



Annex B

TECHNICAL NOTES ON INDICES AND ANALYSIS USED IN TALIS 2013

A note regarding Israel

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

ANNEX B

TECHNICAL NOTES ON INDICES AND ANALYSIS USED IN TALIS 2013

This annex provides information on how the indices (or scales) and other measures derived from the TALIS 2013 teacher and principal questionnaires were constructed. It also provides technical details of some of the more advanced statistical analyses presented throughout the report. Additional technical details on these matters can be found in the *TALIS 2013 Technical Report*.

Construction of indices and other derived measures

This section examines in some detail the composition of indices and other measures used in this report that were derived from the TALIS 2013 teacher and principal and PISA mathematics teacher questionnaires. The section begins with important considerations regarding the reliability and validity of the indices across participating countries and economies.

Reliability and validity of the indices across countries and economies

TALIS measures the self-reported beliefs, attitudes and practices of teachers and school principals in participating countries across a range of topics. The development of these beliefs, attitudes and practices is influenced by individual characteristics but also by the cultural background and the school system. Furthermore, individual and cultural factors affect the interpretation of questions and the ways in which responses are given (Van de Vijver and Leung, 1997). These influences may produce differences in levels of endorsement or frequency in survey responses, but they may also affect the index structure used to compile responses and thus limit the comparability of the resulting scores. As a consequence, social surveys and cross-cultural studies in particular entail special methodological challenges.

Commonly observed inconsistencies and uncertainties in social and cross-cultural research include acquiescence (the tendency for a respondent to agree with a survey statement independent of item content), extremity responding (the tendency to choose extreme response options independent of item content) and social desirability (the tendency to favour response options that are perceived to be socially most adequate). When developing the TALIS 2013 questionnaires, care was taken to ensure that items were compatible with the culture and school system of each TALIS country and economy and that the items had high-quality translation and verification. Moreover, as in the previous cycle of TALIS, the extent to which acquiescence and extremity responding were present in survey responses was examined. The degree of internal consistency and validity of the operationalised teacher and principal indices or derived scales are quantified from the evaluation of the item statistics, the relationship between the scale items and the factor structure of the indices. These psychometric properties of the scale are tested for each participating country. Social desirability response bias was examined in the field-trial phase and findings and implications from these analyses are reported in the *TALIS 2013 Technical Report* (OECD, 2014). Finally, the cross-cultural comparability – or “invariance” – of the indices measuring beliefs, attitudes and practices throughout the report was evaluated simultaneously across countries by means of multi-group confirmatory factor analysis (MGCFA).

Cross-cultural survey methods often differentiate three hierarchical levels of invariance: configural, metric and scalar.

- **Configural invariance** is established when the same items are associated with the same underlying factors in all participating countries. This implies an acceptable fit of confirmatory factor analysis models using the same factor structure for all countries.
- **Metric invariance** is achieved when the strength of the associations between each of the items and the underlying factors is also equivalent across countries.
- **Scalar invariance** is the most rigorous form of invariance. It implies that cross-country differences in the means of the observed items are a result of differences in the means of their corresponding factors. At least partial scalar invariance is needed to make meaningful comparisons of mean scores across countries (e.g. Baumgartner and Steenkamp, 2001).

In invariance tests, metric invariance requires configural invariance, and scalar invariance requires both configural and metric invariance. The ISCED 2 samples were used as reference populations for evaluating configural, metric and scalar invariance. Results for these invariances tests are presented in the *TALIS 2013 Technical Report*. All of the scales achieved metric or loose metric invariance, but none of them reached the scalar level of invariance. The *TALIS 2013 Technical Report* discusses the construction of the indices reported and the results from the invariance analysis in greater detail (OECD, 2014).

Because the level of invariance (namely scalar) required to perform cross-country comparison of indices scores was not reached, a pooled sample with data from all ISCED 2 countries was created and a confirmatory factor analysis (CFA) was conducted using this pooled sample. Weights were rescaled so that each country would contribute equally to the analysis.

The estimated intercepts and loadings from the CFA using the pooled sample (presented in the technical documentation for each scale in the *TALIS 2013 Technical Report*) were used as fixed parameters to calculate factor scores for each country separately per population (ISCED levels 1, 2 and 3, as well as the TALIS-PISA link populations) by using the weighted robust likelihood estimation method. After factor scores with determinacies greater than .80 were computed, they were rescaled to have a standard deviation of 2 on the pooled sample used for estimating the loadings and intercepts (ISCED 2 countries), and the value 10 on the scale was made to coincide with

the midpoint of the scale in the response options for the questions that make up the scale. In the cases of scales made up of items with response options ranging from 1-strongly disagree to 4-strongly agree, a score higher than 10, even if below the empirical scale average, indicates agreement with the items in the scale. A score below 10 indicates disagreement with the items in the scale.

This way, although a scalar level of invariance was not achieved using MGCFA, this scaling approach allowed factor scores to be obtained from the same loadings and intercepts across all countries and populations (ISCED levels 1, 2 and 3 and the TALIS-PISA link populations).

However, not all scales the study planned to produce yielded suitable data for MGCFA. The data from school questionnaire items related to the lack of resources and autonomy indices did not fit the CFA models and had to be produced using a simpler technique. For the autonomy scales, if the principal selected principal, school management team or teacher as those having significant responsibility for the specified task, we considered the task a school responsibility (autonomous). If the principal selected school governing board or external authority, we considered the task an external responsibility (not autonomous). If the school principal selected from both lists, we considered it a shared responsibility (mixed). For each scale, if more than half the tasks were classified as autonomous, the school was classified as autonomous for that scale. If more than half the tasks were classified as not autonomous, the school was classified as not autonomous. If neither criterion was met, the school was classified as mixed. The categories for this index are 1 for “no autonomy”, 2 for “mixed autonomy”, 3 for “autonomy”.

Scores for the lack of resources indices were computed in a different way. If all responses to the component variables for the particular index were “not at all” or “very little”, the index was set to 1. If all responses to the component variables for the particular index were “to some extent” or “a lot”, the index was set to 3. All other combinations were coded as 2. The categories for this index are 1 for “not a problem”, 2 for “a bit of a problem”, and 3 for “a problem”.

The list and description of the indices constructed from the teacher, school principals and PISA mathematics teacher questionnaires’ data follow here. A summary table is presented below. Moreover, tables containing the fit indices for each index for each population are available in the *TALIS 2013 Technical Report*. See the *Technical Report* for the TALIS questionnaires (OECD, 2014).

Summary of the indices constructed from teacher, school principal and PISA mathematics teacher questionnaires

Construct	Scale Description	Scale Name	Items
Teacher Questionnaire			
Teacher self-efficacy	Self- efficacy in classroom management	TSELEFFS, SECLSS	TT2G34D; TT2G34F; TT2G34H; TT2G34I
Teacher self-efficacy	Self-efficacy in instruction	TSELEFFS, SEINSS	TT2G34C; TT2G34J; TT2G34K; TT2G34L
Teacher self-efficacy	Self-efficacy in student engagement	TSELEFFS, SEENGS	TT2G34A; TT2G34B; TT2G34E; TT2G34G
Teacher job satisfaction	Satisfaction with current work environment	TJOBSATS, TJSENV	TT2G46C; TT2G46E; TT2G46G; TT2G46J
Teacher job satisfaction	Satisfaction with profession	TJOBSATS, TJSROS	TT2G46A; TT2G46B; TT2G46D; TT2G46F
School climate	Participation among stakeholders	TSCSTAKES	TT2G44A; TT2G44B; TT2G44C; TT2G44D; TT2G44E
School climate	Teacher-student relations	TSCSTUDS	TT2G45A; TT2G45B; TT2G45C; TT2G45D
Classroom disciplinary climate	Classroom disciplinary climate—need for discipline	TCDISCS	TT2G41A; TT2G41B; TT2G41C; TT2G41D
Teacher pedagogical beliefs	Constructivist beliefs	TCONSBS	TT2G32A; TT2G32B; TT2G32C; TT2G32D
Teacher co-operation	Exchange and coordination for teaching	TCOOPS, TCXCHS	TT2G33D; TT2G33E; TT2G33F; TT2G33G
Teacher co-operation	Professional collaboration	TCOOPS, TCCOLLS	TT2G33A; TT2G33B; TT2G33C; TT2G33H
Effective professional development (PD)	Effective professional development	TEFFPROS	TT2G25A; TT2G25B; TT2G25C; TT2G25D
Needs for professional development	Need for PD in subject matter and pedagogy	TPDPEDS	TT2G26A; TT2G26B; TT2G26C; TT2G26D; TT2G26F
Needs for professional development	Need for PD for teaching for diversity	TPDDIVS	TT2G26H; TT2G26I; TT2G26J; TT2G26K; TT2G26L; TT2G26N
Principal/School Questionnaire			
School climate	School climate—delinquency and violence	PSCDELIQS	TC2G32D; TC2G32E; TC2G32F; TC2G32G
School climate	School climate—mutual respect	PSCMUTRS	TC2G30C; TC2G30D; TC2G30E; TC2G30F
Distributed leadership	Degree of distributed leadership in the school	PDISLEADS	TC2G22A; TC2G22B; TC2G22C
Job satisfaction	Satisfaction with current work environment	PJOBSATS, PJSENV	TC2G39E; TC2G39F; TC2G39H; TC2G39I
Job satisfaction	Satisfaction with profession	PJOBSATS, PJSROS	TC2G39A; TC2G39B; TC2G39D
School leadership	Instructional leadership	PINSLEADS	TC2G21C; TC2G21D; TC2G21E
School resources	Lack of pedagogical personnel	PLACKPER	TC2G31A; TC2G31B; TC2G31C
School resources	Lack of material resources	PLACKMAT	TC2G31D; TC2G31E; TC2G31F; TC2G31G; TC2G31H
School autonomy	School autonomy for staffing	PSASTAFF	TC2G18A; TC2G18B
School autonomy	School autonomy for budgeting	PSBUDGET	TC2G18C; TC2G18D; TC2G18E
School autonomy	School autonomy for instructional policies	PSINSPOL	TC2G18F; TC2G18G; TC2G18J; TC2G18K

Source: OECD, TALIS 2013 Database.

Teacher indices

Teacher self-efficacy

To assess teachers' self-efficacy, TALIS asked teachers to indicate to what extent they can do certain activities (on a four-point scale ranging from "not at all" to "a lot") by responding to a number of statements about their work in the school in terms of classroom management, instruction and student engagement.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD, 2014).

The questionnaire items forming these indices are as follows:

Efficacy in classroom management

- Control disruptive behaviour in the classroom
- Make my expectations about student behaviour clear
- Get students to follow classroom rules
- Calm a student who is disruptive or noisy

Efficacy in instruction

- Craft good questions for my students
- Use a variety of assessment strategies
- Provide an alternative explanation for an example when students are confused
- Implement alternative instructional strategies in my classroom

Efficacy in student engagement

- Get students to believe they can do well in school work
- Help my students value learning
- Motivate students who show low interest in school work
- Help students think critically

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5. The index of teacher self-efficacy is summarised across the three indices.

Teacher job satisfaction

To assess teachers' job satisfaction, TALIS asked teachers to indicate how satisfied they feel about their job (on a four-point scale ranging from "strongly disagree" to "strongly agree") by responding to a number of statements about their work environment and the teaching profession.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD, 2014).

The questionnaire items forming these indices are as follows:

Satisfaction with current work environment

- I would like to change to another school if that were possible
- I enjoy working at this school
- I would recommend my school as a good place to work
- All in all, I am satisfied with my job

Satisfaction with profession

- The advantages of being a teacher clearly outweigh the disadvantages
- If I could decide again, I would still choose to work as a teacher
- I regret that I decided to become a teacher
- I wonder whether it would have been better to choose another profession

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5. The index of teacher job satisfaction is summarised across the two indices.



School climate

To assess teachers' opinions on school climate, TALIS asked teachers to indicate how they felt (on a four-point scale ranging from "strongly disagree" to "strongly agree") regarding different aspects about the participation of different stakeholders in their school's life and the relations between teachers and students.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD, 2014).

The questionnaire items forming these indices are as follows:

Participation among stakeholders

- This school provides staff with opportunities to actively participate in school decisions
- This school provides parents or guardians with opportunities to actively participate in school decisions
- This school provides students with opportunities to actively participate in school decisions
- This school has a culture of shared responsibility for school issues
- There is a collaborative school culture that is characterised by mutual support

Teacher-student relations

- In this school, teachers and students usually get on well with each other
- Most teachers in this school believe that the students' well-being is important
- Most teachers in this school are interested in what students have to say
- If a student from this school needs extra assistance, the school provides it

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

Classroom disciplinary climate

To assess the classroom disciplinary climate, TALIS asked teachers to indicate how strongly they agreed (on a four-point scale ranging from "strongly disagree" to "strongly agree") with a number of statements about a target class that they taught. This target class was defined as the first ISCED level 2 class that the teacher (typically) taught in the school where she or he works after 11 a.m. the previous Tuesday.

A test of reliability in each country revealed that these items consistently measure the same construct. The CFA fit indices in each country have shown that the internal structure of the index is supported (OECD, 2014).

The questionnaire items forming this index are as follows:

- When the lesson begins, I have to wait quite a long time for students to quiet down
- Students in this class take care to create a pleasant learning atmosphere
- I lose quite a lot of time because of students interrupting the lesson
- There is much disruptive noise in this classroom

The index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

Teacher constructivist beliefs

To assess teachers' constructivist beliefs about teaching and learning, TALIS asked teachers to indicate how strongly they agreed (on a four-point scale ranging from "strongly disagree" to "strongly agree") with a number of statements.

In short, constructivist beliefs are characterised by a view of the teacher as the facilitator of learning with more autonomy given to students, whereas a direct transmission view sees the teacher as the instructor, providing information and demonstrating solutions.

A test of reliability in each country revealed that these items consistently measure the same construct. The CFA fit indices in each country have shown that the internal structure of the index is supported (OECD, 2014).

The questionnaire items forming this index are as follows:

- My role as a teacher is to facilitate students' own inquiry
- Students learn best by finding solutions to problems on their own
- Students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved
- Thinking and reasoning processes are more important than specific curriculum content

The index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

Teacher co-operation

To assess co-operation among teaching staff, TALIS asked teachers to indicate the frequency with which they undertook specified activities (using a six-point scale ranging from “never” to “weekly”). Teacher co-operation was measured by two indices: exchange and coordination for teaching and professional collaboration.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD, 2014).

The questionnaire items forming these two indices are as follows:

Exchange and coordination for teaching

- Exchange teaching materials with colleagues
- Engage in discussions about the learning development of specific students
- Work with other teachers in my school to ensure common standards in evaluations for assessing student progress
- Attend team conferences

Professional collaboration

- Teach jointly as a team in the same class
- Observe other teachers’ classes and provide feedback
- Engage in joint activities across different classes and age groups (e.g. projects)
- Take part in collaborative professional learning

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 3.5. The index of teacher co-operation is summarised across the two indices.

Effective professional development

To assess teachers’ effective professional development, TALIS asked teachers to indicate the extent of their professional development activities (on a four-point scale ranging from “not in any” to “yes, in all”) by responding to a number of statements regarding certain components.

A test of reliability in each country revealed that these groups of items consistently measure the same construct. The CFA fit indices in each country have shown that the internal structure of the index is supported (OECD, 2014).

The questionnaire items forming this index are as follows:

- A group of colleagues from my school or subject group
- Opportunities for active learning methods (not only listening to a lecturer)
- Collaborative learning activities or research with other teachers
- An extended time period (several occasions spread over several weeks or months)

The index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

Needs for professional development

To assess teachers’ need for professional development, TALIS asked teachers to indicate the degree to which they need such (on a four-point scale ranging from “no need at present” to “high level of need”) by responding to a number of statements about professional development in subject matter and pedagogy and about professional development for teaching for diversity.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD 2014).

The questionnaire items forming these indices are as follows:

Need for professional development in subject matter and pedagogy

- Knowledge and understanding of my subject field(s)
- Pedagogical competencies in teaching my subject field(s)
- Knowledge of the curriculum
- Student evaluation and assessment practice
- Student behaviour and classroom management



Need for professional development for teaching for diversity

- Approaches to individualised learning
- Teaching students with special needs (see Question 9 for the definition)
- Teaching in a multicultural or multilingual setting
- Teaching cross-curricular skills (e.g. problem solving, learning-to-learn)
- Approaches to developing cross-occupational competencies for future work or future studies
- Student career guidance and counselling

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

School indices

School climate

To assess principals' opinions on school climate, TALIS asked school principals to provide information regarding a number of statements about different aspects of the climate in their school in terms of delinquency and mutual respect. For the index of delinquency and violence, TALIS asked the principals to indicate the frequency (on a five-point scale ranging from "never" to "daily") with which certain acts occurred in their school. For the index of mutual respect, TALIS asked school principals to indicate how strongly they agreed (on a four-point scale ranging from "strongly disagree" to "strongly agree") with a number of statements about the mutual respect of teachers and students in their school.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD, 2014).

The questionnaire items forming these indices are as follows:

Delinquency and violence

- Vandalism and theft
- Intimidation or verbal abuse among students (or other forms of non-physical bullying)
- Physical injury caused by violence among students
- Intimidation or verbal abuse of teachers or staff

Mutual respect

- School staff have an open discussion about difficulties
- There is mutual respect for colleagues' ideas
- There is a culture of sharing success
- The relationships between teachers and students are good

The index of delinquency and violence was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 3.0. The index of mutual respect was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

Distributed leadership

To assess the distributed leadership in schools, TALIS asked school principals to indicate the distribution of the opportunities for it (on a four-point scale ranging from "strongly disagree" to "strongly agree") by responding to a number of statements.

A test of reliability in each country revealed that these groups of items consistently measure the same construct. The CFA fit indices in each country have shown that the internal structure of the index is supported (OECD, 2014).

The questionnaire items forming this index are as follows:

- This school provides staff with opportunities to actively participate in school decisions
- This school provides parents or guardians with opportunities to actively participate in school decisions
- This school provides students with opportunities to actively participate in school decisions

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

Job satisfaction

To assess principals' job satisfaction, TALIS asked school principals to indicate how satisfied they feel with their job (on a four-point scale ranging from "strongly disagree" to "strongly agree") by responding to a number of statements about their work environment and their profession.

A test of reliability in each country revealed that these groups of items consistently measure the same constructs. The CFA fit indices in each country have shown that the internal structure of the indices is supported (OECD, 2014).

The questionnaire items forming these indices are as follows:

Satisfaction with current work environment

- I enjoy working at this school
- I would recommend my school as a good place to work
- I am satisfied with my performance in this school
- All in all, I am satisfied with my job

Satisfaction with profession

- The advantages of this profession clearly outweigh the disadvantages
- If I could decide again, I would still choose this job/position
- I regret that I decided to become a principal

Each index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5. The index of principal job satisfaction is summarised across the two indices.

Instructional leadership

To assess principals' role in school leadership, TALIS asked school principals to indicate the frequency with which they took on certain activities (on a four-point scale ranging from "never or rarely" to "very often") by responding to a number of statements.

A test of reliability in each country revealed that these groups of items consistently measure the same construct. The CFA fit indices in each country have shown that the internal structure of the index is supported (OECD, 2014).

The questionnaire items forming this index are as follows:

- I took actions to support co-operation among teachers to develop new teaching practices
- I took actions to ensure that teachers take responsibility for improving their teaching skills
- I took actions to ensure that teachers feel responsible for their students' learning outcomes

The index was calculated to have a standard deviation of 2, and the mid-point of 10 on the index coincides with the average response scale of 2.5.

School resources

To assess principals' opinion on the lack of resources in their schools, TALIS asked school principals to indicate to what extent the quality of instruction is hindered in their schools (on a four-point scale ranging from "not at all" to "a lot") by responding to a number of statements regarding pedagogical personnel and material resources.

Simple categorisation technique is used for the index because of many items with low item-total correlations and mixed factor structures from the factor analysis models (see OECD, 2014). If all responses to the component variables for the particular index were "not at all" or "very little", the index was set to 1. If all responses to the component variables for the particular index were "to some extent" or "a lot", the index was set to 3. All other combinations were coded as 2. The categories for this index are 1 for "not a problem", 2 for "a bit of a problem", and 3 for "a problem".

The questionnaire items forming these indices are as follows:

Lack of pedagogical personnel

- Shortage of qualified and/or well-performing teachers
- Shortage of teachers with competence in teaching students with special needs
- Shortage of vocational teachers

Lack of material

- Shortage or inadequacy of instructional materials (e.g. textbooks)
- Shortage or inadequacy of computers for instruction
- Insufficient Internet access
- Shortage or inadequacy of computer software for instruction
- Shortage or inadequacy of library materials



School autonomy

To assess principals' autonomy in governing their schools, TALIS asked school principals to indicate who has significant responsibility on making decisions at the school level by responding to a number of statements. The school principals answered the statements with "yes" or "no" depending on who has the significant responsibility for making the decisions: the principal, other members of the school management team, teachers, school governing boards or local authorities.

Simple categorisation technique is used for the index. If the principal selected principal, school management team or teacher as those having significant responsibility for the specified task, the task was considered a school responsibility (autonomous). If the principal selected school governing board or external authority, the task was considered an external responsibility (not autonomous). If the school principal selected from both lists, it was considered a shared responsibility (mixed). For each scale, if more than half the tasks were classified as autonomous, the school was classified as autonomous for that scale. If more than half the tasks were classified as not autonomous, the school was classified as not autonomous. If neither criterion was met, the school was classified as mixed.

The questionnaire items forming these indices are as follows:

School autonomy for staffing

- Appointing or hiring teachers
- Dismissing or suspending teachers from employment

School autonomy for budgeting

- Establishing teachers' starting salaries, including setting pay scales
- Determining teachers' salary increases
- Deciding on budget allocations within the school

School autonomy for instructional policies

- Establishing student disciplinary policies and procedures
- Establishing student assessment policies, including national/regional assessments
- Determining course content, including national/regional curricula
- Deciding which courses are offered

The categories for each index are 1 for "no autonomy", 2 for "mixed autonomy", and 3 for "autonomy".

Ratios derived from TALIS data

Student-teacher ratio

The student-teacher ratio was derived from school principals' responses to a question about the number of staff (head counts) currently working in the school and the total number of students (head counts) of all grades in the school. The measure is not therefore restricted to those teaching or supporting ISCED level 2 education in the school but covers education at all levels provided in the school. The ratio is derived by dividing the number of students by the number of teachers (those whose main activity is the provision of instruction to students). The analyses reporting this ratio in Chapter 2 were done at the school level and therefore used the final school estimation weight (SCHWGT).

Ratio of teachers to number of personnel for pedagogical support

This ratio was derived from school principals' responses to a question about the number of staff (head counts) currently working in the whole school and is therefore not restricted only to those teaching or supporting ISCED level 2 education in the school. The ratio is derived by dividing the number of teachers (those whose main activity is the provision of instruction to students) by the sum of school administrative personnel and management personnel. School administrative personnel include receptionists, secretaries and administration assistants, and management personnel include principals, assistant principals and other staff whose main activity is management. The analyses reporting this ratio in Chapter 2 were done at the school level and therefore used the final school estimation weight (SCHWGT).

Ratio of teachers to number of school administrative or management personnel

This ratio was derived from school principals' responses to a question about the number of staff (headcounts) currently working in the school. The measure is not therefore restricted to those teaching or supporting ISCED level 2 education in the school but covers education at all levels provided in the school. The ratio is derived by dividing the number of teachers (those whose main activity is the provision of instruction to students) by the sum of school administrative personnel and management personnel. School administrative personnel include receptionists, secretaries and administration assistants while management personnel include principals, assistant principals, and other management staff whose main activity is management. The analyses reporting this ratio in Chapter 2 were done at the school level and therefore used the final school estimation weight (SCHWGT).

Average class size

In the section of the teacher questionnaire that asked teachers about their classroom teaching practices, teachers were asked to report on a target class that they taught. This target class was defined as the first ISCED level 2 class that the teacher taught in the school after 11 a.m. on the previous Tuesday. To characterise the target class, teachers were asked to report the number of students currently enrolled in this class. The average class size is obtained by making the average of the class sizes reported by the individual teachers. The analyses reporting this ratio in Chapter 2 were done at the teacher level and therefore used the final teacher estimation weight (TCHWGT).

Technical notes on analyses

Technical note on the logistic regression analyses presented in Chapter 2

Logistic regression analysis enables the estimation of the relationship between one or more independent variables (or predictors) on categorical dependent (or predicted) variables with two categories (binary logistic regression) or more categories (multinomial logistic regression). Regression analysis was carried out for each country separately, as prior analysis showed noticeable differences in regression coefficients between countries.

Multinomial logistic regression compares multiple groups through a combination of binary logistic regressions. To calculate logistic regressions, three transformations of data take place: from probability to odds, from odds to log odds and from log odds to odds ratios. The transformation from probability to odds is a monotonic transformation, meaning that the odds increase as the probability increases or vice versa. Probabilities range from 0 to 1. Odds range from 0 to positive infinity. The transformation from odds to log of odds is the log transformation; this is also a monotonic transformation. Log odds range from negative infinity to positive infinity. One of the main reasons that probabilities need to be transformed to log odds is that among all of the infinitely many choices of transformation, the log of odds is one of the easiest to understand and interpret (UCLA: Institute for Digital Research and Education).

Namely, log odds model the logit-transformed probability as a linear relationship with the predictor variables. More formally, let y be the binary outcome variable indicating failure/success with 0/1, and p be the probability of y to be 1, so that $p = \text{prob}(y=1)$. Let x_1, \dots, x_k be a set of predictor variables. Then, the logistic regression of y on x_1, \dots, x_k estimates parameter values for $\beta_0, \beta_1, \dots, \beta_k$ via the maximum likelihood method of the following equation:

$$\text{logit}(p) = \log(p/(1-p)) = \beta_0 + \beta_1 * x_1 + \dots + \beta_k * x_k$$

Hence, when a categorical outcome variable is modelled using logistic regression, it is assumed that the logit transformation of the outcome variable has a linear relationship with the predictor variables. To make data even more interpretable in terms of probability, the final transformation takes place: from log odds to odds ratios. Odds ratios are the exponentiated coefficients of the predictor variables, where categories of these variables are compared with a predetermined reference category.

Then, in terms of probabilities, the equation above is translated into the following:

$$p = \frac{\exp(\beta_0 + \beta_1 * x_1 + \dots + \beta_k * x_k)}{1 + \exp(\beta_0 + \beta_1 * x_1 + \dots + \beta_k * x_k)}$$

The teacher and school variables included in the regression analysis in Chapter 2 are presented in Table B.1, and the percentages of missing cases for each variable are included in Table B.2. It was necessary to have different reference categories for the binary logistic regressions and the multinomial logistic regressions because of statistical power. This means that for the binary logistic regressions, the first, or zero-coded, category of every binary variable was the baseline category, whereas for multinomial regressions, the last category of every categorical variable was selected as the reference category. Concretely, this means that whereas for Table 2.12 the less-educated and less-experienced teachers were chosen as the reference category, for Table 2.14 it was the opposite: The more highly educated and experienced teachers were the basis for comparison. For the latter table, for example, this means that odds ratios can be interpreted in such a way that for a unit change in the predictor variable (e.g. having attained an educational degree of ISCED level 5B and lower versus 5A and higher), the odds ratio of the outcome variable (e.g. teaching in a small city or large city) relative to the reference category (e.g. teaching in a town) is expected to change by a factor of the respective parameter estimate, given that the variables in the model are held constant.

For all the teacher-level regressions in Chapter 2, of which the results are presented in Tables 2.5, 2.12, and 2.14, gender and subjects taught were included as control variables. For Table 2.5, a teacher's level of education and years of work experience also functioned as control variables, whereas these were the main predictor variables for Tables 2.12 and 2.14. For Table 2.5, TT2G12A, TT2G12B, and TT2G12C were the main predictor variables in each of the models, respectively.

When a logistic regression is calculated, SPSS output generates first the regression coefficient (β – the estimated increase in the log odds of the outcome per unit increase in the value of the predictor variable. Additionally, the exponential function of the regression coefficient ($\exp(\beta)$) is obtained, which is the odds ratio associated with a one-unit increase in the predictor variable. Three outcomes are possible for the odds ratios:

- OR=1 Predictor variable does not affect odds of outcome
- OR>1 Predictor variable associated with higher odds of outcome
- OR<1 Predictor variable associated with lower odds of outcome

In the text, the language of odds ratios was made more accessible by reformulating and rounding up in terms of likelihood and probabilities.

Technical notes on the analyses performed in Chapter 3

Principals in participating countries were asked to provide input into educational policy development by answering a questionnaire developed for this purpose.

Multiple linear regression analyses were computed using the International Database (IDB) Analyzer version 3.1.8. The IDB Analyzer uses SPSS as an engine to compute population estimates and design-based standard errors (IDB Analyzer User Guide, p. 10). Regression analyses were carried out for each country separately. The teacher and school variables included in the regression analyses in Chapter 3 are presented in Table B.3, and the percentages of missing cases for each variable are included in Table B.4.

Multiple linear regression analyses were employed using data from the principal questionnaire to explore the extent to which various factors (independent variables) associate with instructional leadership, distributed leadership or principal job satisfaction (dependent variables). Regression analysis allows for exploring how the value of the dependent variable changes when any one of the independent variables varies while all other independent variables are held constant. A relationship is considered significant if the T-value is equal to or greater than 1.96. The following equation depicts the relationship between dependent variable and independent variables in a multiple regression model (an example is provided for a regression model with instructional leadership as the dependent variable and principal background as independent variables).

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

For example, for the results presented in Table 3.5, Y is the use of distributed leadership and the independent variables are X₁ for gender, X₂ for years of experience as a principal and X₃ for years of experience as a teacher. Principal age and educational attainment were included as control variables. For the regression results presented in Tables 3.6 and 3.7 and Tables 3.16 through 3.23, principal gender, age and educational attainment were controlled for. Since there are other factors that could not be controlled, these factors are part of the error term.

In general, when everything else held constant, a one-unit increase in X_j on average Y increases by β_j units.

A regression coefficient represents the change in the dependent variable that is associated with a change in the predictor variable when all other variables are held constant. When interpreting multiple regression coefficients, it is important to keep in mind that each coefficient is influenced by the other independent variables in a regression model. The influence depends on the extent to which predictor variables are correlated, which is often the case. Therefore, each regression coefficient does not explain the total effect of independent variables on dependent variables. Rather, each coefficient represents the additional effect of adding that variable to the model, if the effects of all other variables in the model are already accounted for. It should be noted that no adjustments were made to correct for the multiple analyses, increasing the likelihood that a relationship will be considered significant simply by chance. It is also important to note that because cross-sectional survey data were used for the analyses, no causal conclusions could be drawn.

Technical notes on the analyses performed in Chapter 4

Please refer to the technical notes for Chapter 2 earlier in this annex for a general description of the use of logistic regressions. This portion of the annex provides further details about the use of logistic regressions in Chapter 4.

In this chapter on professional development, regression analyses were carried out both at an aggregate level and for each country separately. After analysing this background model on professional development participation (see Table 4.21.Web), the predictor variables considered to be relevant based on theoretical considerations were added.

The teacher and school variables included in the regression analysis in Chapter 4 are presented in Table B.5, and the percentages of missing cases for each variable are included in Table B.6. For the results presented in Table 4.13, the following variables were controlled for: teacher gender, age, years of experience, part-time/full-time employment status, permanent/fixed term and percentage of students from disadvantaged homes. For the regression results presented in Table 4.29.Web, the following control variables were included: teacher gender, age, years of experience, part-time/full-time employment status, permanent/fixed term contract status, whether a teacher completed a teacher education or training programme, hours worked in a week, principal working on a school development plan for the school, public/private school, size of the school location and percentage of students from disadvantaged homes. In Table 4.30.Web, the control variables used were teacher gender, age, years of experience, part-time/full-time employment status, permanent/fixed term contract status, whether a teacher completed a teacher education or training programme, hours worked in a week, serving as a mentor, principal working on a school development plan for the school, public/private school, size of the school location and percentage of students from disadvantaged homes.

Regression analyses for Chapter 4 were computed with the programme STATA using population weights and BRR methodology with Fay's adjustment for variance estimation, given the complex sample design of TALIS.

Technical notes on the analyses performed in Chapter 6

Logistic regression and odds ratios

Please refer to the technical notes for Chapter 2 earlier for a general description of the use of logistic regressions. This portion of the annex provides further details about the use of logistic regressions in Chapter 6. The teacher and school variables included in the regression analyses in Chapter 6 are presented in Table B.7, and the percentages of missing cases for each variable are included in Table B.8.

All logistic regressions on the data presented in Chapter 6 were performed using SAS PROC SURVEYLOGISTIC and were all performed for each country separately. The SURVEYLOGIST procedure permitted the use of the BRR replicate weights in the data set (accounting for the complex sample design), as well as the final teacher weight TCHWGT. More information about the use of sampling and replicate weights in TALIS analyses can be found in the *TALIS 2013 Technical Report* (OECD, 2014). Effect coding was employed with CLASS variables, and point estimates from the SAS output were reported as the odds ratios instead of the $\exp(\beta)$ values. Effect coding is used on CLASS variables to make comparisons easier between reference categories. Detailed information on effect coding, point estimates and their interpretation can be found in the SAS documentation at the following link:

http://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#statug_logistic_sect053.htm

The $\exp(\beta)$ value provides an odds ratio that is interpretable as the change in odds for each level change in the independent variable. However, when using effect coding for CLASS variables, a variable such as gender is coded internally to SAS as 1= female and -1= male. In this instance, a one-unit change makes no logical sense because there is no category for 0. Therefore, the $\exp(\beta)$ is not a meaningful odds ratio to make use of. The point estimates derived from SAS are odds ratios where a reference category is employed for all comparisons and effect coding is accounted for. For continuous variables, the “point estimate odds ratio” will be equivalent to the $\exp(\beta)$.

For the logistic regression involving the three active teaching practices (namely, students work on projects that require at least one week to complete, students use ICT for projects or class work and students work in small groups to come up with a joint solution to a problem or task), the distribution of responses on these items justified dichotomising them (splitting the responses into two categories) for use as dependent variables. The three teaching items were therefore dichotomised by combining the categories for “Never” and “Occasionally” into one category named “Occasionally” and by combining the categories for “Frequently” and “In all lessons” into one category named “Frequently”. None of these newly created response categories held less than 27% of the responses, therefore avoiding the problem of low cell counts in the analyses.

To perform the logistic regressions, a separate model was constructed for each of the three dichotomised teaching practice dependent variables. The background variables were entered into the model in their own block and tested before entering the predictor variables of theoretical interest. Only background variables significant at the $\alpha = .05$ level were retained in the model when the predictor variables were entered. Thus, all results reflect net effects of the relevant predictor variables. Teacher characteristics included gender, type of target class taught (mathematics or science or humanities), years of experience, highest level of education and how well prepared teachers felt for the content, pedagogy and classroom practice in the target subject taught. Humanities teachers were defined as in TALIS 2008 as teachers who taught reading, writing and literature, social studies, modern foreign languages, Ancient Greek and/or Latin and religion and/or ethics. These dichotomised control variables are standardised around the mean of 0, where the absence of a characteristic is recoded to -1 and the presence of a characteristic is recoded to 1.

For Tables 6.2 to 6.4, the predictor variables for teaching practices were modified slightly to substitute TT2G13A, B and C in place of TT1G12A, B and C. The TT2G13 set of questions asked teachers how well prepared they felt for the teaching elements of content, pedagogy and classroom practice. This set of variables provided more interesting content and variability across responses than the TT2G12 series of questions, which asked whether the three elements were included in a teacher's formal education and training. Logistic regressions that were run using the TT2G13 series of questions explained roughly 20% more variance in the predicted variable than those using the TT2G12 series.

Control variables were employed in most of the logistic regressions. For the analyses outlined in Tables 6.5 to 6.10 and Tables 6.14, 6.16 and 6.17, controls included teacher gender, years of experience, highest level of education and subject taught in the target class. For Tables 6.2 to 6.4, these same control variables were the predictor variables of interest, and no other control variables were employed for those analyses. Control variables were tested in their own analysis block and non-significant terms were removed before entering the block of predictor variables of interest for the analysis. Please see Table B.7 for specific control variable names.

Multiple linear regression analysis

All multiple linear regressions were performed using the SPSS macros derived from the IEA IDB Analyzer programme or using SAS PROC SURVEYREG. Both of these programmes made use of the BRR replicate weights to account for the complex sample design as well as the final teacher weight TCHWGT. All multiple regressions were performed for each country separately. When these three teaching practices are used as independent variables in the models, the original four answer categories are preserved and not dichotomised as previously when they were used as dependent variables.

Control variables were employed in the linear regressions. Specifically, teacher gender, years of experience working as a teacher, highest level of education and subject taught in the target class were controlled for. These variables are standardised with 0 as the mean. Control variables were tested in their own analysis block and non-significant terms were removed before entering the block of predictor variables of interest for the analysis. All reported effects are net effects instead of gross effects. Please see Table B.7 for specific control variable names.

Multilevel analysis for distribution of variance

The analyses that report the distribution of variance by three levels (country, school and teacher) utilised baseline models in a multilevel modeling framework. This allowed the portioning of the variance into the three different levels. To take a simple example of a two-level model (teachers nested in schools), such a baseline model contains no predictor variables and simply separates the variance into the within-group variance (σ_w^2) and the between-group variance (σ_b^2), such as is completed in a random effects one-way ANOVA model. These components can be used to form the intraclass correlation coefficient (ICC, ρ) that represents the portion of variance that lies between the cluster variable: in this two-level case, that would be schools. This is formed as $\rho = \sigma_b^2 / (\sigma_b^2 + \sigma_w^2)$. When the ICC is small (e.g. < 0.05 or 5%), groups such as schools are only slightly different from one another. When that value increases (e.g. 0.25), the difference between groups increases, be it at the second level (school) or third level (country). In a baseline model for three levels, the within-variance component remains, and instead of a single estimate for between-group variance, this becomes two variance components, representing level 2 and level 3, respectively. The ICC is calculated in the same fashion as before, with all three variance components as the denominator, and the numerator being the variance component of interest.

Technical notes on the analyses performed in Chapter 7

To investigate what factors influence teachers' perception of society's view of the teaching profession, binary logistic regression analyses were carried out for each country separately (see Table 7.3). Please refer to the technical notes on Chapter 2 earlier for more information on logistic regression analyses. Regression analyses for this chapter were computed using population weights and BRR methodology with Fay's adjustment for variance estimation, given the complex sample design of TALIS.

The combined "Strongly Disagree-Disagree" group was chosen as a reference category for the analysis examining the extent to which teachers feel that teaching is a valued profession in society. The variables included as control variables were teacher gender, years of experience, level of education and the extent to which content, pedagogy and classroom practice elements of subjects currently taught by the teacher were included in his or her formal education.

The rest of the chapter used multiple linear regressions. First, multicollinearity was tested for by correlating all dependent and independent variables with each other. Country-specific multiple linear regressions were then run to test the effects of various independent variables on teacher self-efficacy and job satisfaction levels. Multiple linear regression attempts were made to model the relationship between two or more independent variables and a dependent variable (self-efficacy and job satisfaction) by fitting a linear equation to the TALIS data. Every value of the independent variable x is associated with a value of the dependent variable y in the TALIS data that is intended to mirror values in the wider population that the country samples represent.

For each country, the population regression line for k explanatory variables x_1, x_2, \dots, x_k is defined to be $y = \beta_0 + \beta_1 x_1 + \dots + \beta_k x_k$, where β_0 is the intercept and β_1 the slope of the line. Statistical software such as SPSS provides fitted values b_0, b_1, \dots, b_k that estimate the parameters $\beta_0, \beta_1, \dots, \beta_k$ of the population regression line for the TALIS data. This line describes how the mean response of the chosen dependent variable changes with the explanatory variables in the TALIS database. For example, the slope for the relationship between being female and job satisfaction could be 0.30 in country A, meaning that female teachers in country A on average have job satisfaction levels that are higher by 0.30 points than for male teachers. For continuous variables, the slope reflects the effect on the dependent variable of a one-unit increase in the independent variable.

To facilitate interpretation, the text in the chapter discusses weak, moderate, and strong relationships instead of the numerical values of the regression coefficients. Cut-off points for these three categories were regression coefficients that translated into 0.2 and 0.3 standard deviation unit changes, where less than 0.2 is weak, 0.2-0.299 is moderate and 0.3 or higher is strong. These standard deviation unit changes for dichotomous independent variables are obtained by dividing the regression coefficient of the relation (b_k) between the independent variable (x_k) and dependent variable (y) by the standard deviation of the dependent variable for country A (σ_{yA}). This allows for the magnitude of the relation between x_k and y as weak, moderate, or strong to be discussed in comparable standard deviation units, accounting for every country's distribution of self-efficacy and job satisfaction scores. For many countries, these 0.2 and 0.3 standard deviation unit changes on dichotomous independent variables approximate regression coefficients of 0.3 and 0.5, respectively.

For continuous variables such as hours or proportions, the size of the relationship was defined as weak, moderate, or strong at the threshold of ten times the unit ($\beta_1 * 10$ more students, 10 more hours, 10% more time spent). For index scores, we define the cut-off points in relation to a one standard deviation increase on that measure. This means that the coefficient on these continuous-scale indexed independent variables is first translated into standard deviation units by ($\beta_1 * \sigma_{x1}$) and then divided by the standard deviation of the country's dependent variable (σ_{yA}). We discuss a weak, moderate, or strong relationship from this threshold based on one standard deviation change in the indexed independent variable.

Besides key predictor variables, several control variables were included in the regression analyses in this chapter. The teacher and school variables included in the analyses in Chapter 7 are presented in Table B.9, and the percentages of missing cases for each variable are included in Table B.10. For Tables 7.4 and 7.5, educational level of the teacher was controlled. For Tables 7.8 to 7.15, teacher characteristics of gender, educational level, work experience as a teacher and the inclusion of content, pedagogy and classroom practice elements in the formal education of the teacher were controlled. Moreover, the classroom characteristics identifying the target classroom size as well as the composition consisting of more than 10% low-achieving students, more than 10% behaviour problem students and more than 10% gifted students were included as control variables. For Tables 7.16 and 7.17, gender, educational level, work experience as a teacher, the inclusion of content/pedagogy/classroom practice elements in the formal education of the teacher, class size and the classroom composition variables of low academic achievers, behavioural problem students and academically gifted students were controlled for. For Tables 7.8 to 7.15, nested regression modelling techniques are used to demonstrate the relationship of teachers' leadership and school relations (Tables 7.8 and 7.9), professional development (Tables 7.10 and 7.11), appraisal and feedback (Tables 7.12 and 7.13) and beliefs and practices (Tables 7.14 and 7.15) to self-efficacy and job satisfaction. These techniques were also used to test whether these independent variables change any of the classroom composition associations (shown in Tables 7.6 and 7.7) with self-efficacy and job satisfaction. Nesting these key independent variables within the classroom composition models reveals whether the association of classroom composition to the dependent variable is affected by the association of these key independent variables. If there is a substantial reduction in the previously established significant classroom composition coefficient (where the coefficient value is reduced or is no longer significantly related to the dependent variable), then there is reason to conclude that the classroom composition association is partially related to the key independent variable modelled.

To specify this relationship, the sample is restricted by listwise-deleting any missing cases. Due to this, the baseline classroom composition coefficients used in Tables 7.8 to 7.11 and Tables 7.14 and 7.15 are slightly different from those presented in Tables 7.6 and 7.7 (see Tables B2.11.Web to B2.18.Web for each baseline model). Namely, "nesting models", where one model builds off another, requires the n-count (or sample size) to be identical in all the models per country. To do this, all the cases that were in the final model were tagged, that is, the full model which has all the controls + classroom composition variables + focal independent variables (in-school relationships, professional development, or beliefs and practices). The syntax then keeps only these cases and listwise-deletes the other cases that may have missing data on any of those variables. The "baseline" models (controls + classroom composition variables) are consequently rerun on the dependent variable. This is the same model as Tables 7.6 and 7.7 but with a different n-count per model per country. The final models are then run (controls + classroom composition variables + focal independent variables). Because these models compare with the same cases, it can be stated that the changes are due to the inclusion of the focal independent variables. However, this poses the problem that the "baseline" values of the nesting models do not directly align with the ones in Tables 7.6 and 7.7.

Note that with cross-sectional data such as the TALIS data, no direction of impact can be established. Hence, it is not possible to distinguish empirically between, for example, a model that describes teachers' self-efficacy as dependent on teachers' work experience and a model that describes teachers' work experience as dependent on their self-efficacy. The perspective taken, i.e. the choice of independent and dependent variables, is entirely based on theoretical considerations.


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[Part 1/1]
Table B.1 List of variables in the Chapter 2 regression analyses

Variable	Level	Type of variable	Based on variable(s) in the data set
Teacher background			
Feeling prepared for content elements of subjects I teach (0 = not at all/somewhat; 1 = well/very well)	Teacher	Dependent	TT2G13A
Feeling prepared for pedagogy elements of subjects I teach (0 = not at all/somewhat; 1 = well/very well)	Teacher	Dependent	TT2G13B
Feeling prepared for classroom practice elements of subjects I teach (0 = not at all/somewhat; 1 = well/very well)	Teacher	Dependent	TT2G13C
Teacher's gender (1 = female; 2 = male)	Teacher	Independent	TT2G01
Number of years of teaching (0 = 5 years or less; 1 = more than 5 years)	Teacher	Independent	TT2G05B
Teacher's education (0 = ISCED 5B or below; 1 = ISCED 5A or higher)	Teacher	Independent	TT2G10
Inclusion of content elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12A
Inclusion of pedagogy elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12B
Inclusion of classroom practice elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12C
Subjects taught (those with 0% cell count were excluded, original coding)	Teacher	Independent	TT2G15A, 15B, 15C, 15D, 15E, 15F, 15G, 15H, 15I, 15J, 15K, 15L
School background			
Size of school location (1 = 15 000 people or less; 2 = between 15 001 and 100 000 people; 3 = more than 100 000 people)	Teacher	Dependent	TC2G09
Percentage of students whose first language is different from the language of instruction (0 = 10% or below; 1 = above 10%)	Teacher	Dependent	TC2G15A
Percentage of students with special needs (0 = 10% or below; 1 = above 10%)	Teacher	Dependent	TC2G15B
Percentage of students from socio-economically disadvantaged homes (0 = 30% or below; 1 = above 30%)	Teacher	Dependent	TC2G15C

Source: OECD, TALIS 2013 Database.

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[Part 1/3]


The percentage of missing cases for each country for each variable included in the Chapter 2 regression analyses

Table B.2

	Number of responding teachers (unweighted)	Teacher background							
		Feeling prepared for the content of the subject(s) taught	Feeling prepared for the pedagogy of the subject(s) taught	Feeling prepared for classroom practice in the subject(s) taught	Gender	Year(s) working as a teacher in total	Highest level of education of teacher	Content of the subject(s) taught was included in formal education or training	Pedagogy of the subject(s) taught was included in formal education or training
		Teacher %							
		TT2G13A	TT2G13B	TT2G13C	TT2G01	TT2G05B	TT2G10	TT2G12A	TT2G12B
Australia	2 059	1.4	1.7	1.6	0.0	2.6	0.8	1.0	1.0
Brazil	14 291	9.5	13.2	9.9	0.0	17.5	7.8	8.1	8.3
Bulgaria	2 975	1.7	3.0	3.8	0.0	14.4	0.5	0.5	0.5
Chile	1 676	2.4	3.8	4.2	0.0	10.8	1.5	3.3	3.3
Croatia	3 675	0.8	2.3	2.6	0.0	20.2	0.5	1.4	1.5
Czech Republic	3 219	0.1	0.4	0.4	0.0	1.7	0.1	0.1	0.1
Denmark	1 649	0.7	0.9	0.8	0.0	2.4	0.6	1.9	1.9
Estonia	3 129	1.3	1.9	2.1	0.0	3.7	0.5	0.8	0.8
Finland	2 739	0.7	0.8	0.9	0.0	2.2	0.3	0.3	0.3
France	3 002	1.2	1.7	1.5	0.0	1.7	0.6	1.0	1.0
Iceland	1 430	2.2	2.3	2.7	0.0	5.0	1.8	1.5	1.6
Israel	3 403	2.0	2.4	2.2	0.0	3.0	1.1	1.2	1.4
Italy	3 337	0.8	1.0	1.3	0.0	1.2	0.4	0.9	0.9
Japan	3 484	0.4	0.4	0.4	0.0	2.6	0.4	1.8	1.8
Korea	2 933	0.8	1.9	1.9	0.0	3.4	0.1	0.2	0.2
Latvia	2 126	1.0	1.1	1.4	0.0	5.3	0.6	0.7	0.7
Malaysia	2 984	0.5	0.5	0.6	0.0	1.0	0.5	0.4	0.4
Mexico	3 138	2.0	3.2	3.2	0.1	21.4	0.7	1.5	1.7
Netherlands	1 912	0.9	0.9	1.0	0.0	1.1	0.5	0.9	0.9
Norway	2 981	1.3	1.3	1.5	0.0	2.7	0.7	1.4	1.4
Poland	3 858	0.6	0.5	0.7	0.0	5.7	0.2	0.3	0.3
Portugal	3 628	0.2	0.4	0.4	0.0	3.2	0.3	0.2	0.3
Romania	3 286	0.6	1.1	0.9	0.0	1.9	0.5	0.6	0.7
Serbia	3 857	3.3	4.1	2.9	0.0	12.4	0.5	3.9	3.9
Singapore	3 109	0.2	0.3	0.2	0.0	1.0	0.0	0.1	0.1
Slovak Republic	3 493	0.4	0.7	1.0	0.0	1.5	0.1	0.5	0.6
Spain	3 339	0.4	0.5	0.7	0.0	1.1	0.3	0.5	0.5
Sweden	3 319	0.7	1.1	1.1	0.0	1.7	0.6	0.6	0.7
Sub-national entities									
Abu Dhabi (United Arab Emirates)	2 433	2.8	4.6	3.9	0.0	5.1	1.3	2.2	2.2
Alberta (Canada)	1 773	0.2	0.3	0.3	0.0	1.9	0.2	0.2	0.2
England (United Kingdom)	2 496	0.8	1.0	1.0	0.0	3.6	0.8	0.9	0.9
Flanders (Belgium)	3 129	0.6	0.8	0.7	0.0	2.9	0.3	0.4	0.4

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048375>


[Part 2/3]
The percentage of missing cases for each country for each variable included in the Chapter 2 regression analyses

Table B.2

Classroom practice in the subject(s) taught was included in formal education or training	Teacher background								
	Teaching reading, writing and literature	Teaching mathematics	Teaching science	Teaching social studies	Teaching modern foreign languages	Teaching ancient Greek and/or Latin	Teaching technology	Teaching arts	
	Teacher %								
	TT2G12C	TT2G15A	TT2G15B	TT2G15C	TT2G15D	TT2G15E	TT2G15F	TT2G15G	TT2G15H
Australia	1.0	2.5	2.6	2.6	2.6	2.6	2.7	2.5	2.6
Brazil	8.3	6.6	6.7	6.6	6.7	6.7	6.6	6.6	6.6
Bulgaria	0.5	1.9	2.0	2.0	1.9	2.0	2.1	2.1	2.1
Chile	3.3	7.4	7.4	7.3	7.5	7.4	7.4	7.3	7.4
Croatia	1.4	1.3	1.3	1.4	1.3	1.4	1.3	1.3	1.3
Czech Republic	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Denmark	1.9	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1
Estonia	0.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Finland	0.3	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.6
France	1.0	1.7	1.8	1.9	1.8	1.8	1.8	1.8	1.8
Iceland	1.6	4.5	4.5	4.5	4.5	4.4	4.5	4.6	4.4
Israel	1.4	2.8	2.8	2.8	2.9	2.8	0.0	2.8	2.8
Italy	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Japan	1.8	0.4	0.4	0.4	0.3	0.4	100.0	0.4	0.4
Korea	0.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.1
Latvia	0.8	1.7	1.8	1.6	1.6	1.6	1.8	1.6	1.8
Malaysia	0.4	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7
Mexico	1.6	1.3	1.3	1.4	1.4	1.4	1.3	1.4	1.4
Netherlands	0.9	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.4
Norway	1.4	1.1	1.2	1.2	1.3	1.1	1.3	1.3	1.2
Poland	0.3	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7
Portugal	0.2	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9
Romania	0.7	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Serbia	3.9	1.6	1.6	1.7	1.6	1.7	1.7	1.7	1.7
Singapore	0.1	0.4	0.6	0.6	0.6	0.7	0.7	0.6	0.7
Slovak Republic	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.5
Spain	0.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Sweden	0.7	1.3	1.3	1.3	1.3	1.3	0.0	1.3	1.3
Sub-national entities									
Abu Dhabi (United Arab Emirates)	2.2	7.1	7.3	7.3	7.4	7.4	7.6	7.4	7.5
Alberta (Canada)	0.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.3
England (United Kingdom)	0.9	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
Flanders (Belgium)	0.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048375>

[Part 3/3]


The percentage of missing cases for each country for each variable included in the Chapter 2 regression analyses

Table B.2

	Teacher background				School background			
	Teaching physical education	Teaching religion and/or ethics	Teaching practical and vocational skills	Teaching other subject	School location size	Students whose first language is different from the language of instruction	Students with special needs	Students from socio-economically disadvantaged homes
	Teacher %							
	TT2G15I	TT2G15J	TT2G15K	TT2G15L	TC2G09	TC2G15A	TC2G15B	TC2G15C
Australia	2.5	2.6	2.6	2.7	7.5	8.7	8.7	8.7
Brazil	6.6	6.6	6.6	6.7	1.6	4.6	2.3	3.3
Bulgaria	2.1	2.2	2.2	2.1	0.0	4.5	3.3	3.3
Chile	7.4	7.4	7.3	7.5	16.9	17.6	16.9	16.3
Croatia	1.3	1.2	1.3	1.3	2.4	4.5	2.6	3.2
Czech Republic	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.1
Denmark	1.0	1.1	1.1	1.0	16.7	16.5	16.5	17.0
Estonia	1.1	1.1	1.1	1.1	1.0	1.5	1.5	1.5
Finland	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
France	1.8	1.8	1.8	1.9	13.1	14.0	14.7	14.3
Iceland	4.5	4.5	4.4	4.5	19.2	20.5	20.8	21.6
Israel	2.9	2.9	2.8	3.0	6.7	8.0	8.5	8.4
Italy	0.8	0.8	0.8	0.8	0.5	1.1	0.7	0.7
Japan	0.4	0.3	0.4	0.3	0.0	0.6	0.6	0.6
Korea	1.3	1.2	1.2	1.2	7.6	7.7	7.7	7.7
Latvia	1.8	1.7	1.7	2.1	6.5	6.5	6.7	6.5
Malaysia	0.6	0.7	0.6	0.6	2.2	2.9	2.9	2.9
Mexico	1.5	1.4	1.4	1.4	0.4	1.5	0.4	0.4
Netherlands	2.5	2.5	2.5	2.0	6.5	8.8	8.8	8.8
Norway	1.3	1.3	1.3	1.2	23.1	26.8	26.8	26.8
Poland	0.7	0.8	0.8	0.8	3.6	5.0	4.9	4.9
Portugal	1.0	0.9	0.9	1.0	3.7	4.5	5.3	5.6
Romania	0.9	1.0	1.0	1.0	0.0	0.3	0.7	0.3
Serbia	1.7	1.7	1.7	1.7	2.9	7.2	7.0	6.6
Singapore	0.6	0.6	0.6	0.7	9.0	10.2	10.2	9.6
Slovak Republic	0.6	0.5	0.6	0.5	3.3	5.0	4.4	4.4
Spain	1.1	1.1	1.1	1.0	0.5	1.1	1.1	1.1
Sweden	1.3	1.3	1.3	1.3	8.4	8.3	7.9	8.3
Sub-national entities								
Abu Dhabi (United Arab Emirates)	7.4	7.3	7.5	7.5	23.6	26.6	26.6	26.6
Alberta (Canada)	1.1	1.2	1.2	1.4	1.8	1.8	1.8	2.4
England (United Kingdom)	1.7	1.7	1.7	1.8	1.7	4.3	4.3	4.3
Flanders (Belgium)	0.9	0.9	0.9	0.9	8.3	11.2	11.6	11.2

Note: Percentages in this table represent the weighted proportion of missing cases.


Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048375>

[Part 1/1]
 Table B.3 List of variables in the Chapter 3 regression analyses

Variable	Level	Type of variable	Based on variable(s) in the data set
Principals' background			
Principal's gender (0 = female; 1 = male)	Principal	Independent	TC2G01
Principal's age (continuous)	Principal	Independent	TC2G02
Principal's educational attainment (1 = below ISCED level 5; 2 = ISCED level 5B; 3 = ISCED level 5A; 4 = ISCED level 6)	Principal	Independent	TC2G03
Principal's years of experience as a principal in total (continuous)	Principal	Independent	TC2G04B
Principal's years of experience as a teacher in total (continuous)	Principal	Independent	TC2G04D
School background			
Ratio of teacher to administrative or management personnel (continuous)	Principal	Independent	TARATIO
School locality (0 = school in a location of 15 000 people or less; 1 = school in location of 15 001 people or more)	Principal	Independent	TC2G09
Publicly managed school (0 = privately managed; 1 = publicly managed)	Principal	Independent	TC2G10
50% or more of the school's funding comes from the government (0 = public funding not 50% or more; 1 = public funding is 50% or more)	Principal	Independent	TC2G11A
Number of teachers (continuous)	Principal	Independent	TC2G12A
Number of students (continuous)	Principal	Independent	TC2G14
More than 10% of students have a different first language than the language(s) of instruction (0 = 10% or below; 1 = above 10%)	Principal	Independent	TC2G15A
More than 10% of students have special needs (0 = 10% or below; 1 = above 10%)	Principal	Independent	TC2G15B
More than 30% of students are from disadvantaged homes (0 = 30% or below; 1 = above 30%)	Principal	Independent	TC2G15C
Ratio of teacher to pedagogical support personnel (continuous)	Principal	Independent	TPRATIO
School leadership			
Distributed leadership (continuous)	Principal	Dependent	PDISLEADS
Percentage of time the principal spends on curriculum and teaching-related tasks and meetings (continuous)	Principal	Dependent	TC2G19B
Principal used student performance and student evaluation results to develop the school's educational goals and programmes (0 = no; 1 = yes)	Principal	Dependent	TC2G20A
Principal worked on a professional development plan for this school (0 = no; 1 = yes)	Principal	Dependent	TC2G20B
Principal observing instruction in the classroom (0 = sometimes or never or rarely; 1 = often or very often)	Principal	Dependent	TC2G21B
Instructional leadership (continuous)	Principal	Dependent, independent	PINSLEADS
Inadequate school budget and resources (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26A
Government regulation and policy (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26B
Teachers' absence (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26C
Lack of parent/guardian involvement (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26D
Teachers' career-based wage system (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26E
Lack of support for own professional development (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26F
Lack of support for teachers' professional development (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26G
High workload and level of responsibility (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26H
Lack of shared leadership with other school staff members (0 = not at all or very little; 1 = to some extent or a lot)	Principal	Independent	TC2G26I
Teacher formal appraisal			
After teacher appraisal, measures to remedy any weaknesses in teaching are discussed with the teacher (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29A
After teacher appraisal, a development or training plan is developed for each teacher (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29B
If a teacher is found to be a poor performer, material sanctions such as reduced annual increases in pay are imposed on the teacher (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29C
After teacher appraisal, a mentor is appointed to help the teacher improve his/her teaching (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29D
After teacher appraisal, there is a change in a teacher's work responsibilities (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29E
After teacher appraisal, there is a change in a teacher's salary or a payment of a financial bonus (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29F
After teacher appraisal, there is a change in the likelihood of a teacher's career advancement (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29G
After teacher appraisal, dismissal or non-renewal of contract occurs (0 = never; 1 = sometimes, most of the time or always)	Principal	Dependent	TC2G29H
School climate			
School climate - mutual respect (continuous)	Principal	Dependent, independent	PSCMUTRS
Lack of material resources, a bit of a problem (0 = not a problem or a problem; 1 = a bit of a problem)	Principal	Independent	PLACKMAT
Lack of material resources, a problem (0 = Not a problem or a bit of a problem; 1 = a problem)	Principal	Independent	PLACKMAT
Lack of pedagogical personnel, a bit of a problem (0 = not a problem or a problem; 1 = a bit of a problem)	Principal	Independent	PLACKPER
Lack of pedagogical personnel, a problem (0 = not a problem or a bit of a problem; 1 = a problem)	Principal	Independent	PLACKPER
School delinquency and violence (continuous)	Principal	Independent	PSCDELQIS
Job satisfaction			
Principal job satisfaction (continuous)	Principal	Dependent, independent	PJOBSATS

Source: OECD, TALIS 2013 Database.

 StatLink  <http://dx.doi.org/10.1787/888933048394>

[Part 1/6]


The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses

Table B.4

	Number of responding principals (unweighted)	Principals' background				
		Gender	Age	Highest level of education of principal	Number of year(s) of experience working as a principal in total	Number of year(s) of experience working as a teacher in total
		Principal %				
		TC2G01	TC2G02	TC2G03	TC2G04B	TC2G04D
Australia	123	6.3	7.4	6.3	10.9	10.5
Brazil	1 070	1.1	2.4	3.8	24.1	13.7
Bulgaria	197	0.0	0.0	0.0	7.8	4.1
Chile	178	17.5	18.0	15.7	28.2	27.0
Croatia	199	1.9	2.7	1.9	9.0	7.7
Czech Republic	220	0.0	0.0	0.0	0.7	0.7
Denmark	148	16.9	16.9	16.9	18.9	18.2
Estonia	197	0.5	0.0	0.0	0.0	0.5
Finland	146	0.0	0.0	0.0	1.3	2.1
France	204	11.6	10.9	11.4	12.2	14.1
Iceland	129	16.3	16.3	16.3	19.4	18.6
Israel	195	7.7	4.5	4.5	4.9	4.4
Italy	194	0.7	0.7	0.7	1.4	0.7
Japan	192	0.0	0.0	0.0	0.8	2.4
Korea	177	6.7	6.7	6.7	7.0	8.7
Latvia	116	7.5	7.4	6.9	7.3	8.3
Malaysia	150	3.2	2.5	2.5	1.8	1.8
Mexico	187	1.6	2.6	1.8	8.5	7.2
Netherlands	127	5.4	5.4	5.4	5.4	5.4
Norway	145	21.5	21.9	21.5	23.6	23.6
Poland	195	2.1	2.1	2.1	7.6	2.4
Portugal	185	3.6	3.6	5.3	12.9	5.4
Romania	197	0.0	0.0	0.0	0.2	0.6
Serbia	191	3.3	2.9	3.4	12.6	5.3
Singapore	159	10.2	9.6	9.6	10.8	10.8
Slovak Republic	193	3.1	2.3	2.3	2.6	2.5
Spain	192	0.8	2.9	0.6	2.4	2.1
Sweden	186	10.5	10.5	10.5	12.6	13.2
Sub-national entities						
Abu Dhabi (United Arab Emirates)	166	19.7	22.1	20.8	22.0	21.9
Alberta (Canada)	182	3.8	3.8	3.8	5.3	4.7
England (United Kingdom)	154	2.0	2.3	2.0	5.4	1.4
Flanders (Belgium)	168	5.8	7.2	6.8	7.2	7.6

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048413>

[Part 2/6]


The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses

Table B.4

	School background									
	Ratio of teacher to administrative or management personnel	School location size	Public/private schools	Public funding above 50%	Number of teachers	Number of students	Students whose first language is different from the language of instruction	Students with special needs	Students from socio-economically disadvantaged homes	Ratio of teacher to pedagogical support personnel
	TARATIO	TC2G09	TC2G10	TC2G11A	TC2G12A	TC2G14	TC2G15A	TC2G15B	TC2G15C	TPRATIO
Australia	9.9	8.4	8.4	9.4	9.9	8.8	9.9	9.9	9.9	10.0
Brazil	7.9	2.0	1.4	3.6	5.7	4.0	5.1	2.4	4.0	7.3
Bulgaria	7.9	0.0	0.0	0.0	6.4	1.9	3.7	2.9	2.9	6.4
Chile	24.4	16.0	13.6	16.4	23.2	22.0	16.0	15.3	14.7	26.3
Croatia	6.6	2.4	1.9	1.9	6.6	3.5	5.5	2.8	3.3	9.8
Czech Republic	0.2	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.7
Denmark	18.9	17.5	17.6	16.9	18.2	16.9	16.9	16.9	17.5	18.9
Estonia	1.5	0.5	0.5	0.5	1.5	1.0	1.0	1.0	1.0	2.5
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
France	15.2	12.4	11.9	12.4	14.1	12.4	13.0	13.6	13.4	15.4
Iceland	17.8	17.1	17.1	18.6	17.8	17.8	17.8	18.6	18.6	20.9
Israel	8.8	5.5	4.1	4.7	8.6	9.2	5.8	6.4	6.1	9.5
Italy	2.1	0.7	0.0	0.0	0.3	0.0	0.8	0.4	0.4	0.3
Japan	2.7	0.0	0.0	0.0	2.3	0.0	0.4	0.4	0.4	3.5
Korea	7.4	7.5	7.0	7.0	7.4	7.4	7.4	7.4	7.4	9.6
Latvia	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7.3	6.9	7.3
Malaysia	2.6	2.6	2.6	3.2	2.6	2.6	3.1	3.1	3.1	2.6
Mexico	5.2	0.8	0.8	1.6	2.6	2.0	1.5	0.8	0.8	4.2
Netherlands	6.4	5.4	5.4	5.4	6.4	5.4	7.3	7.3	7.3	6.9
Norway	22.9	21.5	21.5	21.5	22.9	21.9	24.7	24.7	24.7	22.9
Poland	4.2	2.5	2.1	2.4	2.7	3.8	4.3	3.3	3.3	7.4
Portugal	9.3	4.0	4.0	4.8	8.3	7.5	4.8	5.6	6.1	8.9
Romania	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.1	1.8
Serbia	6.6	3.2	2.9	3.1	5.6	4.8	6.8	6.5	6.4	7.2
Singapore	11.4	9.6	10.2	10.2	10.2	10.8	10.8	10.8	10.2	10.2
Slovak Republic	4.1	2.5	3.1	2.5	2.5	2.5	4.3	3.6	3.6	2.5
Spain	0.8	0.6	0.9	0.6	0.8	0.6	0.9	0.9	0.9	1.2
Sweden	11.8	11.2	10.5	10.5	11.5	12.0	10.9	10.5	10.9	12.6
Sub-national entities										
Abu Dhabi (United Arab Emirates)	23.9	21.2	20.8	21.5	23.5	22.2	22.2	22.2	22.2	26.7
Alberta (Canada)	3.8	3.8	4.3	3.8	3.8	3.8	3.8	3.8	4.2	8.5
England (United Kingdom)	6.9	1.4	1.4	1.4	3.3	3.1	3.4	3.4	3.4	4.0
Flanders (Belgium)	9.3	7.4	7.4	5.8	8.6	7.4	10.0	10.6	10.0	19.5

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048413>


[Part 3/6]

Table B.4 The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses

	School leadership						
	Distributed leadership	Percentage of time the principal spends on curriculum and teaching-related tasks and meetings	Principal used student performance and student evaluation results to develop the school's educational goals and programmes	Principal worked on a professional development plan for this school	Principal observing instruction in the classroom	Instructional leadership	Inadequate school budget and resources
	Principal %						
	PDISLEADS	TC2G19B	TC2G20A	TC2G20B	TC2G21B	PINSLEADS	TC2G26A
Australia	9.9	9.9	9.9	9.9	9.9	9.9	10.9
Brazil	1.3	9.4	4.5	4.6	3.0	1.4	6.9
Bulgaria	0.0	0.6	1.8	1.8	0.0	0.0	0.8
Chile	17.0	23.0	20.1	20.1	16.5	16.5	17.8
Croatia	1.9	5.7	5.9	5.9	1.9	1.9	3.4
Czech Republic	0.0	0.6	0.6	0.6	0.0	0.0	0.0
Denmark	16.9	16.9	18.2	18.2	16.9	16.9	16.9
Estonia	0.5	1.0	1.0	1.0	1.0	0.5	1.0
Finland	0.6	0.0	0.0	0.0	0.0	0.0	0.0
France	13.3	13.9	15.9	15.9	14.8	13.7	13.8
Iceland	17.8	19.4	17.8	17.8	17.8	17.8	17.8
Israel	4.7	9.8	8.6	8.6	8.2	8.2	9.7
Italy	0.3	1.2	1.7	1.7	1.1	0.3	0.0
Japan	0.0	0.0	0.6	0.6	0.0	0.0	0.0
Korea	8.3	10.4	9.3	9.3	8.3	8.3	8.3
Latvia	6.9	6.9	10.6	10.6	6.9	6.9	6.9
Malaysia	3.0	4.6	2.6	2.6	2.6	2.6	2.6
Mexico	0.8	5.2	1.2	1.2	1.3	1.0	1.6
Netherlands	17.3	11.9	11.5	11.5	17.3	17.3	17.3
Norway	21.9	22.6	21.9	21.9	21.9	21.9	21.9
Poland	2.5	3.1	2.7	2.7	3.7	3.3	2.5
Portugal	4.8	6.5	6.0	6.0	4.8	4.8	7.5
Romania	0.2	2.4	0.6	0.6	0.2	0.2	0.2
Serbia	4.0	9.8	5.3	5.3	4.6	3.8	4.7
Singapore	10.8	10.8	11.4	11.4	11.4	11.4	10.8
Slovak Republic	2.5	2.8	2.5	2.5	2.5	2.5	2.5
Spain	0.6	0.9	1.2	1.2	0.6	0.6	0.6
Sweden	10.7	11.6	11.1	11.1	12.0	12.0	10.7
Sub-national entities							
Abu Dhabi (United Arab Emirates)	21.5	29.8	22.9	22.9	22.2	22.2	23.6
Alberta (Canada)	3.8	7.4	4.9	4.9	4.3	4.3	4.9
England (United Kingdom)	3.8	4.4	2.8	2.8	4.1	2.7	2.7
Flanders (Belgium)	7.4	9.0	7.9	7.9	7.4	7.4	7.9

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048413>


[Part 4/6]
The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses

Table B.4

	School leadership							
	Government regulation and policy	Teachers' absences	Lack of parent or guardian involvement and support	Teachers' career-based wage system	Lack of opportunities for my own professional development	Lack of opportunities for teachers' professional development	High workload and level of responsibilities in teachers' job	Lack of shared leadership with other school staff members
	Principal %							
	TC2G26B	TC2G26C	TC2G26D	TC2G26E	TC2G26F	TC2G26G	TC2G26H	TC2G26I
Australia	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
Brazil	7.9	9.0	5.8	6.7	6.2	6.7	5.6	6.6
Bulgaria	2.3	0.8	0.6	0.0	1.6	1.3	1.3	1.3
Chile	18.5	18.4	17.8	19.0	17.8	17.8	17.8	17.8
Croatia	1.9	3.3	2.2	2.7	1.9	1.9	1.9	1.9
Czech Republic	0.0	0.7	0.0	0.1	0.1	0.0	0.0	0.1
Denmark	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9
Estonia	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.5
Finland	0.0	0.8	0.0	0.0	0.0	0.6	0.0	0.6
France	14.1	13.5	13.5	14.5	14.1	13.5	13.5	13.5
Iceland	17.8	17.8	18.6	19.4	19.4	19.4	18.6	18.6
Israel	13.2	9.3	9.3	9.9	9.9	10.5	10.1	9.9
Italy	0.0	0.8	0.0	0.0	0.2	0.0	0.0	0.0
Japan	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Korea	8.3	8.3	8.3	8.3	8.8	8.3	8.3	8.3
Latvia	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
Malaysia	2.6	2.6	2.6	3.1	2.6	2.6	2.6	2.6
Mexico	2.8	3.8	2.3	1.6	3.3	2.3	2.9	2.3
Netherlands	17.3	17.7	17.3	17.3	17.3	17.3	17.3	17.7
Norway	23.3	21.9	21.9	22.2	21.9	21.9	21.9	21.9
Poland	2.5	2.8	4.0	2.5	2.8	2.5	2.5	2.5
Portugal	5.9	7.2	5.9	7.2	5.9	6.3	5.9	6.3
Romania	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Serbia	5.5	4.4	5.7	6.0	4.8	5.0	3.9	4.5
Singapore	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Slovak Republic	2.9	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Spain	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6
Sweden	10.7	10.7	10.7	100.0	11.7	10.7	10.7	10.7
Sub-national entities								
Abu Dhabi (United Arab Emirates)	24.7	23.6	23.6	23.6	24.2	23.6	23.6	24.0
Alberta (Canada)	4.9	4.3	4.3	4.9	4.3	4.3	4.3	4.3
England (United Kingdom)	3.1	3.3	2.7	3.3	2.7	2.7	2.7	3.5
Flanders (Belgium)	7.9	7.9	7.9	7.9	7.9	7.9	8.2	7.9

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048413>

[Part 5/6]


The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses

Table B.4

	Teacher formal appraisal							
	After teacher appraisal, measures to remedy any weaknesses in teaching are discussed with the teacher	After teacher appraisal, a development or training plan is developed for each teacher	If a teacher is found to be a poor performer, material sanctions such as reduced annual increases in pay are imposed on the teacher	After teacher appraisal, a mentor is appointed to help the teacher improve his/her teaching	After teacher appraisal, there is a change in a teacher's work responsibilities	After teacher appraisal, there is a change in a teacher's salary or a payment of a financial bonus	After teacher appraisal, there is a change in the likelihood of a teacher's career advancement	After teacher appraisal, dismissal or non-renewal of contract occurs
	Principal %							
	TC2G29A	TC2G29B	TC2G29C	TC2G29D	TC2G29E	TC2G29F	TC2G29G	TC2G29H
Australia	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.5
Brazil	17.8	18.1	17.9	18.1	18.5	18.2	19.0	18.0
Bulgaria	13.1	13.1	13.7	14.2	13.1	13.1	13.9	13.1
Chile	31.7	31.7	31.7	31.7	31.7	32.3	32.3	31.7
Croatia	4.2	4.2	100.0	4.2	5.0	100.0	5.7	4.6
Czech Republic	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Denmark	23.5	23.5	23.5	23.5	23.5	24.3	23.5	23.5
Estonia	3.0	3.0	3.0	3.0	3.5	3.0	3.0	3.0
Finland	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
France	15.0	15.5	15.0	15.0	15.7	15.0	15.4	15.4
Iceland	34.9	34.9	34.9	34.9	34.9	35.7	34.9	34.9
Israel	8.4	10.3	8.9	8.4	8.9	8.9	9.5	9.3
Italy	69.1	69.1	69.1	69.3	69.7	69.1	69.1	69.1
Japan	4.2	4.6	4.2	4.2	4.2	4.2	4.2	4.2
Korea	8.9	8.9	9.8	8.9	9.4	9.4	9.4	9.2
Latvia	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
Malaysia	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Mexico	4.0	4.5	4.0	4.0	4.0	4.4	4.0	4.8
Netherlands	18.9	18.9	18.9	18.9	18.9	20.2	18.9	18.9
Norway	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
Poland	4.0	4.8	4.0	4.0	4.5	4.0	4.5	4.0
Portugal	9.5	10.0	9.5	9.5	9.5	9.5	9.5	9.5
Romania	2.8	2.2	2.1	2.1	2.1	2.1	2.1	2.1
Serbia	7.1	7.9	7.8	7.8	7.3	7.7	7.1	7.1
Singapore	12.0	11.4	11.4	11.4	11.4	11.4	11.4	11.4
Slovak Republic	2.8	2.8	3.4	3.4	4.1	3.4	3.4	3.4
Spain	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
Sweden	14.8	14.8	14.8	14.8	14.8	15.4	15.8	15.1
Sub-national entities								
Abu Dhabi (United Arab Emirates)	24.2	24.2	24.2	24.2	25.1	24.2	24.7	24.2
Alberta (Canada)	15.9	15.9	15.9	15.9	15.9	16.5	16.9	16.5
England (United Kingdom)	4.6	4.6	4.6	4.6	4.6	5.0	4.6	4.6
Flanders (Belgium)	9.7	9.7	10.2	9.7	10.3	10.2	10.2	10.2

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048413>

[Part 6/6]


The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses

Table B.4

	School climate				Job satisfaction
	School climate - mutual respect	Lack of pedagogical personnel index	Lack of material resources index	School delinquency and violence	Principal job satisfaction
	Principal %				
	PSCMUTRS	PLACKMAT	PLACKPER	PSCDELIQS	PJOBSATS
Australia	12.2	10.9	10.9	13.3	10.9
Brazil	1.3	2.5	1.8	2.5	1.6
Bulgaria	0.0	2.1	0.0	0.6	1.6
Chile	17.0	18.2	18.2	18.2	17.0
Croatia	1.9	1.9	1.9	1.9	1.9
Czech Republic	0.1	0.1	0.1	0.0	0.6
Denmark	16.9	16.9	16.9	16.9	17.6
Estonia	1.0	1.0	1.0	1.0	1.0
Finland	0.6	0.0	0.0	0.0	0.6
France	14.3	14.0	13.7	14.1	13.7
Iceland	17.8	18.6	18.6	18.6	19.4
Israel	7.4	7.6	7.1	10.8	4.7
Italy	0.0	0.0	0.0	0.7	0.6
Japan	0.0	0.0	0.0	0.0	0.0
Korea	8.8	8.8	8.8	8.3	7.8
Latvia	6.9	7.3	6.9	6.9	6.9
Malaysia	4.4	3.2	3.2	3.7	3.2
Mexico	0.8	0.8	0.8	0.8	0.8
Netherlands	17.3	17.3	17.3	17.3	17.3
Norway	21.9	21.9	21.9	24.3	21.9
Poland	2.5	2.5	2.5	2.5	2.5
Portugal	4.8	4.8	4.8	4.8	4.8
Romania	1.4	1.7	1.7	1.7	2.2
Serbia	3.6	3.6	3.6	3.6	3.6
Singapore	11.4	10.8	10.8	10.8	10.8
Slovak Republic	2.5	2.5	2.5	2.5	2.5
Spain	1.1	0.0	0.0	0.4	0.3
Sweden	10.7	10.7	10.7	10.7	10.7
Sub-national entities					
Abu Dhabi (United Arab Emirates)	22.6	21.9	21.9	23.3	21.9
Alberta (Canada)	4.9	6.0	6.0	4.9	4.9
England (United Kingdom)	2.3	2.3	2.3	2.3	2.7
Flanders (Belgium)	8.9	8.9	8.9	8.9	8.9

Note: Percentages in this table represent the weighted proportion of missing cases.


Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048413>

[Part 1/1]
Table B.5 List of variables in the Chapter 4 regression analyses

Variable	Level	Type of variable	Based on variable(s) in the data set
Teacher background			
Teacher's participation in different professional development programmes (0 = no; 1 = yes)	Teacher	Dependent, independent	TT2G21A1, TT2G21B1, TT2G21C1, TT2G21D1, TT2G21E1, TT2G21F, TT2G21G, TT2G21H, TT2G21I
Teacher's gender (0 = male; 1 = female)	Teacher	Independent	TT2G01
Teacher's age (discretised in three dichotomous variables: age 16-29, age 30-39, age 40 or more)	Teacher	Independent	TT2G02
Teacher's employment status (0 = full time; 1 = part time)	Teacher	Independent	TT2G03
Number of years of teaching at this school (discretised in three dichotomous variables: 0-2 years, 3-5 years, 6 or more years)	Teacher	Independent	TT2G05A
Teacher's employment status at the school (0 = permanent; 1 = fixed-term)	Teacher	Independent	TT2G06
Teacher's education (dichotomised: 0 = ISCED 5B or below; 1 = ISCED 5A or higher)	Teacher	Independent	TT2G10
Teacher's background includes a training programme (0 = no; 1 = yes)	Teacher	Independent	TT2G11
Subjects taught (discretised in four dichotomous variables: Reading & writing, mathematics, science, no specialisation)	Teacher	Independent	TT2G15A; 15B; 15C
Number of hours worked in the most recent complete calendar week (discretised in three dichotomous variables: 0-30 hours, 31-50 hours, 51 or more hours)	Teacher	Independent	TT2G16
Professional development			
Index of needs for teaching for diversity (continuous)	Teacher	Independent	TPDDIV
Index of pedagogical needs (continuous)	Teacher	Independent	TPDPED
Teacher's participation in formal professional development programmes (0 = no; 1 = yes)	Teacher	Independent	TT2G19A
Teacher serving as a mentor (0 = no; 1 = yes)	Teacher	Independent	TT2G20B
School background			
Management of the school (0 = public; 1 = private)	Teacher	Independent	TC2G10
School's enrollment (discretised in three dichotomous variables: 1-365 students; 366-1065 students; 1066 or more students)	Teacher	Independent	TC2G14
Percentage of students from socio-economically disadvantaged homes (0 = above 30%; 1 = 30% or below)	Teacher	Independent	TC2G15C
School leadership			
Principal working on a professional development plan for their school (0 = no; 1 = yes)	Teacher	Independent	TC2G20B
Teacher induction and mentoring			
Access to mentoring system for teachers in the school (0 = no; 1 = yes)	Teacher	Independent	TC2G36

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048432>


[Part 1/4]

Table B.6 The percentage of missing cases for each country for each variable included in the Chapter 4 regression analyses

	Number of responding teachers (unweighted)	Teacher background					
		Participation in courses/workshops	Participation in education conferences or seminars	Participation in observation visits to other schools	Participation in observation visits to business premises, public organisations, non-governmental organisations	Participation in in-service training courses in business premises, public organisations, non-governmental organisations	Participation in a qualification programme
		Teacher %					
		TT2G21A1	TT2G21B1	TT2G21C1	TT2G21D1	TT2G21E1	TT2G21F
Australia	2 059	4.5	4.5	4.5	4.5	4.5	4.5
Brazil	14 291	6.7	6.8	6.7	6.7	6.8	6.5
Bulgaria	2 975	2.0	2.2	2.0	1.9	2.0	1.9
Chile	1 676	7.6	7.5	7.6	7.7	7.8	7.5
Croatia	3 675	1.4	1.5	1.5	1.5	1.5	1.3
Czech Republic	3 219	0.3	0.3	0.3	0.3	0.3	0.3
Denmark	1 649	2.7	2.7	2.7	2.7	2.7	2.6
Estonia	3 129	1.9	2.1	2.0	2.0	2.1	1.8
Finland	2 739	1.2	1.2	1.3	1.2	1.4	1.2
France	3 002	4.1	4.2	4.1	4.3	4.2	4.0
Iceland	1 430	11.2	11.3	11.4	11.2	11.2	11.3
Israel	3 403	4.0	4.1	4.1	4.1	4.1	4.2
Italy	3 337	1.8	1.8	1.7	1.9	1.9	1.7
Japan	3 484	1.0	1.1	1.1	1.1	1.0	0.8
Korea	2 933	2.3	2.3	2.3	2.4	2.4	2.2
Latvia	2 126	1.3	1.3	1.3	1.3	1.4	1.2
Malaysia	2 984	0.6	0.6	0.6	0.6	0.6	0.6
Mexico	3 138	0.5	0.5	0.5	0.5	0.5	0.4
Netherlands	1 912	2.6	2.7	2.7	2.7	2.6	2.6
Norway	2 981	3.5	3.5	3.5	3.5	3.5	3.5
Poland	3 858	0.8	0.8	0.8	0.8	0.8	1.0
Portugal	3 628	0.9	0.9	0.9	0.9	0.9	0.9
Romania	3 286	1.6	1.7	1.7	1.8	1.8	1.6
Serbia	3 857	1.6	1.7	1.5	1.4	1.4	1.4
Singapore	3 109	0.3	0.3	0.3	0.3	0.4	0.3
Slovak Republic	3 493	0.7	0.7	0.7	0.8	0.8	0.7
Spain	3 339	1.3	1.4	1.4	1.4	1.4	1.3
Sweden	3 319	3.0	3.0	3.0	3.0	3.0	2.9
Sub-national entities							
Abu Dhabi (United Arab Emirates)	2 433	5.9	6.0	6.2	6.0	6.2	6.2
Alberta (Canada)	1 773	1.9	2.0	2.0	1.9	1.9	1.9
England (United Kingdom)	2 496	2.9	2.9	2.9	2.9	3.0	2.9
Flanders (Belgium)	3 129	1.3	1.4	1.3	1.4	1.4	1.4

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048451>


[Part 2/4]

Table B.6 The percentage of missing cases for each country for each variable included in the Chapter 4 regression analyses

	Teacher background						
	Participation in a network of teachers formed specifically for the professional development of teachers	Participation in individual or collaborative research on a topic of interest to you professionally	Participation in mentoring and/or peer observation and coaching, as part of a formal school arrangement	Gender	Age	Employment status (full-time or part-time)	Number of years teaching at this school
	Teacher %						
	TT2G21G	TT2G21H	TT2G21I	TT2G01	TT2G02	TT2G03	TT2G05A
Australia	4.5	4.5	4.5	0.0	0.4	0.6	1.4
Brazil	6.6	6.7	6.7	0.0	0.1	11.2	23.8
Bulgaria	2.0	2.0	2.2	0.0	0.1	1.8	6.7
Chile	7.6	7.6	7.6	0.0	0.8	1.7	8.5
Croatia	1.4	1.4	1.4	0.0	0.1	0.9	14.1
Czech Republic	0.4	0.4	0.4	0.0	0.6	0.1	0.1
Denmark	2.8	2.8	2.7	0.0	0.0	0.4	0.8
Estonia	2.0	2.0	2.0	0.0	1.6	0.6	1.1
Finland	1.2	1.3	1.2	0.0	0.0	0.2	0.8
France	4.2	4.2	4.3	0.0	0.0	0.2	0.6
Iceland	11.5	11.3	11.4	0.0	0.3	0.4	1.5
Israel	4.2	4.2	4.2	0.0	0.2	0.8	1.8
Italy	1.8	1.7	1.8	0.0	0.0	0.4	1.4
Japan	0.9	0.9	0.9	0.0	0.1	0.6	1.0
Korea	2.3	2.2	2.3	0.0	0.0	0.8	1.2
Latvia	1.2	1.2	1.2	0.0	1.1	0.8	2.0
Malaysia	0.6	0.6	0.6	0.0	0.0	0.8	0.7
Mexico	0.5	0.5	0.5	0.1	0.2	2.3	12.7
Netherlands	2.6	2.6	2.6	0.0	0.1	0.1	0.7
Norway	3.5	3.5	3.5	0.0	0.1	0.4	0.7
Poland	1.0	1.0	1.0	0.0	0.0	0.3	3.5
Portugal	0.9	0.9	0.9	0.0	0.0	0.6	7.5
Romania	1.7	1.7	1.6	0.0	0.0	0.8	1.3
Serbia	1.6	1.6	1.6	0.0	0.1	1.8	8.2
Singapore	0.3	0.3	0.3	0.0	0.2	0.1	0.3
Slovak Republic	0.7	0.8	0.8	0.0	0.3	0.1	0.6
Spain	1.5	1.3	1.4	0.0	0.0	0.5	0.5
Sweden	2.9	3.1	3.0	0.0	0.1	0.1	0.7
Sub-national entities							
Abu Dhabi (United Arab Emirates)	6.3	6.2	6.2	0.0	0.3	1.8	2.9
Alberta (Canada)	1.9	1.9	1.9	0.0	0.4	0.2	1.0
England (United Kingdom)	2.9	2.9	3.0	0.0	0.3	0.1	1.4
Flanders (Belgium)	1.5	1.4	1.4	0.0	0.0	0.1	0.8

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048451>

[Part 3/4]


The percentage of missing cases for each country for each variable included in the Chapter 4 regression analyses

Table B.6

	Teacher background						
	Employment status (permanent or fixed-term)	Highest level of education of teacher	Completion of teacher education or training programme	Teaching reading, writing and literature	Teaching mathematics	Teaching science	Number of hours worked in the most recent complete calendar week
	Teacher %						
	TT2G06	TT2G10	TT2G11	TT2G15A	TT2G15B	TT2G15C	TT2G16
Australia	0.8	0.8	0.9	2.5	2.6	2.6	2.9
Brazil	10.1	7.8	7.4	6.6	6.7	6.6	8.8
Bulgaria	0.5	0.5	0.6	1.9	2.0	2.0	2.5
Chile	1.7	1.5	2.5	7.4	7.4	7.3	7.9
Croatia	0.6	0.5	1.5	1.3	1.3	1.4	3.6
Czech Republic	0.1	0.1	0.5	0.3	0.3	0.3	0.3
Denmark	0.3	0.6	0.5	1.1	1.1	1.0	1.9
Estonia	0.5	0.5	0.6	1.1	1.1	1.1	1.5
Finland	0.2	0.3	0.3	0.6	0.6	0.7	1.2
France	0.4	0.6	1.0	1.7	1.8	1.9	2.6
Iceland	0.7	1.8	0.9	4.5	4.5	4.5	6.4
Israel	1.2	1.1	1.0	2.8	2.8	2.8	3.8
Italy	0.4	0.4	0.4	0.8	0.8	0.8	1.0
Japan	1.2	0.4	1.0	0.4	0.4	0.4	2.0
Korea	0.3	0.1	0.2	1.2	1.2	1.2	1.1
Latvia	0.6	0.6	0.5	1.7	1.8	1.6	1.3
Malaysia	0.5	0.5	0.6	0.7	0.7	0.7	1.0
Mexico	1.4	0.7	1.1	1.3	1.3	1.4	1.7
Netherlands	0.1	0.5	0.7	2.6	2.5	2.5	1.8
Norway	0.5	0.7	0.8	1.1	1.2	1.2	2.1
Poland	0.1	0.2	0.2	0.7	0.7	0.7	0.6
Portugal	0.4	0.3	2.2	0.9	0.9	1.0	1.2
Romania	0.7	0.5	0.5	0.9	1.0	1.0	0.8
Serbia	0.4	0.5	5.2	1.6	1.6	1.7	3.8
Singapore	0.1	0.0	0.1	0.4	0.6	0.6	0.4
Slovak Republic	0.3	0.1	0.2	0.6	0.6	0.5	0.7
Spain	0.5	0.3	0.3	1.1	1.1	1.1	0.8
Sweden	0.3	0.6	0.5	1.3	1.3	1.3	2.1
Sub-national entities							
Abu Dhabi (United Arab Emirates)	1.7	1.3	1.7	7.1	7.3	7.3	5.0
Alberta (Canada)	0.5	0.2	0.3	1.2	1.2	1.2	1.3
England (United Kingdom)	0.7	0.8	1.0	1.7	1.7	1.7	2.2
Flanders (Belgium)	0.2	0.3	0.3	0.9	0.9	0.9	0.9

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048451>


[Part 4/4]

Table B.6 The percentage of missing cases for each country for each variable included in the Chapter 4 regression analyses

	Professional development				School background			School leadership	Teacher induction and mentoring
	Index of needs for teaching for diversity	Index of pedagogical needs	Participation in formal induction programme	Serving as a mentor	Public/private schools	Number of students	Students from socio-economically disadvantaged homes	Principal working on a professional development plan for their school	Teachers' access to mentoring system
	Teacher %								
	TPDDIV	TPDPED	TT2G19A	TT2G20B	TC2G10	TC2G14	TC2G15C	TC2G20B	TC2G36
Australia	6.1	5.8	3.4	4.2	7.5	8.1	8.7	8.9	9.5
Brazil	7.5	7.5	7.4	9.7	0.9	4.8	3.3	3.5	5.1
Bulgaria	3.0	2.9	0.8	5.0	0.0	1.3	3.3	2.3	1.5
Chile	8.5	7.9	4.1	6.6	14.5	22.7	16.3	21.5	22.7
Croatia	2.4	2.1	1.7	9.7	1.9	3.2	3.2	7.5	5.4
Czech Republic	0.6	0.5	0.4	1.0	0.0	0.0	0.1	0.5	1.0
Denmark	3.7	3.7	2.2	2.7	17.2	16.5	17.0	17.6	16.5
Estonia	2.3	2.1	1.6	2.4	1.0	1.5	1.5	1.6	1.6
Finland	1.6	1.5	1.2	1.5	0.0	0.0	0.0	0.0	0.0
France	5.7	5.8	2.9	3.7	12.7	13.1	14.3	17.4	16.2
Iceland	15.8	15.5	7.8	8.7	19.2	20.5	21.6	20.5	20.5
Israel	5.9	5.7	4.2	4.9	5.9	10.6	8.4	8.8	7.4
Italy	2.1	1.9	1.5	3.4	0.0	0.0	0.7	1.4	0.0
Japan	0.7	0.7	0.3	0.6	0.0	0.0	0.6	1.8	4.3
Korea	2.9	2.7	1.9	2.9	7.2	7.7	7.7	9.5	8.8
Latvia	2.1	1.8	1.3	2.7	6.5	6.5	6.5	11.4	6.5
Malaysia	0.8	0.8	0.6	0.7	2.2	2.2	2.9	2.2	3.7
Mexico	1.0	0.8	0.8	3.2	0.4	2.0	0.4	1.5	6.1
Netherlands	4.9	4.8	2.0	2.5	6.5	6.5	8.8	12.0	13.3
Norway	5.1	4.9	2.8	3.5	23.1	23.6	26.8	23.6	23.6
Poland	1.8	2.0	0.8	2.6	3.3	4.7	4.9	4.2	5.0
Portugal	1.6	1.3	1.1	2.3	3.7	7.1	5.6	5.9	6.9
Romania	1.7	1.7	1.3	2.8	0.0	0.0	0.3	1.4	1.3
Serbia	1.7	1.5	1.7	8.3	2.4	4.4	6.6	5.0	8.3
Singapore	0.5	0.4	0.2	0.6	9.6	10.1	9.6	10.9	9.6
Slovak Republic	1.4	1.2	0.9	1.2	4.1	3.3	4.4	3.3	3.9
Spain	2.0	1.7	1.1	1.8	1.1	0.5	1.1	1.1	0.6
Sweden	4.5	4.2	3.0	3.2	7.9	8.9	8.3	8.9	9.0
Sub-national entities									
Abu Dhabi (United Arab Emirates)	7.9	8.0	5.4	6.6	23.5	26.3	26.6	26.6	26.2
Alberta (Canada)	3.2	3.3	1.7	2.0	2.2	1.8	2.4	3.9	2.1
England (United Kingdom)	4.9	5.1	2.5	3.5	1.7	3.6	4.3	3.9	5.5
Flanders (Belgium)	2.4	2.3	1.4	1.5	8.3	8.3	11.2	8.7	10.0

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048451>


[Part 1/1]
Table B.7 List of variables in the Chapter 6 regression analyses

Variable	Level	Type of variable	Based on variable(s) in the data set
Teachers' background			
Teacher gender (-1=male; 1 = female)	Teacher	Independent	TT2G01
Years of experience (continuous)	Teacher	Independent	TT2G05B
Education (-1 = below ISCED 5A; 1 = ISCED 5A or above)	Teacher	Independent	TT2G10
Feel prepared for the content of the subject(s) taught (-1 = not at all/somewhat; 1 = well/very well)	Teacher	Independent	TT2G13A
Feel prepared for the pedagogy of the subject(s) taught (-1 = not at all/somewhat; 1 = well/very well)	Teacher	Independent	TT2G13B
Feel prepared for classroom practice in the subject(s) taught (-1 = not at all/somewhat; 1 = well/very well)	Teacher	Independent	TT2G13C
Professional development¹			
Courses/workshops (-1 = no; 1 = yes)	Teacher	Independent	TT2G21A1
Education conferences or seminars (-1 = no; 1 = yes)	Teacher	Independent	TT2G21B1
Observation visits to other schools (-1 = no; 1 = yes)	Teacher	Independent	TT2G21C1
Qualification programme (-1 = no; 1 = yes)	Teacher	Independent	TT2G21F
Participation in a network of teachers formed specifically for the professional development of teachers (-1 = no; 1 = yes)	Teacher	Independent	TT2G21G
Individual or collaborative research on a topic of interest (-1 = no; 1 = yes)	Teacher	Independent	TT2G21H
Mentoring and/or peer observation and coaching (-1 = no; 1 = yes)	Teacher	Independent	TT2G21I
Classroom context			
Classroom climate (continuous)	Teacher	Independent	TCDISCS
Students whose first language is different from the language(s) of instruction (-1 = 10% or below; 1 = More than 10%)	Teacher	Independent	TT2G35A
Low academic achievers (-1 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35B
Students with special needs (-1 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35C
Students with behavioural problems (-1 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35D
Students from socio-economically disadvantaged homes (-1 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35E
Academically gifted students (-1 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35F
Target class subject: Math or Science (-1 = other; 1 = math/science)	Teacher	Independent	TT2G37
Target class subject: Humanities (-1 = other; 1 = humanities ²)	Teacher	Independent	TT2G37
Target class size (continuous)	Teacher	Independent	TT2G38
Teaching practices			
Professional collaboration (continuous)	Teacher	Dependent	TCCOLLS
Exchange and coordination for teaching (continuous)	Teacher	Dependent	TCEXCHS
Constructivist beliefs (continuous)	Teacher	Dependent	TCONSBS
Students work in small groups to come up with a joint solution to a problem (1 = frequently/In all or nearly all lessons; 2 = never or almost never/occasionally)	Teacher	Dependent	TT2G42B
Students work on projects that require at least one week to complete (1 = frequently/In all or nearly all lessons; 2 = never or almost never/occasionally)	Teacher	Dependent	TT2G42G
Students use ICT for projects or class work (1 = frequently/In all or nearly all lessons; 2 = never or almost never/occasionally)	Teacher	Dependent	TT2G42H
Students work in small groups to come up with a joint solution to a problem (original coding for TT2G42B)	Teacher	Independent	TT2G42B
Students work on projects that require at least one week to complete (original coding for TT2G42G)	Teacher	Independent	TT2G42G
Students use ICT for projects or class work (original coding for TT2G42H)	Teacher	Independent	TT2G42H

1. For the linear regression tables, the professional development variables are recoded "0 = no, 1 = yes" instead of "-1 = no, 1 = yes".

2. Humanities combines the following subject categories: reading, writing and literature, social studies, modern foreign languages, ancient Greek and/or Latin and religion and/or ethics.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048470>


[Part 1/4]

Table B.8 The percentage of missing cases for each country for each variable included in the Chapter 6 regression analyses

	Number of responding teachers (unweighted)	Teacher background					
		Gender	Year(s) working as a teacher in total	Highest level of education of teacher	Feeling prepared for the content of the subject(s) taught	Feeling prepared for the pedagogy of the subject(s) taught	Feeling prepared for classroom practice in the subject(s) taught
		Teacher %					
		TT2G01	TT2G05B	TT2G10	TT2G13A	TT2G13B	TT2G13C
Australia	2 059	0.0	2.6	0.8	1.4	1.7	1.6
Brazil	14 291	0.0	17.5	7.8	9.5	13.2	9.9
Bulgaria	2 975	0.0	14.4	0.5	1.7	3.0	3.8
Chile	1 676	0.0	10.8	1.5	2.4	3.8	4.2
Croatia	3 675	0.0	20.2	0.5	0.8	2.3	2.6
Czech Republic	3 219	0.0	1.7	0.1	0.1	0.4	0.4
Denmark	1 649	0.0	2.4	0.6	0.7	0.9	0.8
Estonia	3 129	0.0	3.7	0.5	1.3	1.9	2.1
Finland	2 739	0.0	2.2	0.3	0.7	0.8	0.9
France	3 002	0.0	1.7	0.6	1.2	1.7	1.5
Iceland	1 430	0.0	5.0	1.8	2.2	2.3	2.7
Israel	3 403	0.0	3.0	1.1	2.0	2.4	2.2
Italy	3 337	0.0	1.2	0.4	0.8	1.0	1.3
Japan	3 484	0.0	2.6	0.4	0.4	0.4	0.4
Korea	2 933	0.0	3.4	0.1	0.8	1.9	1.9
Latvia	2 126	0.0	5.3	0.6	1.0	1.1	1.4
Malaysia	2 984	0.0	1.0	0.5	0.5	0.5	0.6
Mexico	3 138	0.1	21.4	0.7	2.0	3.2	3.2
Netherlands	1 912	0.0	1.1	0.5	0.9	0.9	1.0
Norway	2 981	0.0	2.7	0.7	1.3	1.3	1.5
Poland	3 858	0.0	5.7	0.2	0.6	0.5	0.7
Portugal	3 628	0.0	3.2	0.3	0.2	0.4	0.4
Romania	3 286	0.0	1.9	0.5	0.6	1.1	0.9
Serbia	3 857	0.0	12.4	0.5	3.3	4.1	2.9
Singapore	3 109	0.0	1.0	0.0	0.2	0.3	0.2
Slovak Republic	3 493	0.0	1.5	0.1	0.4	0.7	1.0
Spain	3 339	0.0	1.1	0.3	0.4	0.5	0.7
Sweden	3 319	0.0	1.7	0.6	0.7	1.1	1.1
Sub-national entities							
Abu Dhabi (United Arab Emirates)	2 433	0.0	5.1	1.3	2.8	4.6	3.9
Alberta (Canada)	1 773	0.0	1.9	0.2	0.2	0.3	0.3
England (United Kingdom)	2 496	0.0	3.6	0.8	0.8	1.0	1.0
Flanders (Belgium)	3 129	0.0	2.9	0.3	0.6	0.8	0.7

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048489>

[Part 2/4]


The percentage of missing cases for each country for each variable included in the Chapter 6 regression analyses

Table B.8

	Professional development						
	Participation in courses/workshops	Participation in education conferences or seminars	Participation in observation visits to other schools	Participation in a qualification programme	Participation in a network of teachers formed specifically for the professional development of teachers	Participation in individual or collaborative research on a topic of interest to you professionally	Participation in mentoring and/or peer observation and coaching, as part of a formal school arrangement
	Teacher %						
	TT2G21A1	TT2G21B1	TT2G21C1	TT2G21F	TT2G21G	TT2G21H	TT2G21I
Australia	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Brazil	6.7	6.8	6.7	6.5	6.6	6.7	6.7
Bulgaria	2.0	2.2	2.0	1.9	2.0	2.0	2.2
Chile	7.6	7.5	7.6	7.5	7.6	7.6	7.6
Croatia	1.4	1.5	1.5	1.3	1.4	1.4	1.4
Czech Republic	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Denmark	2.7	2.7	2.7	2.6	2.8	2.8	2.7
Estonia	1.9	2.1	2.0	1.8	2.0	2.0	2.0
Finland	1.2	1.2	1.3	1.2	1.2	1.3	1.2
France	4.1	4.2	4.1	4.0	4.2	4.2	4.3
Iceland	11.2	11.3	11.4	11.3	11.5	11.3	11.4
Israel	4.0	4.1	4.1	4.2	4.2	4.2	4.2
Italy	1.8	1.8	1.7	1.7	1.8	1.7	1.8
Japan	1.0	1.1	1.1	0.8	0.9	0.9	0.9
Korea	2.3	2.3	2.3	2.2	2.3	2.2	2.3
Latvia	1.3	1.3	1.3	1.2	1.2	1.2	1.2
Malaysia	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Mexico	0.5	0.5	0.5	0.4	0.5	0.5	0.5
Netherlands	2.6	2.7	2.7	2.6	2.6	2.6	2.6
Norway	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Poland	0.8	0.8	0.8	1.0	1.0	1.0	1.0
Portugal	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Romania	1.6	1.7	1.7	1.6	1.7	1.7	1.6
Serbia	1.6	1.7	1.5	1.4	1.6	1.6	1.6
Singapore	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Slovak Republic	0.7	0.7	0.7	0.7	0.7	0.8	0.8
Spain	1.3	1.4	1.4	1.3	1.5	1.3	1.4
Sweden	3.0	3.0	3.0	2.9	2.9	3.1	3.0
Sub-national entities							
Abu Dhabi (United Arab Emirates)	5.9	6.0	6.2	6.2	6.3	6.2	6.2
Alberta (Canada)	1.9	2.0	2.0	1.9	1.9	1.9	1.9
England (United Kingdom)	2.9	2.9	2.9	2.9	2.9	2.9	3.0
Flanders (Belgium)	1.3	1.4	1.3	1.4	1.5	1.4	1.4

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048489>

[Part 3/4]


The percentage of missing cases for each country for each variable included in the Chapter 6 regression analyses

Table B.8

	Classroom context								
	Classroom disciplinary climate	Students whose first language is different from language of instruction (target class)	Low academic achievers (target class)	Students with special needs (target class)	Students with behavioural problems (target class)	Students from socio-economically disadvantaged homes (target class)	Academically gifted students (target class)	Subject category of the target class	Class size (target class)
	Teacher %								
	TT2G35A	TT2G35B	TT2G35C	TT2G35D	TT2G35E	TT2G35F	TT2G37	TT2G38	
Australia	17.6	9.1	9.1	9.2	9.1	9.5	9.2	17.6	17.7
Brazil	20.8	10.2	9.9	10.5	9.4	9.2	9.4	27.6	22.4
Bulgaria	1.4	3.5	3.3	4.3	3.2	4.0	3.3	10.9	4.5
Chile	30.9	11.1	10.0	10.9	9.9	10.4	10.2	38.8	35.2
Croatia	14.5	3.2	3.7	3.1	3.5	3.6	3.3	18.3	16.6
Czech Republic	5.7	0.8	0.7	0.8	0.7	0.8	0.8	5.9	6.2
Denmark	16.5	4.9	5.1	5.2	5.2	5.5	4.9	16.2	16.3
Estonia	16.2	2.9	3.1	3.2	2.9	3.7	3.1	17.4	16.6
Finland	16.3	2.1	2.4	2.6	2.4	3.1	2.4	16.5	16.8
France	14.0	7.4	7.7	7.7	7.4	8.0	7.5	13.7	13.9
Iceland	31.5	18.0	17.8	18.0	18.2	19.8	18.3	31.9	33.1
Israel	23.8	7.3	7.7	7.7	7.4	8.0	7.5	24.0	24.0
Italy	20.8	2.8	2.9	2.8	2.9	3.0	2.8	20.9	21.2
Japan	11.9	0.7	0.8	0.7	0.7	0.9	1.0	21.5	12.7
Korea	20.3	4.6	4.8	4.7	4.9	4.8	4.9	20.0	20.5
Latvia	9.5	3.2	3.3	4.1	3.2	3.5	3.7	9.2	9.7
Malaysia	38.6	1.2	1.1	1.3	1.1	1.2	1.3	38.6	38.8
Mexico	12.1	1.6	1.5	2.0	1.5	1.5	1.5	24.9	13.8
Netherlands	24.1	8.5	8.3	8.3	8.5	8.6	8.4	24.1	24.3
Norway	23.8	8.7	9.2	8.5	8.5	10.1	8.8	27.3	26.9
Poland	12.7	2.4	2.3	2.1	2.2	2.6	2.3	13.3	13.1
Portugal	5.6	2.0	2.0	2.2	1.9	2.0	1.9	8.6	5.8
Romania	18.7	1.7	1.5	1.7	1.8	1.5	1.7	18.8	19.4
Serbia	7.6	2.8	5.0	3.1	2.8	3.1	3.1	9.6	10.3
Singapore	7.3	0.7	1.0	1.0	0.8	0.8	0.8	7.7	8.8
Slovak Republic	14.4	1.2	1.4	1.4	1.5	1.4	1.4	14.5	15.3
Spain	12.8	3.8	3.7	3.9	3.7	4.6	4.0	12.9	13.2
Sweden	29.7	6.0	6.1	6.1	6.3	7.1	6.2	29.1	30.4
Sub-national entities									
Abu Dhabi (United Arab Emirates)	29.7	12.4	12.5	13.2	12.6	14.0	12.3	29.7	31.1
Alberta (Canada)	17.1	4.1	4.4	4.2	4.1	4.4	4.2	17.1	17.2
England (United Kingdom)	21.6	6.9	7.2	7.1	7.3	7.2	7.2	21.4	22.0
Flanders (Belgium)	15.4	3.1	3.2	3.5	3.2	3.5	3.6	15.4	16.1

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048489>


[Part 4/4]

Table B.8 The percentage of missing cases for each country for each variable included in the Chapter 6 regression analyses

	Teaching practices					
	Professional collaboration	Teacher co-operation sub-scale/exchange and coordination for teaching	Constructivist beliefs	Students work in small groups to come up with a joint solution to a problem (target class)	Students work on projects that require at least one week to complete (target class)	Students use ICT for projects or class work (target class)
	Teacher %					
	TCCOLLS	TCEXCHS	TCONSBS	TT2G42B	TT2G42G	TT2G42H
Australia	8.1	8.1	7.7	17.8	17.7	17.7
Brazil	6.9	6.9	6.7	21.3	21.9	22.1
Bulgaria	0.7	0.7	0.6	2.3	4.9	4.8
Chile	9.4	9.4	8.4	31.7	32.4	32.1
Croatia	1.5	1.5	1.4	14.4	15.1	15.1
Czech Republic	0.4	0.4	0.5	6.0	6.0	6.1
Denmark	3.9	3.9	3.9	16.7	16.9	16.8
Estonia	2.2	2.2	2.0	16.9	17.1	17.1
Finland	1.7	1.7	1.9	16.7	17.0	17.0
France	6.3	6.3	6.3	14.6	15.9	15.3
Iceland	15.3	15.3	14.2	33.6	34.8	34.4
Israel	5.9	5.9	6.3	25.2	26.0	25.6
Italy	2.0	2.0	2.2	21.2	21.5	21.4
Japan	0.4	0.4	0.4	12.0	12.1	12.2
Korea	4.3	4.3	4.0	21.2	20.9	20.9
Latvia	2.3	2.3	1.9	10.1	10.7	10.4
Malaysia	1.0	1.0	1.0	38.7	38.8	38.7
Mexico	0.9	0.9	0.7	12.4	12.5	12.4
Netherlands	6.8	6.8	6.3	24.5	24.6	24.7
Norway	7.1	7.1	6.2	24.4	24.3	24.3
Poland	1.3	1.3	1.2	13.1	13.8	13.7
Portugal	1.1	1.1	1.1	5.9	6.6	6.4
Romania	1.3	1.3	1.3	19.1	19.2	19.2
Serbia	0.8	0.8	0.9	8.1	9.5	9.5
Singapore	0.3	0.3	0.3	7.6	7.7	7.6
Slovak Republic	0.8	0.8	0.7	14.9	14.8	14.8
Spain	2.4	2.4	2.2	13.3	13.5	13.3
Sweden	5.1	5.1	5.0	30.2	30.4	30.2
Sub-national entities						
Abu Dhabi (United Arab Emirates)	8.3	8.3	7.7	30.4	30.5	30.6
Alberta (Canada)	3.1	3.1	3.3	17.5	18.0	17.7
England (United Kingdom)	6.3	6.3	5.9	22.0	22.1	22.0
Flanders (Belgium)	2.2	2.2	2.2	15.9	16.4	16.3

Note: Percentages in this table represent the weighted proportion of missing cases.


Source: OECD, TALIS 2013 Database.

 StatLink  <http://dx.doi.org/10.1787/888933048489>

[Part 1/1]
Table B.9 List of independent variables in the Chapter 7 regression analyses

Variable	Level	Type of variable	Based on variable(s) in the data set
Teacher background			
Teacher's gender (1 = female; 2 = male)	Teacher	Independent	TT2G01
Number of years of teaching (0 = 5 years or less; 1 = more than 5 years)	Teacher	Independent	TT2G05B
Teacher's education (0 = ISCED 5B or below; 1 = ISCED 5A or higher)	Teacher	Independent	TT2G10
Inclusion of content/pedagogy/classroom practice elements in formal training (continuous variable where the scores on the three variables were combined following the questionnaire coding: 1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12A, TT2G12B, TT2G12C
Subjects taught (0 = yes; 1 = no)	Teacher	Independent	TT2G15A, TT2G15B, TT2G15C, TT2G15E, TT2G15G, TT2G15H
Number of hours worked in the most recent complete calendar week (more than 90 hours were excluded) (continuous)	Teacher	Independent	TT2G16
Professional development			
Teacher's participation in formal professional development programmes (0 = no; 1 = yes)	Teacher	Independent	TT2G19A
Teacher's participation in informal professional development programmes (0 = no; 1 = yes)	Teacher	Independent	TT2G19B
Teacher assigned a mentor (0 = no; 1 = yes)	Teacher	Independent	TT2G20A
Teacher serving as a mentor (0 = no; 1 = yes)	Teacher	Independent	TT2G20B
Formal participation in mentoring and coaching (0 = no; 1 = yes)	Teacher	Independent	TT2G21I
Professional development participation in conferences, courses and workshops (summation: 0 = no; 1 or higher = yes)	Teacher	Independent	TT2G21A1, TT2G21B1
Teacher feedback			
Feedback from at least two evaluators on classroom observation (0 = recorded receiving feedback from 1 or 0 evaluators; 1 = received feedback from 2 or more evaluators)	Teacher	Independent	TT2G28B1, TT2G28B2, TT2G28B3, TT2G28B4, TT2G28B5
Feedback from student surveys (0 = did not record receiving any student survey feedback; 1 = received 1 or more types of student survey feedback)	Teacher	Independent	TT2G28A1, TT2G28A2, TT2G28A3, TT2G28A4, TT2G28A5
Feedback from test scores (0 = did not record receiving any test score feedback; 1 = received 1 or more types of test score feedback)	Teacher	Independent	TT2G28D1, TT2G28D2, TT2G28D3, TT2G28D4, TT2G28D5
Feedback on student behavior in the classroom (0 = low to no importance; 1 = moderate to high importance)	Teacher	Independent	TT2G29E
Appraisal is only for administrative purposes (0 = disagree/strongly disagree; 1 = agree/strongly agree)	Teacher	Independent	TT2G31C
Appraisal impacts teaching (0 = disagree/strongly disagree; 1 = agree/strongly agree)	Teacher	Independent	TT2G31B
Teaching practices			
Teacher self-efficacy (continuous)	Teacher	Dependent	TSELEFFS
Teacher co-operation (continuous)	Teacher	Independent	TCOOPS
Constructivist beliefs (continuous)	Teacher	Independent	TCONSB
Teach jointly as a team in the same class (0 = less than five times a year; 1 = five times a year or more)	Teacher	Independent	TT2G33A
Observe other teachers' classes and provide feedback (0 = less than five times a year; 1 = five times a year or more)	Teacher	Independent	TT2G33B
Engage in joint activities across different classes and age groups (e.g. projects) (0 = less than five times a year; 1 = five times a year or more)	Teacher	Independent	TT2G33C
Take part in collaborative professional learning (0 = less than five times a year; 1 = five times a year or more)	Teacher	Independent	TT2G33H
Classroom context			
Low academic achievers (0 = 10% or below; 1 = above 10%)	Teacher	Independent	TT2G35B
Students with behavioural problems (0 = 10% or below; 1 = above 10%)	Teacher	Independent	TT2G35D
Academically gifted students (0 = 10% or below; 1 = above 10%)	Teacher	Independent	TT2G35F
Target class size (continuous: number of students)	Teacher	Independent	TT2G38
Proportion of time doing administrative tasks (continuous)	Teacher	Independent	TT2G39A
Proportion of time keeping order (continuous)	Teacher	Independent	TT2G39B
School climate and job satisfaction			
Teacher job satisfaction (continuous)	Teacher	Dependent	TJOBSATS
I think that teaching is a valued profession in society (0 = strongly disagree or disagree; 1 = strongly agree or agree)	Teacher	Dependent	TT2G46H
Teacher-student relations (continuous)	Teacher	Independent	TSCTSTU
This school provides staff with opportunities to actively participate in school decisions (0 = strongly disagree or disagree; 1 = strongly agree or agree)	Teacher	Independent	TT2G44A
School background			
Instructional leadership (continuous)	Principal	Independent	PINSLEAD

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048508>


[Part 1/7]

Table B.10 The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

	Number of responding teachers (unweighted)	Teacher background					
		Gender	Year(s) working as a teacher in total	Highest level of education of teacher	Content of the subject(s) taught was included in formal education or training	Pedagogy of the subject(s) taught was included in formal education or training	Classroom practice in the subject(s) taught was included in formal education or training
		TT2G01	TT2G05B	TT2G10	TT2G12A	TT2G12B	TT2G12C
Australia	2 059	0.0	2.6	0.8	1.0	1.0	1.0
Brazil	14 291	0.0	17.5	7.8	8.1	8.3	8.3
Bulgaria	2 975	0.0	14.4	0.5	0.5	0.5	0.5
Chile	1 676	0.0	10.8	1.5	3.3	3.3	3.3
Croatia	3 675	0.0	20.2	0.5	1.4	1.5	1.4
Czech Republic	3 219	0.0	1.7	0.1	0.1	0.1	0.1
Denmark	1 649	0.0	2.4	0.6	1.9	1.9	1.9
Estonia	3 129	0.0	3.7	0.5	0.8	0.8	0.8
Finland	2 739	0.0	2.2	0.3	0.3	0.3	0.3
France	3 002	0.0	1.7	0.6	1.0	1.0	1.0
Iceland	1 430	0.0	5.0	1.8	1.5	1.6	1.6
Israel	3 403	0.0	3.0	1.1	1.2	1.4	1.4
Italy	3 337	0.0	1.2	0.4	0.9	0.9	0.9
Japan	3 484	0.0	2.6	0.4	1.8	1.8	1.8
Korea	2 933	0.0	3.4	0.1	0.2	0.2	0.2
Latvia	2 126	0.0	5.3	0.6	0.7	0.7	0.8
Malaysia	2 984	0.0	1.0	0.5	0.4	0.4	0.4
Mexico	3 138	0.1	21.4	0.7	1.5	1.7	1.6
Netherlands	1 912	0.0	1.1	0.5	0.9	0.9	0.9
Norway	2 981	0.0	2.7	0.7	1.4	1.4	1.4
Poland	3 858	0.0	5.7	0.2	0.3	0.3	0.3
Portugal	3 628	0.0	3.2	0.3	0.2	0.3	0.2
Romania	3 286	0.0	1.9	0.5	0.6	0.7	0.7
Serbia	3 857	0.0	12.4	0.5	3.9	3.9	3.9
Singapore	3 109	0.0	1.0	0.0	0.1	0.1	0.1
Slovak Republic	3 493	0.0	1.5	0.1	0.5	0.6	0.6
Spain	3 339	0.0	1.1	0.3	0.5	0.5	0.5
Sweden	3 319	0.0	1.7	0.6	0.6	0.7	0.7
Sub-national entities							
Abu Dhabi (United Arab Emirates)	2 433	0.0	5.1	1.3	2.2	2.2	2.2
Alberta (Canada)	1 773	0.0	1.9	0.2	0.2	0.2	0.2
England (United Kingdom)	2 496	0.0	3.6	0.8	0.9	0.9	0.9
Flanders (Belgium)	3 129	0.0	2.9	0.3	0.4	0.4	0.4

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048527>

[Part 2/7]


The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

Table B.10

	Teacher background						
	Teaching reading, writing and literature	Teaching mathematics	Teaching science	Teaching modern foreign languages	Teaching technology	Teaching arts	Number of hours worked in the most recent complete calendar week
	Teacher %						
	TT2G15A	TT2G15B	TT2G15C	TT2G15E	TT2G15G	TT2G15H	TT2G16
Australia	2.5	2.6	2.6	2.6	2.5	2.6	3.0
Brazil	6.6	6.7	6.6	6.7	6.6	6.6	9.1
Bulgaria	1.9	2.0	2.0	2.0	2.1	2.1	2.6
Chile	7.4	7.4	7.3	7.4	7.3	7.4	8.2
Croatia	1.3	1.3	1.4	1.4	1.3	1.3	3.6
Czech Republic	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Denmark	1.1	1.1	1.0	1.1	1.1	1.1	1.9
Estonia	1.1	1.1	1.1	1.1	1.1	1.1	1.6
Finland	0.6	0.6	0.7	0.6	0.7	0.6	1.2
France	1.7	1.8	1.9	1.8	1.8	1.8	2.6
Iceland	4.5	4.5	4.5	4.4	4.6	4.4	6.4
Israel	2.8	2.8	2.8	2.8	2.8	2.8	3.9
Italy	0.8	0.8	0.8	0.8	0.8	0.8	1.1
Japan	0.4	0.4	0.4	0.4	0.4	0.4	2.6
Korea	1.2	1.2	1.2	1.2	1.2	1.1	1.2
Latvia	1.7	1.8	1.6	1.6	1.6	1.8	1.3
Malaysia	0.7	0.7	0.7	0.7	0.6	0.7	1.7
Mexico	1.3	1.3	1.4	1.4	1.4	1.4	1.9
Netherlands	2.6	2.5	2.5	2.5	2.5	2.4	1.8
Norway	1.1	1.2	1.2	1.1	1.3	1.2	2.1
Poland	0.7	0.7	0.7	0.7	0.8	0.7	0.6
Portugal	0.9	0.9	1.0	0.9	0.9	0.9	1.6
Romania	0.9	1.0	1.0	1.0	1.0	1.0	0.8
Serbia	1.6	1.6	1.7	1.7	1.7	1.7	3.8
Singapore	0.4	0.6	0.6	0.7	0.6	0.7	1.3
Slovak Republic	0.6	0.6	0.5	0.6	0.6	0.5	0.8
Spain	1.1	1.1	1.1	1.1	1.1	1.1	0.8
Sweden	1.3	1.3	1.3	1.3	1.3	1.3	2.1
Sub-national entities							
Abu Dhabi (United Arab Emirates)	7.1	7.3	7.3	7.4	7.4	7.5	5.1
Alberta (Canada)	1.2	1.2	1.2	1.2	1.2	1.3	1.6
England (United Kingdom)	1.7	1.7	1.7	1.7	1.6	1.6	2.4
Flanders (Belgium)	0.9	0.9	0.9	0.9	0.9	0.9	0.9

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048527>

[Part 3/7]


The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

Table B.10

	Professional development											
	Participation in formal induction programme	Teacher's participation in informal professional development programmes	Teacher assigned a mentor	Serving as a mentor	Participation in mentoring and/or peer observation and coaching, as part of a formal school arrangement	Professional development participation in conferences, courses and workshops (combined TT2G21A1, TT2G21B1)						
							Teacher %					
							TT2G19A	TT2G19B	TT2G20A	TT2G20B	TT2G21I	TT2G21A1, TT2G21B1
Australia	3.4	3.6	3.6	4.2	4.5	4.4						
Brazil	7.4	8.7	8.7	9.7	6.7	6.6						
Bulgaria	0.8	1.0	1.0	5.0	2.2	1.8						
Chile	4.1	5.0	5.0	6.6	7.6	7.5						
Croatia	1.7	2.2	2.2	9.7	1.4	1.4						
Czech Republic	0.4	0.6	0.6	1.1	0.4	0.3						
Denmark	2.2	3.1	3.1	2.7	2.7	2.6						
Estonia	1.6	2.6	2.6	2.4	2.0	1.9						
Finland	1.2	1.4	1.4	1.5	1.2	1.2						
France	2.9	3.4	3.4	3.7	4.3	4.1						
Iceland	7.8	8.9	8.9	8.7	11.4	11.1						
Israel	4.2	4.8	4.8	4.9	4.2	4.0						
Italy	1.5	1.8	1.8	3.4	1.8	1.7						
Japan	0.3	0.4	0.4	0.6	0.9	1.0						
Korea	1.9	2.0	2.0	2.9	2.3	2.3						
Latvia	1.3	2.0	2.0	2.7	1.2	1.2						
Malaysia	0.6	0.8	0.8	0.7	0.6	0.6						
Mexico	0.9	1.4	1.4	3.2	0.5	0.4						
Netherlands	2.1	2.6	2.6	2.5	2.6	2.6						
Norway	2.8	4.0	4.0	3.5	3.5	3.5						
Poland	0.8	2.0	2.0	2.6	1.0	0.8						
Portugal	1.1	1.9	1.9	2.3	0.9	0.9						
Romania	1.3	1.4	1.4	2.8	1.7	1.7						
Serbia	1.7	2.9	2.9	8.3	1.6	1.4						
Singapore	0.2	0.3	0.3	0.6	0.3	0.3						
Slovak Republic	0.9	1.1	1.1	1.2	0.8	0.7						
Spain	1.1	1.8	1.8	1.8	1.4	1.3						
Sweden	3.0	3.7	3.7	3.2	3.0	3.0						
Sub-national entities												
Abu Dhabi (United Arab Emirates)	5.4	5.5	5.5	6.6	6.2	5.8						
Alberta (Canada)	1.7	1.8	1.8	2.0	1.9	1.9						
England (United Kingdom)	2.5	2.7	2.7	3.5	3.0	2.9						
Flanders (Belgium)	1.4	1.7	1.7	1.5	1.4	1.3						

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048527>

[Part 4/7]


The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

Table B.10

	Professional development					
	Feedback from at least two evaluators on classroom observation (combined TT2G28B1 to TT2G28B5)	Feedback from student surveys (combined TT2G28A1 to TT2G28A5)	Feedback from test scores (combined TT2G28D1 to TT2G28D5)	Feedback on student behavior in the classroom	Appraisal is only for administrative purposes	Appraisal impacts teaching
	Teacher %					
	TT2G28B1 to TT2G28B5	TT2G28A1 to TT2G28A5	TT2G28D1 to TT2G28D5	TT2G29E	TT2G31C	TT2G31B
Australia	7.1	9.4	8.3	22.0	9.5	9.3
Brazil	9.0	11.6	10.4	20.0	17.7	14.0
Bulgaria	1.6	1.6	1.6	8.6	6.7	5.9
Chile	10.9	12.3	12.3	26.9	10.9	10.6
Croatia	0.1	0.1	0.1	12.3	6.9	7.2
Czech Republic	0.8	3.6	3.7	4.8	2.4	2.2
Denmark	4.2	6.6	5.3	26.6	10.5	7.6
Estonia	3.2	5.6	6.6	11.1	4.7	4.6
Finland	2.4	3.4	2.9	39.7	6.5	4.8
France	7.9	16.5	15.4	22.7	12.1	11.1
Iceland	18.7	20.5	20.1	56.1	26.5	22.5
Israel	6.9	11.0	9.8	19.8	9.6	9.3
Italy	4.0	5.6	5.7	45.3	8.8	8.1
Japan	0.6	0.6	0.6	8.3	7.0	6.3
Korea	3.5	5.5	5.5	10.0	6.0	5.5
Latvia	2.9	6.1	5.0	7.5	3.9	3.3
Malaysia	1.2	1.8	1.8	2.9	1.2	1.1
Mexico	1.5	3.2	2.3	13.8	4.5	4.9
Netherlands	6.2	7.6	7.5	12.9	8.3	8.4
Norway	6.3	11.8	10.3	25.4	14.4	13.3
Poland	1.6	6.5	4.5	6.3	4.9	4.0
Portugal	2.6	7.1	5.2	20.4	3.9	3.7
Romania	1.7	4.2	3.8	5.0	3.0	2.7
Serbia	4.6	4.8	4.8	9.1	5.1	5.8
Singapore	0.9	3.1	2.4	3.0	1.4	1.3
Slovak Republic	1.2	4.1	4.1	6.2	2.7	2.4
Spain	2.9	4.0	3.4	35.7	6.4	6.1
Sweden	5.4	6.6	6.5	38.8	10.2	10.0
Sub-national entities						
Abu Dhabi (United Arab Emirates)	8.1	10.7	9.9	13.3	11.4	10.4
Alberta (Canada)	3.8	6.0	5.7	12.3	5.2	5.2
England (United Kingdom)	4.9	8.1	6.8	7.4	6.7	6.8
Flanders (Belgium)	3.1	6.2	6.0	20.0	4.8	4.7

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048527>

[Part 5/7]


The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

Table B.10

	Teaching practices						
	Teacher self-efficacy	Teacher co-operation index	Constructivist beliefs	Teach jointly as a team in the same class	Observe other teachers' classes and provide feedback	Engage in joint activities across different classes and age groups	Take part in collaborative professional learning
	TSELEFFS	TCOOPS	TCONSBS	TT2G33A	TT2G33B	TT2G33C	TT2G33H
Australia	8.2	8.1	7.7	8.2	8.3	8.2	8.4
Brazil	6.8	7.0	6.7	9.4	9.0	8.5	8.8
Bulgaria	0.7	0.7	0.6	2.6	2.4	4.6	3.1
Chile	8.7	9.4	8.4	13.0	10.9	12.1	12.8
Croatia	1.4	1.5	1.4	4.3	2.9	3.2	2.2
Czech Republic	0.3	0.4	0.5	0.7	0.7	0.6	1.1
Denmark	4.2	3.9	3.9	4.0	4.2	4.1	4.3
Estonia	2.2	2.2	2.0	6.0	3.2	3.4	3.9
Finland	1.9	1.7	1.9	1.9	2.1	1.9	2.5
France	7.0	6.3	6.3	7.1	7.2	7.1	7.8
Iceland	15.1	15.3	14.2	16.8	16.0	16.7	16.8
Israel	6.6	5.9	6.3	6.6	6.7	7.4	8.2
Italy	2.3	2.0	2.2	2.5	3.2	2.7	3.5
Japan	0.6	0.4	0.4	1.6	0.4	1.0	0.7
Korea	4.2	4.3	4.0	4.6	5.4	4.9	5.2
Latvia	2.3	2.3	1.9	4.9	3.0	3.2	3.7
Malaysia	1.1	1.0	1.0	1.1	1.2	1.1	1.1
Mexico	0.8	0.9	0.7	4.8	2.1	1.7	1.6
Netherlands	7.3	6.8	6.3	7.6	7.0	7.0	7.3
Norway	7.3	7.1	6.2	10.1	8.5	8.5	9.0
Poland	1.2	1.3	1.2	5.2	2.1	2.0	2.8
Portugal	1.5	1.1	1.1	1.6	1.6	1.7	2.0
Romania	1.6	1.3	1.3	1.8	1.8	1.8	1.7
Serbia	0.8	0.8	0.9	3.7	2.0	2.4	1.9
Singapore	0.4	0.4	0.3	0.8	0.7	0.6	0.7
Slovak Republic	1.0	0.8	0.7	1.4	1.6	1.0	2.3
Spain	2.4	2.4	2.2	2.8	2.9	3.0	3.6
Sweden	5.5	5.1	5.0	5.3	5.4	5.5	5.6
Sub-national entities							
Abu Dhabi (United Arab Emirates)	8.5	8.3	7.7	10.5	10.5	9.9	10.5
Alberta (Canada)	3.7	3.1	3.3	3.2	3.1	3.1	3.3
England (United Kingdom)	6.5	6.4	5.9	6.4	6.7	6.5	7.0
Flanders (Belgium)	2.5	2.2	2.2	2.9	2.6	2.8	5.5

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048527>

[Part 6/7]


The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

Table B.10

	Classroom context					
	Low academic achievers (target class)	Students with behavioural problems (target class)	Academically gifted students (target class)	Class size (target class)	Proportion of time doing administrative tasks	Proportion of time keeping order
	Teacher %					
	TT2G35B	TT2G35D	TT2G35F	TT2G38	TT2G39A	TT2G39B
Australia	9.1	9.1	9.2	17.7	18.1	18.1
Brazil	9.9	9.4	9.4	22.4	26.3	26.3
Bulgaria	3.3	3.2	3.3	4.5	2.9	2.9
Chile	10.0	9.9	10.2	35.2	36.4	36.4
Croatia	3.7	3.5	3.3	16.6	15.3	15.3
Czech Republic	0.7	0.7	0.8	6.2	6.2	6.2
Denmark	5.1	5.2	4.9	16.3	16.7	16.7
Estonia	3.1	2.9	3.1	16.6	17.0	17.0
Finland	2.4	2.4	2.4	16.8	16.8	16.8
France	7.7	7.4	7.5	13.9	14.6	14.6
Iceland	17.8	18.2	18.3	33.1	34.6	34.6
Israel	7.7	7.4	7.5	24.0	25.9	25.9
Italy	2.9	2.9	2.8	21.2	23.4	23.4
Japan	0.8	0.7	1.0	12.7	13.1	13.1
Korea	4.8	4.9	4.9	20.5	21.9	21.9
Latvia	3.3	3.2	3.7	9.7	11.8	11.8
Malaysia	1.1	1.1	1.3	38.8	41.0	41.0
Mexico	1.5	1.5	1.5	13.8	14.6	14.6
Netherlands	8.3	8.5	8.4	24.3	24.5	24.5
Norway	9.2	8.5	8.8	26.9	25.7	25.7
Poland	2.3	2.2	2.3	13.1	13.2	13.2
Portugal	2.0	1.9	1.9	5.8	6.2	6.2
Romania	1.5	1.8	1.7	19.4	20.4	20.4
Serbia	5.0	2.8	3.1	10.3	10.3	10.3
Singapore	1.0	0.8	0.8	8.8	9.8	9.8
Slovak Republic	1.4	1.5	1.4	15.3	15.6	15.6
Spain	3.7	3.7	4.0	13.2	14.0	14.0
Sweden	6.1	6.3	6.2	30.4	31.2	31.2
Sub-national entities						
Abu Dhabi (United Arab Emirates)	12.5	12.6	12.3	31.1	37.5	37.5
Alberta (Canada)	4.4	4.1	4.2	17.2	18.3	18.3
England (United Kingdom)	7.2	7.3	7.2	22.0	21.9	21.9
Flanders (Belgium)	3.2	3.2	3.6	16.1	17.1	17.1

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

StatLink  <http://dx.doi.org/10.1787/888933048527>

[Part 7/7]


The percentage of missing cases for each country for each variable included in the Chapter 7 regression analyses

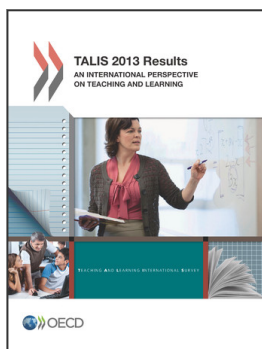
Table B.10

	School climate and job satisfaction				School background
	Teacher job satisfaction	I think that teaching is a valued profession in society	Teacher-student relations index	This school provides staff with opportunities to actively participate in school decisions	Instructional leadership
	Teacher %				
	TJOBSATS	TT2G46H	TSCTSTU	TT2G44A	PINSLEAD
Australia	9.0	9.2	8.6	8.7	8.9
Brazil	7.2	8.1	7.3	8.0	1.1
Bulgaria	0.7	1.4	0.8	1.1	0.0
Chile	8.7	10.1	8.6	9.4	17.2
Croatia	1.3	1.7	1.5	2.1	1.9
Czech Republic	0.5	0.7	0.4	0.7	0.0
Denmark	4.2	4.4	4.2	4.6	16.5
Estonia	2.2	2.5	2.1	2.8	1.0
Finland	2.1	2.5	2.2	2.4	0.0
France	6.7	7.1	6.9	8.8	14.6
Iceland	15.5	15.9	15.4	16.9	20.5
Israel	6.3	6.8	6.1	7.2	8.4
Italy	2.2	2.5	2.3	3.1	0.5
Japan	0.4	0.7	0.5	0.7	0.0
Korea	4.6	5.1	4.6	4.8	8.8
Latvia	2.0	2.4	2.2	2.6	6.5
Malaysia	1.0	1.0	1.0	1.1	2.3
Mexico	1.3	1.5	1.1	1.3	0.9
Netherlands	7.6	7.7	7.4	7.9	13.3
Norway	7.7	8.4	7.6	8.8	23.6
Poland	1.1	1.5	1.1	1.6	4.6
Portugal	1.4	1.5	1.4	2.0	4.5
Romania	1.4	1.6	1.3	1.6	0.3
Serbia	0.9	1.5	0.8	1.5	3.5
Singapore	0.5	0.8	0.5	0.9	10.9
Slovak Republic	0.9	1.4	0.9	1.4	3.3
Spain	2.6	3.0	2.6	3.3	0.5
Sweden	5.8	5.8	5.8	6.3	9.4
Sub-national entities					
Abu Dhabi (United Arab Emirates)	8.9	9.8	8.7	9.9	26.6
Alberta (Canada)	3.7	3.8	3.8	4.0	3.1
England (United Kingdom)	6.8	6.8	6.9	7.1	3.5
Flanders (Belgium)	2.7	3.3	2.7	3.3	8.3

Note: Percentages in this table represent the weighted proportion of missing cases.

Source: OECD, TALIS 2013 Database.

 StatLink  <http://dx.doi.org/10.1787/888933048527>



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