

*Creating Effective Teaching and Learning Environments:
First results from the OECD Teaching and Learning
International Survey*

TALIS

*OECD Briefing Note
For Mexico*

OECD's Teaching and Learning International Survey (TALIS) provides the first internationally comparative perspective on the conditions of teaching and learning, based on data from over 70,000 teachers and school principals who represent lower secondary teachers in the 23 participating countries.

TALIS examines important aspects of professional development; teacher beliefs, attitudes and practices; teacher appraisal and feedback; and school leadership. TALIS looks at these factors through the eyes of teachers and school principals. This innovative approach was chosen in order to examine how the intended school and teacher policies of education systems are actually perceived and implemented in schools and classrooms, recognising that the best intentions will only yield results if effectively and consistently implemented in the frontline.

This note contextualises key findings for **Mexico** with international trends among countries participating in TALIS, under the headings: conditions for effective learning, preparing and supporting a high-quality teaching force, improving teaching practice, supporting effective teaching through appraisal and feedback and shaping the development of teachers through effective school leadership.

TALIS Initial Report, as well as its executive summary, all data and web-only tables, can be downloaded free of charge at www.oecd.org/edu/TALIS.

CLASSROOM CLIMATE, JOB SATISFACTION AND TEACHERS BELIEF IN THEIR EFFECTIVENESS

Classroom climate not only has been shown to affect student outcomes and attainment but is a prominent policy issue. Student behaviour and the creation of a safe and productive learning environment can be a challenging dimension of teachers' work. How successful teachers feel they are with regard to their students' education can be linked to productivity and can influence people's actions in the workplace. When teachers envisage effective teaching as a skill that can be acquired, this feeling of self-efficacy can help them better analyse and solve problems. Conversely, those teachers confronting a low feeling of self-efficacy can experience self-doubt and become preoccupied with evaluative concerns if efforts proved unsuccessful.

One teacher in four in most countries loses at least 30% of lesson time because of disruptive student behaviour or administrative tasks, and some teachers lose more than half.

At least half of teachers in most countries spend over 80% of the lesson time on teaching and learning. However, often time is lost because students are disruptive or because teachers have to deal with administrative tasks. One teacher in four in most countries loses at least 30% of lesson time to these two factors, and some teachers lose more than half (Figure 4.10).

Teachers were also asked about their relations with students as an indicator of school climate. Teacher-student relations varied considerably within countries, although Norway stood out as a country in which over 95% of teachers reported better relations with students than the international average (Figure 4.13).

- Mexico had the highest percentage of teachers working in schools where the school principal reports classroom disturbances as a hindering factor for education, with 72%. A higher percentage of teachers' school principal reported arriving late at school and absenteeism (around 80% respectively) as an important student behaviour hindering the quality of their education. Mexican teachers report that 70% of the lesson time is spent on actual teaching and learning whereas 17% of it is lost because of administrative tasks (country average 9%), and 13% is spent maintaining order in the classroom. However, more so than in the average country, teachers tend to disagree that when the lesson begins, it is necessary to wait quite a long time for students to quieten down (Tables 4.18, 7.3a to 7.3d).

Teachers in the same school vary in terms of job satisfaction and belief in their effectiveness.

TALIS asked teachers about their job satisfaction and about how successful they feel they are with regard to their students' education (self-efficacy). Norwegian teachers stand out as well above average on both measures. High scores for job satisfaction were also reported by teachers in Austria and Belgium (Fl), while the opposite was true particularly in Hungary. Korean teachers were on average the least positive about their self-efficacy compared with other countries (Figure 4.15). Around 90% of overall variation on these measures is among teachers within schools.

- Mexico has the highest percentage of teachers across TALIS countries who strongly agree that they can make progress with the most difficult students, as well as their capacity to get through to students. Teachers in Mexico also report the highest percentage of teachers, after Norway, who strongly agree that they make a significant educational difference with their students (Tables 7.2a to 7.2d).
- When Mexican teachers were asked the question "All in all I am satisfied with my job", they tended to respond more negatively than teachers in participating countries did on average (Table 4.19). Unlike in some of the participating countries, teachers in Mexico did not relate their job satisfaction to a specific kind of teacher belief about teaching, but to other factors such as: classroom climate, teacher-student relations and their own sense of being effective as a teacher. In contrast, for their perceptions of self-efficacy (making a difference with students' learning), Mexican teachers reported to be slightly more positive than teachers on average.

Teachers who have undertaken more professional development tend to feel better equipped to deal with teaching challenges...

In around half of the countries (Denmark, Estonia, Iceland, Italy, Korea, Lithuania, Malaysia, Malta, Mexico, Portugal and Slovenia), teachers who had received more professional development reported significantly higher levels of self-efficacy (Table 7.5a). TALIS also suggests that teachers' participation in professional development goes hand in hand with their mastery of a wider array of methods to use in the classroom, even if it is not clear to what extent professional development triggers or responds to the adoption of new techniques (Table 4.7).

- In Mexico, as in about half of the participating countries, teachers receiving more days of professional development reported a higher self-efficacy. Professional development had a stronger relationship with self efficacy than providing induction processes for teachers or having a mentor.

...but professional development and intervention need to be targeted at individual teachers.

TALIS identifies close associations between factors such as a positive school climate, teaching beliefs, co-operation between teachers, teacher job satisfaction, professional development, and the adoption of different teaching techniques (Table 4.12). For all of these factors, much of the variation identified was in differences among individual teachers rather than among schools or countries (e.g. Figure 4.3). The implication is that by addressing teachers' attitudes, beliefs and practices as a whole, there is scope for considerable improvement in teaching and learning, but that this may require individualised support for teachers rather than just whole-school or system-wide interventions.

Teacher appraisal and feedback can be important instruments to raise self-efficacy, and public recognition can reinforce this relationship.

In a number of countries, the appraisal and feedback which teachers receive is mirrored in the beliefs in their own teaching abilities, in other words, the more feedback they on their work in specific areas, the more they trust in their abilities to address the respective teaching challenges (Table 7.7a). However, this relationship is not always visible when other factors are accounted for, suggesting that third factors are at play too. In some countries teachers reported higher levels of self-efficacy when they had received public recognition for the improvements and innovations in connection with the appraisal (Austria, Belgium (Fl.), Estonia, Hungary, Ireland, Italy, Korea, Lithuania, Malta, Norway and Spain) and also when innovative practices were part of appraisal and feedback (Brazil, Iceland and Portugal (Table 7.7a).

School evaluation and teacher appraisal show less relationship with classroom climate, in particular once other factors have been taken into account (Table 7.7). School evaluation was also not markedly associated with teacher efficacy (Table 7.7a).

- In Mexico, teachers who have never received appraisal or feedback in their school are more likely to have lower levels of reported self-efficacy, even if the relationship is tenuous only. The same is the case for receiving public recognition from the principal or receiving appraisal of professional development undertake.

Some teaching practices are more closely associated with classroom climate and self-efficacy than others.

Structured teaching practices were associated with a good classroom disciplinary climate in around half of the countries (Australia, Austria, Belgium (Fl), Bulgaria, Hungary, Ireland, Italy, Korea, Mexico, Portugal and Spain), and in some cases this effect was strong (Table 7.6). These practices were also associated with greater teacher self-efficacy in around the same number of countries, many the same ones (Australia, Austria, Belgium (Fl), Iceland, Ireland, Korea, Malaysia, Mexico, Norway, Portugal and Spain). Similar results were found for teachers who adopted student-oriented teaching practices but the number of countries where such positive associations were evident was smaller (Table 7.6a).

Teacher co-operation tended not to be strongly associated with classroom disciplinary climate, but in just under half of the countries teachers who engage in more progressive forms of professional collaboration such as team teaching were more likely to feel more effective in their teaching (Austria, Belgium (Fl.), Bulgaria, Estonia, Hungary, Iceland, Korea, Poland, Portugal and Spain) (Table 7.6a).

PREPARING AND SUPPORTING A HIGH QUALITY TEACHING FORCE

Education systems seek to provide teachers with opportunities for on-going professional development to fully prepare them for their work and to retain a high-quality teacher workforce. TALIS examined the take-up of professional development, the degree of unsatisfied demand for development and the factors that support or hinder meeting development needs.

Several findings from TALIS underline the need for a better preparation of teachers.

More than one teacher in three is in a school whose principal thinks that the school suffers from a shortage of qualified teachers (Table 2.5). This ranges from 12% in Poland to the great majority in Estonia, Mexico and Turkey.

The factors hindering instruction that school principals most frequently cite are a lack of equipment and a lack of instructional support personnel. There is a strong relationship between schools in which a shortage of instructional support staff and of other support staff hinders instruction, an indication that a squeeze on non-teacher resources can affect these two problems together. On the other hand there seems to be no correspondence between a shortage of qualified teachers and average class size. TALIS also found that in some countries, negative aspects of teacher behaviour such as absenteeism or lack of pedagogical preparation often hinder instruction. In Italy and Mexico for example, the majority of teachers are in schools whose principals thought that unprepared teachers hindered instruction (Table 2.8).

- The percentage of Mexican teachers whose school principal report a lack of qualified teachers as a factor hindering learning is almost twice the average of countries (64%, compared to 38% for the TALIS average). A similar difference is shown for principals' reports for a lack of laboratory technicians (65% of teachers compared to 33% on average across participating countries), and to a lesser extent regarding instructional support personnel (65%, compared to 48% for the TALIS average) and other support personnel (69%), although the percentages are still among the highest (Table 2.5).

The great majority of teachers participate in professional development...

Nearly nine teachers in ten reported taking part in a structured professional development activity during the 18 months preceding the survey. This is generally a high participation rate, but there is considerable variation in: *i)* The proportion of teachers participating in different countries: in Denmark, the Slovak Republic and Turkey, one in four reported no professional development. Given the broad definition of professional development used in the survey, this may be a concern (Table 3.1). *ii)* The intensity of participation: in some countries teachers' average participation is a handful of days a year, while in Mexico and Korea it is 30 days or more (Table 3.1). *iii)* Equity issues raised by the participation of various groups within countries: older teachers for example are under-represented and within-country variation is greatest in Korea, Spain, Italy, Poland and Mexico (Tables 3.1a and Table 3.1d). *iv)* The type of professional development activities (Table 3.2).

- The percentage of Mexican teachers who report having followed a professional development course during the 18 months preceding the survey is relatively high in Mexico (92%, with an average across countries of 89%). Mexico also has more than twice the TALIS average number of days of professional development across teachers (34, compared to 15 for the TALIS average). However, participation patterns are highly unequal within the country (Figures 3.2 and 3.3). Mexico shows a particularly pronounced difference of participation of teachers in professional development courses according to their previous qualification level, with teachers with higher initial qualifications showing higher participation rates: In Mexico, those with at least a Masters degree or higher received almost twice the number of days of development as those with less than a Bachelor's degree. Teachers in schools in a village on average took 8 days less than those living in a small town or a large city.
- In all countries except Mexico (89%) and Hungary (79%) the type of professional development that teachers cited most frequently was "Informal dialogue to improve teaching", with 93% of teachers on average reporting this activity during the survey period. For Mexico, attendance at "Courses and workshops" (94%) had the highest participation rate (Table 3.2 and Figure 3.4).

On average among the participating countries, some 51% of teachers' professional development was compulsory (Table 3.1). The proportion ranged from about one-third or less in Austria, Belgium (Fl.), Denmark and Portugal to 78% in Malta and as high as 88% in Malaysia. The countries with the highest number of compulsory days on average were Mexico, Bulgaria, Spain, Italy and Korea and those with the lowest were Austria, Belgium (Fl.) and Ireland.

- About 66% of the professional development days were compulsory in Mexico, which is higher than the OECD average of 51% and no doubt influences both the high participation in professional development and the high degree of scheduled time given to teachers to undertake development activities (Table 3.1).

...but half do not think this meets their needs...

Although the great majority of teachers received some professional development over the previous 18 months, 55% on average reported that they would have liked more. However, teachers' views on this varied widely: In Belgium (Fl.) and Slovenia, two-thirds of teachers felt that they had received enough professional development, while in Brazil, Malaysia and Mexico, over 80% did not. While some degree of unmet need can be expected, its extent in some of the countries will need closer examination (Table 3.3).

- Despite the high participation rates in Mexico (90%), Mexico also has the highest percentage of teachers reporting that they would have liked to receive more development than they did. (Table 3.3).

...with unmet demand concentrated in areas relating to dealing with heterogeneous learning groups, ICT and student behaviour.

Teachers' demand for more professional development appears concentrated in certain areas. In particular, one teacher in three reports a high level of need for teaching students with special learning needs. This indicates a serious issue in terms of teachers' capacity to deal with heterogeneous learning groups. Teachers also frequently mentioned ICT teaching and student behaviour as areas in which they required more development (Table 3.4). It is noteworthy in this context that one teacher in four in most countries reports losing at least 30% of learning time because of disruptive student behaviour or administrative tasks. Since the greatest amount of variation in loss of teaching time is among different teachers within schools, policy attention will need to focus on addressing the skills and dispositions of individual teachers, rather than improving overall school climate and discipline.

- Among the main professional development needs identified by teachers in Mexico, three are above the average of participating countries in TALIS. These concern dealing with heterogeneity in classroom, such as teaching students with special learning needs, teaching in a multicultural setting, and student counselling (Table 3.4).

Policy makers and practitioners need to ensure that incentives and support for professional development are better aligned with the types of activity that are effective in meeting teachers' needs.

The great majority of teachers reported that the professional development they take part in, across a range of activities, had a moderate or high impact. The greatest perceived impact is in teacher research and qualification programmes (Table 3.8). Yet relatively few participate in this type of activity and those who do often feel frustrated by the lack of sufficient time to devote to them.

- Teachers in Mexico follow the international pattern of most teachers reporting a moderate or high impact from qualification programmes and individual or collaborative research. While participation rates in qualification programmes is low compared with other activities for teachers in Mexico, engagement in research activities is less so, indicating a closer alignment between impact and participation rates for development activities than in some other countries.

Two-thirds of teachers paid nothing for their professional development...

On average in TALIS countries, two-thirds of teachers paid nothing for the professional development they participated in, and a similar proportion received time from their employers to undertake it. This indicates a significant investment in teachers' professional development on the part of schools and public authorities (Table 3.5).

- Around 70% of Mexican teachers received scheduled time in order to undertake professional development courses (above the TALIS country average), but 57% had to pay at least some of the costs for it (along with Austria, Malaysia, Mexico and Poland, this is one of the highest percentages among participating countries, the country average being 35%). The percentage of Mexican teachers who had to pay for all the costs of their professional development is twice the average across TALIS countries (19%, compared with the TALIS average of 8%). Mexico, along with Portugal (25%), Brazil and Italy (18% respectively) has one of the highest percentages of teachers having to pay for the full cost of their professional development.

...but free participation is not the only way to stimulate participation.

However, where teachers paid for their own development, they tended to do more. Those who paid the full cost undertook over twice as much training as those who received it free (Table 3.5a). This partly reflects the fact that courses that are paid for tend to lead to professional qualifications and are more time-consuming. Teachers paying for their professional development are also more likely to feel that they need more than they get. This suggests that free provision is not necessarily the only way of stimulating participation.

- In Mexico and Brazil, where a relatively high percentage of teachers had to pay the full cost of their professional development, teachers were more likely to report cost as a barrier to taking more (about half the teachers reported not being able to take more professional development because these were too expensive). In Mexico, conflict with work schedule (49% of teachers) and family responsibilities also played an important role (37%) in preventing teachers to pursue further professional development. About 20% of teachers in Mexico reported not having the pre-requisites, lack of employer support, or no suitable professional development as barriers. In the case of the last of these, the reported percentage in Mexico is half that reported on average across participating countries (42%) (Table 3.7).

IMPROVING TEACHING PRACTICE

Teachers' beliefs, practices and attitudes are important for understanding and improving educational processes. TALIS examines a variety of these which previous research has shown to be relevant to school improvement and effectiveness.

Teachers tend to be more inclined to see their role as supporting active learning rather than directly transmitting information...

Two alternative views of teaching emphasise, on the one hand, the teacher's role in transmitting knowledge and providing correct solutions, and on the other, the teacher's role as a facilitator of active learning by students who seek out solutions for themselves. The latter "constructivist" view of teaching generally has more support among the teachers surveyed today than the former "direct transmission" view (Figure 4.2), particularly so in Northern and Western European countries, Australia and Korea but less so in Southern Europe, Brazil or Malaysia.

...Nevertheless, structured practices are more common than student-oriented practices, or project work...

In the classroom, teachers in all countries reported using practices aimed at ensuring learning is well structured ("structuring practices") more often than they used student-oriented practices, such as adapting teaching to individual needs. Both of these teaching practices are used more often than activities such as project work ("enhanced activities"), which require more active participation by the student. This pattern is true in every country (Figure 4.4). Since each of these practices can raise student achievement, there may be scope for countries that make less use of student-oriented and enhanced activities to improve their results by using them more.

It is notable that the domination of structuring practices among countries is to some extent contrary to the general preference for constructivist beliefs, which would be expected to be more closely aligned to student-oriented practices. The factors that prevent teachers from putting their beliefs about teaching into practice require further investigation but this may nevertheless be a source of frustration for teachers.

Teachers of mathematics place greater emphasis on structuring. Teachers in the humanities report that they are relatively more likely to assign project work and other forms of enhanced activities, and in arts and subjects that teach practical skills, to use more student-oriented practices (Figure 4.5).

- Mexico follows these general patterns, except that, as is the case with Brazil, Korea and Malta, there is less of a difference in the extent of the use of enhanced activities and student-oriented practices (Figure 4.4)

There is also scope for strengthening teachers' collaboration, beyond exchanging ideas.

In all countries, co-operation by teachers takes the form of exchanging and co-ordinating ideas and information more often than direct professional collaboration such as team teaching (Figure 4.7). However, there are big differences among countries, with professional collaboration relatively more common in the Slovak Republic, Turkey and Poland and much less common in the Slovenia, Belgium (Fl.) and Spain. Generally, there seems scope to enhance this form of co-operation, which research has shown to raise school effectiveness.

- Mexico is among a number of countries with a more balanced mix between exchange and coordination among teachers, on the one hand, and professional collaboration. The picture is similar in Estonia, Hungary, Korea, Lithuania, Slovak Republic, Poland and Turkey.

Teacher-student relations vary across countries, but most variation is within schools, suggesting that some teachers need extra support to establish an effective learning environment.

Teachers were asked about their relations with students as an indicator of school climate. Teacher-student relations varied considerably within countries, although Norway stood out as a country in which over 95% of teachers reported better relations with students than the international average (Figure 4.13). Within countries, a considerable amount of variation is due to differences among schools, but two-thirds of all variation is among teachers regardless of school or country differences. This suggests that some teachers need extra support to ensure a climate in which to teach effectively.

- Compared with other countries, Mexican teachers differ in their views on teacher-student relations to a relatively high degree. This is also the case for Austria and Turkey, and to a lesser degree, in Brazil, Lithuania, Poland and Spain (Figure 4.13).

Countries with a high mean score for classroom disciplinary climate also have comparatively high mean scores for time on task. This is the case for Estonia and to a lesser extent for Austria, Bulgaria, Hungary, Ireland, Lithuania, Poland and Slovenia.

- Mexico is a notable exception in that teachers view the classroom disciplinary climate quite positively and yet report a relatively low percentage of classroom time spent teaching and learning. As noted above, the time loss in Mexico is due less to noise and interruptions than to the fact that a large proportion of instructional time is spent on administrative activities (see Figure 4.9).

SUPPORTING EFFECTIVE TEACHING THROUGH APPRAISAL AND FEEDBACK

TALIS shows that strong school-level evaluation tends to feed through to better teacher appraisal and feedback, which in turn can feed through to improvements in the classroom. This is true not just for evaluation in general but for specific aspects of teaching, such as teaching students from diverse backgrounds. These links provide important policy levers for policy makers and useful guidance for shaping the framework for evaluating schools to facilitate and improve the work of teachers.

Teachers tend to feel positive about their appraisal and feedback, and see this as having an impact on their teaching skills...

An important finding of TALIS is that teachers generally respond positively to appraisal and feedback (Table 5.7a). They report that it is fair and helpful for their work and that it increases their job satisfaction and to a lesser extent their job security. In addition, teachers report that it significantly increases their development as teachers (Table 5.7). Teachers' positive perceptions of appraisal and feedback show that it is possible to overcome concerns that have previously been raised about such practices.

- The frequency of the appraisal of and feedback to teachers seems higher in Mexico compared with the TALIS average. Some 30% of teachers in Mexico report receiving appraisal/feedback from the school principal at least once per month compared with 12% on average.
- On average teachers in Mexico are positive about the outcomes of appraisals in terms of the appraisal being fair, helpful to their development, improving their job satisfaction and job security and actually leading to changes in their work practices. In fact, almost 70% of teachers in Mexico reported appraisal and feedback increasing their job security, compared with the TALIS country average of 34%.

Over eight teachers in ten reported that they had received some kind of appraisal or feedback on their work and most were carried out by school principals or other teachers within their school (Table 5.3).

...and see this as having an impact on their teaching skills...

Not only do teachers report that the appraisal and feedback they receive improves their teaching skills, they also report that it leads to changes in specific aspects of their teaching. Greater emphasis on an aspect of teachers' work in appraisal and feedback is more likely to lead to changes in that area (Figure 5.8-Figure 5.13).

- "Knowledge and understanding of their main subject fields" was one of the two most important aspects when teachers received appraisal and feedback. The other was the "knowledge and understanding of instructional practices in their main subject field".
- Mexican teachers reported that that the appraisal and feedback they received had the strongest impact on the emphasis they place upon improving test scores in their teaching. They also reported a large impact on their classroom management practices. These areas were also important in Australia, Brazil, Bulgaria, Ireland and Slovenia (Table 5.8).

...especially where it is supported with effective school evaluation.

Between 70% and 80% of teachers work in schools whose school principal reported that school evaluations had an effect on feedback to the school, the appraisal of management and teachers, and helping teachers improve their teaching skills (Table 5.2). This shows why school-level evaluation can be an important driver of school improvement.

- In Mexico (as is the case in Australia, Brazil, Bulgaria, Hungary, Italy, Korea, Lithuania, Malaysia, Poland, Slovak Republic, Slovenia and Turkey), at least half of teachers worked in schools whose school principal reported having at least an annual school evaluation (either an external evaluation or a school self-evaluation). However, external evaluations are relatively more common in Mexico than school self-evaluations.

- Aspects which are reported by Mexican school principals to be relatively less important in school evaluations are feedback from parents and teaching students with special learning needs. Conversely, student test scores and retention and pass rates were considered to be particularly important (Table 5.1a).
- Publication of the results of school evaluations is reported as more common in Mexico than in TALIS countries on average (75% of teachers in Mexico work in schools where their school principal say this happens compared with 55% for TALIS average).

But the framework for evaluating education in schools is weak in a number of areas and countries...

At the same time, on average across TALIS countries 13% of teachers receive no appraisal and feedback on their work as teachers in their school. This was particularly apparent in Ireland and Portugal where over one-quarter of teachers had no appraisal and feedback and in Italy and Spain where around half of teachers had none (Table 5.3).

Furthermore on average just under one-third of teachers across TALIS countries worked in schools that had not been subject to an external evaluation in the previous five years. An average of one-fifth worked in schools that had not conducted a self-evaluation (Table 5.1).

In schools that are not evaluated, teachers are less likely to benefit from appraisal or feedback, as is the case of Korea, for example. This suggests that where school evaluation takes place, appraisal and feedback for individual teachers is encouraged.

- In Mexico and Malta, teachers in their first two years at a school are much more likely to receive more appraisal and feedback in schools with formal induction processes. For example, among teachers in Mexico who had received no appraisal or feedback in their school, 78% were in schools that had no formal induction process.

...and teachers do not receive recognition for effective teaching...

As shown in Figure 5, on average across TALIS countries, three-quarters of teachers report that they would receive no recognition for increasing the quality of their work. A similar proportion report that they would receive no recognition for being more innovative in their teaching. In addition, only around one half of teachers across TALIS countries reported that their school principal used effective methods to determine teachers' performance (Table 5.9).

Additionally, three-quarters of teachers reported that, in their school, the most effective teachers do not receive the most recognition and that their school principal does not take steps to alter the monetary rewards of a persistently underperforming teacher (Table 5.9). A similar proportion reported that, in their school, teachers would not be dismissed because of sustained poor performance.

The lack of recognition and incentives for teachers to develop their teaching and improve their effectiveness runs counter to efforts to lift school improvement. The resources devoted to countless school improvement initiatives across countries are not matched with either incentives or recognition for teachers to improve their own effectiveness. It would appear that an appraisal system and career structure that focuses upon and promotes innovation and effectiveness would better assist school improvement programmes and efforts to increase school effectiveness.

In schools that are not evaluated, teachers are less likely to benefit from appraisal or feedback. In Korea, for example, a teacher in a school that has not been evaluated is more than twice as likely not to receive appraisal or feedback as one in a school that has been evaluated. This suggests that where school evaluation takes place, appraisal and feedback for individual teachers is encouraged.

- Mexican teachers are more positive regarding appraisal and feedback in their school than is the case on average across TALIS countries. 89% of teachers in Mexico agree or strongly agree that the principal uses effective methods to determine whether teachers are performing well or badly (TALIS average 55%). 43% agree or strongly agree that they will receive an increased monetary or non-monetary reward if they improve the quality of their teaching (TALIS average 26%) (Table 5.9).
- In Mexico, 47% of teachers worked in schools whose school principal said they report underperforming teachers to another body always or most of the time (12% for the TALIS country average). In Mexico at least

one-third of teachers had school principals who reported that they always establish a development plan using appraisal and feedback for teachers to address weaknesses in their teaching (TALIS country average of 21%) (Table 5.9).

...and feedback tends to have limited impact on material reward systems or career advancement...

School evaluations and teacher appraisal and feedback have little financial impact. On average across TALIS countries, only around 10% of teachers' appraisal and feedback is linked to any kind of monetary reward and for only 16% is it linked to career advancement (Table 5.5). In addition, school evaluations are linked to the remuneration of only one-quarter of teachers and less than four teachers in ten work in schools where school evaluations are linked to the school budget (Table 5.2).

- In Mexico, school evaluations had a comparatively greater influence on teachers' remuneration and bonuses (as is the case in Brazil, Hungary, Italy, Korea, Malaysia, Poland, the Slovak Republic and Slovenia) (Table 5.2). Also Mexican teachers relatively frequently report a change in work responsibilities as a result of appraisal and feedback (56% of teacher report this, which is a proportion twice as large as the TALIS average of 27%). Teachers in Mexico (and Australia, Brazil, Ireland, Malta, Poland, Portugal, Spain and Turkey) also report more of an impact on career advancement than of direct monetary outcomes from appraisal and feedback (Table 5.5).

SHAPING THE DEVELOPMENT OF TEACHERS THROUGH EFFECTIVE SCHOOL LEADERSHIP

School leadership plays a vital role in teachers' working lives and on their effectiveness. A revolution in the model of school leadership in recent years has seen a substantial shift from a largely bureaucratic administration to a paradigm of "leadership for learning" with the school principal as instructional leader. TALIS is the first international survey to address in detail the management behaviour and style of school principals in secondary schools and to look at the presence of new trends in school leadership and their impact on teachers.

Instructional leadership often goes hand in hand with administrative leadership.

Instructional leadership (actions to support or improve teachers' instruction and to set the school's goals and curriculum development) is present particularly in Brazil, Poland and Slovenia. Although, in the same countries, administrative leadership (actions to support or improve teachers' instruction and to set the school's goals and curriculum development) is also visible (Table 6.7).

Countries where administrative leadership is particularly evident are Bulgaria and Malaysia, whereas the opposite is true most notably in Denmark. Overall, school principals who are strong instructional leaders are more likely to be strong administrative leaders as well. This contradicts the notion that these are alternative styles.

- Based on their own reports about their attitudes and practices, school principals in Mexico on average show relatively stronger tendencies towards administrative leadership than instructional leadership. Principals in Mexican schools in which teachers' innovative teaching practices are important to the evaluations tend to take more of an instructional leadership style of management (this is the case as well for Belgium (Fl.), Bulgaria, Estonia, Korea, Norway, Portugal and Turkey).
- In Mexico also, higher levels of an instructional leadership style are associated with the use of student test scores as an evaluation criterion for the appraisal of teachers. This is the case as well in Austria, Belgium (Fl), Bulgaria, Norway, Portugal and Spain.

Leadership style has little association with teachers' beliefs, attitudes or practices...

A school's leadership style has no pronounced relation to teachers' beliefs about teaching, to their teaching practices or to classroom climate (Tables 6.4, 6.5 and 6.7).

- In Mexico (as well as Hungary, Iceland, Lithuania, Malaysia, and Poland), where principals use an instructional leadership style, teachers are also more likely to co-operate and work together (Table 6.6). Last but not least, in Mexico (as in Denmark, Hungary, Iceland, Malta, and Portugal), schools with principals who

adopt more of an instructional leadership style tend to have more positive relations between teachers and students, net of other factors regarding the school and the teacher (Table 6.7).

...but often relates to the ways in which teachers are appraised, and the link between appraisal and professional development.

In more than half of the TALIS countries there is a greater chance of teacher appraisal recognising the participation in professional development by teachers in schools where strong instructional leadership is present (Table 6.9). In most countries, school principals in such schools are also more likely to use further professional development to address teachers' weaknesses identified in appraisals.

- In Mexico, as in 12 other countries, when a principal uses a more pronounced instructional leadership style, teacher appraisals are more likely to consider teacher's use of professional development. Also in Mexico, principals who adopt instructional leadership manage schools in which appraisals recognise innovative teaching practices. This can be observed as well in Australia, Estonia, Hungary, Iceland, Korea, Lithuania, Poland, Slovenia and Turkey.

A PROFILE OF LOWER SECONDARY TEACHERS AND THEIR SCHOOLS

TALIS establishes a profile of lower secondary teachers and their schools in order to contextualise its findings.

Teachers in lower secondary schools are mostly female...

In every TALIS country, most teachers are female: almost 70%, on average, rising to 80-85% in Bulgaria, Estonia, Lithuania, the Slovak Republic and Slovenia. Turkey, Mexico and Spain are more balanced, with over 40% of male teachers (Table 2.1).

On the other hand, only 45% of school principals across countries are female, suggesting a "glass ceiling" for promotion possibilities within schools (Table 2.1).

- Mexico shows a more balanced picture of gender representation, with 53% of female teachers, than its counterparts across countries. Nevertheless, the glass ceiling seems to exist as well, as only 34% of school principals are teachers (compared to 45% across TALIS countries).

...and the workforce is ageing.

In most cases, the majority of teachers are over 40. On average across TALIS countries, the percentage of teachers over 50 is 27%, which is nearly double the percentage of teachers under 30 (15%). In Austria, Italy and Norway 40% or more of teachers are over 50 and less than 10% are under 30 (Table 2.1). Many countries will soon need to replace a large number of retiring teachers.

- Mexico is also experiencing an aging teaching force, although to a lesser extent than the average of TALIS countries. The percentage of teachers over 50 is 22%, but the percentage of teachers under 30 is similar to the OECD average. Only 15% of teachers are aged under 30 years, and about 60% of teachers are over 40 years-old (Table 2.1).

Most teachers are long-serving and on permanent contracts.

Across TALIS countries some 85% of teachers are on permanent contracts. Over 60% have taught for more than ten years, and in Austria and Italy the majority have over 20 years of service (Table 2.3).

However, some teachers, particularly those first entering the profession, face the uncertainty and challenge of a fixed-term contract usually of a year or less. In Brazil, Iceland, Ireland and Portugal, at least one teacher in four is on a fixed-term contract (Table 2.3). For many, these are requirements that must be successfully fulfilled before being granted a permanent contract. Policy makers need to balance the advantages of supporting an experienced, long-serving teaching force against the need for dynamism and "new blood".

- The distribution of teachers in Mexico is similar to that of the average of TALIS countries. 87% are permanently employed, and also nearly two-thirds of them have more than ten years of service. The percentage of teachers on a fixed-term contract of one year or less is, with 8%, lower than the TALIS average of 11%.

Schools have autonomy over many things, but generally not teachers' pay.

Three-quarters of teachers are in schools whose principals have little say over their pay. On the other hand, the great majority teach in schools with wide autonomy in other areas: around two-thirds teach in schools with considerable responsibility for hiring and firing, three-quarters in schools which formulate the school budget, and 95% in schools which establish their disciplinary procedures (Table 2.7).

- Schools in Mexico have much less autonomy than is the case on average across TALIS countries. It is particularly low with regard to the involvement of schools in allocating funds to teachers' professional development, firing teachers and selecting teachers for hire. In these areas, the percentage of teachers whose school principal reported that considerable responsibility is granted ranges in Mexico from 21% to 24%, whereas the TALIS average does from 60% to 68%.
- Only just over half of Mexican teachers work in schools where the school principal has a considerable responsibility for formulating the school budget, but a similar percentage of teachers in Mexico to that of TALIS countries on average work in a school that can establish its own disciplinary procedures (95%).