school management team; or an external – to the school – individual or body). An additional variable indicating whether a teacher has never received appraisal or feedback from any source was derived from these items.[1]

Most new teachers received some form of appraisal and feedback from both the school principal and other teachers. However, in most countries (except for Korea, Mexico and Turkey) more than half of new teachers never received appraisal and feedback from an external individual (see Table 3.A.1). It is to be expected that the frequency of appraisal and feedback from external inspectors is lower in all countries given the low frequency with which external inspectors visit schools and given that "new teachers" have been defined here as having two years or less of teaching.

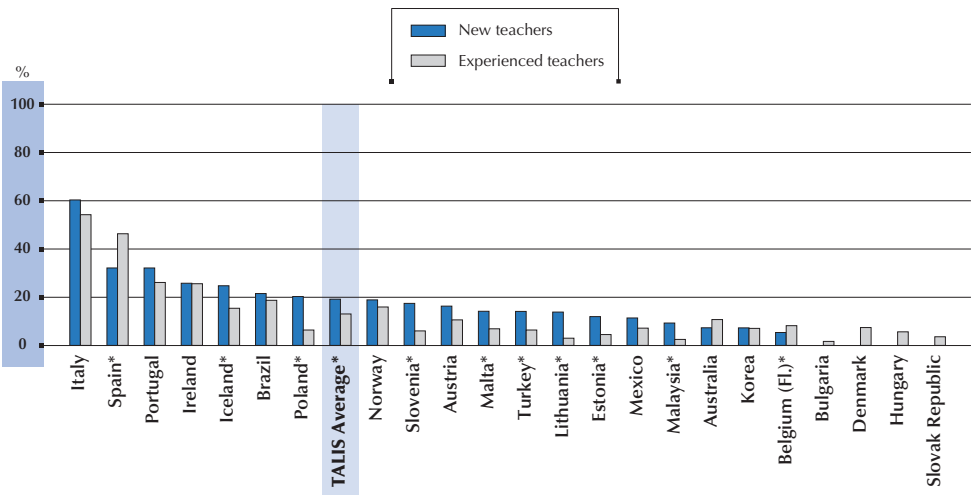
More than 19% on average of new teachers have never received appraisal or feedback on their work. This is a worrying finding considering the evidence showing that appraisal and feedback

provide important support and development for teachers, especially new teachers (Blackwell and McLean, 1996; Gates Foundation, 2010; Goldstein, 2007). It would also be a problem for particular countries that have tried to implement mentoring and induction programmes for new teachers that emphasise feedback to develop the effectiveness of new teachers. In some countries, the percentage of new teachers who have not received appraisal and feedback is considerably higher. For example, as shown in Figure 3.1 and Table 3.A.1, in Italy 60% of new teachers had not received appraisal and feedback from any source. This is the only country where over half of new teachers had not received any appraisal or feedback on their work. However, this figure is also high in Spain and Portugal (32% of new teachers reported never having received appraisal and feedback), Ireland (26%) and Iceland (24%).

Unfortunately, there is a larger percentage of new teachers who have never received appraisal and feedback compared to more experienced teachers. On average, only 13% of the experienced teachers had never received appraisal and feedback at their school compared to 19% of the new teachers.

Figure 3.1

Percentage of new and experienced teachers who report never having received appraisal and feedback from anyone



Countries are ranked in descending order based on the percentage of new teachers who report never having received appraisal from anyone.
Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577707

It is possible that this may be a function of new teachers not having the opportunity to receive appraisal and feedback because they have not been in schools for long enough to receive the regular appraisal provided to all teachers. For example, a new teacher may only have been in a school (that provides annual appraisal of its teachers) for six months at the time of the TALIS 2008 survey and therefore may never have received appraisal and feedback.

To analyse this issue, teachers in their first year of teaching were excluded from the analysis. It was found that this only had a very minor impact on the findings. Therefore, our definition of a new teacher should not be significantly biasing the results reported here concerning the frequency of appraisal and feedback that new teachers received on their work.

Focus of appraisal and feedback for new teachers

There were no marked differences between the focus of appraisal and feedback for new teachers compared to more experienced teachers. TALIS asked teachers to rate the importance given to 17 distinct aspects of their teaching and work in their appraisal and feedback. No marked differences were found between the importance placed on specific aspects of the teaching and work of new teachers compared to more experienced teachers.

A priori, there are no substantial reasons why the focus of appraisal and feedback should differ between new and experienced teachers. One exception may be that a greater focus on classroom management and student discipline issues may be advantageous for new teachers, given their reported problems in these areas.

The 17 aspects of teacher appraisal and feedback concentrate on particular aspects of their work. For example, student test scores and other learning outcomes, collegiality, professional development, classroom practices, teaching of specific students (e.g. special learning needs) and more general knowledge of subject content and instructional practices. This is supplemented by some questions of the methods used to appraise and provide feedback for teachers. Research around the methods used for teacher appraisal and feedback has grown in recent years to complement research of the focus on particular aspects of teachers' work (Jensen and Reichl, 2011).

The Gates Foundation's *Measures of Effective Teaching Project* highlights the correlation between various methods for teacher appraisal and teacher effectiveness (measured by teacher value-added scores). While initial findings are only available at this stage, it is clear that a number of methods were correlated with teachers' abilities to improve student performance. For example, students' responses on surveys about aspects of classroom teaching and learning were found to be correlated with teacher value-added scores (Gates Foundation, 2010). This highlights the reliability of these methods of appraisal and feedback, and complements the research showing the effectiveness of constructive feedback to teachers in improving student learning (Fuchs and Fuchs, 1986; BCG, 2003).

TALIS 2008 did collect some data on the methods used for teacher appraisal and feedback but did not explicitly distinguish them from the focus of appraisal and feedback (OECD, 2009). Data were collected on the use of student feedback, parental feedback, direct observation of classroom teaching, and analysis of student test scores (although this did not distinguish between the use of student assessments in classroom teaching [e.g. formative assessment] and overall measures of student performance).

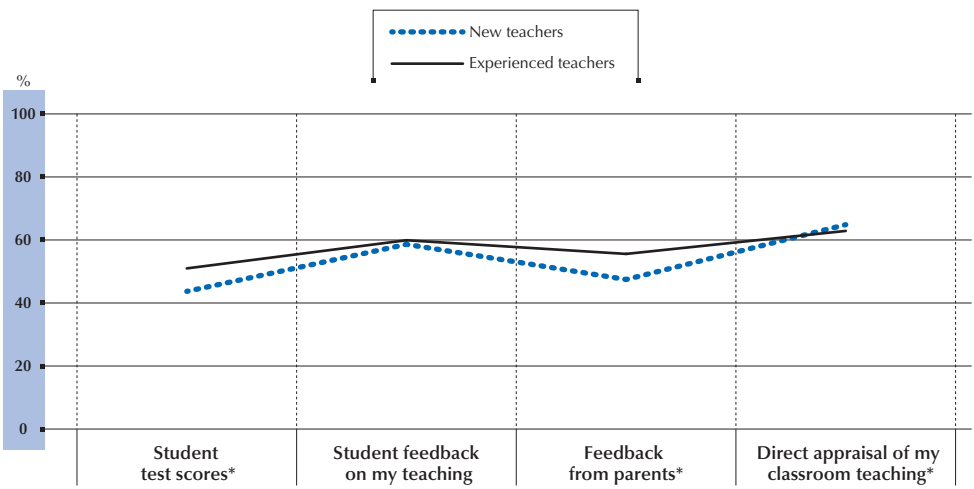
New teachers were less likely than experienced teachers to have student test scores emphasised in the appraisal and feedback they received. On average, 44% of new teachers reported that student test scores were considered with moderate or high importance in the appraisal and feedback they received compared to 51% for more experienced teachers (Figure 3.2). As shown

in Table 3.A.2, this difference was statistically significant in ten countries, with the largest differences reported in: Ireland (31% of new teachers reported that student test scores were considered with moderate or high importance in the appraisal and feedback they received compared to 53% for more experienced teachers); Estonia (35% of new teachers compared to 54% of more experienced teachers); Australia showed (22% of new teachers compared to 41% of more experienced teachers); and Poland (48% of new compared to 65% of more experienced teachers). A significant difference was also reported in Spain, but the difference was in the opposite direction. In Spain, new teachers were significantly more likely to report that student test scores were considered with moderate or high importance in their appraisal and feedback (66%) than more experienced teachers (52%).

Figure 3.2

Percentage of new and experienced teachers who reported that these aspects were considered with moderate or high importance when they received appraisal and/or feedback

Average across all TALIS countries



Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577726

New teachers were also less likely to have parental feedback emphasised in the appraisal and feedback they received. On average, 56% of more experienced teachers reported that feedback from parents was considered with a moderate or high importance, compared to 47% of new teachers. This was a significant difference in eight countries. It is difficult to determine the rationale for these differences in appraisal and feedback. The difference may simply lie in the fact that more time is needed to appraise teachers' work in regard to student test scores and feedback from parents may be more common for more experienced teachers. Alternatively, new teachers may be sheltered from appraisal based on student test scores and parental feedback.

In some countries such as Australia, Austria, Belgium (Fl.) and Norway, new teachers were significantly more likely than experienced teachers to receive appraisal and feedback based on direct appraisal of their classroom teaching. It may be considered that this is more helpful in developing the classroom teaching skills of new teachers. This may reflect more formative than summative systems of appraisal and feedback for new teachers in these countries.

An important issue in teacher appraisal and feedback is the extent to which it is summative or formative. Summative appraisals focus more on providing a judgement about teachers' work, while formative appraisals are more development-oriented (Fuchs and Fuchs, 1986). Research showing the positive impact of teacher appraisal and feedback on student learning emphasises the need for feedback to be developmental and focused on the learning that occurs in teachers' classrooms (Hattie, 2009).

While little difference was found in the importance placed on specific aspects of teaching in the appraisal and feedback received by new teachers, they did consider their appraisal and feedback to be more development-oriented than experienced teachers. Seventy-two per cent of new teachers reported that the appraisal and feedback they received contained suggestions for improving certain aspects of their work. This is compared to 57% of more experienced teachers (Table 3.A.3).

While new teachers were more likely to report that the appraisal and feedback they received was developmental, a similar percentage (75%) of new and more experienced teachers considered that the appraisal and feedback they received contained a judgement about the quality of their work (Table 3.A.3). The appraisal and feedback provided to new teachers therefore has similarities with that provided to more experienced teachers.

Some caution should be taken in interpreting comparisons of the reports of new teachers concerning the developmental nature of their appraisal and feedback. On the one hand, the appraisal and feedback provided to new teachers may be more developmental in nature and contain more suggestions for improving certain aspects of their work. On the other hand, these reports may reflect the inexperience of new teachers who interpret the appraisal and feedback they receive as more developmental. New teachers lack the classroom experience of other teachers and may be more open to suggestions or may simply interpret a given piece of feedback as more developmental in nature. This is reflected in the larger percentage of new teachers (compared to experienced teachers) who consider the appraisal and feedback they have received to be both fair and helpful in their development as a teacher (Table 3.A.4).

Nearly 89% of new teachers agreed or strongly agreed that the appraisal and feedback they received was a fair assessment of their work, compared to 83% of more experienced teachers.

In addition, 88% of new teachers agreed or strongly agreed that their appraisal and feedback was helpful in the development of their work as a teacher compared to 78% of more experienced teachers. This difference was most apparent in Australia, Austria, Belgium (Fl.), Denmark, Estonia, Iceland, Ireland, Korea, Norway, Spain where the percentage of new teachers that agreed or strongly agreed with this statement was at least ten points higher than for more experienced teachers.

Perhaps the most important message here is the positive impact that appraisal and feedback is having on new teachers. Nearly nine in ten new teachers considered the appraisal and feedback

they received to be a fair assessment of their work and helpful in their development as a teacher. This is encouraging for countries looking to further develop the effectiveness of new teachers and provide support for them in the beginning of their careers.

An important facet of appraisal and feedback for new teachers is the support it provides them with, which should hopefully translate into increased retention of new teachers. This is often an objective of induction and mentoring programmes that have similarities to appraisal and feedback for new teachers and have been found to increase retention of new teachers (e.g. Smith and Ingersoll, 2004). It is therefore encouraging that many new teachers considered that the appraisal and feedback they received to have had a positive impact on their job security and job satisfaction. While this was also true for more experienced teachers, the impact is larger for new teachers. Fifty-eight per cent of new teachers reported that the appraisal and feedback they received increased their job satisfaction compared to 51% of more experienced teachers (Table 3.A.5), and 43% reported that it increased their job security compared to 33% of more experienced teachers (Table 3.A.6).

PERCEPTIONS OF APPRAISAL AND FEEDBACK THROUGHOUT SCHOOLS

While new teachers were generally more favourable about their own appraisal and feedback, their perceptions of the importance and consequences (both positive and negative) stemming from appraisal and feedback in their school were very different. Like all teachers, new teachers considered that there were substantial problems in terms of recognition of effective and quality teaching. They also reported that there were few consequences for under-performing teachers.

On average, 25% of new teachers considered that their school principal takes steps to alter the monetary rewards of a persistently under-performing teacher. On average, this is similar to the perceptions of more experienced teachers (23%) but there were differences in some countries. For example, in Poland only 20% of new teachers considered that their school principal takes steps to alter the monetary rewards of persistently under-performing teachers compared to 32% of more experienced teachers. Conversely, in Portugal 45% of new teachers considered that their school principal takes steps to alter the monetary rewards of a persistently under-performing teacher compared to only 22% of more experienced teachers; in Slovenia 58% of the new teachers considered that the school principal takes steps to alter the monetary rewards for under-performing teachers compared to 44% of the more experienced teachers (Figure 3.3 and Table 3.A.7).

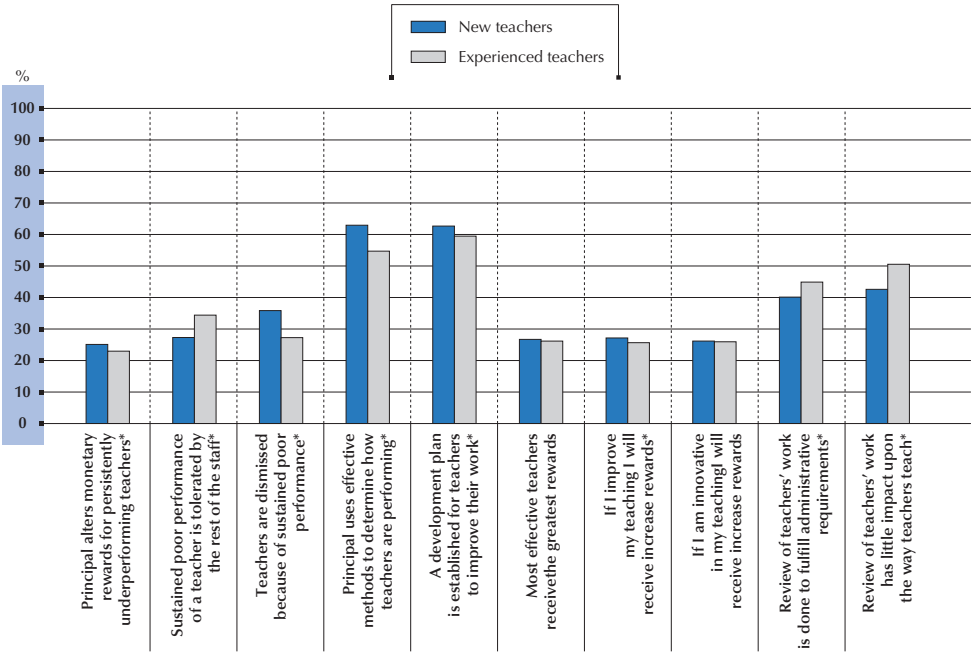
Fewer new teachers reported that the sustained poor performance of a teacher would be tolerated by the rest of the staff in their school. On average, 27% of new teachers reported this to be the case compared to 34% of more experienced teachers. The biggest differences were found in Malta (21%), Ireland (20%), Spain (16%), Belgium (14%) and Norway (13%).

In addition, a greater percentage of new teachers (36% of new teachers on average across TALIS 2008 countries compared to 27% of more experienced teachers) reported that teachers would be dismissed because of sustained poor performance in their school. Again, some large differences were evident in the perceptions of new teachers compared to more experienced teachers in specific countries such as Mexico (23% difference), Belgium (Fl.) (21% difference), Poland (17% difference) and Portugal (17% difference).

Figure 3.3

Percentage of new and experienced teachers who agree or strongly agree with the following statements about aspects of appraisal or/and feedback in their school

Average across all TALIS countries



Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577745

More new teachers considered that their school principal uses effective methods to determine whether teachers are performing well or badly in their school. While the average difference across all countries is not large (63% of new teachers considered that their school principal uses effective methods to determine whether teachers are performing well or badly in their school compared to 55% of more experienced teachers) there were larger differences in particular countries. For example, just over three-quarters of new teachers in Belgium (Fl.) considered that their school principal uses effective methods to gauge teacher performance compared to less than half of more experienced teachers. Large differences were also evident in Ireland (18% difference), Iceland (17% difference) and Portugal, Slovenia and Spain all with a 15% difference between new teachers and more experienced teachers (Figure 3.3 and Table 3.A.7).

Supporting the positive perceptions that new teachers had about their own appraisal and feedback, nearly two-thirds of new teachers reported that a development or training plan is established to improve the work of teachers. On average, there was little difference between new and more experienced teachers as 59% of more experienced teachers reported that a development or training plan is established in their school (Figure 3.3 and Table 3.A.7).

It is unfortunate that, like more experienced teachers, new teachers also considered that the most effective teachers in their school do not receive the greatest recognition. On average, only 27% of new teachers considered that the most effective teachers in their school receive the greatest monetary or non-monetary rewards. This reflected the views of not only new teachers as, on average, 26% of more experienced teachers held this view. In some countries, higher percentages of new teachers than their more experienced counterparts held this view. For example, in Iceland 25% of new teachers considered that the most effective teachers in their school received the greatest recognition compared to 17% of more experienced teachers. In Australia, 16% of new teachers considered that the most effective teachers in their school received the greatest recognition compared to 8% of more experienced teachers. Conversely, in a number of countries this belief was stronger amongst more experienced teachers. For example, in Italy 43% of more experienced teachers considered that the most effective teachers in their school received the greatest recognition compared to only 30% of new teachers. A similar difference was evident in Turkey, where 21% of the new teachers expressed this view compared to 34% of more experienced teachers (Figure 3.3 and Table 3.A.7).

Only just over a quarter of new teachers believed that they would receive any recognition if they improved the quality of their teaching or were more innovative in their classroom teaching (Figure 3.3 and Table 3.A.7). This is not encouraging for recognising and supporting new teachers and also reflects the views of experienced teachers. On average, there was little difference between the percentages of new teachers reporting they would receive recognition for improved teaching compared to more experienced teachers. However, there were notable differences between some countries.

New teachers in some countries were more likely to report that they would receive some recognition if they increased the quality of their teaching. The largest of these differences were found in Australia (9% difference) and Iceland (7%) where, compared to more experienced teachers, new teachers were more likely to report that they would receive increased monetary or non-monetary rewards if they increased the quality of their teaching. In contrast, in Bulgaria 55% of more experienced teachers reported that they would receive increased monetary or non-monetary rewards if they increased the quality of their teaching compared to 42% of new teachers.

A similar pattern was evident for teachers receiving recognition for being more innovative in their teaching (Figure 3.3 and Table 3.A.7). In countries such as Ireland, over 20% of new teachers reported that they would receive increased monetary or non-monetary rewards if they were more innovative in their teaching compared to only 6% of more experienced teachers. However, new teachers were less likely to report that they would receive recognition for innovative teaching in countries such as Poland, where 48% of more experienced teachers reported that they would receive increased monetary or non-monetary rewards if they were more innovative in their teaching compared to only 34% of new teachers.

Fewer new teachers than more experienced teachers considered that appraisal and feedback was an ineffectual exercise. A slightly smaller percentage of new teachers considered that the review of teachers' work is largely done to fulfil administrative requirements (40% of new teachers on average compared to 45% of more experienced teachers on average) (Figure 3.3; Table 3.A.7). This difference was particularly marked in Austria (14% difference), Belgium (Fl.) (17% difference), Spain (16% difference) and Malta (15% difference).

On average, 43% of new teachers considered that the review of teachers' work has little impact on their classroom teaching compared to 51% of more experienced teachers. This indicates more positive perceptions of appraisal and feedback amongst new teachers (Figure 3.3 and Table 3.A.7). This difference was particularly apparent in Belgium (Fl.) (18% difference), Ireland (17% difference), Spain (15% difference) and Austria (13% difference). A contrary result was found in Bulgaria where 41% of the new teachers considered that the review of teachers' work has little impact on their classroom teaching compared to 33% of more experienced teachers.

INDUCTION AND MENTORING PROGRAMMES

In numerous countries, induction and mentoring programmes have been developed to assist new teachers. These programmes often have multiple objectives including the development of teachers' effectiveness and to provide support for new teachers as they become accustomed to their new careers (OECD, 2005).

They have also had the objective of addressing a lack of support for many new teachers. It has been perceived that new teachers were often left on their own, creating a 'sink or swim' atmosphere for new teachers in their first years in schools and classrooms (Smith and Ingersoll, 2004).

In general, induction programmes can include a number of elements to support and develop new teachers. These include orientation seminars, workshops, professional collaborations, structured support systems, and different forms of appraisal and feedback. It can also include structured mentoring programmes. In fact, in a number of countries the two terms are often used interchangeably (Smith and Ingersoll, 2004).

A number of studies have concluded that well-conceived and well-implemented teacher induction programmes are successful in increasing the job satisfaction, efficacy and retention of new teachers (e.g., Holloway 2001; Fuller 2003; Wilson, Darling-Hammond and Berry, 2001; Strong and St. John, 2001). Some research has shown that mentoring programmes can have a positive impact on teachers' effectiveness and student outcomes. Positive impacts on students' reading and mathematics achievement were found with more intensive mentoring (measured in the number of hours) (Rockoff, 2008).

There is some evidence that mentoring reduces teacher turnover. Rockoff (2008) found that new teachers who were engaged in mentoring programmes were more likely to complete the current school year, but found little impact on longer term teacher retention or for other measures such as teacher absences. The most consistent finding is that retention within a particular school is higher when a mentor has previous experience working in that school. This suggests that an important part of mentoring may be the provision of school specific knowledge.

There appears to be a belief amongst many policy makers that mentors should teach the same subjects as the teacher being mentored. In numerous education systems, a requirement of mentoring systems is that the participants share the same teaching field. However, the evidence to support this belief is mixed. Smith and Ingersoll (2004) found a positive impact on teacher retention. Teachers who were provided mentors from the same subject area were less likely to leave teaching or move to other schools after their first year of teaching. However, while Rockoff (2008) found a significant positive impact on student performance of more intensive mentoring, no impact was found for mentors who taught in the same subject field as their assigned new teacher.

Frequency of induction and mentoring

Approximately three-quarters of new teachers work in schools that have formal mentoring or induction programmes. There are some distinctions between induction programmes that are for all teachers that are new to a school and for teachers for whom this is their first teaching job. On average, 45% of all new teachers work in schools where there is a formal induction process for all teachers who begin working at their school (Table 3.A.8). Furthermore, 30% work in schools where the induction process is restricted to teachers who are starting their careers (rather than teachers moving between schools).

A similar distinction is made in mentoring programmes, but these are more likely to be restricted to teachers starting their careers. On average, 38% of new teachers work in schools where mentoring programmes were restricted to teachers in their first teaching positions, whereas 36% of the teachers work in schools where mentoring programmes were provided to all teachers new to the school (Table 3.A.9).

A similar percentage of new teachers, compared with more experienced teachers, worked in schools with mentoring and induction programmes. This should not be surprising given that these are school-level programmes[2]. Any differences between new and more experienced teachers measure differences in the schools where they work, rather than differences in their individual experiences. Differences between new and experienced teachers could reflect that, for example, there were more new teachers working in schools where there were induction programmes for all teachers who were new to the school in which they work.

Induction and mentoring, and feedback received by new teachers

Induction programmes can vary widely between countries and between schools within countries. For some schools, it can focus on extensive interaction between more effective teachers and new teachers who receive frequent feedback about their teaching and how to develop their effectiveness. In other schools, induction programmes can be perfunctory, focusing more on logistics and "meeting new people". These may consist of one or two days before the start of a new school year (or term) in which the new teacher is shown around the school and introduced to staff. Analysis of the appraisal and feedback received by new teachers should shed more light on the type of induction programmes used by schools and countries.

New teachers who worked in schools with induction or mentoring programmes were not significantly more likely to receive more frequent appraisal and feedback than other new teachers. In fact whether or not new teachers worked in schools with induction or mentoring programmes had little impact on the appraisal and feedback they received.

For example, on average, 54% of new teachers who worked in schools with induction programmes only received appraisal and feedback once per year or less. The same percentage of new teachers who work in schools with mentoring programmes reported that they receive appraisal and feedback once a year or less (Table 3.A.10).

This result may be because these programmes focus on areas distinct from appraisal and feedback. For example, induction programmes could focus more on familiarising new teachers with their new school, or on specific seminars or professional development for new teachers.

This is less likely to be true for mentoring programmes. We would expect effective mentoring programmes to provide regular feedback for new teachers. It may be that for those new teachers who receive only annual (or less frequent) feedback, the mentoring programmes in their schools are ineffective. Given the large percentage of teachers who reported that the appraisal and feedback they received was largely a bureaucratic exercise, it may be that this is also true of mentoring programmes. They may be a requirement within a school, or a system-level requirement that fails to move past an administrative exercise and create regular and meaningful feedback for new teachers.

Regardless of the cause or rationale for the absence of the relationship between induction and mentoring programmes and the frequency with which new teachers receive appraisal and feedback, it is a potential problem given the research showing that the effectiveness of mentoring and induction programmes has been found to be strongly related to their intensity. For example, Smith and Ingersoll (2004) found that mentoring programmes were more successful in lifting new teachers' effectiveness when they involved regular interaction over longer time periods.

PROFESSIONAL DEVELOPMENT

Various forms of professional development can increase new teachers' effectiveness, address shortcomings in their initial education, and support teachers as they confront the many challenges of classroom teaching. This is reflected in the greater developmental needs of new teachers compared to more experienced teachers, particularly in the areas of student discipline and behaviour problems, and classroom management.

Although professional development is quite common for new and experienced teachers alike, new teachers were less likely than more experienced teachers to have undertaken professional development in the 18 months prior to the TALIS survey. However, of those teachers that participated in professional development, the amount of time spent on it was greater for new rather than more experienced teachers.

This section discusses the amount of professional development undertaken by new teachers compared to more experienced teachers. The format and types of professional development is then discussed, followed by an analysis of the impact of professional development on new teachers. The section concludes with an examination of new teachers' professional development needs.

Quantity of professional development

On average, 77% of new teachers participated in some form of professional development in the 18 months prior to the TALIS survey. This is significantly lower than the 90% of more experienced teachers who participated in professional development during the period (Table 3.11). But the amount of time spent on professional development activities was greater for new rather than more experienced teachers (19 days compared to17 days respectively).

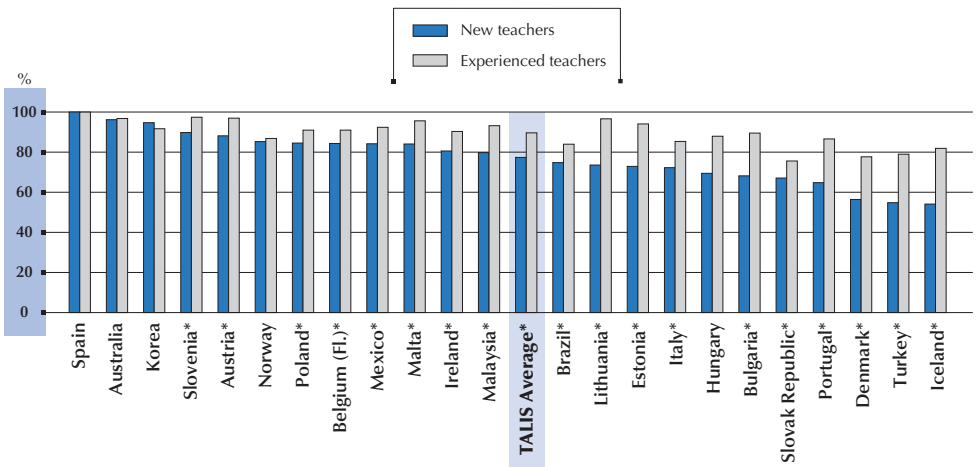
There is considerable variation in the quantity of professional development taken by new teachers across TALIS 2008 countries (Figure 3.4). Less than two-thirds of new teachers undertook some form of professional development during this 18-month period in Denmark (56%), Iceland (54%), Portugal (65%), and Turkey (55%). In contrast, all new teachers in Spain reported undertaking some professional development during this period. More than 90% of

the new teachers reported some professional development undertaken during the previous 18 months in Australia (96%) and Korea (95%).

Some caution should be taken in interpreting these figures. By definition, new teachers include those teachers who have just started working in schools. These teachers may not have had sufficient time to undertake professional development, particularly if it is structured, for example, at the end of the school year. Therefore, lower percentages of new teachers undertaking professional development may also indicate a specific structure of professional development that has not yet engaged teachers who have only just begun their careers.

Figure 3.4

Percentage of new and experienced teachers who participated in professional development in the previous 18 months



Countries are ranked in descending order based on the percentage of new teachers who report having participated in professional development in the previous 18 months.
Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577764

This may explain the large variation in the percentage of new teachers who undertook professional development compared to more experienced teachers in these countries. For example, while only 68% of new teachers in Bulgaria undertook professional development during the period in question, this figure rose to 90% of more experienced teachers. Similar results were reported in Denmark, Estonia, Iceland, Lithuania, Portugal and Turkey. A number of the countries with a low percentage of new teachers reporting that they had not undertaken some professional development during the previous 18 months had considerably larger percentages of more experienced teachers reporting that they had participated in professional development during this period. Unfortunately, TALIS data do not provide the means to explain this discrepancy.

New teachers who participated in professional development completed, on average, 19 days of professional development in the 18 months prior to the TALIS survey (Table 3.A.11). This ranged from fewer than 10 days in Australia (new teachers participated, on average for those who undertook some professional development, in nine days of professional development during this period), Ireland (four days), Malta (seven days) and Slovenia (eight days) to a group of countries where new teachers undertook around a month or more of professional development. In Poland, new teachers reported, on average for teachers who participated in some professional development, taking 31 days of professional development during this period. These levels of professional development were even larger in Italy (50 days) and Korea (39 days).

For most TALIS 2008 countries, the average amount of professional development undertaken by new teachers was similar to more experienced teachers in the country. On average, for all but four TALIS 2008 countries, there was a difference of only two days (or fewer) between the amounts of professional development that new teachers undertook compared to more experienced teachers in the country. The exceptions to this were countries where new teachers undertook more professional development than their more experienced counterparts. In Korea, new teachers undertook six more days of professional development during the 18 month period compared to more experienced teachers. This difference was larger in Italy (new teachers undertook 20 more days of professional development) and Turkey (eight days).

Format of professional development

New teachers were less likely to participate in many of the nine types of professional development identified in the TALIS survey programme. While the differences in participation rates for these types of professional development were not generally large, the greatest differences were found in participation rates in professional development networks, courses and workshops, and educational conferences and seminars (Figure 3.5 and Table 3.A.12).

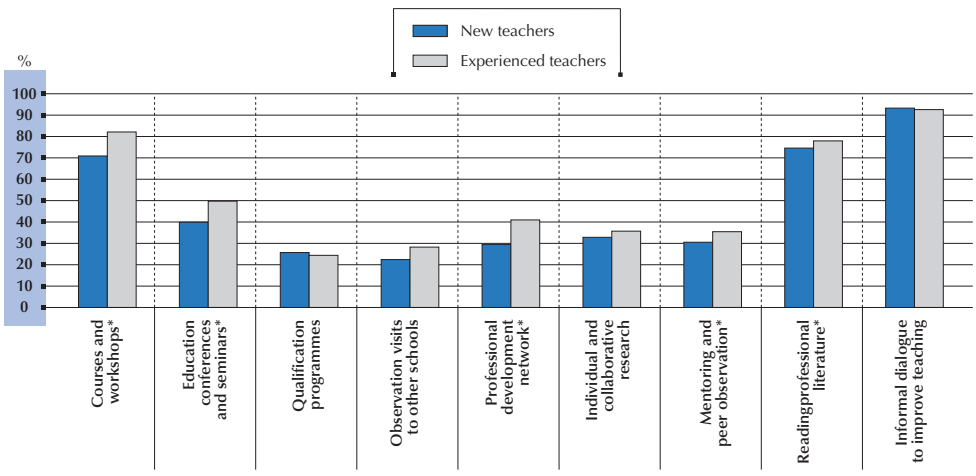
On average, over 90% of new teachers engaged in informal dialogue to improve their teaching. Similar percentages of experienced teachers engaged in this professional development activity. Reading professional literature was the second most common professional development activity with three-quarters of new teachers, on average, engaging in this form of professional development. As with more experienced teachers, participating in courses and workshops was also popular with new teachers, 71% of whom on average, reported participating in this professional development activity in the 18 months period prior to the TALIS survey compared to 82% of more experienced teachers.

New teachers were less likely to participate in observation visits to other schools (on average, 22% of new teachers participated in this professional development activity in the 18 months prior to the TALIS survey compared to 28% of experienced teachers). They were also less likely to have participated in mentoring and peer observation (31% of new teachers), and professional development networks (29% of new teachers). This could be cause for concern in a number of countries given the difficulties new teachers have reported as they begin their career in the classroom. Given the potential benefits of these three professional development activities, there could be substantial benefits to ensuring they are effectively provided to new teachers.

Figure 3.5

Percentage of new and experienced teachers that undertook different types of professional development

Average across all TALIS countries



Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

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Impact of professional development

New teachers considered their professional development to have a large impact on their development as a teacher. This is encouraging news considering the resources invested in professional development and provides a rationale for further investments in the development of new teachers.

Informal dialogue with colleagues to improve the teaching of new teachers was reported as having a moderate or large impact on their development by more new teachers than any other method of professional development (Figure 3.6 and Table 3.A.13). On average, over nine in ten new teachers reported that informal dialogue with colleagues had a moderate or large impact on their development. In six TALIS 2008 countries (Australia, Denmark, Hungary, Lithuania, Malaysia and Norway), this impact was reported by at least 95% of new teachers, and in only one TALIS country did fewer than eight in ten new teachers report informal dialogue with colleagues having a moderate or large impact on their development (75% of new teachers in Bulgaria reported that it had a moderate or large impact on their development). This emphasises the need to continue providing constructive dialogue and feedback for new teachers in both formal and informal settings.

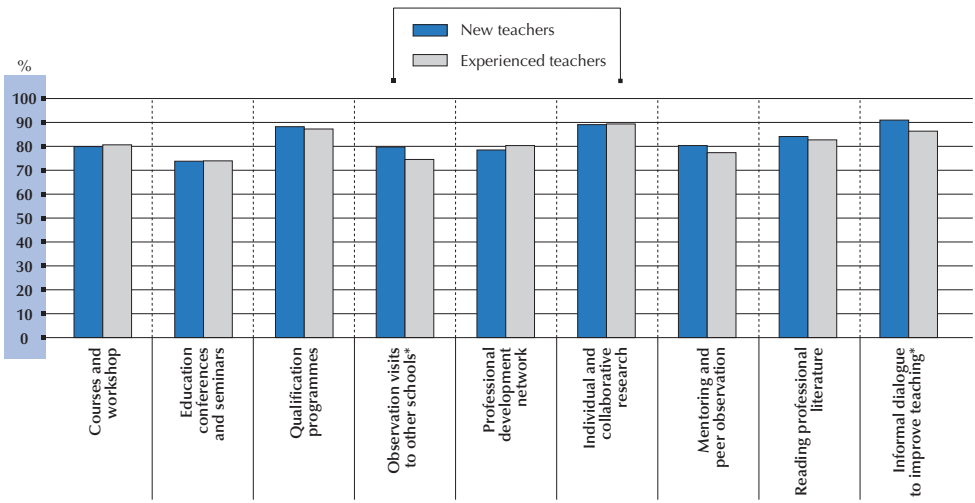
Slightly fewer new teachers considered that individual and collaborative research (89%) and qualification programmes (88%) had a moderate or large impact on their development as teachers compared to informal dialogue. Education conferences and seminars were considered to be the least effective form of professional activity. However, 74% of new teachers still considered they had a moderate or large impact on their development as teachers (Figure 3.6).

There were only minor differences between new and more experienced teachers in the reported impact of their professional development activities. The greatest difference was evident in the impact of observation visits to other schools and the impact of informal dialogue with colleagues. On average, 80% of new teachers reported that observation visits to other schools had a moderate or large impact on their development as teachers, compared with 75% of more experienced teachers, while 91% of new teachers reported that informal dialogue had a moderate or large impact on their development, compared with 86% of more experienced teachers (Figure 3.6).

Figure 3.6

Percentage of new and experienced teachers who reported a large impact of professional development activities on their development as teacher

Average across all TALIS countries



Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008*.

StatLink http://dx.doi.org/10.1787/888932577802

Professional development needs

New teachers have greater developmental needs than more experienced teachers, particularly in the areas of student discipline and behaviour problems, and classroom management. In contrast, new teachers had considerably less need to develop their ICT (Information and Communication Technologies) teaching skills than more experienced teachers.

On average, nearly one-third of new teachers reported that they had a high level of need for professional development aimed at student discipline and behaviour problems (Figure 3.7). This is considerably higher than the 20% of more experienced teachers who reported they had such a need. In five TALIS 2008 countries (Estonia, Italy, Korea, Lithuania, and Malaysia), over 40% of new teachers reported that they had a high level of need for professional development

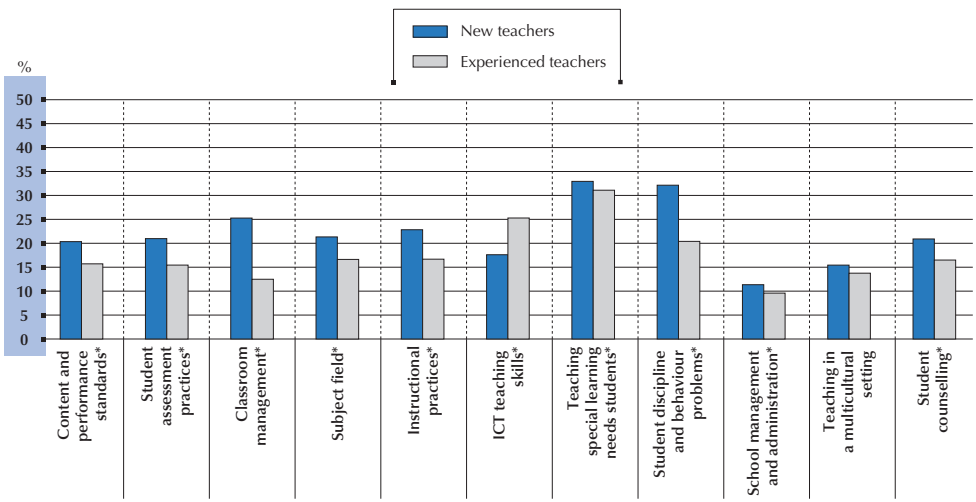
in this area. In these countries, there is a substantial difference between new teachers' need for this type of professional development compared to more experienced teachers (Figure 3.7 and Table 3.A.14).

A related issue for teachers is the need for professional development to improve classroom management practices, which was also particularly concentrated amongst new teachers. On average, 25% of new teachers reported that they had a high level of need for professional development to improve their classroom management skills compared to 12% of more experienced teachers. As with student discipline and behaviour problems, over half of new teachers in Korea and Malaysia reported a high level of need for professional development aimed at classroom management. Nearly half (49%) of new teachers in Lithuania reported this level of need.

Figure 3.7

Percentage of new and experienced teachers who report high professional development needs in the following areas

Average across all TALIS countries



Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008*.

StatLink http://dx.doi.org/10.1787/888932577821

As with student discipline and behaviour problems, a need to develop classroom management skills is particularly concentrated amongst new teachers in a number of TALIS 2008 countries. In eight TALIS 2008 countries, at least double the percentage of new teachers – compared to more experienced teachers – had a high level of need for professional development to improve their classroom management skills. This was apparent in Belgium (Fl.) (31% of new teachers reported this level of developmental need compared to 10% of more experienced teachers), Iceland (27% of new teachers compared to 9% of more experienced teachers), Norway (20% of new teachers compared to 7% of all teachers), and Spain (20% of new teachers compared to

7% of more experienced teachers). In Australia, the difference is even greater. The percentage of teachers reporting they had a high level of need for professional development in this area is eight times as large as the percentage of all teachers (24% of new teachers compared to 3% of more experienced teachers).

Teaching students with special learning needs was reported by most new teachers as the area where they had the largest professional development needs. This reflected the high percentage of all teachers with professional development needs in this area. This need was particularly apparent in Brazil (49% of new teachers had a high level of need for professional development in this area), Italy (41% of new teachers), Portugal (41% of new teachers) and Spain (42% of new teachers).

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NOTES

1. For the detailed description of the method used to construct this variable index, see the *TALIS 2008 Technical Report* (OECD, 2010).

2. In TALIS 2008, data about mentoring and induction programmes were obtained from school principals.

Annex 3.A

Key Tables on Teacher Support and Development

Table 3.A.1

Appraisal and feedback for new and experienced teachers

	Never received appraisal from principal				Never received appraisal from colleagues			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**39.3**	4.01	**28.8**	1.60	**8.3**	2.11	**15.6**	0.88
Austria	**28.7**	3.07	**17.5**	0.89	34.1	3.88	34.8	0.89
Belgium (Fl.)	18.5	2.60	19.1	1.14	**19.7**	2.16	**44.3**	1.79
Brazil	32.4	4.38	27.9	1.27	36.8	4.03	28.6	1.29
Bulgaria	**14.0**	3.67	**3.6**	0.36			19.6	1.88
Denmark	15.8	3.54	13.9	1.15	22.1	4.05	20.8	1.27
Estonia	**34.0**	3.79	**12.5**	0.87	**15.0**	3.04	**9.0**	0.74
Hungary			8.2	0.95			12.4	1.04
Iceland	**32.8**	3.44	**21.4**	1.40	33.3	3.56	27.9	1.48
Ireland	36.4	4.81	43.9	1.45	**41.0**	5.25	**53.6**	1.17
Italy	**66.7**	4.15	**58.4**	1.41	72.5	3.26	67.3	1.13
Korea	**22.0**	2.97	**14.6**	0.87	**11.0**	2.39	**17.5**	0.86
Lithuania	**27.0**	4.68	**10.7**	0.90	**19.3**	3.75	**5.1**	0.51
Malaysia	**25.9**	3.75	**9.1**	0.80	**15.9**	2.45	**6.2**	0.47
Malta	**30.9**	5.49	**15.7**	1.32	30.0	4.54	24.8	1.69
Mexico	18.7	2.93	16.9	1.15	36.8	3.09	33.7	1.12
Norway	32.3	4.37	25.4	1.37	26.3	4.15	27.8	0.99
Poland	**23.7**	3.38	**8.3**	0.58	32.7	3.36	29.6	1.23
Portugal	**49.2**	4.88	**38.4**	1.48	34.6	5.18	31.0	1.32
Slovak Republic	8.2	2.00	7.7	0.90	7.4	2.05	9.9	0.84
Slovenia	**22.2**	3.26	**7.7**	0.86	**36.2**	4.07	**25.6**	1.09
Spain	**44.8**	4.83	**58.7**	1.62	**35.9**	4.45	**57.3**	1.42
Turkey	23.9	2.03	19.8	1.36	**35.2**	2.08	**50.1**	1.91
TALIS average	**29.4**	0.82	**21.2**	0.24	28.8	0.79	28.4	0.26

	Never received appraisal from external individuals				Never received appraisal from anyone			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	77.0	3.87	73.2	1.32	7.3	2.00	10.7	0.83
Austria	**67.1**	4.17	**41.4**	1.11	16.3	3.03	10.6	0.62
Belgium (Fl.)	**64.5**	3.74	**37.3**	2.15	**5.4**	1.21	**8.2**	0.70
Brazil	61.9	3.87	56.3	1.38	21.50	3.42	18.7	1.03
Bulgaria	**66.4**	9.45	**17.5**	1.93			1.7	0.25
Denmark	**77.0**	3.38	**68.8**	1.54			7.4	0.87
Estonia	**71.3**	3.71	**34.1**	1.19	**11.9**	2.77	**4.5**	0.55
Hungary	**78.9**	8.96	**49.4**	2.99			5.6	0.91
Iceland	**76.8**	3.24	**67.8**	1.46	**24.7**	3.12	**15.4**	1.04
Ireland	**68.8**	4.75	**51.8**	1.82	25.8	4.44	25.6	1.13
Italy	**97.2**	0.98	**89.7**	0.85	60.3	3.46	54.2	1.32
Korea	**42.7**	4.31	**29.9**	1.18	7.3	1.92	7.1	0.60
Lithuania	**61.6**	5.36	**33.0**	1.36	**13.8**	3.31	**3.0**	0.42
Malaysia	**54.2**	3.18	**30.6**	1.29	**9.3**	1.88	**2.5**	0.30
Malta	49.8	4.88	43.6	1.88	**14.2**	3.10	**6.9**	0.93
Mexico	**35.6**	5.67	**23.8**	1.33	11.4	2.39	7.2	0.68
Norway	**85.7**	2.61	**76.9**	1.17	18.9	3.47	15.9	0.91
Poland	**86.7**	2.60	**58.1**	1.17	**20.3**	2.89	**6.4**	0.57
Portugal	86.4	4.21	84.0	1.06	32.1	4.72	26.1	1.25
Slovak Republic	**63.1**	5.58	**30.6**	1.48			3.6	0.50
Slovenia	**88.3**	2.64	**55.0**	1.25	**17.4**	2.85	**6.0**	0.70
Spain	57.0	6.25	64.5	1.58	**32.1**	3.96	**46.3**	1.43
Turkey	**28.2**	5.47	**11.6**	1.17	**14.1**	1.58	**6.4**	0.67
TALIS average	**67.2**	1.01	**49.1**	0.32	**19.2**	0.70	**13.0**	0.18

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578106

Table 3.A.2

Aspects considered with moderate or high importance when teachers received appraisal and/or feedback

	Student test scores				Student feedback on my teaching			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**22.2**	2.54	**41.0**	1.60	48.0	4.64	46.4	1.77
Austria	25.3	3.68	31.1	0.98	50.4	3.72	57.6	1.11
Belgium (Fl.)	**30.4**	3.27	**37.7**	1.40	**50.1**	3.54	**43.1**	1.51
Brazil	63.1	3.59	67.2	1.25	79.3	3.46	81.8	1.04
Bulgaria	79.1	7.16	80.2	2.35	74.5	12.00	69.6	1.81
Denmark	18.9	4.08	23.1	1.51	56.9	4.78	52.8	1.51
Estonia	**35.4**	3.62	**54.0**	1.62	56.5	4.42	57.9	1.48
Hungary	26.8	4.26	33.7	1.35	44.0	10.32	47.3	1.77
Iceland	23.7	3.61	29.8	1.48	61.3	3.99	61.1	1.63
Ireland	**30.6**	4.88	**52.5**	1.30	38.5	5.93	39.5	1.16
Italy	43.0	4.94	45.1	1.77	69.8	5.52	76.1	1.47
Korea	**52.5**	3.41	**59.6**	1.09	61.4	4.14	55.7	1.08
Lithuania	**29.9**	4.80	**44.7**	1.10	**61.3**	4.10	**69.8**	0.97
Malaysia	95.5	1.06	94.1	0.48	93.3	1.63	92.9	0.49
Malta	40.6	4.75	44.7	2.10	56.1	4.11	59.0	1.74
Mexico	69.8	3.34	64.7	1.46	74.9	4.81	68.5	1.28
Norway	**19.8**	3.07	**31.3**	1.40	39.5	4.74	42.3	1.35
Poland	**47.8**	4.51	**65.1**	1.32	62.9	4.20	64.8	1.27
Portugal	**35.8**	5.12	**47.2**	1.45	70.1	4.96	69.4	1.20
Slovak Republic	54.1	5.04	63.7	1.16	**59.0**	3.38	**73.2**	1.04
Slovenia	40.9	5.16	46.3	1.20	43.9	4.14	47.9	1.20
Spain	**66.4**	4.34	**52.1**	1.53	37.9	4.47	38.4	1.64
Turkey	54.0	4.67	64.2	2.15	58.8	6.01	63.5	1.84
TALIS average	**43.7**	0.89	**51.0**	0.31	58.6	1.12	59.9	0.29

	Feedback from parents				Direct appraisal of my classroom teaching			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	37.6	3.57	42.3	1.23	**71.6**	4.03	**46.3**	1.45
Austria	**42.2**	4.03	**60.7**	1.03	**79.5**	2.84	**67.8**	0.92
Belgium (Fl.)	**31.2**	3.13	**37.4**	1.49	**84.2**	2.22	**64.8**	1.34
Brazil	58.7	4.50	67.0	1.36	77.0	3.47	83.2	0.84
Bulgaria	**30.3**	6.81	**53.7**	1.54	78.0	7.52	84.8	1.02
Denmark	43.3	4.75	50.3	1.71	37.3	3.54	32.6	1.71
Estonia	**37.3**	3.94	**47.7**	1.35	60.4	4.14	64.4	1.35
Hungary	**39.2**	6.70	**51.9**	1.64	70.1	4.02	66.1	1.64
Iceland	51.4	3.72	56.6	1.75	33.6	4.15	27.7	1.62
Ireland	38.3	5.47	47.7	1.27	55.2	4.92	50.8	1.37
Italy	74.3	5.23	80.6	1.35	58.9	5.21	68.6	1.36
Korea	51.4	4.13	49.8	1.10	66.3	3.50	62.9	1.01
Lithuania	**55.1**	4.45	**64.1**	1.04	**50.4**	4.27	**69.7**	1.10
Malaysia	84.2	2.54	81.3	0.92	95.6	1.28	96.0	0.38
Malta	57.7	5.02	56.7	1.94	68.4	3.97	68.3	1.90
Mexico	53.4	5.49	50.0	1.21	78.5	5.07	77.6	1.12
Norway	46.4	4.40	50.9	1.01	**48.5**	4.53	**33.9**	1.17
Poland	**58.7**	4.13	**69.2**	1.20	**79.9**	3.24	**87.1**	0.96
Portugal	**42.3**	7.62	**57.7**	1.28	46.1	6.72	42.7	1.41
Slovak Republic	**45.1**	5.52	**60.4**	1.39	73.9	3.89	74.8	1.22
Slovenia	**35.0**	4.23	**46.6**	1.17	72.8	3.90	65.2	1.32
Spain	41.7	4.86	41.2	1.21	48.7	6.14	40.7	1.55
Turkey	**37.4**	3.98	**54.7**	2.16	**56.9**	3.36	**70.6**	1.94
TALIS average	**47.5**	1.01	**55.6**	0.29	**64.9**	0.91	**62.9**	0.28

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578125

Table 3.A.3

Characteristics of the appraisal received by new and experienced teachers

	Appraisal contained a judgement about the quality of their work				Appraisal contained suggestions for improving certain aspects of their work			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	71.2	3.62	67.7	1.39	**77.6**	2.96	**52.5**	1.35
Austria	73.8	3.11	79.6	0.68	**73.6**	3.98	**39.9**	1.09
Belgium (Fl.)	**83.4**	2.92	**76.7**	0.93	**89.6**	2.00	**62.4**	1.24
Brazil	**82.5**	2.74	**74.2**	1.30	**76.0**	3.71	**64.9**	1.68
Bulgaria	91.4	2.80	92.7	0.88	78.8	6.98	69.7	2.24
Denmark	77.7	4.43	68.7	1.78	**53.6**	4.48	**34.1**	1.76
Estonia	**74.8**	3.76	**83.9**	0.91	**70.2**	4.28	**57.3**	1.19
Hungary	84.2	9.53	78.8	1.79	61.3	12.24	58.7	1.71
Iceland	67.0	4.00	63.4	1.85	**49.9**	4.01	**26.1**	1.51
Ireland	71.1	4.73	69.5	1.54	**54.0**	5.02	**39.3**	1.76
Italy	64.0	4.39	68.8	1.45	**71.8**	5.15	**55.0**	1.69
Korea	69.4	3.10	63.8	1.19	**74.5**	3.71	**63.9**	1.07
Lithuania	**76.2**	4.24	**89.2**	0.85	**79.0**	3.87	**69.5**	1.22
Malaysia	95.9	1.24	94.7	0.46	95.6	1.50	92.9	0.53
Malta	**76.2**	4.36	**86.7**	1.44	**78.3**	3.77	**59.8**	1.75
Mexico	72.1	4.40	72.9	1.05	**89.5**	2.82	**76.5**	1.05
Norway	68.4	4.04	61.1	1.50	**40.8**	4.49	**27.0**	1.31
Poland	85.9	3.49	89.1	0.84	**82.5**	2.85	**57.3**	1.72
Portugal	77.0	5.17	77.5	1.03	**73.5**	5.40	**55.5**	1.47
Slovak Republic	91.3	2.20	86.9	1.09	**77.5**	3.48	**64.0**	1.43
Slovenia	78.0	3.41	75.2	1.00	**74.8**	4.12	**60.8**	1.31
Spain	34.8	4.81	42.6	1.53	**68.2**	3.86	**59.6**	1.44
Turkey	60.0	3.76	52.5	2.48	**70.2**	5.25	**56.3**	1.80
TALIS average	75.1	0.88	74.6	0.28	**72.2**	1.00	**56.7**	0.31

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932578144

Table 3.A.4

Percentage of new and experienced teachers who agreed or strongly agreed with the following statements

	Appraisal of my work and/or feedback received was a fair assessment of my work as a teacher in this school				Appraisal of my work and/or feedback received was helpful in the development of my work as a teacher in this school			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	89.6	2.48	84.9	1.04	**84.7**	2.75	**73.5**	1.37
Austria	90.8	2.62	86.8	0.69	**80.4**	3.61	**66.9**	0.98
Belgium (Fl.)	**95.2**	1.27	**87.3**	0.80	**97.4**	0.81	**81.0**	0.91
Brazil	84.0	3.22	79.4	1.34	**91.7**	1.96	**84.0**	1.22
Bulgaria	96.1	1.67	90.8	0.78	96.3	1.66	90.5	0.86
Denmark	93.9	2.78	84.9	1.25	**87.5**	3.45	**75.1**	1.22
Estonia	90.7	2.55	86.5	0.88	**86.1**	3.56	**69.4**	1.25
Hungary	85.0	8.88	86.9	0.84	93.0	3.52	84.0	1.07
Iceland	**91.0**	2.10	**78.8**	1.46	**83.9**	2.94	**69.4**	1.91
Ireland	90.8	2.70	87.6	0.85	**89.2**	3.54	**78.1**	1.09
Italy	91.0	2.78	86.1	0.91	**90.1**	2.93	**82.8**	1.17
Korea	66.3	3.31	51.9	1.15	**67.2**	3.53	**52.4**	1.15
Lithuania	92.9	2.36	92.9	0.53	93.3	2.80	89.4	0.62
Malaysia	**96.0**	1.14	**88.7**	0.73	97.4	0.96	92.7	0.55
Malta	87.9	3.62	85.4	1.46	86.8	3.97	78.4	1.72
Mexico	**87.9**	3.08	**79.5**	1.09	**93.9**	1.96	**84.6**	0.90
Norway	**90.2**	2.99	**83.5**	0.94	**87.7**	2.87	**73.9**	1.28
Poland	94.2	1.80	93.5	0.64	92.1	2.12	88.7	0.81
Portugal	88.5	5.39	81.3	0.94	88.4	4.86	82.3	0.91
Slovak Republic	**87.5**	2.81	**80.9**	1.08	**85.6**	2.87	**77.5**	1.35
Slovenia	96.0	1.42	88.0	0.74	**88.0**	3.21	**81.5**	0.92
Spain	**87.0**	3.03	**73.5**	1.39	**82.4**	4.02	**69.2**	1.46
Turkey	71.0	5.61	63.4	2.51	72.2	4.00	63.3	2.53
TALIS average	**88.8**	0.72	**82.7**	0.23	**87.6**	0.65	**77.8**	0.26

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578163

Table 3.A.5

Percentage of new and experienced teachers for whom appraisal and/or feedback led to changes in job satisfaction

	Small or large decrease				No change				Small or large increase			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	7.2	1.82	9.9	0.74	42.3	3.36	48.7	1.33	**50.5**	3.48	**41.4**	1.24
Austria	6.4	1.88	5.7	0.44	**42.4**	4.28	**53.9**	0.90	**51.2**	4.29	**40.3**	0.91
Belgium (Fl.)	**3.8**	1.16	**7.4**	0.62	**43.6**	3.39	**52.2**	1.52	**52.6**	3.39	**40.4**	1.62
Brazil	6.1	1.45	8.2	0.89	30.3	3.10	34.0	1.50	63.6	3.48	57.8	1.41
Bulgaria			7.4	0.86	29.9	8.33	35.1	2.35	59.3	13.42	57.5	2.43
Denmark			5.1	0.63	**42.5**	4.56	**52.2**	1.61	**54.7**	4.34	**42.8**	1.55
Estonia	7.4	2.41	9.4	0.66	37.4	3.89	37.8	1.15	55.2	4.41	52.8	1.36
Hungary			5.0	0.61	32.4	9.92	42.6	1.18	56.4	12.91	52.4	1.21
Iceland			6.9	0.89	**32.0**	3.45	**40.9**	1.73	**63.9**	3.64	**52.2**	1.78
Ireland			6.1	0.75	**33.0**	4.80	**44.7**	1.64	**63.8**	4.83	**49.2**	1.71
Italy			3.9	0.68	54.0	6.44	47.5	1.35	44.8	6.40	48.6	1.31
Korea	10.3	2.03	12.2	0.76	49.1	3.71	53.0	1.14	40.6	3.67	34.8	1.12
Lithuania			6.9	0.48	36.6	5.02	38.4	1.01	56.7	5.74	54.7	1.15
Malaysia			3.8	0.37	9.8	1.96	13.2	0.86	**87.7**	2.12	**82.9**	0.93
Malta			9.2	1.31	**28.7**	4.81	**39.9**	1.89	**65.0**	4.88	**50.9**	1.90
Mexico			6.8	0.57	**11.3**	2.47	**17.0**	0.74	**85.7**	2.72	**76.3**	0.96
Norway	5.0	1.61	4.0	0.48	**36.3**	4.16	**47.2**	1.36	**58.7**	4.63	**48.8**	1.32
Poland	5.4	1.72	4.8	0.49	36.3	4.03	36.4	1.24	58.3	4.48	58.8	1.38
Portugal			9.8	0.79	41.7	7.60	42.1	1.28	56.8	7.50	48.0	1.22
Slovak Republic	8.3	2.48	8.8	0.77	42.4	4.64	42.6	1.14	49.3	4.37	48.6	1.25
Slovenia			3.1	0.30	36.8	4.18	40.9	1.08	57.8	4.39	56.0	1.12
Spain	8.2	2.53	10.6	0.75	**34.9**	4.19	**52.0**	1.52	**56.9**	4.55	**37.4**	1.48
Turkey	14.5	3.58	15.3	1.46	40.6	4.96	48.3	2.99	44.9	5.07	36.4	2.55
TALIS average	**7.5**	0.65	**7.4**	0.16	**35.8**	1.04	**41.8**	0.31	**58.0**	1.22	**50.8**	0.31

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578182

Table 3.A.6

Percentage of new and experienced teachers for whom appraisal and/or feedback led to changes in job security

	Small or large decrease				No change				Small or large increase			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			3.7	0.48	**62.5**	3.37	**78.1**	1.05	**33.5**	3.19	**18.2**	1.02
Austria			1.9	0.20	**65.7**	4.13	**83.9**	0.72	**32.6**	4.02	**14.2**	0.72
Belgium (Fl.)			2.3	0.27	**50.6**	4.15	**70.0**	1.46	**45.2**	4.25	**27.7**	1.43
Brazil	3.9	0.96	4.1	0.56	**47.2**	3.89	**59.6**	1.53	**48.9**	4.14	**36.4**	1.38
Bulgaria			3.0	0.45			38.0	2.32	65.5	12.70	59.0	2.38
Denmark	**0.0**	0.00	**2.2**	0.42	**63.2**	5.29	**83.8**	1.33	**36.8**	5.29	**14.0**	1.28
Estonia			10.7	0.62	36.6	4.22	42.7	1.14	55.9	4.64	46.6	1.19
Hungary			5.6	0.71	47.9	10.90	62.3	1.19	37.9	5.74	32.1	1.16
Iceland			4.4	0.71	**35.4**	4.09	**53.8**	1.92	**61.9**	4.11	**41.8**	1.94
Ireland			1.9	0.40	**70.1**	4.72	**82.7**	1.15	**27.3**	4.70	**15.4**	1.11
Italy			2.7	0.44	76.5	4.13	77.0	1.23	23.1	4.13	20.3	1.13
Korea			9.8	0.72	61.6	3.66	58.9	1.18	32.8	3.28	31.4	1.08
Lithuania	8.7	2.82	6.0	0.51	37.6	4.84	46.0	1.06	53.7	5.49	48.0	1.10
Malaysia			2.7	0.53	26.0	4.56	29.8	1.88	72.4	4.76	67.5	1.81
Malta			3.8	0.78	**59.9**	5.38	**76.5**	1.68	**36.7**	5.33	**19.7**	1.49
Mexico			5.2	0.53	23.9	4.16	26.5	0.95	74.6	4.23	68.3	1.05
Norway	**5.6**	1.23	**2.3**	0.39	**35.1**	4.37	**72.8**	1.14	**59.4**	4.80	**24.9**	1.08
Poland			3.7	0.44	54.0	4.29	55.4	1.26	39.5	4.34	40.9	1.18
Portugal			5.2	0.62	74.9	5.67	77.8	1.28	24.7	5.68	17.1	1.12
Slovak Republic	8.2	2.53	4.5	0.54	58.5	4.91	58.7	1.20	33.3	4.40	36.9	1.23
Slovenia			4.1	0.47	**53.3**	4.21	**62.6**	1.06	40.8	4.26	33.4	1.02
Spain			5.6	0.63	**58.0**	4.74	**73.7**	1.19	**37.5**	4.91	**20.7**	1.16
Turkey	8.1	2.39	6.7	0.89	72.2	4.35	75.6	1.35	19.6	3.67	17.7	1.46
TALIS average	5.8	0.79	4.4	0.12	**53.2**	1.05	**62.9**	0.28	**43.2**	1.08	**32.7**	0.28

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578201

Table 3.A.7 (1/3)

Teacher appraisal and feedback and school development

Percentage of teachers of lower secondary education who agree or strongly agree with the following statements about aspects of appraisal or/and feedback in their school

	The school principal takes steps to alter the monetary rewards of a persistently under-performing teacher				The sustained poor performance of a teacher would be tolerated by the rest of the staff				Teachers will be dismissed because of sustained poor performance				The principal uses effective methods to determine whether teachers are performing well or badly			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	7.8	2.04	7.0	0.71	38.5	3.62	43.4	1.58	31.0	3.78	28.9	1.64	48.5	4.09	48.6	1.56
Austria	**12.6**	2.64	**7.3**	0.45	**31.0**	3.95	**41.3**	0.99	**18.6**	3.19	**11.1**	0.73	**56.5**	3.97	**45.8**	1.14
Belgium (Fl.)	**11.5**	1.94	**5.4**	0.54	**13.1**	2.09	**27.0**	1.21	**62.7**	4.01	**41.9**	1.70	**75.6**	3.14	**47.0**	1.59
Brazil	24.1	3.67	23.9	1.10	27.2	3.26	30.6	1.14	**38.6**	3.76	**29.3**	1.49	**65.7**	4.06	**56.8**	1.40
Bulgaria	45.0	12.27	44.0	2.27			10.8	1.07	69.4	10.52	64.4	2.56	**89.7**	2.77	**83.0**	1.37
Denmark	11.8	2.99	6.1	0.80	34.5	3.85	41.4	1.83	34.6	6.21	35.0	1.81	**46.0**	3.75	**36.8**	1.85
Estonia	10.3	2.18	13.5	0.93	17.7	3.18	18.1	0.94	30.9	3.65	29.6	1.23	53.0	4.00	50.3	1.74
Hungary	**24.5**	7.55	**41.7**	1.89	29.6	3.09	32.9	1.87	**48.7**	7.26	**33.3**	1.68	62.5	10.09	61.3	2.23
Iceland	31.3	3.76	27.6	1.49	**26.8**	2.90	**33.0**	1.45	**46.0**	3.49	**33.4**	1.47	**52.2**	3.39	**35.6**	1.60
Ireland	**18.0**	3.63	**4.7**	0.49	**40.1**	4.82	**60.2**	1.31	**21.3**	4.24	**10.2**	0.94	**56.1**	4.61	**37.9**	1.61
Italy	27.2	3.27	26.3	0.87	**14.6**	2.44	**28.8**	1.06	**36.0**	3.41	**26.7**	1.01	**73.5**	2.32	**67.8**	1.19
Korea	10.2	1.98	13.5	0.75	46.3	3.87	47.4	1.05	11.1	1.97	10.0	0.73	29.0	3.59	32.1	1.19
Lithuania	27.6	3.77	27.0	1.25	16.6	3.44	20.3	0.93	62.0	4.43	59.9	1.03	74.2	4.45	70.2	1.20
Malaysia	48.9	4.00	47.3	1.66	57.3	3.19	52.4	1.35	**24.6**	3.10	**16.9**	0.92	78.7	2.95	74.5	1.28
Malta	**21.1**	3.93	**12.2**	1.28	**23.5**	3.75	**44.7**	1.91	26.9	4.58	24.3	1.33	59.1	4.81	55.5	1.71
Mexico	37.3	3.04	33.9	1.33	12.2	3.30	18.0	1.07	**49.3**	5.29	**26.7**	1.18	90.4	2.70	88.5	0.87
Norway	8.4	1.95	7.4	0.66	**46.6**	4.53	**59.3**	1.16	**17.5**	2.98	**10.2**	0.89	32.1	4.02	27.1	1.37
Poland	**20.4**	2.82	**32.2**	1.42	**10.2**	1.78	**27.9**	1.18	**49.9**	3.49	**32.8**	1.28	**82.5**	2.93	**74.4**	1.37
Portugal	**44.6**	5.90	**21.6**	0.87	17.9	4.15	20.0	0.99	**43.6**	4.99	**26.5**	1.14	**71.8**	4.83	**56.7**	1.31
Slovak Republic	47.1	4.45	51.1	1.45	**21.6**	3.78	**35.9**	1.47	**55.1**	4.98	**41.4**	1.75	71.1	4.67	63.8	1.79
Slovenia	**58.5**	4.03	**43.9**	1.39	29.5	3.95	35.3	1.20	**17.6**	3.29	**8.3**	0.71	**78.6**	3.68	**63.4**	1.30
Spain	16.1	3.06	12.1	0.79	**21.6**	3.02	**37.3**	1.20	21.3	3.97	14.7	0.90	**49.9**	4.36	**34.6**	1.28
Turkey	**12.7**	2.52	**18.5**	1.69	24.0	5.20	24.8	1.40	7.2	1.67	11.0	1.28	50.6	5.79	46.1	1.94
TALIS average	**25.1**	0.92	**23.0**	0.26	**27.3**	0.77	**34.4**	0.27	**35.8**	0.97	**27.3**	0.28	**62.9**	0.92	**54.7**	0.31

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578220

Table 3.A.7 (2/3)

Teacher appraisal and feedback and school development

Percentage of teachers of lower secondary education who agree or strongly agree with the following statements about aspects of appraisal or/and feedback in their school

	A development or training plan is established for teachers to improve their work as teachers				The most effective teachers receive the greatest monetary or non-monetary rewards				If I improve the quality of my teaching I will receive increased monetary or non-monetary rewards				If I am more innovative in my teaching I will receive increased monetary or non-monetary rewards			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	49.3	4.19	55.1	1.72	**16.3**	2.51	**8.3**	0.64	**16.1**	2.48	**7.2**	0.62	**15.4**	2.74	**8.3**	0.71
Austria	27.1	3.79	20.7	1.00	16.2	3.29	10.7	0.63	**17.7**	3.17	**11.3**	0.60	18.7	3.21	13.5	0.65
Belgium (Fl.)	**61.2**	3.97	**43.7**	1.62	**11.1**	2.37	**4.5**	0.44	**10.0**	2.32	**3.6**	0.33	**9.4**	2.16	**3.7**	0.33
Brazil	72.0	3.35	70.6	1.43	16.6	2.69	12.8	0.87	**23.2**	2.42	**17.6**	0.97	24.6	2.91	19.5	0.89
Bulgaria	74.6	8.63	77.6	2.12	39.0	12.65	51.3	2.69	**42.1**	5.06	**54.5**	1.69	46.5	9.91	56.6	1.56
Denmark	54.4	3.72	54.4	1.74	13.8	2.80	15.1	1.41	9.3	2.92	8.2	0.95	10.1	2.56	8.8	0.96
Estonia	57.6	3.56	64.4	1.47	31.1	3.95	38.4	1.67	22.1	2.99	25.4	1.25	**12.6**	2.44	**21.9**	1.20
Hungary	72.1	7.35	71.9	2.45	39.4	5.43	45.3	1.56	**34.7**	4.64	**44.9**	1.73	34.4	8.70	42.5	1.67
Iceland	50.8	3.79	44.3	1.64	**24.7**	3.50	**16.6**	1.08	**23.1**	3.13	**16.2**	1.08	21.8	3.09	16.5	1.14
Ireland	**63.0**	4.05	**51.2**	1.72	**20.9**	3.74	**6.5**	0.61	**18.7**	3.48	**5.7**	0.59	**20.0**	3.21	**6.1**	0.58
Italy	**64.8**	3.04	**72.3**	1.19	**30.2**	3.05	**43.4**	1.36	43.6	3.47	49.2	1.41	41.8	3.62	49.1	1.39
Korea	28.4	3.18	31.5	1.20	8.2	1.86	10.2	0.67	15.4	2.73	10.9	0.64	16.2	2.60	11.5	0.65
Lithuania	91.3	2.70	90.6	0.76	36.3	3.57	36.5	1.39	31.5	3.93	27.5	1.26	26.7	3.81	26.6	1.26
Malaysia	**94.9**	1.18	**88.9**	0.76	54.8	2.78	53.0	1.36	58.4	2.80	56.8	1.22	55.6	2.92	55.1	1.16
Malta	57.3	4.76	60.8	1.71	14.9	3.23	9.6	1.30	13.1	3.32	12.2	1.19	16.5	3.45	12.1	1.34
Mexico	77.3	5.01	68.0	1.46	32.7	3.55	26.4	1.16	45.6	3.21	42.6	1.31	42.2	3.66	39.4	1.37
Norway	**52.1**	4.28	**41.5**	1.41	10.6	2.48	11.4	0.85	6.0	1.99	6.2	0.71	7.5	2.06	11.8	0.95
Poland	81.9	3.34	78.5	1.27	58.2	4.22	59.1	1.54	48.7	3.69	52.4	1.36	**33.7**	3.45	**47.8**	1.31
Portugal	57.2	5.36	49.0	1.55	18.5	4.08	10.7	0.76	13.9	3.70	18.0	1.01	22.8	4.05	17.2	1.08
Slovak Republic	**80.7**	3.15	**73.1**	1.48	45.2	5.48	49.0	1.96	43.9	5.49	47.3	1.78	42.9	5.11	48.8	1.78
Slovenia	**77.5**	3.14	**66.7**	1.29	46.6	3.63	42.0	1.50	36.7	3.66	31.2	1.25	33.3	3.70	36.1	1.36
Spain	57.8	4.08	53.4	1.73	7.7	2.07	7.3	0.61	12.5	3.26	10.8	0.74	14.7	3.34	11.2	0.73
Turkey	37.7	4.71	39.0	2.48	**21.0**	3.01	**33.5**	2.22	37.8	5.25	30.1	2.14	34.0	4.95	32.4	2.02
TALIS average	**62.6**	0.91	**59.5**	0.33	**26.7**	0.89	**26.2**	0.28	**27.1**	0.74	**25.6**	0.25	26.2	0.88	25.9	0.25

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578220

Table 3.A.7 (3/3)

Teacher appraisal and feedback and school development

Percentage of teachers of lower secondary education who agree or strongly agree with the following statements about aspects of appraisal or/and feedback in their school

	The review of teachers' work is largely done to fulfill administrative requirements				The review of teachers' work has little impact upon the way teachers teach in the classroom			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**57.1**	3.57	**64.1**	1.51	**53.05**	4.20	**62.4**	1.47
Austria	**31.2**	4.29	**45.2**	1.00	**46.8**	4.21	**59.6**	0.85
Belgium (Fl.)	**22.4**	2.77	**39.4**	1.65	**27.8**	3.15	**46.1**	1.50
Brazil	49.1	3.69	45.3	1.26	32.6	3.66	36.3	1.40
Bulgaria	41.9	6.88	28.6	1.88	**41.0**	3.99	**33.0**	1.34
Denmark	43.8	5.00	48.6	1.87	**50.9**	4.33	**61.9**	1.83
Estonia	24.1	3.47	28.0	1.21	**34.6**	3.40	**43.9**	1.16
Hungary			25.2	2.08	**24.6**	4.29	**41.2**	1.54
Iceland	**36.0**	3.65	**47.5**	1.67	**46.1**	3.46	**57.5**	1.55
Ireland	46.6	5.24	53.2	1.30	**44.2**	5.21	**61.3**	1.29
Italy	28.3	2.99	33.1	1.23	34.4	3.43	41.3	1.06
Korea	61.8	3.78	60.4	0.94	47.7	3.58	52.3	1.20
Lithuania	57.8	4.82	48.4	1.40	52.8	5.03	54.9	1.17
Malaysia	**42.1**	3.23	**51.4**	1.21	**28.0**	2.81	**35.3**	1.38
Malta	**45.5**	4.86	**60.2**	1.68	**41.6**	4.43	**53.3**	1.69
Mexico	**37.5**	6.82	**51.8**	1.52	38.4	7.10	46.2	1.46
Norway	41.6	3.89	43.6	1.32	60.5	4.06	65.3	1.15
Poland	36.0	4.41	42.3	1.58	34.2	3.33	37.1	1.49
Portugal	**37.3**	5.05	**48.2**	1.15	47.1	5.13	55.6	1.22
Slovak Republic	34.3	4.45	33.8	1.41	58.7	4.28	54.1	1.62
Slovenia	32.5	3.91	37.9	1.18	52.0	3.95	55.7	1.26
Spain	**34.1**	3.66	**49.7**	1.17	**48.1**	4.02	**63.0**	1.24
Turkey	41.2	5.90	46.1	2.29	**34.0**	4.47	**44.9**	2.20
TALIS average	**40.1**	0.96	**44.9**	0.31	**42.6**	0.88	**50.5**	0.30

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578220

Table 3.A.8

When a teacher begins teaching at this school, does he/she undertake a formal induction process?

	Yes, for all teachers new to the school		Yes but only for those in their first teaching job		No formal induction process	
	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	93.1	2.41				
Austria	32.1	3.15	23.6	2.61	44.3	2.99
Belgium (Fl.)	94.4	1.69	3.9	1.21		
Brazil	19.8	2.38	6.5	1.42	73.7	2.46
Bulgaria	53.2	4.94	30.7	6.13	16.2	3.85
Denmark	47.7	5.22	23.5	4.51	28.8	3.81
Estonia	23.1	3.68	59.1	4.19	17.8	3.14
Hungary	34.8	5.06	46.4	5.26	18.8	3.46
Iceland	72.8	0.17	15.7	0.13	11.5	0.12
Ireland	83.7	3.67			9.0	2.64
Italy	36.6	2.87	34.4	2.91	29.0	2.81
Korea	33.6	3.33	49.8	3.75	16.6	3.03
Lithuania	17.1	2.61	14.0	2.49	68.9	3.26
Malaysia	43.0	3.62	40.9	4.00	16.2	2.87
Malta	25.3	0.17	11.8	0.11	62.9	0.18
Mexico	22.7	3.35	14.7	2.91	62.6	3.94
Norway	29.9	3.83	18.3	3.25	51.8	4.27
Poland	14.3	3.13	79.4	3.63		
Portugal	73.1	3.52			22.7	3.20
Slovak Republic	62.1	3.85	35.5	3.67		
Slovenia	41.1	3.83	51.5	4.06	7.4	2.01
Spain	20.9	3.22	15.7	2.71	63.4	3.70
Turkey	50.2	5.27	16.2	4.04	33.6	5.10
TALIS average	44.5	0.73	29.6	0.78	34.5	0.74

Notes: Shaded cells indicate estimates with high sampling variability.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578239

Table 3.A.9

When teachers begin teaching at this school, is there a programme or policy by which he/she works with an experienced teacher or teachers who act as their mentor?

	Yes, for all teachers new to the school		Yes but only for those in their first teaching job		No formal mentoring process	
	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	70.4	4.59	23.8	4.27	5.8	1.84
Austria	23.0	2.73	23.0	2.64	54.1	3.24
Belgium (Fl.)	90.5	2.08	8.8	2.02		
Brazil	17.7	2.11	11.7	2.03	70.7	2.91
Bulgaria	29.6	3.95	53.5	4.87	16.9	3.51
Denmark	62.6	4.52	27.0	3.77	10.4	2.65
Estonia	25.8	3.49	64.9	3.81	9.2	1.98
Hungary	44.8	4.50	44.2	4.68	11.0	2.40
Iceland	44.7	0.17	48.4	0.16	6.9	0.04
Ireland	63.8	4.21	10.7	2.44	25.5	4.10
Italy	26.3	2.70	61.3	2.99	12.4	2.16
Korea	26.8	3.76	44.3	4.37	29.0	4.18
Lithuania	29.0	3.59	50.6	4.08	20.4	3.13
Malaysia	45.0	3.71	38.1	3.82	16.9	2.61
Malta	22.4	0.18	12.3	0.12	65.3	0.20
Mexico	19.2	3.47	20.4	3.52	60.5	4.14
Norway	43.3	3.85	25.4	3.67	31.3	3.67
Poland	23.5	3.97	71.9	4.32		
Portugal	41.3	4.48	20.4	3.53	38.3	4.32
Slovak Republic	26.4	4.06	71.3	4.22		
Slovenia	23.5	3.55	64.6	4.02	11.9	2.65
Spain	17.6	2.77	18.1	2.74	64.3	3.60
Turkey	22.3	4.85	69.6	5.51		
TALIS average	36.5	0.75	38.4	0.76	29.5	0.70

Notes: Shaded cells indicate estimates with high sampling variability.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578258

Table 3.A.10

Frequency of appraisal for new teachers who work in schools with induction and mentoring programmes

	Schools with induction programmes				Schools with mentoring programmes			
	Receive appraisal once per year or less		Receive appraisal more than once per year		Receive appraisal once per year or less		Receive appraisal more than once per year	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	64.9	3.90	35.1	3.90	68.0	3.68	32.0	3.68
Austria	65.1	4.66	34.9	4.66	71.8	5.37	28.2	5.37
Belgium (Fl.)	64.0	3.90	36.0	3.90	64.3	3.81	35.7	3.81
Brazil	35.4	5.92	64.6	5.92	47.4	5.06	52.6	5.06
Bulgaria	42.8	11.76	57.2	11.76	33.2	9.43	66.8	9.43
Denmark	64.0	5.23	36.0	5.23	68.2	4.28	31.8	4.28
Estonia	58.7	4.73	41.3	4.73	56.4	4.45	43.6	4.45
Hungary	50.2	13.68	49.8	13.68	35.2	9.18	64.8	9.18
Iceland	55.7	4.30	44.3	4.30	57.8	4.16	42.2	4.16
Ireland	64.7	5.56	35.3	5.56	61.9	6.25	38.1	6.25
Italy	76.4	5.09	23.6	5.09	75.2	4.67	24.8	4.67
Korea	64.0	3.94	36.0	3.94	64.8	4.19	35.2	4.19
Lithuania	57.9	6.11	42.1	6.11	44.3	6.12	55.7	6.12
Malaysia	49.5	4.62	50.5	4.62	49.3	4.53	50.7	4.53
Malta	38.9	7.62	61.1	7.62	43.7	7.53	56.3	7.53
Mexico	17.3	3.85	82.7	3.85	21.4	4.27	78.6	4.27
Norway	63.3	4.36	36.7	4.36	63.9	4.32	36.1	4.32
Poland	44.4	3.91	55.6	3.91	42.6	3.98	57.4	3.98
Portugal	68.2	6.23	31.8	6.23	74.7	6.70	25.3	6.70
Slovak Republic	25.0	4.32	75.0	4.32	26.6	4.50	73.4	4.50
Slovenia	51.4	4.42	48.6	4.42	53.2	4.88	46.8	4.88
Spain	69.9	7.42	30.1	7.42	58.2	12.47	41.8	12.47
Turkey	50.6	3.57	49.4	3.57	51.6	3.44	48.4	3.44
TALIS average	54.0	1.28	46.0	1.28	53.6	1.24	46.4	1.24

Note: Shaded cells indicate estimates with high sampling variability.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578277

Table 3.A.11

Participation in professional development in the previous 18 months

	Percentage of teachers who undertook some professional development				Average days of professional development amongst all teachers				Average days of professional development amongst all those who participated			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	96.2	1.38	96.8	0.49	8.5	0.66	8.8	0.19	8.79	0.67	9.1	0.20
Austria	**88.1**	2.70	**96.9**	0.34	9.7	0.73	10.6	0.18	11.0	0.78	10.9	0.17
Belgium (Fl.)	**84.3**	2.96	**91.0**	0.67	**12.0**	1.99	**7.5**	0.29	**14.2**	2.39	**8.3**	0.31
Brazil	**74.8**	3.30	**84.0**	1.22	16.3	1.51	17.4	0.74	21.7	1.98	20.8	0.82
Bulgaria	**68.2**	6.61	**89.5**	1.29	20.6	4.24	27.6	1.79	30.2	6.58	30.8	2.20
Denmark	**56.4**	4.50	**77.7**	1.35	7.9	1.43	10.0	0.37	13.9	2.32	12.9	0.40
Estonia	**72.9**	3.72	**94.1**	0.44	**10.2**	1.19	**13.3**	0.30	14.0	1.61	14.2	0.31
Hungary	69.4	11.91	87.9	1.46	**10.2**	2.44	**14.8**	0.48	14.7	1.25	16.8	0.43
Iceland	**54.1**	3.89	**81.9**	1.12	**6.2**	0.79	**11.7**	0.51	11.5	1.36	14.3	0.60
Ireland	**80.6**	3.31	**90.3**	0.80	**3.2**	0.28	**5.8**	0.21	**4.0**	0.27	**6.4**	0.22
Italy	**72.3**	3.78	**85.3**	0.74	**36.4**	4.44	**26.0**	0.98	**50.4**	5.16	**30.4**	1.17
Korea	94.7	1.53	91.7	0.61	**36.5**	1.88	**29.6**	0.59	**38.5**	1.92	**32.2**	0.58
Lithuania	**73.6**	3.80	**96.6**	0.36	**7.6**	0.88	**11.5**	0.22	10.3	1.20	11.9	0.22
Malaysia	**79.8**	2.70	**93.2**	0.61	**8.8**	0.57	**11.2**	0.34	11.1	0.69	12.0	0.34
Malta	**84.1**	3.35	**95.6**	0.70	6.2	0.84	7.5	0.26	7.4	0.96	7.8	0.27
Mexico	**84.2**	3.34	**92.4**	0.54	32.8	8.51	34.3	1.67	38.9	10.32	37.2	1.83
Norway	85.2	2.82	86.8	0.86	9.7	1.13	9.1	0.31	11.4	1.36	10.4	0.34
Poland	**84.5**	2.32	**91.0**	0.72	26.1	3.02	26.1	1.10	30.8	3.55	28.7	1.18
Portugal	**64.8**	5.17	**86.6**	0.90	13.6	3.41	18.7	0.89	21.1	5.27	21.6	1.00
Slovak Republic	**67.1**	3.35	**75.6**	1.22	6.6	1.28	7.3	0.28	9.9	1.89	9.6	0.35
Slovenia	**89.8**	2.65	**97.4**	0.34	7.2	0.65	8.4	0.21	8.0	0.67	8.6	0.21
Spain	100.0	0.00	100.0	0.03	27.8	2.12	25.5	0.52	27.8	2.12	25.5	0.52
Turkey	**54.8**	6.45	**79.0**	1.83	12.0	1.40	11.0	0.48	**21.9**	2.78	**14.0**	0.51
TALIS average	**77.4**	0.91	**89.6**	0.19	14.6	0.56	15.4	0.15	**18.8**	0.71	**17.1**	0.17

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578296

Table 3.A.12 (1/3)

Types of professional development undertaken by teachers

	Courses and workshops				Education conferences and seminars				Qualification programmes			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	92.2	1.80	90.4	0.81	61.4	3.84	64.3	1.28	15.22	2.90	11.2	0.92
Austria	**78.2**	3.44	**92.5**	0.55	**32.9**	3.92	**50.0**	1.01	**29.0**	3.24	**19.3**	0.70
Belgium (Fl.)	**75.6**	3.41	**86.1**	0.85	**26.4**	2.63	**33.1**	1.45	**25.6**	2.87	**17.1**	0.79
Brazil	78.1	2.48	80.7	1.41	56.6	3.77	61.4	1.62	42.5	3.91	40.7	1.32
Bulgaria	**59.7**	6.44	**74.5**	2.13			42.6	3.20	**23.8**	4.11	**51.8**	2.47
Denmark	73.7	5.44	82.0	1.44	**31.3**	5.27	**42.7**	1.68			16.5	1.64
Estonia	**72.7**	3.63	**93.9**	0.63	**32.3**	4.16	**52.0**	1.32	34.2	4.06	27.2	1.01
Hungary	50.2	14.82	69.8	1.53	**26.6**	7.47	**40.8**	1.69			26.9	1.24
Iceland	**54.0**	3.68	**75.6**	1.32	**35.6**	3.60	**55.2**	1.56	19.2	2.95	18.7	1.19
Ireland	**78.5**	3.86	**86.3**	0.89	**32.1**	4.40	**42.9**	1.44	**22.5**	3.11	**10.6**	0.66
Italy	**46.8**	3.81	**67.6**	1.11	39.5	3.51	43.7	1.07	**25.1**	2.99	**9.8**	0.49
Korea	86.1	2.44	84.9	0.88	39.7	3.89	47.4	1.27	24.9	3.57	27.6	0.84
Lithuania	**82.5**	2.95	**96.3**	0.43	**54.1**	5.11	**68.2**	1.09	**20.8**	3.68	**45.0**	1.19
Malaysia	**78.8**	3.22	**89.7**	0.71	33.1	3.04	32.4	0.94	**31.3**	3.57	**21.1**	0.97
Malta	**75.3**	4.14	**92.4**	0.87	52.1	5.26	51.8	1.93	18.9	3.69	18.0	1.45
Mexico	**85.8**	3.23	**95.1**	0.56	33.8	3.67	33.1	1.23	31.2	3.93	33.8	1.23
Norway	68.5	3.70	72.8	1.46	**31.3**	3.96	**41.1**	1.58	15.7	2.55	17.7	0.80
Poland	87.3	2.11	91.1	0.77	**44.0**	3.30	**66.1**	1.27	40.1	3.50	34.5	1.02
Portugal	**54.6**	5.95	**77.8**	0.89	40.1	5.85	52.0	1.35	33.8	5.04	29.4	0.89
Slovak Republic	44.4	4.34	50.7	1.57	**30.2**	3.81	**39.0**	1.41	**27.4**	4.73	**39.1**	1.31
Slovenia	**74.8**	3.32	**89.1**	0.67	**64.8**	3.31	**75.5**	1.09	12.6	2.73	10.0	0.67
Spain	86.8	2.38	83.7	0.89	31.1	3.89	36.6	1.12	**24.3**	3.48	**16.8**	0.65
Turkey	**46.0**	5.47	**65.7**	1.83	**48.4**	4.91	**71.9**	1.76	21.9	4.57	18.4	1.21
TALIS average	**70.9**	1.02	**82.1**	0.24	**39.9**	0.92	**49.7**	0.32	25.7	0.79	24.4	0.24

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578315

Table 3.A.12 (2/3)

Types of professional development undertaken by teachers

	Observation visits to other schools				Professional development network				Individual and collaborative research			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**14.2**	2.47	**23.1**	1.57	**50.1**	4.01	**61.3**	1.44	29.6	4.09	37.5	1.31
Austria	**24.4**	3.91	**9.6**	0.54	**24.2**	2.95	**38.3**	1.01	21.9	2.78	26.2	0.84
Belgium (Fl.)	15.6	2.62	15.0	1.18	21.7	2.90	26.0	1.07	28.1	2.59	32.2	0.89
Brazil	33.2	3.03	32.5	1.06	17.0	2.83	22.5	0.95	53.7	3.22	54.8	1.20
Bulgaria	29.5	4.76	22.1	2.14	**8.8**	2.83	**20.5**	2.39			24.8	1.63
Denmark	**6.8**	1.93	**10.8**	0.93	**33.9**	4.36	**44.5**	1.74	43.3	6.20	53.2	1.50
Estonia	**37.4**	3.12	**64.4**	1.36	**22.3**	2.93	**44.3**	1.18	24.5	3.44	26.7	1.06
Hungary			35.5	2.01	**20.6**	4.70	**45.1**	2.23			17.1	0.71
Iceland	**37.4**	3.28	**64.3**	1.31	**68.9**	3.08	**85.2**	1.18	**12.8**	2.13	**19.4**	1.21
Ireland			7.9	0.80	**36.2**	4.23	**52.1**	1.28	20.8	3.21	26.7	1.25
Italy	17.2	2.59	16.0	0.91	**9.1**	1.97	**20.8**	0.79	**44.0**	3.42	**57.3**	0.91
Korea	60.4	3.84	67.2	1.29	43.7	3.92	39.4	1.05	45.1	3.86	50.4	1.07
Lithuania	**36.5**	3.18	**58.1**	1.21	**21.0**	3.99	**38.5**	1.07	**33.9**	5.32	**48.9**	1.02
Malaysia	**23.3**	2.91	**30.8**	1.44	**39.1**	3.39	**48.8**	1.28	**15.1**	2.38	**22.5**	1.14
Malta	16.5	3.66	14.5	1.29	**30.5**	3.82	**40.2**	1.93	37.8	4.21	37.4	1.99
Mexico	24.9	3.47	31.1	1.29	**12.7**	2.50	**28.9**	1.18	65.2	2.83	62.7	1.13
Norway	**10.3**	2.38	**19.8**	1.52	29.0	3.81	35.9	1.63	12.9	2.41	12.3	0.78
Poland	**10.9**	2.11	**20.4**	0.90	**48.0**	3.92	**61.8**	1.54	**33.0**	3.56	**40.6**	1.10
Portugal	**18.0**	3.70	**26.6**	1.06	10.9	3.25	15.1	0.87	52.6	4.48	46.9	1.16
Slovak Republic	**22.8**	3.61	**34.0**	1.52	**25.0**	4.63	**35.4**	1.46	13.7	3.26	11.6	0.84
Slovenia	8.6	2.14	7.6	0.59	**52.9**	4.26	**73.2**	1.33	**12.7**	2.57	**23.1**	1.03
Spain	12.7	2.22	14.8	0.80	24.2	3.49	22.5	0.89	46.1	3.46	49.4	0.98
Turkey	**10.0**	2.43	**23.6**	1.96	**27.0**	3.65	**41.9**	1.89	42.5	3.09	39.7	1.50
TALIS average	**22.4**	0.68	**28.2**	0.27	**29.4**	0.75	**41.0**	0.30	**32.8**	0.78	**35.7**	0.25

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578315

Table 3.A.12 (3/3)

Types of professional development undertaken by teachers

	Mentoring and peer observation				Reading professional literature				Informal dialogue to improve teaching			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	55.4	3.90	47.7	1.43	**73.4**	3.05	**83.6**	1.10	96.0	1.49	93.4	0.80
Austria	17.0	3.33	18.4	0.87	88.5	2.54	89.5	0.59	**96.6**	1.40	**91.8**	0.61
Belgium (Fl.)	24.1	3.05	21.9	1.09	77.2	2.73	79.8	1.00	**95.8**	1.22	**90.9**	0.74
Brazil	43.0	3.63	47.9	1.38	85.0	2.17	82.3	0.80	**89.8**	2.30	**94.6**	0.55
Bulgaria			36.1	3.10	93.5	2.33	93.5	1.00	96.0	1.82	94.7	0.69
Denmark	**33.6**	4.36	15.7	1.73	76.1	4.36	77.4	1.60	93.1	2.89	90.1	0.95
Estonia	24.6	3.88	32.0	1.39	**93.5**	1.68	**87.2**	0.89	92.8	2.02	93.9	0.61
Hungary			48.2	2.53	79.7	9.42	88.9	1.47	**89.6**	4.15	**78.4**	1.22
Iceland	**14.7**	2.58	37.3	1.30	**72.9**	3.26	**84.8**	1.02	**91.8**	1.90	**95.6**	0.62
Ireland	20.2	4.06	18.1	1.08	61.1	4.06	60.2	1.05	**92.9**	2.35	**86.9**	0.87
Italy	24.0	2.94	27.7	0.96	**56.0**	3.10	**66.9**	0.86	91.3	2.11	93.2	0.45
Korea	65.8	3.37	69.7	1.19	53.8	4.69	52.4	1.08	**93.7**	1.74	**89.7**	0.69
Lithuania	**15.8**	3.62	40.9	1.21	**85.3**	3.43	**93.9**	0.50	**90.4**	2.85	**97.1**	0.34
Malaysia	**24.6**	2.58	43.6	1.28	**53.3**	3.59	**62.4**	1.64	95.9	1.10	95.8	0.38
Malta	16.9	3.39	16.4	1.22	63.4	4.36	60.7	2.06	91.2	2.93	92.5	1.11
Mexico	**30.5**	4.01	38.7	1.39	68.4	4.84	67.5	1.06	85.5	3.82	89.3	0.75
Norway	27.6	3.60	21.4	1.55	59.5	4.24	64.5	1.18	95.5	1.71	93.9	0.62
Poland	69.1	3.37	66.5	1.51	**89.2**	2.22	**95.7**	0.43	95.3	1.59	95.9	0.39
Portugal			15.1	0.88	63.8	4.97	73.6	1.00	91.6	2.50	94.3	0.51
Slovak Republic	64.9	3.78	64.8	1.36	94.1	1.71	93.1	0.68	94.2	1.99	96.1	0.52
Slovenia	**8.4**	2.15	30.4	0.90	81.3	2.77	86.7	0.76	98.6	1.11	96.9	0.37
Spain	**10.9**	2.36	22.0	1.02	60.2	4.36	68.7	0.92	91.6	2.04	92.6	0.51
Turkey	**19.6**	4.51	35.0	2.18	86.2	4.54	79.3	2.45	**96.4**	1.87	**92.0**	0.73
TALIS average	**30.5**	0.78	**35.5**	0.31	**74.6**	0.83	**77.9**	0.25	93.3	0.47	92.6	0.14

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578315

Table 3.A.13 (1/3)

Percentage of new and experienced teachers who reported a moderate or large impact of professional development activities on their development as a teacher

	Courses and workshops				Education conferences and seminars				Qualification programmes			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	79.1	3.17	78.5	1.22	62.2	4.87	68.3	1.42	79.9	8.25	78.6	2.92
Austria	74.1	4.05	75.7	0.93	44.8	7.00	55.9	1.27	88.4	5.77	89.4	1.13
Belgium (Fl.)	55.4	3.91	52.8	1.32	48.9	6.71	42.3	1.93	75.6	5.45	66.0	2.28
Brazil	**83.8**	2.39	**75.3**	1.12	**85.5**	2.92	**71.8**	1.33	**95.1**	1.37	**89.4**	1.02
Bulgaria	76.9	9.91	84.6	1.33	90.2	5.73	80.2	1.58	73.3	16.07	88.3	2.17
Denmark	**77.8**	4.38	**86.8**	0.98	74.2	8.04	83.5	1.64	**100.0**	0.00	**96.7**	1.22
Estonia	79.2	4.52	86.8	0.73	65.9	6.58	70.6	1.50	94.1	3.30	90.0	1.06
Hungary	72.4	9.23	86.6	0.90	72.1	11.39	78.5	1.69	97.0	3.26	92.9	0.96
Iceland	80.1	4.10	83.6	1.25	73.3	5.21	73.7	1.80	94.2	3.50	92.4	1.89
Ireland	83.0	3.71	81.8	1.00	79.7	5.96	74.2	1.60	90.3	5.63	92.9	1.76
Italy	**88.6**	2.83	**81.6**	1.22	77.5	4.66	78.5	1.20	87.0	4.39	86.6	1.75
Korea	80.9	3.37	79.1	0.88	82.0	4.55	74.8	1.41	86.0	6.13	84.1	1.37
Lithuania	93.8	2.61	91.2	0.65	80.3	5.00	83.2	1.04	92.3	5.32	88.2	1.28
Malaysia	94.9	1.43	94.4	0.49	92.2	1.94	88.8	1.15	95.3	2.04	94.9	0.98
Malta	69.8	5.11	74.4	1.74	71.2	5.98	69.8	2.72	88.3	6.64	95.3	1.71
Mexico	**91.2**	2.29	**85.1**	0.81	87.6	4.30	81.6	1.60	**99.5**	0.46	**90.6**	1.11
Norway	**86.6**	2.92	**78.6**	0.99	65.2	6.34	74.4	1.49	91.1	5.00	93.8	1.28
Poland	83.9	2.42	86.5	0.77	74.5	4.61	75.7	1.40	**96.8**	1.71	**91.7**	1.07
Portugal	74.9	5.71	83.0	0.90	75.9	6.48	72.9	1.39	**98.4**	1.60	**86.5**	1.17
Slovak Republic	77.1	5.78	75.4	1.71	78.7	6.42	75.8	1.59	86.8	5.04	82.8	1.43
Slovenia	82.9	3.79	83.4	0.77	76.0	4.20	78.8	0.93	72.7	10.56	80.7	2.65
Spain	77.1	3.59	76.5	0.96	66.2	7.03	72.1	1.80	75.9	5.97	72.9	2.04
Turkey	73.7	5.37	72.7	2.09	72.6	7.51	74.3	1.68	70.6	11.11	82.0	3.33
TALIS Average	79.9	0.97	80.6	0.24	73.8	1.27	73.9	0.33	88.2	1.32	87.2	0.37

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578334

Table 3.A.13 (2/3)

Percentage of new and experienced teachers who reported a moderate or large impact of professional development activities on their development as a teacher

	Observation visits to other schools				Professional development network				Individual and collaborative research			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	78.5	8.46	71.9	2.36	74.7	4.23	73.4	1.31	84.2	5.05	85.9	1.56
Austria	67.1	7.22	60.7	3.27	71.0	6.10	68.6	1.34	78.9	5.78	88.9	0.98
Belgium (Fl.)	**70.7**	5.53	**44.9**	3.03	**68.1**	5.41	**53.0**	2.04	76.6	4.73	66.8	1.62
Brazil	75.3	4.54	66.6	1.56	70.7	8.86	73.8	1.95	83.5	3.66	80.8	1.27
Bulgaria	73.1	20.35	79.9	2.05	70.3	14.25	86.5	1.87	69.8	10.27	87.5	1.73
Denmark	76.1	12.75	84.1	3.37	83.5	5.77	88.5	1.42	90.5	3.53	94.9	0.82
Estonia	79.4	5.63	69.6	1.27	**69.0**	7.16	**84.8**	1.07	89.5	5.10	90.5	1.09
Hungary	94.3	8.24	81.0	1.51	74.1	22.67	85.1	1.48	89.9	13.26	94.0	1.32
Iceland	75.9	5.51	80.8	1.39	89.7	2.63	90.6	0.89	**98.4**	1.20	**93.6**	1.89
Ireland	92.9	7.38	80.5	4.50	69.1	5.62	79.1	1.37	91.1	5.94	86.5	1.46
Italy	92.2	6.35	82.0	2.18	91.6	6.41	86.4	1.11	95.7	1.73	95.1	0.47
Korea	**75.6**	4.60	**64.5**	1.20	83.0	4.80	85.5	1.02	92.7	3.50	89.7	0.88
Lithuania	91.5	4.75	90.6	0.84	91.8	4.99	90.2	0.97	94.0	3.51	91.3	0.79
Malaysia	90.3	4.31	87.4	1.31	90.8	2.79	90.2	0.93	88.9	6.17	88.8	1.24
Malta	77.9	8.02	68.4	4.46	65.7	8.18	76.3	2.58	84.5	4.91	90.6	1.74
Mexico	80.8	4.49	77.9	1.67	78.5	7.47	81.4	1.78	93.9	2.06	90.8	0.70
Norway	55.6	13.60	72.6	2.30	84.1	5.33	80.8	1.90	91.6	5.93	95.7	1.45
Poland	79.1	7.69	78.1	2.39	88.9	3.36	88.3	0.97	92.4	3.66	92.9	0.96
Portugal	49.7	11.42	68.0	1.85	81.9	11.36	80.7	2.15	95.7	2.52	93.9	0.78
Slovak Republic	**83.1**	6.18	**65.1**	2.05	71.1	7.75	78.7	1.89	**100.0**	0.00	**82.3**	3.91
Slovenia	**90.9**	6.36	**76.4**	2.96	66.4	5.44	64.1	1.31	95.5	4.44	89.6	1.48
Spain	86.5	5.42	75.5	2.41	86.7	4.99	81.2	1.59	91.2	3.05	89.8	0.91
Turkey	**96.5**	1.72	**86.9**	2.16	83.9	6.29	79.9	1.40	80.1	8.23	95.2	1.36
TALIS Average	**79.7**	1.74	**74.5**	0.51	78.5	1.71	80.3	0.33	89.1	1.15	89.4	0.31

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578334

Table 3.A.13 (3/3)

Percentage of new and experienced teachers who reported a moderate or large impact of professional development activities on their development as a teacher

	Mentoring and peer observation				Reading professional literature				Informal dialogue to improve teaching			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**79.5**	3.44	**71.6**	1.58	65.4	4.43	66.3	1.25	**96.1**	1.49	**84.6**	0.94
Austria	75.8	9.11	72.9	1.63	87.0	2.65	82.2	0.70	**92.0**	1.88	**84.5**	0.73
Belgium (Fl.)	**66.3**	7.49	**46.3**	2.62	60.7	3.76	57.6	1.28	**90.8**	1.73	**69.8**	1.08
Brazil	75.5	5.69	64.9	1.60	**89.2**	2.35	**81.9**	1.07	**82.2**	2.55	**76.0**	1.06
Bulgaria	88.7	7.09	85.9	1.71	89.1	5.00	92.5	1.05	**74.6**	5.99	**87.1**	1.09
Denmark	75.5	7.75	79.4	3.93	81.4	4.37	85.3	1.20	95.1	2.68	92.6	1.04
Estonia	77.8	6.51	76.5	1.64	90.0	2.20	87.1	0.72	**90.6**	2.07	**81.3**	0.96
Hungary	95.9	2.94	90.9	1.03	92.3	5.23	92.6	0.67	96.0	3.62	92.6	0.98
Iceland	**90.6**	5.60	**76.9**	2.16	91.0	2.11	88.2	1.10	90.5	2.31	92.0	0.91
Ireland	57.4	10.45	72.4	2.87	75.7	4.81	70.7	1.55	87.1	3.33	82.6	1.06
Italy	**97.4**	2.00	**89.2**	1.05	87.5	3.15	91.1	0.60	92.4	1.88	90.4	0.49
Korea	69.1	4.68	69.5	1.18	82.6	4.05	77.1	1.31	**93.2**	2.43	**85.3**	0.71
Lithuania	69.6	12.67	85.4	1.26	97.8	0.99	96.1	0.43	**96.6**	1.64	**91.7**	0.66
Malaysia	87.3	3.67	90.1	0.95	90.2	2.59	86.0	0.82	**95.1**	1.15	**91.9**	0.53
Malta	77.4	7.95	66.3	4.32	80.9	4.63	77.7	1.84	89.2	2.63	83.6	1.54
Mexico	78.7	5.64	78.6	1.62	88.0	2.81	83.8	1.09	**91.7**	1.73	**80.7**	0.99
Norway	**89.7**	4.47	**76.3**	2.92	71.3	4.19	78.6	0.91	**99.7**	0.33	**95.4**	0.48
Poland	**90.1**	2.75	**76.8**	1.15	89.9	2.06	93.7	0.53	**93.9**	1.69	**89.7**	0.73
Portugal	**100.0**	0.00	**87.6**	1.85	79.2	6.13	78.9	1.05	89.9	3.21	88.0	0.70
Slovak Republic	78.9	4.74	78.5	1.19	88.7	2.99	88.9	1.05	**93.0**	2.16	**85.3**	0.90
Slovenia	66.8	12.38	76.4	1.50	79.3	3.45	81.6	0.88	86.9	2.87	87.0	0.75
Spain	81.1	8.58	81.2	1.53	79.5	4.24	74.0	1.03	**85.5**	2.47	**79.9**	0.79
Turkey	78.1	6.74	85.5	2.02	**97.4**	1.42	**89.9**	1.41	90.1	2.77	93.4	1.21
TALIS average	80.3	1.44	77.3	0.43	84.1	0.77	82.7	0.22	**91.0**	0.54	**86.3**	0.19

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578334

Table 3.A.14 (1/4)

Percentage of teachers who report high professional development needs in the following areas

	Overall index of development need				Content and performance standards				Student assessment practices			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**53.4**	1.01	**43.1**	0.35	**14.6**	2.44	**7.5**	0.66	**13.9**	2.16	**6.7**	0.63
Austria	52.3	0.95	50.7	0.32	14.2	2.39	13.9	0.71	**24.4**	4.13	**11.6**	0.55
Belgium (Fl.)	**56.8**	0.98	**46.0**	0.42	16.1	2.73	11.7	0.69	19.7	2.67	15.2	0.78
Brazil	56.0	1.43	58.1	0.59	22.1	3.10	23.1	1.34	21.2	3.42	21.1	1.11
Bulgaria	**55.8**	2.31	**49.0**	0.65	23.6	3.58	25.8	2.45			16.3	1.52
Denmark	**48.7**	1.18	**44.0**	0.62	16.6	3.50	17.2	1.30	12.7	2.60	13.8	1.06
Estonia	**60.4**	1.24	**54.9**	0.47	22.7	2.96	17.3	0.98	15.1	2.72	10.0	0.65
Hungary	42.0	3.48	44.9	0.57			9.4	0.59			6.1	0.51
Iceland	**55.4**	1.20	**50.9**	0.46	**12.6**	2.31	**6.2**	0.74	17.4	2.61	13.7	1.05
Ireland	49.5	1.25	48.8	0.51	7.4	2.15	6.4	0.54	6.9	1.85	8.3	0.84
Italy	**65.1**	1.00	**62.3**	0.35	18.7	2.13	17.4	0.72	26.5	2.30	23.7	0.86
Korea	**75.6**	0.96	**69.2**	0.30	**36.8**	3.94	**26.1**	0.94	**31.6**	4.00	**20.9**	0.84
Lithuania	**66.6**	1.76	**61.6**	0.37	39.8	3.66	39.2	1.05	33.7	4.45	37.5	1.04
Malaysia	**78.8**	1.11	**71.7**	0.68	**62.7**	2.99	**48.5**	1.69	**53.9**	3.36	**42.8**	1.55
Malta	48.8	1.72	47.4	0.56			8.2	1.03			7.2	0.96
Mexico	45.0	2.77	50.5	0.55	14.1	3.94	13.8	0.75	13.7	3.46	15.3	0.89
Norway	**58.1**	1.10	**55.1**	0.51	15.5	2.68	12.6	0.92	**29.8**	3.43	**21.3**	1.32
Poland	**54.3**	1.33	**48.7**	0.50	**19.5**	2.92	**11.3**	0.78	12.4	2.35	12.8	0.82
Portugal	**51.2**	1.31	**56.0**	0.31			9.9	0.64			7.0	0.53
Slovak Republic	**52.8**	1.41	**48.2**	0.55	11.6	3.20	8.0	0.67	13.2	2.62	8.6	0.63
Slovenia	56.4	1.24	57.4	0.37	14.3	2.92	13.3	0.72	23.2	2.79	22.3	0.96
Spain	**55.8**	1.25	**48.2**	0.44	7.6	1.90	5.9	0.41	**11.8**	2.44	**5.5**	0.43
Turkey	**49.4**	1.72	**41.5**	0.73	16.5	4.29	8.3	1.17	17.5	4.72	7.5	0.98
TALIS average	**56.0**	0.33	**52.5**	0.10	**20.3**	0.68	**15.7**	0.21	**21.0**	0.72	**15.4**	0.20

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
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Table 3.A.14 (2/4)

Percentage of teachers who report high professional development needs in the following areas

	Classroom management				Subject field				Instructional practices			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**24.3**	3.10	**2.8**	0.37	**9.6**	2.09	**4.4**	0.55	**10.6**	2.16	**2.7**	0.37
Austria	17.9	2.77	13.5	0.64	18.1	2.67	14.7	0.59	24.1	3.52	18.3	0.75
Belgium (Fl.)	**30.9**	2.80	**10.3**	0.65	**24.3**	3.04	**16.8**	0.79	19.1	2.67	13.6	0.83
Brazil	14.3	2.43	13.6	0.98	12.1	2.73	15.2	1.10	11.2	2.18	15.2	1.09
Bulgaria			12.5	1.34			20.6	1.22	16.6	2.44	18.5	1.73
Denmark	**6.6**	1.58	**1.9**	0.52	5.8	1.83	4.5	0.58	10.7	3.41	4.1	0.60
Estonia	**24.8**	3.59	**12.6**	0.77	26.7	3.09	22.1	1.05	**26.2**	2.78	**17.6**	0.82
Hungary			3.3	0.37			6.9	0.49			14.5	0.69
Iceland	**27.0**	2.88	**8.5**	0.94	13.3	2.29	9.6	0.93	**13.1**	2.20	**7.2**	0.78
Ireland	11.3	2.73	5.9	0.61	6.1	1.86	3.9	0.50	7.1	1.85	5.2	0.63
Italy	**28.6**	2.65	**18.3**	0.88	29.5	2.96	34.2	0.80	36.3	3.10	34.7	0.91
Korea	**52.2**	3.81	**28.8**	0.91	**46.2**	3.89	**37.8**	0.98	**54.2**	3.76	**38.9**	0.91
Lithuania	**48.6**	4.52	**26.9**	0.93	48.9	5.11	43.0	0.98	50.8	4.61	44.0	0.99
Malaysia	**55.1**	3.13	**40.2**	1.50	**66.1**	3.31	**55.9**	1.59	**69.9**	2.90	**53.6**	1.55
Malta	**12.1**	3.68	**4.2**	0.68			6.4	0.86			4.0	0.67
Mexico	8.9	2.79	8.9	0.66	14.5	3.15	10.7	0.84	15.7	4.58	12.1	0.93
Norway	**19.5**	3.11	**6.7**	0.62	5.3	1.48	8.8	0.76	9.6	1.98	8.2	0.68
Poland	**29.2**	3.48	**16.6**	0.96	**23.1**	2.95	**16.4**	0.92	**23.7**	2.36	**17.0**	0.79
Portugal			5.9	0.48			4.8	0.44			7.8	0.56
Slovak Republic	**17.2**	3.24	**9.1**	0.81	19.1	4.00	17.1	0.98	11.6	2.73	13.5	0.95
Slovenia	**31.6**	3.84	**23.4**	0.84	13.6	2.92	16.0	0.83	20.4	3.26	19.9	0.87
Spain	**20.0**	3.18	**7.4**	0.52	**11.3**	3.03	**4.6**	0.46	**13.3**	2.94	**5.0**	0.36
Turkey			5.6	1.13	11.8	3.32	8.2	1.15	12.8	3.75	8.1	1.12
TALIS average	**25.3**	0.73	**12.5**	0.17	**21.3**	0.70	**16.6**	0.18	**22.8**	0.68	**16.7**	0.19

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
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Table 3.A.14 (3/4)

Percentage of teachers who report high professional development needs in the following areas

	ICT teaching skills				Teaching special learning needs students				Student discipline and behaviour problems			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**11.7**	2.48	**18.5**	1.08	**21.8**	3.07	**14.3**	1.04	**24.3**	3.97	**4.3**	0.53
Austria	**13.7**	2.57	**24.2**	0.66	32.3	3.75	30.2	0.98	38.3	3.78	32.3	1.06
Belgium (Fl.)	**8.1**	1.75	**15.5**	0.77	14.8	2.33	12.6	0.78	**22.4**	2.80	**10.8**	0.71
Brazil	**25.8**	2.98	**36.6**	1.38	**49.5**	3.34	**64.5**	1.19	27.0	3.02	26.5	1.16
Bulgaria	**10.4**	2.72	**28.0**	1.58	28.7	5.03	24.1	1.67			14.1	1.49
Denmark	22.6	4.22	19.8	1.72	**34.3**	3.64	**23.6**	1.51	**23.3**	3.81	**8.3**	1.28
Estonia	**17.8**	2.60	**28.5**	0.97	33.1	3.85	27.8	0.95	**44.8**	3.68	**22.3**	1.02
Hungary			23.8	1.06	39.1	6.87	42.2	1.45	38.4	7.03	30.6	1.36
Iceland	14.8	2.23	17.9	1.23	**29.8**	3.13	**21.8**	1.25	**32.2**	3.22	**17.2**	1.13
Ireland	**11.6**	2.40	**35.9**	1.38	34.1	3.65	38.6	1.33	15.2	2.91	13.7	0.98
Italy	23.2	2.38	25.8	0.85	40.6	3.60	34.9	1.07	**43.4**	3.54	**27.3**	1.04
Korea	21.3	3.07	17.5	0.71	31.2	3.81	25.3	0.91	**53.9**	4.14	**33.3**	0.89
Lithuania	**27.8**	3.84	**36.5**	0.94	31.2	4.03	25.2	0.96	**45.6**	5.54	**23.3**	0.87
Malaysia	47.4	3.25	43.3	1.21	**33.8**	2.97	**25.0**	1.11	**58.9**	2.86	**39.8**	1.51
Malta	**13.4**	3.94	**24.2**	1.63	32.2	4.79	34.8	1.61	**18.6**	4.18	**9.4**	1.14
Mexico	**16.1**	2.97	**25.8**	1.08	**28.3**	4.25	**40.0**	1.24	21.9	4.11	21.5	1.12
Norway	**9.6**	2.39	**29.6**	1.23	37.5	4.49	28.5	1.06	**29.2**	3.38	**15.4**	0.93
Poland	18.0	2.40	22.6	0.95	26.4	3.44	29.7	1.25	**39.5**	3.31	**22.1**	1.02
Portugal			24.9	0.92	41.0	5.37	50.4	1.09	16.2	3.53	17.4	0.90
Slovak Republic	11.2	2.89	15.2	0.94	25.5	3.57	19.5	0.99	24.3	4.29	18.8	1.22
Slovenia	**16.0**	2.61	**25.8**	0.84	37.1	4.01	40.7	1.11	38.7	3.78	31.6	1.11
Spain	20.8	3.52	26.5	1.05	41.7	3.98	35.4	1.06	**29.8**	3.24	**17.7**	0.81
Turkey	**8.4**	1.30	**15.1**	1.03	33.9	5.55	26.4	1.75	**21.2**	4.56	**11.7**	1.18
TALIS average	**17.6**	0.63	**25.3**	0.24	**32.9**	0.86	**31.1**	0.25	**32.1**	0.84	**20.4**	0.23

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
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Table 3.A.14 (4/4)

Percentage of teachers who report high professional development needs in the following areas

	School management and administration				Teaching in a multicultural setting				Student counselling			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	8.4	2.36	5.7	0.57	6.1	1.79	3.8	0.45	**14.6**	2.22	**6.4**	0.60
Austria	**9.2**	2.25	**3.7**	0.38	8.5	2.07	10.0	0.70	10.6	2.35	13.2	0.68
Belgium (Fl.)	4.5	1.47	2.2	0.31	**6.9**	1.55	**3.4**	0.43	**15.6**	2.18	**10.5**	0.75
Brazil	17.5	2.68	20.3	0.78	28.4	3.01	33.6	1.29	19.3	2.75	21.0	1.19
Bulgaria			8.1	0.81			15.4	2.15	**18.2**	2.78	**9.9**	1.38
Denmark			3.9	0.49	**12.9**	2.61	**6.4**	0.96	8.1	2.34	5.2	0.70
Estonia	7.7	1.75	4.4	0.40	13.1	2.66	9.5	0.79	24.7	3.14	21.3	0.97
Hungary			3.3	0.76			11.0	0.71			8.8	0.78
Iceland	8.5	2.09	7.8	0.89	16.5	2.66	13.2	0.84	14.9	2.48	12.5	0.91
Ireland	**7.5**	2.01	**12.1**	0.98	**12.2**	2.82	**25.2**	1.37	20.7	3.68	25.2	1.33
Italy	8.4	1.83	8.4	0.51	29.6	3.33	25.0	0.90	15.2	2.38	20.0	0.90
Korea	15.5	2.57	10.5	0.63	13.4	3.02	10.2	0.59	**58.3**	3.74	**40.3**	1.08
Lithuania	12.2	3.32	9.6	0.65	16.1	3.80	9.4	0.81	**32.4**	6.00	**17.7**	0.99
Malaysia	**38.5**	3.04	**29.0**	1.21	**42.7**	3.34	**29.0**	1.41	**44.4**	3.19	**34.1**	1.28
Malta	13.9	3.54	12.7	1.43	11.5	3.01	14.3	1.48	14.5	3.21	16.0	1.37
Mexico	10.8	2.32	12.0	0.76	16.8	3.33	18.4	0.95	22.2	3.76	26.3	1.09
Norway	6.0	1.94	5.9	0.56	6.5	1.84	8.5	0.80	11.6	2.65	7.5	0.63
Poland	6.8	1.92	7.8	0.57	8.1	1.80	6.5	0.62	23.8	3.05	25.5	1.00
Portugal	**11.1**	3.23	**18.5**	0.93	14.2	3.40	17.1	0.74			8.7	0.63
Slovak Republic	4.3	1.42	4.9	0.52			4.5	0.47	10.5	2.72	7.7	0.57
Slovenia	7.2	1.89	7.1	0.62	11.8	2.62	9.8	0.68	19.1	3.04	21.1	0.82
Spain	15.8	3.00	14.0	0.69	21.1	3.11	17.2	0.74	**19.2**	3.43	**11.6**	0.57
Turkey	12.9	3.13	8.6	0.72	12.5	3.39	14.9	1.43			8.9	1.44
TALIS Average	**11.3**	0.55	**9.6**	0.16	**15.4**	0.63	**13.8**	0.21	**20.9**	0.71	**16.5**	0.20

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578353

CHAPTER 4

The Work of New Teachers

Teaching practices are at the centre of the debate of what constitutes effective teaching. The work of new teachers, including their teaching practices and professional collaboration, is explored in Chapter 4. This discussion explores the work and teaching load of new teachers, along with an analysis of new teachers' contractual status and job satisfaction. As teaching beliefs are often found to play a role in teachers'choice of teaching practices, a discussion of teaching beliefs of new teachers compared with those of more experienced teachers is also presented in this chapter.

Highlights

- **The teaching practices and beliefs of new teachers are similar to experienced teachers.**
  Constructivist beliefs were favoured by both new and experienced teachers in virtually all countries. Structured teaching practices were most frequently used by all teachers, followed by student-oriented and activity enhanced practices.
- **New and experienced teachers have similar work and teaching loads.**
  New teachers spent slightly more time on lesson planning and slightly less time teaching students but these differences are small in most countries.
- **New and experienced teachers have similar levels of job satisfaction.**
  Nearly 90% of both new and experienced teachers either agreed or strongly agreed that they are satisfied with their job.

A number of issues have been analysed to explore the working lives of new teachers. In the first part of this chapter, new teachers' teaching practices and beliefs are examined. Then, the workload and teaching load of new teachers is analysed. This is complemented with a discussion of teachers' contractual status and job satisfaction.

TEACHING PRACTICES

Teaching practices are at the centre of the debate about what constitutes effective teaching. But what can be considered the best teaching practices constitutes an inherently unending debate, as it is a consensus that the best practices vary with context and goals (Good, et al., 2006).

The TALIS 2008 analytical framework recognises that effective practices are not enough to ensure effective learning and to improve student outcomes. To reach this goal, learning opportunities provided by teachers must be recognised and utilised by students in an effective way. For this reason, based on the results from the IEA (International Association for the Evaluation of Educational Achievement) TIMSS (Trends in International Mathematics and Science Study) video study (Klieme, et al., 2006), TALIS 2008 teachers were asked about their teaching practices using a triarchic model. The model considers identifying structure, student orientation, and enhanced activities as three basic dimensions of teaching practices (OECD, 2009). The next figure presents the country mean of ipsative scores (see Box 4.1) for the three dimensions of teaching practices mentioned above (Figure 4.1).

Box 4.1 Calculation and use of ipsative scores

The calculation of ipsative scores is an approach to standardising individual responses to express them as preferences between two or more options (OECD, 2009). The procedure consists of subtracting the individual mean across all the items measuring a construct (e.g. teaching practices) from the individual mean across a subset of items measuring a dimension of this construct (e.g. student-oriented practices). Therefore, the resulting score is the relative position of the individual on one of the options available, in this case between structured, student- or activities-oriented practices (Fischer, 2004).

For the indices measuring *teaching beliefs, classroom teaching practices* and *co-operation among teaching staff*, an analysis of cross-cultural comparability – or invariance – suggested that the country means of these indices are not directly comparable. Therefore, for these indices, within-countries differences are examined through the calculation of ipsative scores.

Figure 4.1 shows that, in accordance with previous studies (e.g. Klieme, et al., 2006), the general trend for both new and experienced teachers across countries is very similar. Structured teaching practices were the most frequently used followed by student-oriented practices and activity enhanced practices, in this order.

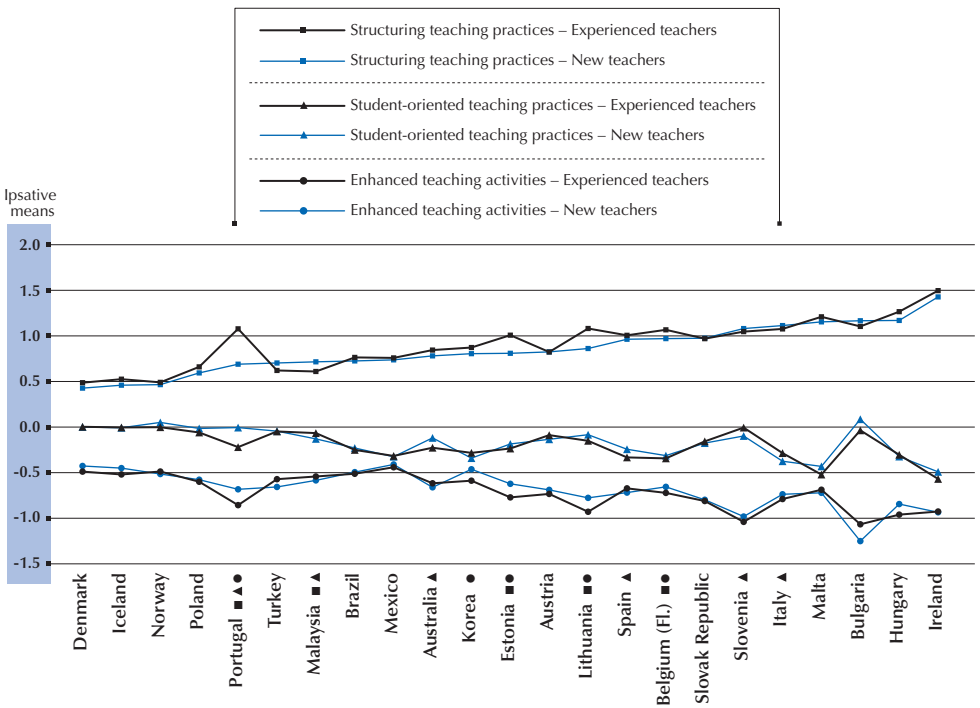
Possible differences between new and experienced teachers regarding their teaching practices were further analysed by comparing the means of their ipsative scores for the three teaching practices considered (Figure 4.1). Although the preferences of new and more experienced

teachers regarding their teaching practices were similar, there were still some interesting differences. For example, experienced teachers show a considerably higher endorsement for structured practices than their less experienced peers in Portugal, and a moderate higher endorsement in Belgium (Fl.), Estonia, Lithuania.

Figure 4.1

Country profiles of classroom teaching practices for new and experienced teacher

Country mean of ipsative scores



Countries are ranked by the relative frequency with which their new teachers engage in structuring teaching practices, student-oriented teaching practices and enhanced activities. So new teachers in Denmark adopt the different practices to a fairly similar degree, while new teachers in Ireland use structuring teaching practices much more than they use student-oriented practices and enhanced activities.

Note: Symbols indicate significant differences (at the 5% level) between the mean ipsative scores of new and experienced teachers in structuring (■), student-oriented (▲) and activity-enhanced teaching practices (●), respectively.

Source: OECD, *Teaching And Learning International Survey 2008*.

StatLink http://dx.doi.org/10.1787/888932577840

Significant differences between new and experienced teachers' use of student-oriented teaching practices were found in six countries. In Australia, Portugal and Spain student-oriented practices were more frequently used amongst new teachers, and among experienced teachers in Italy, Malaysia and Slovenia. Finally, in Belgium (Fl.), Estonia, Korea, Lithuania and Portugal significant differences favouring new teachers were found in the level of endorsement for activity-enhanced teaching practices.

PROFESSIONAL CO-OPERATION

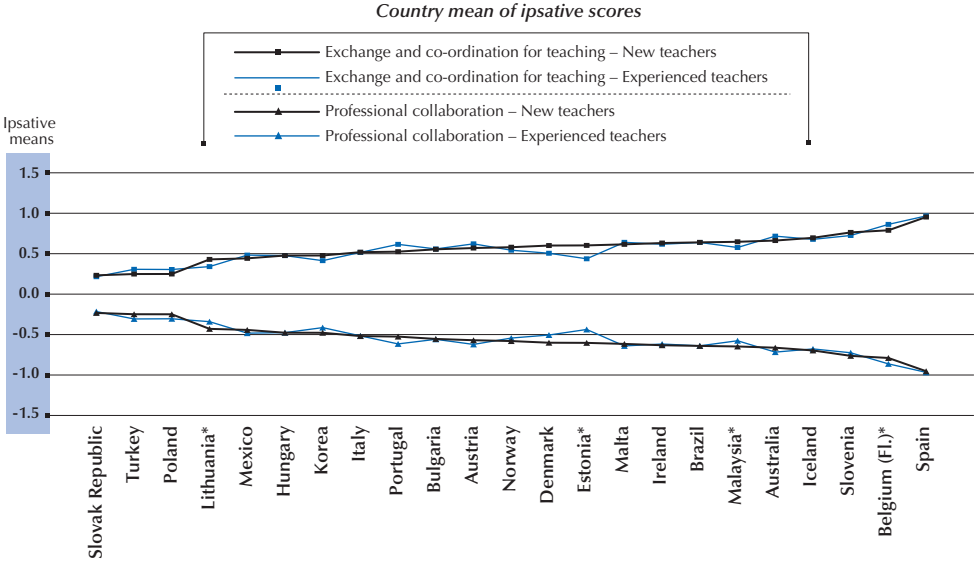
Teachers' professional co-operation is indispensable to achieve complex objectives such as quality of education. This co-operation involves the co-ordination of efforts, resources and strategies of individual teachers in order to improve educational processes and outcomes (Clement and Vandenberghe, 2000; OECD, 2009).

TALIS 2008 used two indices to measure teachers' co-operation practices with other staff. The index exchange and co-ordination for teaching consists of the following practices: exchange and discussion of teaching material, discussion of the development of individual students, attendance at team conferences and ensuring common standards. Previous analyses showed that these practices were highly correlated. That is, teachers who exchange and discuss teaching material also engage in the other practices more often than other teachers and vice versa. The index of professional collaboration is formed by practices such as team teaching, observing other teachers to provide feedback, co-ordinating homework or activities across classes and age groups, and engaging in professional learning activities. These practices were highly correlated to each other as well (see OECD, 2010 for full details about the construction of indices). Figure 4.2 presents the country mean of ipsative scores (see Box 4.1) for the three dimensions of teaching practices mentioned above.

Figure 4.2

Country profiles for co-operation among staff for new and experienced teachers

Country mean of ipsative scores



Countries are ranked in ascending order of the degree to which their new teachers engage in exchange and co-ordination for teaching more than professional collaboration. For example, for new teachers in the Slovak Republic both types of co-operation are reported with a similar frequency, while new teachers in Spain reported a considerably more common practice of exchange and co-ordination for teaching over professional collaboration.

Note: Statistically significant differences (at the 5% level) between the mean ipsative scores of new and experienced teachers are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577859

Figure 4.2 shows that in all participating countries, teachers, both new and experienced, reported a noticeably higher frequency of *exchange and co-ordination for teaching* than *professional collaboration*.

In addition to this general pattern, the figure also shows statistically significant, albeit relatively small, differences between new and experienced teachers in Lithuania, Estonia, Malaysia and Belgium (Fl.). Among those, the largest difference is found in Estonia where new teachers reported a higher endorsement for *exchange and co-ordination for teaching* (and lower endorsement for *professional collaboration*) than their more experienced counterparts.

To further analyse the country profiles of professional co-operation among teaching staff for new and experienced teachers we carried out a correlation analysis between the *exchange and co-ordination for teaching* and the *professional collaboration* indices. We then tested for significant differences between the correlation coefficients (Cohen, et al., 2003) for new and experienced teachers within each country. This analysis reveals whether teachers who reported to carry out exchange and co-ordination practices were more or less likely also to carry out professional collaboration practices and vice versa. Additionally, the test for differences in the correlation coefficients allows us to evaluate if there are differences in this pattern for new and experienced teachers. Table 4.A.1 shows the results of the analyses described above.

As expected, strong and positive correlations were found between the two professional co-operation practices evaluated in all countries. In other words, those teachers reporting high levels of professional collaboration also tended to report high levels of exchange and co-ordination practices. This pattern is quite stable across countries and between the two groups of teachers analysed here. Statistically significant differences between the correlation coefficients of new and experienced teachers were found only in two countries (favouring experienced teachers in Turkey and new teachers in Lithuania); however these differences were rather small (Table 4.A.1).

TEACHING BELIEFS

Teachers' beliefs about the nature of teaching and learning have been consistently found to play an important role in teachers' effectiveness and their choice of teaching practices (Leder, Pehkonen, and Torner, 2002; van de Schaaf, Stokking and Verloop 2008; Wilkins, 2008).

Despite its relevance for educational research, investigations of teachers' beliefs have faced many difficulties mainly caused by definition problems, poor conceptualisation and differing understandings of beliefs and belief structures (Pajares, 1992). The debate is far from over, however it is safe to say that there are two clear and soundly defined ideological orientations: direct instruction and constructivist approaches (Rowe, 2006).

When analysing these approaches it is important not to create an artificial dichotomy. Teachers should not be seen as applying solely constructivist or direct instruction approaches. Virtually all teachers will utilise both approaches at some point in their teaching, moving between the two depending on the context and objectives of various stages of lessons and subjects. The TALIS data do not provide the detail to track movement between different approaches but adds valuable information about teachers' preferences between the two main approaches for classroom teaching.

According to TALIS 2008 International Report, these two ideological orientations can be understood as follows:

> "The direct transmission view of student learning implies that a teachers' role is to communicate knowledge in a clear and structured way, to explain correct solutions, to give students clear and resolvable problems, and to ensure calm and concentration in the classroom." (OECD, 2009:92).

In contrast, a constructivist view focuses on students, not as passive recipients but as active participants in the process of acquiring knowledge.

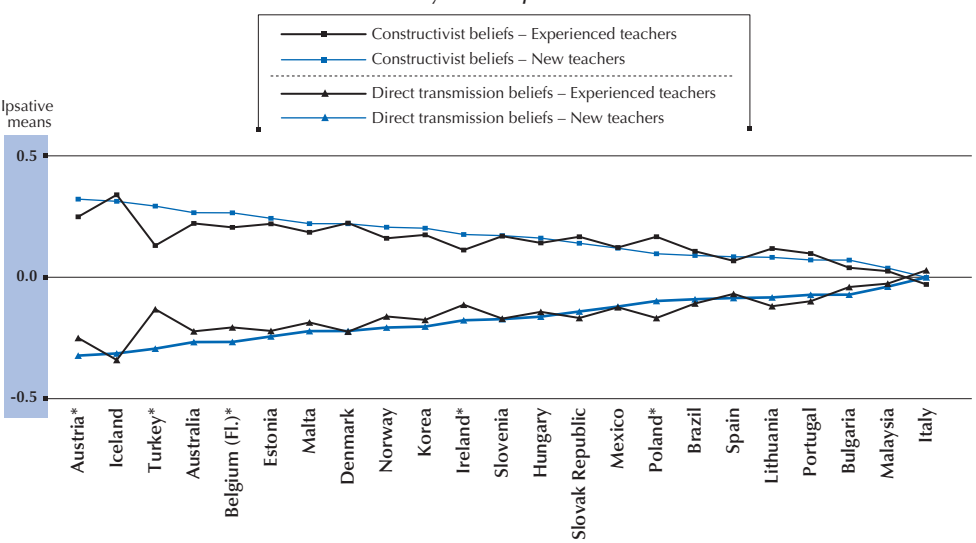
> "Teachers holding this view emphasise facilitating student inquiry, prefer to give students the chance to develop solutions to problems on their own, and allow students to play active role in instructional activities." (OECD, 2009:92).

Figure 4.3 presents the country means of ipsative scores for the two ideological orientations of teaching beliefs considered in TALIS 2009. Because the structure of the indices used to measure teaching beliefs is not completely invariant across countries (OECD, 2010) ipsative scores were used instead of the indices themselves. Thus, instead of comparing country means, Figure 4.3 shows country preferences for new and experienced teachers.

Figure 4.3

Country profiles of teaching beliefs for new and experienced teachers

Country mean of ipsative scores



Countries are ranked by the strength of preference among their new teachers in each country between direct transmission beliefs about teaching and constructivist beliefs about teaching. So, new teachers in Austria show the strongest preference for constructivist beliefs, over direct transmission beliefs, while new teachers in Italy show almost the same level of endorsement to both teaching beliefs.

Note: Statistically significant differences (at the 5% level) between the mean ipsative scores of new and experienced teachers are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577878

As displayed in Figure 4.3 the general average endorsement to constructivist beliefs is stronger than the endorsement to direct transmission beliefs across countries. Figure 4.3 shows that this pattern is more pronounced in Austria and, at the other end of the spectrum, is marginal or does not exist in Bulgaria and Malaysia. Italy is the only TALIS 2008 country where direct transmission beliefs were more favoured by both new and experienced teachers than the constructivist approach.

In order to test for significant differences in teaching beliefs and practices between new and experienced teachers, the means of ipsative scores for the two teaching beliefs considered in TALIS 2008 were compared. Significant differences showed new teachers favoured constructivist beliefs in Austria, Belgium (Fl.), Ireland and Turkey. In Poland, experienced teachers were more likely to favour the constructivist approach.

For teachers in most countries, the correlation between constructivist and direct transmission beliefs is positive (OECD, 2009). That is, even when the endorsement of constructivist beliefs is relatively stronger than that of direct transmission beliefs (Figure 4.3), the two approaches are commonly integrated by teachers across most participant countries. To explore whether this pattern is different for new and experienced teachers, an analysis of the differences between the correlation coefficients for these two groups is presented in Table 4.A.2.

Confirming the results of the TALIS 2008 International Report, all countries except Australia, Austria and Iceland show positive correlations. However, no meaningful differences were found regarding the pattern of this finding for new and experienced teachers. Differences found in the correlation coefficients for new and experienced teachers are, in general, small across the participant countries, and only in Turkey did this difference prove to be statistically significant (Table 4.A.2). Therefore, if the correlation between the two beliefs is interpreted as the degree to which teachers are willing to combine these two approaches in their teaching practices, we cannot say that new and experienced teachers differ in their willingness to combine direct transmission and constructivist beliefs.

WORKLOAD AND TEACHING LOAD

There were few differences in the workload of new and more experienced teachers. On average, new teachers spent slightly more time on lesson planning and slightly less time actually teaching students and performing administrative duties (Table 4.A.3). A number of the differences in the time new and more experienced teachers spent on these aspects of their work were statistically significant in specific countries. However, with a few exceptions, the magnitudes of the differences do not appear to be quantitatively important.

New teachers in Mexico spent about seven fewer hours of teaching per week than experienced teachers. New teachers in Austria, Brazil, Estonia, Italy, Lithuania and Portugal teach 3-5 fewer hours per week than more experienced teachers. With the exception of these countries, differences between new and more experienced teachers in the number of hours spent on different activities were small.

The lack of large differences between new and more experienced teachers in the time they spent on various tasks is an important finding for policy makers. In some respects, this report offers support to other research showing that new teachers are often less effective in classroom teaching.

For example, TALIS 2008 data show that new teachers report feeling somewhat less effective in their work than more experienced teachers (see Chapter 5). Moreover, new teachers report spending a smaller proportion of their classroom time teaching and learning, report participating in less professional development, and report higher needs of professional development than more experienced teachers in a number of areas. If a school were trying to maximise the effectiveness of the teaching in its classrooms, it would have its more effective teachers spending more time teaching compared to its less effective teachers. Instead, there is little job differentiation between new and more experienced teachers. In most countries, teachers were likely to have spent similar amounts of time teaching in the first year of their careers as they were in the last year of their careers.

It is considered a problem in many countries that for teachers to be promoted and move up their career structure, they have to leave the classroom to assume management positions (OECD, 2005). The career structure can therefore be counterproductive as it is taking its most experienced teachers out of the classroom. But the lack of job differentiation in schools receives relatively less attention, even though it can offer significant opportunities to increase school effectiveness.

NEW TEACHERS' CONTRACTUAL STATUS AND JOB SATISFACTION

A concern in many countries is the contractual status of new teachers. While most teachers enjoy secure and even permanent employment across TALIS 2008 countries (84.5% according to the TALIS International Report), a proportion of teachers were often employed on fixed-term contracts (11% with contracts for one school year or less, and 4.5% with contracts for more than one school year). This is a concern for many teachers who lack the job security that is prevalent throughout the teaching profession. Short-term contracts can affect teachers' effectiveness not only through heightened anxiety from being employed on fixed-term contracts, but also from the practicalities of having to seek new employment on a continual basis. Job searching is a time-consuming activity that can detract from teachers' responsibilities and reduce their commitment and attachment to their school (OECD, 2005).

New teachers were substantially more likely than more experienced teachers to be employed on fixed-term contracts. On average, 45% of new teachers were employed on permanent contracts, compared to 88% of experienced teachers (Table 4.A.4).

In a number of countries, the career structure of teachers appears to include fixed-term contracts for new teachers who are then employed on a permanent basis once they have gained more experience in the profession. For example, in Austria, Belgium (Fl.), Bulgaria, Ireland, Italy, Poland, Portugal, Slovenia and Spain, over 80% of new teachers were employed on fixed-term contracts. But this is a step towards permanent employment which is the contractual status for most of their teachers overall (Table 4.A.4).

But in a number of other countries, fixed-term contracts were not necessarily a step on the road to permanent employment. On average, 24% of teachers on fixed-term contracts had been working as teachers for between 3 and 10 years. This is especially evident in Ireland, Italy and Portugal, where the proportion of teachers in this situation exceeds 50%. Clearly, these are not all new teachers but still find themselves on fixed-term contracts (Table 4.A.5). TALIS 2008 data do not identify if these teachers were on fixed-term contracts by choice. If they are not, one

would assume that these are the teachers who are a concern for stakeholders and policy makers in some countries. It is therefore important to look at the relationship between contractual status and factors such as job satisfaction.

Teachers were found to have high job satisfaction regardless of their contractual status. Teachers on fixed-term contracts had similar levels of job satisfaction as permanently employed teachers (Tables 4.A.6 and 4.A.7).

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Annex 4.A
Key Tables on Teachers' Work

Table 4.A.1

Correlation of different co-operation practices among staff

	Exchange and co-ordination for teaching and professional collaboration			
	New teachers		Experienced teachers	
	r	(S.E.)	r	(S.E.)
Australia	0.76	0.03	0.76	0.01
Austria	0.87	0.02	0.90	0.00
Belgium (Fl.)	0.83	0.02	0.82	0.01
Brazil	0.85	0.02	0.83	0.01
Bulgaria	0.80	0.05	0.82	0.01
Denmark	0.97	0.01	0.98	0.00
Estonia	0.92	0.01	0.94	0.00
Hungary	0.94	0.01	0.92	0.00
Iceland	0.83	0.02	0.85	0.01
Ireland	0.92	0.01	0.93	0.00
Italy	0.88	0.01	0.88	0.00
Korea	0.77	0.03	0.76	0.01
Lithuania	**0.94**	0.01	**0.92**	0.00
Malaysia	0.80	0.02	0.82	0.01
Malta	0.90	0.02	0.88	0.01
Mexico	0.88	0.03	0.85	0.01
Norway	0.92	0.01	0.92	0.00
Poland	0.88	0.02	0.88	0.00
Portugal	0.87	0.02	0.85	0.01
Slovak Republic	0.90	0.02	0.88	0.01
Slovenia	0.72	0.04	0.73	0.01
Spain	0.78	0.03	0.78	0.01
Turkey	**0.91**	0.01	**0.94**	0.00

Note: Statistically significant differences are marked in bold.

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932578372

Table 4.A.2

Correlation of different teaching beliefs

	Constructivist and direct transmission teaching beliefs			
	New teachers		Experienced teachers	
	r	(S.E.)	r	(S.E.)
Australia	-0.19	0.05	-0.07	0.02
Austria	-0.29	0.08	-0.24	0.02
Belgium (Fl.)	0.07	0.07	0.18	0.02
Brazil	0.66	0.05	0.65	0.01
Bulgaria	0.70	0.09	0.67	0.02
Denmark	0.18	0.08	0.13	0.03
Estonia	0.05	0.07	0.02	0.02
Hungary	0.22	0.13	0.29	0.04
Iceland	-0.09	0.08	-0.20	0.04
Ireland	0.29	0.08	0.20	0.02
Italy	0.35	0.06	0.45	0.02
Korea	0.68	0.04	0.67	0.02
Lithuania	0.45	0.09	0.36	0.02
Malaysia	0.98	0.00	0.98	0.00
Malta	0.26	0.07	0.29	0.03
Mexico	0.70	0.05	0.74	0.01
Norway	0.08	0.06	0.14	0.03
Poland	0.35	0.06	0.30	0.02
Portugal	0.44	0.08	0.34	0.02
Slovak Republic	0.40	0.07	0.41	0.03
Slovenia	0.30	0.08	0.40	0.02
Spain	0.52	0.05	0.39	0.02
Turkey	**0.75**	0.05	**0.82**	0.01

Note: Statistically significant differences are marked in bold.

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932578391

Table 4.A.3

Estimated number of hours spent by teachers in different activities

	Teaching students in school				Planning of lessons				Administrative duties			
	New Teachers		Experienced teachers		New Teachers		Experienced teachers		New Teachers		Experienced teachers	
	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)
Australia	**20.7**	0.40	18.9	0.21	**14.3**	0.60	**12.2**	0.17	**5.3**	0.40	**9.2**	0.22
Austria	**14.9**	0.55	18.5	0.09	14.7	0.66	14.3	0.11	**2.7**	0.18	**4.1**	0.07
Belgium (Fl.)	18.9	0.36	18.6	0.14	**12.5**	0.38	**10.3**	0.13	3.3	0.20	3.5	0.08
Brazil	**16.6**	0.79	20.0	0.31	8.5	0.67	8.5	0.20	3.1	0.41	3.6	0.16
Bulgaria	16.8	0.86	17.2	0.45	10.5	0.54	10.6	0.48	3.5	0.65	4.4	0.24
Denmark	**19.2**	0.45	18.2	0.20	12.9	0.47	12.0	0.18	**2.3**	0.22	**4.1**	0.19
Estonia	**16.5**	0.64	20.9	0.21	**9.6**	0.50	**10.7**	0.16	**2.4**	0.15	**3.7**	0.08
Hungary	20.0	1.50	20.3	0.18	**10.4**	0.57	**11.9**	0.17	**3.6**	0.52	**5.2**	0.19
Iceland	21.4	0.53	21.3	0.25	10.9	0.41	11.7	0.17	**2.0**	0.40	**5.4**	0.29
Ireland	**17.3**	0.61	20.0	0.10	**10.2**	0.54	**8.4**	0.15			3.8	0.12
Italy	**13.3**	0.45	16.7	0.10	9.0	0.39	8.8	0.12	**2.2**	0.23	**3.3**	0.08
Korea	19.4	0.45	19.2	0.15	**10.5**	0.47	**9.2**	0.11	9.9	0.51	9.0	0.15
Lithuania	**15.8**	0.66	19.8	0.20	**7.8**	0.56	**9.7**	0.15	**3.7**	0.51	**5.2**	0.16
Malaysia	16.6	0.37	15.9	0.20	**10.5**	0.41	**9.4**	0.21	6.8	0.44	6.8	0.16
Malta	17.2	0.52	16.7	0.19	**12.7**	0.74	**10.2**	0.21	**2.9**	0.31	**3.6**	0.15
Mexico	**13.9**	0.79	21.2	0.42	7.2	0.45	8.0	0.18	**3.4**	0.27	**4.4**	0.15
Norway	16.7	0.33	16.2	0.14	**13.4**	0.45	**12.1**	0.18	**5.0**	0.31	**6.2**	0.14
Poland	**14.8**	0.60	16.1	0.29	9.6	0.60	9.0	0.15	**2.4**	0.24	**3.6**	0.11
Portugal	**13.9**	0.78	18.4	0.14	**11.6**	0.72	**13.9**	0.17	**2.1**	0.26	**4.8**	0.11
Slovak Republic	17.4	0.46	17.1	0.19	9.6	0.53	9.1	0.17	**3.2**	0.32	**4.1**	0.12
Slovenia	**16.0**	0.60	18.1	0.12	11.9	0.58	11.6	0.15	3.6	0.55	4.4	0.10
Spain	16.2	0.58	16.8	0.16	10.2	0.40	9.9	0.15	**3.2**	0.20	**4.6**	0.10
Turkey	21.1	0.84	20.4	0.48	8.3	0.75	8.5	0.51	**1.8**	0.19	**2.4**	0.22
TALIS average	**17.1**	0.14	**18.5**	0.05	**10.7**	0.11	**10.4**	0.04	**3.6**	0.08	**4.8**	0.03

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578410

Table 4.A.4

Percentage of teachers on permanent and fixed-term contract

	Permanent contract				Fixed-term contract			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	**55.4**	3.54	**91.1**	0.92	**44.6**	3.54	**8.9**	0.92
Austria	**8.7**	2.30	**93.1**	0.48	**91.3**	2.30	**6.9**	0.48
Belgium (Fl.)	**3.4**	1.05	**87.9**	0.69	**96.6**	1.05	**12.1**	0.69
Brazil	**38.5**	4.34	**78.2**	1.27	**61.5**	4.34	**21.8**	1.27
Bulgaria	**12.7**	2.60	**89.1**	1.20	**87.3**	2.60	**10.9**	1.20
Denmark	**82.4**	4.04	**98.1**	0.59	**17.6**	4.04	**1.9**	0.59
Estonia	**60.0**	4.74	**85.9**	1.12	**40.0**	4.74	**14.1**	1.12
Hungary	**42.2**	11.37	**88.7**	1.14	**57.8**	11.37	**11.3**	1.14
Iceland	**34.0**	3.25	**82.9**	1.05	**66.0**	3.25	**17.1**	1.05
Ireland					**92.6**	2.79	**21.7**	1.08
Italy	**15.7**	2.45	**84.7**	0.79	**84.3**	2.45	**15.3**	0.79
Korea	**89.8**	2.67	**96.0**	0.44	**10.2**	2.67	**4.0**	0.44
Lithuania	**70.5**	4.43	**93.4**	0.52	**29.5**	4.43	**6.6**	0.52
Malaysia	**92.3**	1.90	**98.3**	0.27	**7.7**	1.90	**1.7**	0.27
Malta	**88.5**	2.70	**97.5**	0.54	**11.5**	2.70	**2.5**	0.54
Mexico	**63.0**	4.37	**89.2**	1.70	**37.0**	4.37	**10.8**	1.70
Norway	**36.8**	4.23	**94.3**	0.69	**63.2**	4.23	**5.7**	0.69
Poland	**17.4**	3.22	**82.2**	1.01	**82.6**	3.22	**17.8**	1.01
Portugal					**97.4**	1.40	**29.9**	1.40
Slovak Republic	**30.1**	4.78	**86.5**	0.96	**69.9**	4.78	**13.5**	0.96
Slovenia	**10.7**	2.76	**87.6**	0.74	**89.3**	2.76	**12.4**	0.74
Spain	**18.8**	2.84	**79.0**	1.06	**81.2**	2.84	**21.0**	1.06
Turkey	**70.0**	5.66	**92.3**	1.09	**30.0**	5.66	**7.7**	1.09
TALIS average	**44.8**	3.77	**88.0**	0.90	**58.7**	0.86	**12.0**	0.20

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Empty cells indicate that the sampling variability of the estimate was too high for reporting.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578429

Table 4.A.5

Percentage of teachers on fixed-term contract by teaching experience

	Up to 2 years		From 3 to 10 years		More than 10 years	
	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	44.2	3.63	13.97	1.78	6.3	0.89
Austria	91.8	2.26	33.49	2.35	1.8	0.25
Belgium (Fl.)	96.8	1.09	29.08	1.53	1.5	0.29
Brazil	61.2	4.41	30.15	2.18	15.0	1.07
Bulgaria	87.4	2.69	23.46	3.52	8.0	0.96
Denmark	16.6	4.00	3.91	1.44	0.8	0.32
Estonia	39.6	4.81	19.81	3.01	12.3	0.97
Hungary	60.7	12.93	25.57	3.33	6.4	0.92
Iceland	64.8	3.46	25.78	2.09	9.4	1.15
Ireland	92.5	2.91	51.98	2.25	5.0	0.67
Italy	84.3	2.49	52.94	2.01	4.9	0.64
Korea	10.3	2.69	4.71	0.84	3.7	0.51
Lithuania	28.5	4.37	8.48	1.58	6.0	0.51
Malaysia	7.4	1.87	2.47	0.59	1.0	0.12
Malta	10.7	2.65	3.43	0.94	1.8	0.72
Mexico	37.1	4.65	21.18	3.60	6.3	1.25
Norway	62.3	4.24	12.68	1.36	2.0	0.48
Poland	82.7	3.27	25.02	1.50	13.5	1.11
Portugal	97.3	1.52	70.41	1.93	16.4	1.03
Slovak Republic	69.5	4.89	18.36	1.95	10.9	0.95
Slovenia	90.1	2.77	29.93	1.83	4.7	0.62
Spain	79.2	3.53	41.23	2.16	11.7	1.11
Turkey	27.6	5.20	10.39	1.60	3.9	0.79
TALIS average	58.4	0.91	24.28	0.44	6.7	0.17

Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578448

Table 4.A.6

Percentage of teachers who agreed or strongly agreed with the statement: "I am satisfied with my job"

	New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)
Australia	82.3	2.86	82.4	0.92
Austria	91.8	2.14	93.2	0.48
Belgium (Fl.)	95.8	1.16	94.5	0.46
Brazil	87.4	1.99	84.4	0.99
Bulgaria	87.2	7.76	94.4	0.56
Denmark	**93.1**	2.00	**87.9**	1.07
Estonia	**82.8**	2.98	**88.9**	0.65
Hungary	85.3	5.83	82.4	1.26
Iceland	90.8	1.92	90.0	0.98
Ireland	93.2	2.50	89.3	0.85
Italy	96.0	1.36	94.9	0.48
Korea	88.7	2.19	89.4	0.65
Lithuania	85.4	3.11	88.3	0.71
Malaysia	**81.7**	2.19	**90.4**	0.63
Malta	**93.4**	2.81	**87.4**	1.33
Mexico	96.5	1.89	93.9	0.63
Norway	**85.3**	3.04	**91.8**	0.74
Poland	92.3	1.91	93.3	0.61
Portugal	90.2	3.21	86.6	0.80
Slovak Republic	84.2	3.48	88.2	0.82
Slovenia	94.3	1.99	94.9	0.49
Spain	**95.1**	1.68	**90.5**	0.63
Turkey	78.5	3.69	83.5	1.38
TALIS average	**89.2**	0.65	**89.6**	0.17

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578467

Table 4.A.7

Percentage of teachers with fixed-term contract who are satisfied with their jobs

	New teachers		Experienced teachers	
	%	(S.E.)	%	(S.E.)
Australia	81.0	4.79	74.4	3.85
Austria	91.4	2.31	92.3	1.62
Belgium (Fl.)	**96.3**	1.10	**91.3**	2.00
Brazil	88.5	2.95	89.4	1.78
Bulgaria	84.8	10.29	94.0	1.98
Denmark	96.1	4.05	92.0	5.31
Estonia	83.5	4.45	85.4	2.23
Hungary	82.6	7.33	80.2	4.21
Iceland	89.5	2.65	82.7	3.32
Ireland	**93.6**	2.87	**86.6**	2.02
Italy	96.4	1.56	96.2	0.83
Korea	94.5	4.55	92.6	3.13
Lithuania	80.7	5.63	88.5	1.97
Malaysia	73.4	12.24	76.3	3.78
Malta	100.0	0.00	88.6	6.54
Mexico	94.1	4.77	91.4	2.99
Norway	87.5	3.50	89.5	3.19
Poland	93.4	2.07	91.3	1.58
Portugal	90.5	3.41	91.0	1.14
Slovak Republic	84.4	3.59	88.7	2.14
Slovenia	95.2	2.11	94.7	1.37
Spain	93.5	2.47	92.0	1.27
Turkey	78.8	7.10	79.5	3.68
TALIS average	**89.1**	1.05	**88.2**	0.63

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578486

Chapter 5

How Effective are New Teachers?

While TALIS 2008 does not include any external judgement of individual teacher's effectiveness, teachers are asked to report on their own feelings of self-efficacy. These reports encompass a number of aspects of teaching such as teacher's reports of their success with their students. An important aspect of effective classroom teaching is time-on-task. The amount of classroom time that new teachers spend on teaching, compared to more experienced teachers, is also discussed in this chapter. In addition, the time that new teachers devote to administrative duties and classroom management issues is examined in relation to the amount of time spent on teaching and learning.

Highlights

- **New teachers provide less actual teaching and learning time in their classes.**
  Less than three-quarters of new teachers' classroom time was spent on actual teaching and learning, on average across TALIS 2008 countries.
- **New teachers spend more time than experienced teachers keeping order in the classroom.**
  In more than one-third of TALIS 2008 countries new teachers spent about 20% of class time keeping order in their classroom.
- **New teachers report significantly lower levels of self-efficacy than experienced teachers.**
  This difference was statistically significant in 12 countries but the difference is often not quantitatively large.

Teachers' efficacy beliefs have been studied for several decades. Already in the 1980's, in an influential article, Ashton had claimed that "a potentially powerful paradigm for teacher education can be developed on the basis of the construct of teacher efficacy" (1984, p. 28). More recently, researchers have concluded that high self-efficacy influences teachers' interpretation of successes and disappointments, the standards they set and their approaches to coping with difficult instructional situations (Bandura, 1997; Ross, 1998). Furthermore, self-efficacy beliefs are frequently associated with instructional practices and student academic results (e.g. Ashton and Webb, 1986; Caprara, et al., 2006; Woolfolk-Hoy and Weinstein, 2006).

For the analyses presented here we used a teacher self-efficacy index constructed from four items of the TALIS 2008 teacher questionnaire. These items asked teachers, for instance, how strongly they felt that they made an educational difference in students' lives and how well they were able to make progress with the most difficult and unmotivated students (see OECD, 2010 for full details about the construction of indices).

In a number of TALIS 2008 countries, new teachers reported slightly lower levels of self-efficacy than more experienced teachers. This is in addition to their reports of classrooms with insufficient time devoted to teaching and learning and poorer disciplinary climate.

On average, less than three-quarters of new teachers' classroom time was spent on actual teaching and learning. The main reason for this is the slightly greater percentage of class time new teachers spent on keeping order in the classroom. Across TALIS countries, 18% of new teachers' class time was spent trying to keep order in classrooms compared to around 13% for more experienced teachers. In more than one-third of the TALIS 2008 countries new teachers spent about 20% of class time keeping order in their classroom. This results in significant reductions in effective teaching and learning for students of these teachers.

This chapter discusses new teachers' self-efficacy and their time-on-task in their classes. Time-on-task is reported as the percentage of class time spent on actual teaching and learning. The lower percentage of time spent on actual teaching and learning in new teachers' classes is compared to the time devoted to administrative duties and keeping order in the classroom.

SELF-EFFICACY

New teachers reported significantly lower levels of self-efficacy than more experienced teachers. This difference was statistically significant on average both across TALIS 2008 countries and in 12 individual countries (i.e. Belgium (Fl.), Denmark, Estonia, Iceland, Ireland, Korea, Malaysia, Malta, Norway, Poland, Slovak Republic, and Turkey) (Table 5.A.1). These differences were often not quantitatively large, but are important given they highlight differences in teachers' beliefs about their effectiveness in the classroom. It should also be remembered that TALIS is a survey that uses teachers' reports of their self-efficacy rather than a more direct measure of teaching and learning in schools.

TIME-ON-TASK AND TEACHING TIME

On average across TALIS 2008 countries, 73% of new teachers' classroom time was spent on actual teaching and learning compared to 79% of more experienced teachers' classes. In every TALIS 2008 country, new teachers reported a lower percentage of class time spent on actual

teaching and learning than their more experienced counterparts. The differences were larger in countries such as Estonia (76% of new teachers class time spent on effective teaching and learning compared to 86% for more experienced teachers) (Table 5.A.2). It may well be that this smaller amount of time spent on actual teaching and learning entails a smaller amount of time spent on *effective* teaching in the classroom.

The time devoted to administrative tasks in the classroom, such as recording attendance and handing out school information forms, is remarkably similar amongst these two groups of teachers. On average, new teachers devote 9% of class time to fulfilling administrative duties compared to 8% for more experienced teachers. The largest difference is evident in Lithuania where new teachers spent 11% of class time fulfilling administrative duties compared to 8% for more experienced teachers (Table 5.A.2).

In five TALIS 2008 countries new teachers spent more than 10% of their class time performing administrative duties. New teachers in Belgium (Fl.) (11% of class time performing administrative duties), Brazil (15%), Lithuania (11%), Malaysia (12%) and Mexico (17%) spent the greatest proportion of their class time on administrative duties (Table 5.A.2).

On average, the difference in time spent keeping order in the classroom explains most of the reduced actual teaching and learning in new teachers' classrooms. On average, 18% of new teachers' class time was spent trying to keep order in classrooms compared to 13% for more experienced teachers. These differences were greatest in countries like Denmark (new teachers spent 19% of class time keeping order in the classroom compared to 12% for more experienced teachers), (Table 5.A.2).

In many respects, this is a worrying trend given concerns that new teachers are not properly trained for the rigours of classroom teaching (OECD, 2005). Unfortunately, the picture looks worse when considering that, on average, in more than one-third of the TALIS 2008 countries new teachers spent about 20% of class time keeping order in their classroom, whereas experienced teachers do not reach that percentage in any country. Obviously, this results in significant reductions in opportunities for effective teaching and learning for students of these teachers.

While there is no doubt that low levels of time spent on actual teaching and learning are a worrying indicator, the difference in teaching time for new and experienced teachers can be interpreted in a number of ways. As shown in Table 5.A.2, on average, there is little difference between the percentage of class time lost to factors other than actual teaching and learning (27% for new teachers and 21% for experienced teachers). This relatively small difference could be considered encouraging in that new teachers are responding well to the demands of classroom teaching compared to their more experienced colleagues. This may be due to effective initial education and training or an indication that there is a substantial increase in classroom management skills in the first few months of teachers' careers.[1] It also sheds light on the research comparing the effectiveness of new teachers compared to more experienced teachers, though caution must be taken in interpreting the data for this purpose, given that the data represent teacher self-reports.

It could also be considered that this gap is an indicator of insufficient teacher development and professional learning in teachers' careers. The small gap in lost class time between new

and experienced teachers indicates that there is little improvement in classroom teaching throughout teachers' careers. This is particularly pertinent to both the discussion of teachers' professional development and, perhaps more importantly, the appraisal and feedback received by new and experienced teachers, particularly regarding classroom management issues.

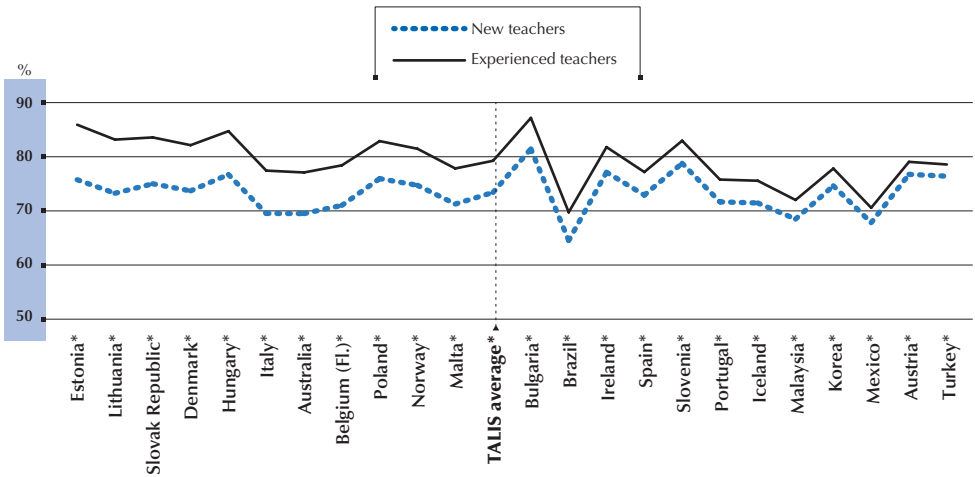
While on average, new teachers reported that just under three-quarters of their class time was spent on actual teaching and learning, for some new teachers, the percentage was much lower. On average, one-quarter of new teachers lose 40% of their class time to factors other than actual teaching and learning. For 10% of new teachers, less than half of their class time (45%) was spent on actual teaching and learning.

It is clear that these teachers were not equipped to provide effective teaching and learning for their students. The TALIS data show that this is largely due to the time spent trying to keep order in the classroom. But the data do not provide a rationale for why these teachers were ineffective at keeping order in their classes. There could be many reasons that explain the lost time. For example, new teachers may not have been provided with appropriate education and training, they may receive little support in their schools, or they may just be ineffective teachers.

The problem may also stem from the students in the class. These new teachers may have been given particularly difficult classes to teach, with students whose ill-discipline makes it difficult to maintain order for effective teaching and learning. If this is the case, these teachers may be more effective in different circumstances. However, the reports of new and more experienced teachers (presented in Chapter 2) indicate that this is likely not the case.

Figure 5.1

Teachers' percentage of class time spent on actual teaching and learning



Countries are ranked in descending order based on the difference in the time reported by new teachers and experienced teachers for actual teaching and learning.

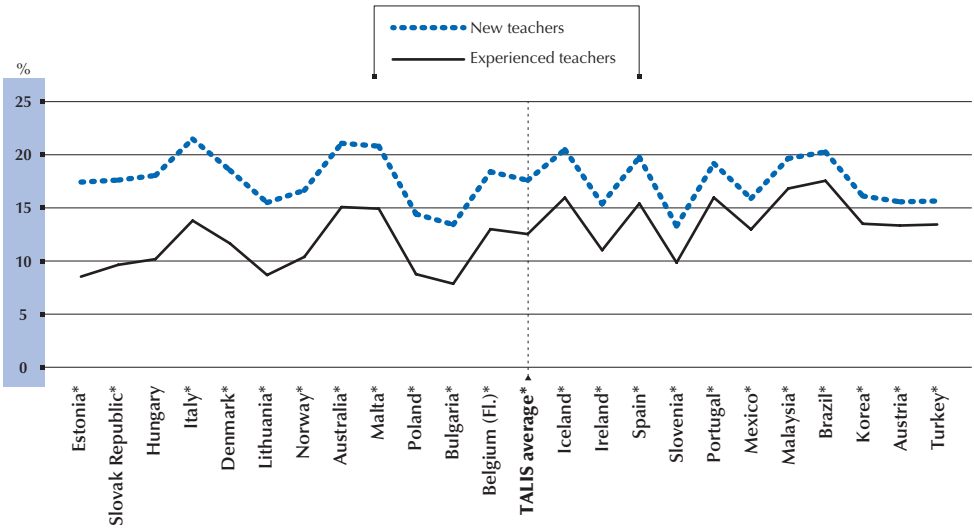
Note: Statistically significant differences are marked with an *.

Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577897

Figure 5.2

Teachers' percentage of class time spent keeping order in the classroom



Countries are ranked in descending order based on the difference in the time reported by new teachers and experienced teachers for keeping order in the classroom.
Note: Statistically significant differences are marked with an *.
Source: OECD, *Teaching And Learning International Survey 2008.*

StatLink http://dx.doi.org/10.1787/888932577916

Further research is required to identify the reasons underlying the lower levels of actual teaching and learning time in the classrooms of some new teachers and how this may be related to a lack of effective teaching. An appropriate policy response (e.g. improved initial education for teachers) may greatly improve the education provided to students.

Any difference in teachers' effectiveness is worth analysing as it can have a large impact on student learning. Nevertheless it is reasonable to expect that new teachers are not as effective as more experienced teachers given the amount of on-the-job learning that comes with classroom teaching. How should we therefore interpret these differences? As with all comparisons of the effectiveness between new and more experienced teachers, differences can be interpreted in multiple ways. For example, on the one hand, it could be considered a positive finding that new teachers often have only small differences in their self-efficacy compared to more experienced teachers. On the other hand, this could be considered a negative finding. Teachers undertake substantial amounts of professional development but it appears that these investments have not been effective in raising the self-efficacy of more experienced teachers well above that of new teachers.

In order to further analyse these differences we carried out a correlation analysis between new and experienced teachers' self-perceived efficacy and three sets of variables: the overall index of professional development needs, teaching beliefs about the nature of teaching and learning, and classroom teaching practices. The differences between these correlation coefficients for

new and experienced teachers were also evaluated. The results of these analyses are shown in Tables 5.A.3, 5.A.4 and 5.A.5.

In most TALIS 2008 countries, for both new and experienced teachers, the self-efficacy of teachers tends to be negatively associated to their professional development needs. That is, those teachers reporting to have high professional development needs also tend to consider themselves as less efficient. In general, this could be taken as good news, as it would suggest that addressing teachers' professional development needs could have a positive influence in their self-perceived efficacy. However, these results must be interpreted with caution, as in all cases this association is rather weak (Table 5.A.3). Concerning the differences related to teachers' length of tenure, this pattern seems to be more pronounced for new teachers in Slovenia, Poland and Italy; and for experienced teachers (to a minimal degree, though) in Norway and Turkey (Table 5.A.3).

Table 5.A.4 shows that the two teaching beliefs analysed (i.e. constructivist and direct transmission beliefs) tend to establish a low and positive correlation with the teachers' self-perceived efficacy across most countries. This pattern is also similar across new and experienced teachers in most countries. Statistically significant differences between the two groups were found in one-quarter of the participant countries for constructivist beliefs, and in only four countries for the direct transmission beliefs. For the association between constructivist beliefs and self-efficacy, in Hungary and Turkey new teachers reported a significantly higher correlation than experienced teachers; conversely, in Bulgaria, Mexico, Norway and Poland this association is higher for experienced teachers. Regarding the group differences in the correlation between self-efficacy and direct transmission beliefs, we also found mixed results. Significantly higher correlations for new teachers were found in the Slovak Republic and Turkey and for experienced teachers in Bulgaria and Slovenia.

It is interesting to compare the strength of the association between constructivist and direct transmission beliefs with self-efficacy within each country, between the two groups of teachers. Under this perspective, it is worth pointing out that, for new teachers in Hungary and Slovenia, a significantly higher correlation was found between constructivist beliefs and self-efficacy than between direct transmission beliefs and self-efficacy. In other words, the self-efficacy of new teachers in Hungary and Slovenia is more strongly positively related to constructivist rather than direct transmission beliefs (Table 5.A.4).

Finally, the results of the correlation analysis between teachers' self-perceived efficacy and teaching practices are shown in Table 5.A.5. The three teaching practices evaluated (i.e. structuring teaching practices, student-oriented teaching practices, and enhanced activities teaching practices) tend to show a positive, weak to moderate correlation with self-efficacy across countries, with no important differences in the strength of this relationship between them. Further, differences between new and experienced teachers were found in only a few cases. Ireland and Malaysia reported significant differences in the strength of the association between structuring teaching practices and self-efficacy. However these differences favour experienced teachers in the first case and new teachers in the second. For the association between student-oriented practices and self-efficacy, significant differences were found in Brazil, Malaysia, Portugal and Turkey. In these cases, the magnitude of the correlation is larger for the new teachers in Brazil, Malaysia and Turkey, and for the experienced teachers in the Portugal.

Similarly, for the strength of the association between enhanced activities teaching practices and the self-perceived efficacy of teachers, significant differences were found in the same countries and with the same pattern. New teachers in Brazil, Malaysia and Turkey reported significantly higher correlations between activity-enhanced practices and self-efficacy, than their more experienced peers; while only in Portugal is this association stronger for the more experienced teachers (Table 5.A.5).

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Note

1. The TALIS 2008 survey was administered late in the school year. Hence, this may be after a steep learning curve for new teachers in the first six months of their careers.

Annex 5.A
Key Tables on Teacher Self-Efficacy

Table 5.A.1

Teachers' perceived self-efficacy

	New teachers		Experienced teachers	
	Mean	(S.E.)	Mean	(S.E.)
Australia	0.20	0.14	0.32	0.03
Austria	0.39	0.08	0.24	0.02
Belgium (Fl.)	**-0.10**	0.05	**0.07**	0.02
Brazil	-0.10	0.09	-0.10	0.03
Bulgaria	-0.03	0.13	0.23	0.03
Denmark	**-0.01**	0.07	**0.31**	0.03
Estonia	**-0.54**	0.05	**-0.39**	0.01
Hungary	-0.49	0.08	-0.41	0.02
Iceland	**0.18**	0.07	**0.37**	0.03
Ireland	**0.10**	0.09	**0.31**	0.03
Italy	0.24	0.06	0.37	0.02
Korea	**-1.05**	0.07	**-0.75**	0.02
Lithuania	-0.09	0.08	0.06	0.02
Malaysia	**-0.15**	0.07	**0.02**	0.03
Malta	**-0.27**	0.08	**-0.01**	0.04
Mexico	0.11	0.11	0.08	0.03
Norway	**0.34**	0.07	**0.52**	0.03
Poland	**-0.28**	0.04	**-0.12**	0.02
Portugal	-0.12	0.09	-0.08	0.02
Slovak Republic	**-0.57**	0.07	**-0.27**	0.02
Slovenia	0.04	0.05	0.00	0.01
Spain	-0.46	0.07	-0.45	0.02
Turkey	**-0.37**	0.14	**0.08**	0.03
TALIS average	**-0.13**	0.02	**0.02**	0.01

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578505

Table 5.A.2

Teachers' percentage of class time spent on actual teaching and learning in the average lesson

	Administrative tasks				Keeping order in the classroom				Actual teaching and learning			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)	Mean	(S.E.)
Australia	9.4	1.02	7.76	0.17	**21.1**	1.30	**15.1**	0.48	**69.5**	1.56	**77.1**	0.53
Austria	7.6	0.47	7.6	0.14	**15.6**	1.04	**13.3**	0.26	**76.8**	1.16	**79.1**	0.33
Belgium (Fl.)	**10.6**	0.50	**8.5**	0.17	**18.4**	0.79	**13.0**	0.24	**71.0**	1.00	**78.4**	0.31
Brazil	**15.3**	0.87	**12.7**	0.31	**20.3**	0.80	**17.6**	0.37	**64.5**	1.41	**69.7**	0.57
Bulgaria	5.1	0.93	5.0	0.16	**13.4**	1.49	**7.9**	0.27	**81.5**	2.09	**87.2**	0.36
Denmark	**7.6**	0.59	**6.1**	0.17	**18.5**	1.32	**11.7**	0.35	**73.7**	1.51	**82.1**	0.44
Estonia	**6.6**	0.32	**5.5**	0.09	**17.4**	0.97	**8.5**	0.23	**75.8**	1.04	**85.9**	0.28
Hungary	5.3	0.49	5.1	0.10	18.0	4.16	10.2	0.24	**76.7**	4.02	**84.7**	0.26
Iceland	8.1	0.43	8.4	0.20	**20.5**	1.20	**16.0**	0.42	**71.5**	1.30	**75.6**	0.50
Ireland	7.6	0.39	7.2	0.13	**15.4**	1.27	**11.0**	0.48	**77.1**	1.28	**81.8**	0.54
Italy	9.0	0.43	8.8	0.12	**21.5**	1.15	**13.8**	0.27	**69.5**	1.21	**77.4**	0.32
Korea	9.2	0.74	8.6	0.24	**16.1**	0.83	**13.5**	0.23	**74.6**	1.29	**77.8**	0.40
Lithuania	**11.4**	1.10	**8.1**	0.24	**15.5**	1.06	**8.7**	0.23	**73.3**	1.62	**83.2**	0.39
Malaysia	11.9	0.70	11.2	0.20	**19.7**	0.80	**16.8**	0.33	**68.5**	1.26	**72.0**	0.41
Malta	7.9	0.57	7.2	0.24	**20.8**	1.42	**14.9**	0.54	**71.3**	1.69	**77.8**	0.63
Mexico	16.6	0.67	16.5	0.24	**15.9**	0.77	**13.0**	0.26	**67.8**	1.13	**70.6**	0.40
Norway	8.6	0.42	8.1	0.18	**16.6**	0.86	**10.4**	0.27	**74.7**	1.05	**81.5**	0.36
Poland	**9.5**	0.35	**8.3**	0.12	**14.4**	1.06	**8.8**	0.21	**76.0**	1.10	**82.9**	0.26
Portugal	9.1	0.79	8.2	0.17	**19.2**	1.18	**16.0**	0.39	**71.7**	1.30	**75.8**	0.43
Slovak Republic	7.4	0.35	6.7	0.12	**17.6**	1.45	**9.6**	0.28	**75.0**	1.49	**83.6**	0.35
Slovenia	7.9	0.50	7.2	0.13	**13.3**	0.88	**9.8**	0.24	**78.8**	1.10	**83.0**	0.30
Spain	7.4	0.42	7.4	0.12	**19.8**	1.18	**15.4**	0.34	**72.9**	1.36	**77.2**	0.38
Turkey	7.5	0.39	7.8	0.21	**15.6**	0.95	**13.4**	0.52	**76.4**	1.03	**78.6**	0.66
TALIS average	**9.0**	0.13	**8.2**	0.04	**17.6**	0.29	**12.5**	0.07	**73.4**	0.32	**79.3**	0.09

Notes: Shaded cells indicate estimates with high sampling variability. Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578524

Table 5.A.3

Correlation between self efficacy and the overall index of professional development needs

	Differences between new and experienced teachers			
	New teachers		Experienced teachers	
	r	(S.E.)	r	(S.E.)
Australia	-0.21	0.08	-0.13	0.03
Austria	-0.14	0.08	-0.11	0.02
Belgium (Fl.)	-0.01	0.07	0.01	0.02
Brazil	-0.12	0.08	-0.17	0.02
Bulgaria	-0.18	0.11	-0.06	0.03
Denmark	-0.20	0.07	-0.22	0.03
Estonia	0.04	0.09	0.02	0.02
Hungary	-0.04	0.28	-0.15	0.03
Iceland	-0.04	0.07	-0.08	0.04
Ireland	-0.21	0.06	-0.16	0.02
Italy	**-0.13**	0.07	**0.00**	0.02
Korea	0.02	0.06	0.08	0.02
Lithuania	0.07	0.13	0.03	0.02
Malaysia	0.08	0.06	0.03	0.03
Malta	-0.31	0.08	-0.17	0.04
Mexico	-0.23	0.08	-0.15	0.02
Norway	**-0.05**	0.07	**-0.20**	0.02
Poland	**-0.20**	0.06	**-0.04**	0.03
Portugal	0.02	0.12	-0.13	0.03
Slovak Republic	-0.12	0.08	0.00	0.03
Slovenia	**-0.24**	0.07	**0.02**	0.02
Spain	-0.20	0.08	-0.19	0.02
Turkey	**-0.05**	0.18	**-0.17**	0.03

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578543

Table 5.A.4

Correlation between self efficacy and teaching beliefs

Differences between new and experienced teachers

	Constructivist beliefs				Direct transmission beliefs			
	New teachers		Experienced teachers		New teachers		Experienced teachers	
	r	(S.E.)	r	(S.E.)	r	(S.E.)	r	(S.E.)
Australia	0.11	0.07	0.15	0.02	0.01	0.07	0.03	0.03
Austria	0.13	0.07	0.13	0.02	-0.05	0.09	0.09	0.02
Belgium (Fl.)	0.14	0.07	0.19	0.02	0.10	0.06	0.08	0.02
Brazil	0.19	0.08	0.21	0.02	0.27	0.06	0.27	0.02
Bulgaria	**0.08**	0.16	**0.28**	0.04	**0.09**	0.16	**0.31**	0.05
Denmark	0.24	0.09	0.22	0.04	0.18	0.09	0.11	0.03
Estonia	0.18	0.07	0.15	0.02	0.04	0.07	0.04	0.02
Hungary	**0.49**	0.07	**0.20**	0.04	0.02	0.11	0.13	0.03
Iceland	0.18	0.08	0.21	0.03	-0.06	0.06	0.04	0.03
Ireland	0.17	0.09	0.18	0.02	0.03	0.10	0.13	0.03
Italy	0.06	0.07	0.14	0.02	0.10	0.08	0.20	0.02
Korea	0.23	0.07	0.18	0.02	0.21	0.06	0.21	0.02
Lithuania	0.20	0.10	0.19	0.02	0.18	0.09	0.14	0.02
Malaysia	0.26	0.05	0.33	0.02	0.27	0.05	0.34	0.02
Malta	0.02	0.09	0.17	0.04	0.01	0.07	0.13	0.04
Mexico	**0.08**	0.12	**0.22**	0.02	0.18	0.10	0.25	0.02
Norway	**0.01**	0.09	**0.17**	0.02	0.12	0.07	0.08	0.02
Poland	**0.06**	0.07	**0.21**	0.02	0.09	0.06	0.17	0.02
Portugal	0.10	0.09	0.14	0.02	0.02	0.10	0.17	0.02
Slovak Republic	0.29	0.14	0.22	0.03	**0.30**	0.09	**0.16**	0.03
Slovenia	0.23	0.07	0.22	0.02	**0.01**	0.08	**0.17**	0.02
Spain	0.02	0.10	0.15	0.02	0.08	0.10	0.16	0.02
Turkey	**0.35**	0.08	**0.21**	0.05	**0.36**	0.10	**0.24**	0.04

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578562

Table 5.A.5

Correlation between self efficacy and teaching practices

Differences between new and experienced teachers

	Structuring teaching practices				Student oriented teaching practices				Enhanced activities teaching practices			
	New teachers		Experienced teachers		New teachers		Experienced teachers		New teachers		Experienced teachers	
	r	(S.E.)	r	(S.E.)	r	(S.E.)	r	(S.E.)	r	(S.E.)	r	(S.E.)
Australia	0.26	0.08	0.19	0.02	0.30	0.06	0.19	0.03	0.32	0.05	0.19	0.03
Austria	0.17	0.07	0.18	0.02	0.27	0.08	0.22	0.02	0.17	0.09	0.19	0.02
Belgium (Fl.)	0.19	0.05	0.17	0.02	0.12	0.06	0.16	0.02	0.05	0.06	0.14	0.02
Brazil	0.32	0.06	0.24	0.02	**0.43**	0.06	**0.31**	0.02	**0.42**	0.06	**0.30**	0.02
Bulgaria	0.31	0.11	0.16	0.03	0.30	0.09	0.26	0.03	0.25	0.14	0.27	0.03
Denmark	0.02	0.11	0.17	0.04	0.04	0.08	0.16	0.03	0.08	0.09	0.16	0.03
Estonia	0.14	0.07	0.08	0.02	0.17	0.08	0.14	0.02	0.19	0.08	0.13	0.02
Hungary	0.10	0.20	0.13	0.03	0.10	0.20	0.20	0.02	0.15	0.10	0.20	0.03
Iceland	0.19	0.07	0.20	0.04	0.21	0.08	0.18	0.03	0.19	0.08	0.17	0.03
Ireland	**-0.07**	0.10	**0.19**	0.02	0.19	0.09	0.12	0.02	0.01	0.07	0.11	0.02
Italy	0.17	0.07	0.12	0.02	0.17	0.08	0.17	0.02	0.18	0.07	0.21	0.02
Korea	0.21	0.07	0.23	0.02	0.29	0.06	0.30	0.02	0.29	0.07	0.28	0.02
Lithuania	0.20	0.10	0.17	0.02	0.21	0.13	0.19	0.02	0.25	0.12	0.15	0.02
Malaysia	**0.31**	0.06	**0.19**	0.02	**0.35**	0.05	**0.24**	0.02	**0.34**	0.05	**0.23**	0.02
Malta	0.07	0.09	0.17	0.04	0.24	0.10	0.16	0.04	0.26	0.08	0.14	0.05
Mexico	0.39	0.07	0.29	0.03	0.30	0.07	0.28	0.02	0.24	0.08	0.29	0.02
Norway	0.14	0.08	0.17	0.02	0.14	0.09	0.17	0.02	0.08	0.10	0.15	0.02
Poland	0.09	0.05	0.10	0.02	0.19	0.07	0.17	0.03	0.10	0.06	0.17	0.02
Portugal	0.20	0.09	0.12	0.02	**0.03**	0.11	**0.26**	0.02	**0.02**	0.10	**0.24**	0.02
Slovak Republic	0.15	0.07	0.15	0.02	0.20	0.08	0.22	0.03	0.27	0.08	0.18	0.03
Slovenia	0.14	0.08	0.11	0.02	0.18	0.08	0.19	0.02	0.13	0.10	0.15	0.03
Spain	0.23	0.08	0.18	0.02	0.34	0.07	0.19	0.02	0.33	0.06	0.19	0.02
Turkey	0.21	0.08	0.24	0.03	**0.42**	0.06	**0.29**	0.03	**0.37**	0.05	**0.25**	0.03

Note: Statistically significant differences are marked in bold.
Source: OECD, *TALIS Database. Teaching And Learning International Survey 2008.*
StatLink http://dx.doi.org/10.1787/888932578581

Chapter 6

Policy Implications

Based on the discussions and analyses in this report and the comparisons of the working lives of new and more experienced teachers, this chapter now summarises the findings of the report in terms of their policy implications. Four points are presented that might offer the greatest opportunities for improving schooling in countries. These include discussions of the job differentiation between new teachers and more experienced teachers, the amount and type of appraisal and feedback provided to new teachers, learnings about mentoring and induction programmes, and the support and development needed by new teachers to improve classroom management.

This report has provided a picture of the working lives of new teachers in comparison with the more experienced teachers. Survey reports of new teachers have been compared to more experienced teachers in regard to the schools in which they work, their support and development initiatives, and the effectiveness of their teaching. Differences between new and experienced teachers have been highlighted that have implications for effective schooling and public policy.

As has been highlighted, the policy implications of a difference between new and experienced teachers are not always clear. However, some findings in this report have important policy implications for numerous countries. These have been discussed in reference to the data presented in previous chapters. Here, we highlight four policy implications from the data and analysis on new teachers that may offer the greatest opportunities for improving schooling in countries.

1. Greater job differentiation between new and experienced teachers would improve effective teaching and learning within schools

New teachers reported lower levels of self-efficacy in teaching their students. They also reported reduced teaching and learning time in their classrooms. This is in comparison to more experienced teachers who reported that they have more effective classrooms.

Despite these differences in reports of effective teaching and learning, new and more experienced teachers have very similar teaching responsibilities. New teachers reported only slightly less teaching time per week than more experienced teachers. On average, new teachers teach for 17 hours per week while their more experienced colleagues teach for 18 hours per week. Reducing teaching responsibilities for new teachers would provide more time for them to develop their teaching skills at the beginning of their careers. This could lead to an increase of effective teaching and learning in schools.

If more experienced teachers teach for a greater amount of time (or more students or more classes) than new teachers, then effective teaching and learning could be increased in schools.

Increasing the responsibilities for more effective teachers does not have to mean that they only increase their regular teaching load or increase the number of classes they teach. There are other methods to increase the teaching responsibilities of more effective teachers. For example, more effective teachers could have the main responsibility for the quality of teaching and learning in more classes, but these additional classes could be taught in conjunction with a less effective teacher. This would see an increase in team teaching that could, for example, be accompanied with a reduction in administrative workload for the more experienced teacher.

There are numerous ways that a school's workforce can be organised to improve its effectiveness. Currently, it appears to be inefficient to have teachers of differing levels of effectiveness having the same teaching responsibilities.

2. Appraisal and feedback are considered to be beneficial by new teachers and important for improving their teaching

Teacher appraisal and feedback provide one of the most powerful levers to improve student learning for policy makers and school leaders (Jensen and Reichl, 2011). Providing constructive

feedback to teachers based on a meaningful appraisal of their work has consistently been shown to produce significant improvements in teaching and learning in classrooms (Hattie, 2009).

It is therefore important not only that policy makers realise the impact this lever can have on improved learning, but also that TALIS 2008 data show that new teachers consider appraisal and feedback to be very important for improving their teaching. More new teachers (than experienced teachers) considered the appraisal and feedback they received to be fair and helpful in their development as a teacher. It also had a positive impact on their job satisfaction and job security.

The positive association that new teachers have with appraisal and feedback provides both an obligation and an opportunity for policy makers. Governments and school leaders will become more obligated to provide constructive feedback to teachers to ensure that, as the current new teachers mature in the profession, their job satisfaction and needs for development are met. This is coupled with greater opportunities to improve student learning, given the impact of appraisal and feedback not only on teachers, but also on student outcomes.

3. Mentoring and induction programmes, in their current forms, do not increase feedback to new teachers

It will be of great concern to many policy makers that mentoring and induction programmes do not increase the feedback that new teachers receive. On average, new teachers who worked in schools with mentoring and induction programmes were not significantly more likely to receive appraisal and feedback than new teachers working schools without these programmes. In fact, of the new teachers who work in schools with these programmes, nearly half reported that the programmes do not facilitate regular feedback.

Over the years, many schools and education systems have emphasised the importance of mentoring and induction, increasing the resources devoted to these programmes. In many cases, the aim was to improve the effectiveness of teaching and learning in new teachers' classrooms (OECD, 2005). However, the TALIS 2008 data show that these programmes are not increasing feedback and therefore may not be maximising their impact on improving learning and teaching.

The TALIS data have shown that, for both new and experienced teachers, the appraisal and feedback they receive is too often not seriously focused on improving learning or teacher development. Instead it is seen as just an administrative exercise (OECD, 2009). It may be that mentoring and induction programmes suffer from similar failings. Requirements for induction and mentoring programmes (and the resources devoted to them) are not leading to the increases in constructive feedback to new teachers that have continually been shown to be so important for improved teaching and learning outcomes.

There is some evidence showing that the greater the intensity of mentoring programmes, the greater their impact on student outcomes (Smith and Ingersoll, 2004). Intensity is normally measured as the frequency of meetings with mentors. If we consider such meetings to encourage constructive feedback for new teachers, then this may help increase the effectiveness of these programmes. More substantial changes may also be required to the job description of teachers. Great responsibilities for some teachers to increase the effectiveness of other teachers

may encourage greater constructive feedback for new teachers. The impact of teachers on the development of students is well recognised, but their impact on the development of new teachers may need to be emphasised.

4. New teachers need support and development to improve their classroom management practices

The practical classroom skills of classroom management and dealing with problems of student discipline are difficult issues for new teachers. They reported that they were losing more class time than experienced teachers to these issues. This resulted in reduced time for effective teaching and learning and increased needs for professional development.

In every TALIS 2008 country, new teachers reported a lower percentage of class time spent on actual teaching and learning than their more experienced counterparts. On average, 18% of new teachers' class time was spent trying to keep order in classrooms. This explains most of the reduced teaching and learning time n new teachers' classrooms.

The reasons for this are unclear and cannot be directly identified with the TALIS data. One option for policy makers would be to examine the teaching courses offered by initial education institutions. It may be that insufficient attention is given to practical classroom skills in teachers' initial education or that these skills are not well taught to prospective teachers. This may explain why new teachers have greater developmental needs than more experienced teachers, particularly in the areas of student discipline and behaviour problems, and classroom management.

Policy makers may also want to consider placing a greater focus on appraisal and feedback for new teachers that is directly aimed at improving classroom management and dealing with student discipline. The evidence shows that this can be an effective method to improve teaching and, more importantly, student learning (Hattie, 2009).

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