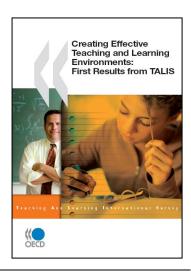


## **Creating Effective Teaching and Learning Environments: First Results from TALIS**

Summary in English



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

### **Conditions for effective learning**

TALIS looks at important features that shape effective learning...

OECD's Teaching and Learning International Survey (TALIS) provides the first internationally comparative perspective on the conditions of teaching and learning. With a focus on lower secondary education in both the public and private sectors, TALIS examines important aspects of professional development; teacher beliefs, attitudes and practices; teacher appraisal and feedback; and school leadership in the 23 participating countries. <sup>1</sup>

But how strongly do these characteristics affect learning itself? While TALIS does not directly measure student learning and learning outcomes, it looks at important features that shape effective learning. Special emphasis was given i) to how successful teachers feel in addressing the educational challenges they face (self-efficacy) and ii) to

<sup>1</sup> Australia; Austraia; Belgium (Fl); Denmark; Hungary; Iceland; Ireland; Italy; Korea; Mexico; Norway; Poland; Portugal; Spain; Slovak Republic; Turkey; Brazil; Bulgaria; Estonia; Lithuania; Malta; Slovenia; Malaysia. The Netherlands also participated but did not achieve the sampling standards.



what extent classrooms are orderly and conducive to learning (classroom disciplinary climate).

TALIS looked at how far factors such as aspects of professional development or varying teaching practices were associated with selfefficacy and classroom disciplinary climate. It then adjusted this effect by accounting for background factors such as the socio-economic characteristics of schools. Finally, for each factor for which significant effects had been found, additional estimates accounted for factors in other categories where the effects were significant. The associations that remain after these adjustments, measured in a "final model", are noted below and discussed in detail in Chapter 7 of the full report.

...including how well teachers feel prepared to address the challenges they face...

> Reports of self-efficacy have been shown to be linked to productivity and 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 selfefficacy can experience self-doubt and become preoccupied with evaluative concerns if efforts proved unsuccessful.

...as well as the quality of classroom climate, one in four teachers losing at least 30% of learning time because of disruptive student behaviour or administrative tasks.

> Classroom climate not only has been shown to affect student outcomes and attainment but is a prominent policy issue in a number of countries and regions. The actions of students within classrooms and the creation of a safe and productive learning environment are important for many schools and can be a challenging dimension of teachers' work. For example, TALIS finds that 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<sup>2</sup>). Furthermore, across countries, 60% of teachers are in schools whose school principal reports that classroom disturbances hinder learning (Table 2.8a). In all countries this is a problem in a relatively high proportion of schools and poses a significant challenge for effective teaching.

<sup>&</sup>lt;sup>2</sup> References in brackets are to tables and figures in the main report.

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

> Only in Australia was the number of days that teachers spent on professional development significantly associated with classroom disciplinary climate, once all other factors had been taken into account (Table 7.5). On the other hand, 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 selfefficacy (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).

. ...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, cooperation between teachers, teacher job satisfaction, professional development, and the adoption of different teaching techniques (Table 4.12, Table 7.5a and Table 7.6a). 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 wholeschool 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, when they receive feedback on their work, the more they trust in their abilities to address 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 little 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).

Teachers holding different beliefs have contrasting experiences of classroom climate...

> 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. Comparing teacher beliefs with classroom disciplinary climate, the analysis found that in Hungary, Italy, Korea, Poland and Slovenia, teachers with "constructivist" beliefs that regard students as active participants in the process of acquiring knowledge are more likely to report positive classroom disciplinary climate. In contrast, teachers who favour the "direct transmission" of knowledge are more likely to report a negative classroom disciplinary climate in the seven countries where there is a detectable net effect (Belgium (Fl.), Korea, Norway, Poland, Portugal, Slovenia and Spain). The choice of competing teacher beliefs is a particularly significant issue for Korea, Poland, and Slovenia, where both of the above effects were observed (Table 7.6).

> In virtually all TALIS countries, there is a relation between teachers' beliefs and their classroom practices. In particular, teachers who employ student-oriented practices are more likely to be those who take a "constructivist" view of teaching; that is, teachers who believe that students should be more active participants in the learning process tend to follow this through in practice. On the other hand, there is no consistent pattern to the association between teachers' beliefs and more structured lessons and teaching (Table 4.9).

...but tend to have confidence in their own teaching whichever beliefs they hold strongly.

> On the other hand, both "constructivist" and "direct transmission" beliefs were positively associated with self-efficacy in most TALIS countries (Table 7.6a). Even though these are competing views of teaching, this result indicates that holding any strong view about technique tends to be associated with confidence in one's own effectiveness.

Female teachers are more likely to regard teaching as a way to enable students to become autonomous learners rather than as the direct transmission of information.

> It is noteworthy that female teachers report using structuring and student-oriented practices more often than their male counterparts and are also more likely to say that they engage in co-operation with colleagues (Table 4.3).

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 collaboration such as team teaching were more likely to feel more effective (Austria, Belgium (Fl.), Bulgaria, Estonia, Hungary, Iceland, Korea, Poland, Portugal and Spain) (Table 7.6a).

> Those teachers who said that they involved students in enhanced activities such as project work were more likely in some countries to experience a worse classroom disciplinary climate (Austria, Belgium (Fl.), Lithuania and Malaysia), and had mixed reports of their selfefficacy (positive relationship in Ireland, Italy and Poland but a negative relationship in Austria) (Tables 7.6 and 7.6a). It is, of course, difficult to discern what is cause and effect as teachers may, for example, employ project work in particularly difficult classroom conditions.

#### **Other findings**

- More than one teacher in three works in a school whose principal thinks that the school suffers from a shortage of qualified teachers. The lack of adequate equipment and instructional support are other barriers hindering effective instruction.
- In some countries, negative aspects of teacher behaviour such as absenteeism or lack of pedagogical preparation also hinder instruction.
- The level and intensity of participation in professional development varies considerably among countries. Nearly nine in ten teachers take part in some sort of activity, but in some countries up to one in four teachers receive none. Moreover, intensity varies across countries more than participation, with Mexico and Korea seeing teachers participating on average for over 30 days in 18 months, twice the average rate.
- More than half of the teachers surveyed reported that they wanted more professional development than they received during the 18month survey period. The extent of unsatisfied demand is sizeable in every country ranging, from 31% in Belgium (Fl.) to over 80% in Brazil, Malaysia and Mexico.
- The principal cause of unfulfilled demand, according to teachers, is the conflict with their work schedule, but they also often cited lack of suitable development opportunities.
- Teachers are more inclined to regard students as active participants in the process of acquiring knowledge than to see the teacher's main role as the transmission of information and demonstration of "correct solutions". This is most true in northwest Europe, Scandinavia, Australia and Korea and least true in southern Europe, Brazil and Malaysia where teachers fall between the two views.
- In the classroom, teachers in all countries put greater emphasis on ensuring that learning is well structured than on student-oriented activities which give them more autonomy. Both of these teaching practices are emphasised more than enhanced learning activities such as project work. This pattern is true in every country.
- One in four teachers report losing at least 30% of learning time because of disruptive student behaviour or administrative tasks.
- Appraisal and feedback have a strong positive influence on teachers and their work. Teachers report that it increases their job satisfaction and, to some degree, their job security, and it significantly increases their development as teachers.
- A number of countries have a relatively weak evaluation structure and do not benefit from school evaluations and teacher appraisal and feedback. For example, one-third or more of teachers work in

schools in Portugal (33%), Austria (35%) and Ireland (39%) that had no form of school evaluation in the previous five years. In addition, on average across TALIS countries, 13% of teachers did not receive any appraisal or feedback in their school. Large proportions of teachers are missing out on the benefits of appraisal and feedback in Italy (55%), Portugal (26%), and Spain (46%).

- Most teachers work in schools that offer no rewards or recognition for their efforts. Three-quarters reported that they would receive no recognition for improving the quality of their work. A similar proportion reported they would receive no recognition for being more innovative in their teaching. This says little for a number of countries' efforts to promote schools as centres of learning that foster continual improvements.
- Some principals in every country have adopted the "instructional leadership" styles which are central to today's paradigm of effective school leadership. However, the prevalence of such practices varies greatly by country and they are much more in evidence in some countries such as Brazil, Poland and Slovenia than they are in others, such as Estonia and Spain.
- In a number of countries, where school leaders adopt a stronger instructional leadership role, there is more collaboration between teachers, better student-teacher relations, greater recognition given to teachers for innovative teaching practices and more emphasis on developmental outcomes of teacher appraisals.

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