Teaching and Learning International Survey (TALIS) 2013: U.S. Technical Report

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Gregory A. Strizek
Steve Tourkin
Strategic Analytics, Inc.

Ebru Erberber
American Institutes for Research

Patrick Gonzales
Project Officer
National Center for Education Statistics

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U.S. Department of Education
1990 K Street NW
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Content Contact

Patrick Gonzales
(415) 920-9229
Patrick.Gonzales@ed.gov

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1 Overview of TALIS 2013

1.1 Introduction

The Teaching and Learning International Survey (TALIS) is an international survey of lower secondary education teachers and principals coordinated by the Organization for Economic Cooperation and Development (OECD). The study is a collaborative effort of the OECD and participating countries. Representatives of each country form the TALIS Board of Participating Countries, which sets policies and standards for the administration, analysis, and reporting of TALIS. Each country administers TALIS according to the guidelines set by the TALIS Board of Participating Countries. In the United States, TALIS 2013 was conducted by the National Center for Education Statistics (NCES) of the Institute of Education Sciences, U.S. Department of Education.

TALIS is a survey of teachers and principals designed to provide useful policy information on teachers and schools to participating countries. The initial administration of TALIS, in 2008, was the first large-scale international survey of the teaching workforce, the conditions of teaching, and the learning environments of schools in participating countries. TALIS 2013 is the second administration. TALIS 2013 had 34 countries participating, including the United States. The United States did not participate in TALIS 2008 and thus the United States administered TALIS for the first time in 2013.

1.2 What TALIS Measures

The OECD launched the Indicators of Education Systems (INES) project to help create a system of education indicators for cross-national comparisons for the use of policymakers, consumers, and private industry. INES achieves its purpose by collecting and analyzing a set of key indicators for international comparison; providing an international forum for the exchange of methods and practices of developing and using education indicators for national policymakers; and contributing to evaluation methodology and developing more valid, reliable, and comprehensive indicators for use in policymaking. TALIS, as part of INES, has been designed to increase the international information available to OECD countries and a set of partner countries on teachers and the conditions under which they work. The overall objective of TALIS is to provide international indicators and policy-relevant analysis on teachers and their workplaces in order to help countries develop and review policies that create the conditions for improved learning and spur further investigation into differences within and between countries.

The TALIS 2013 administration focused on the ISCED[1] Level 2 teacher workforce. ISCED Level 2 is also known as lower secondary education and usually lasts between 2 and 6 years, and begins around age 11. In the United States, grades 7 through 9 are classified as ISCED Level 2 and are generally found in middle and junior high schools and some high schools that include grade 9. The administration of TALIS 2013 included both classroom teachers of lower secondary

[1] ISCED stands for the International Standard Classification of Education. Details on the ISCED classification system can found at http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm.

education school programs as well as the principals of their schools. Teachers that teach in special needs-only schools, that teach exclusively adults, occasional or emergency teachers, or teachers who are on long-term leave and are not expected to be back teaching at the time of data collection were not included in the sample.

TALIS focuses on six themes motivated primarily by the collective policy interests of participating countries and secondarily by current theory and research, as follows:

- Continuous Professional Development: This includes a profile of in-service professional development (types of activities, participation rates, intensity of participation, mentoring and induction programs), needs and demands for in-service professional development, barriers preventing participation in in-service professional development, perceived impact of in-service professional development, and initial teacher education.
- Teacher Appraisal: This includes a profile of teacher appraisal (frequency, criteria, outcomes) and perceptions of the effectiveness and impact of teacher appraisal.
- School Leadership and Management: This includes a profile of school leadership and management styles (including indicators on the roles and functions of school leaders) and distributed/team leadership.
- School Climate: This includes disciplinary climate, teacher-student relations, a profile of teachers' working time, teacher and principal job satisfaction, and parent-teacher and parent-school relations.
- Teachers' Instructional Beliefs: This includes a profile of teachers' beliefs about teaching; teachers' and principals' perceptions about contextual, school, and classroom conditions that affect school and teachers' effectiveness; and teachers' beliefs about student assessment practice.
- Teachers' Pedagogical and Professional Practices: This includes a profile of teaching practices, a profile of cooperation among teaching staff, teaching special education needs students, pedagogical use of technology, and a profile of student assessment practices.

1.3 TALIS 2013 Administration

The TALIS Board of Participating Countries, a board of country representatives organized by the OECD to set policy and standards for the implementation of TALIS, developed technical standards that provided standardized procedures for all countries to follow. NCES was responsible for the implementation of TALIS in the United States in accordance with the international standards and procedures. TALIS 2013 data collection and associated tasks were carried out through a contract with Strategic Analytics, Inc. and its two subcontractors, Strategic Research Group, Inc. (SRG), and Sabre Systems, Inc. Strategic Analytics was responsible for project coordination, preparation of recruitment materials, preparation of the U.S. data files, and reporting. Sabre Systems was responsible for school and teacher sampling, data processing, and bias analyses. Strategic Research Group was responsible for recruitment of schools and teachers, adaptation of the international instruments, and data collection. Strategic Research Group worked closely with the school principal and a school coordinator (a school staff member designated by the principal) in conducting the data collection. In 2013, 140 U.S. schools participated; 111 principals and 2,034 teachers completed questionnaires. Data collection occurred from March 4 through May 31, 2013. The international data were released on June 25, 2014, and the U.S. data will be released in late 2014.

1.4 Organization of This Document

This technical report and user's guide is designed to provide researchers with an overview of the design and implementation of TALIS 2013. This information is meant to supplement that presented in OECD publications by describing those aspects of TALIS 2013 that are unique to the United States. Chapter 2 provides information about sampling requirements and sampling in the United States. Chapter 3 provides information on instrument development. Chapter 4 describes the details of how schools and teachers were recruited, and Chapter 5 describes field operations used for collecting data. Chapter 6 describes participation rates at the school and teacher level. Chapter 6 also includes nonresponse bias analysis (NRBA) results for unit-level and item-level response rates (details of the NRBA are provided in appendix E). Chapter 7 describes international activities related to data processing, and weighting. Chapter 8 describes the data available from both international and U.S. sources. Chapter 9 discusses some special issues involved in analyzing the TALIS 2013 U.S. data because of response rates below the international TALIS standards (as described in chapter 6) and also includes selected data tables from the international TALIS report.

Several appendixes are included:

- Appendix A. Recruitment Materials
- Appendix B. Agencies Endorsing TALIS 2013
- Appendix C. U.S. Questionnaires
- Appendix D. TALIS 2013 Questionnaire Adaptations
- Appendix E. Nonresponse Bias Analysis

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2 Sampling

The TALIS 2013 U.S. sample was based on a stratified two-stage probability sample design. At the first stage the primary sampling units were individual ISCED Level 2 schools, selected systematically with probability proportional to size from the stratified sampling frame. At the second stage, the secondary sampling units were the in-scope teachers, selected randomly within the sample schools.

The universe of interest was composed of schools where ISCED Level 2 education is provided along with the affiliated principals and teachers. No subject matter was excluded from the scope of TALIS teachers. Thus, coverage of TALIS extended to all teachers of ISCED Level 2 and to the principals of the schools where they teach.

According to the Indicators of Education Systems (INES) data collection concept, "the formal definition of a classroom teacher is a person whose professional activity involves the planning, organizing, and conduction of group activities whereby students' knowledge, skills, and attitudes develop as stipulated by educational programs. In short, it is one whose main activity is teaching." An ISCED Level 2 teacher is one who, as part of his or her regular duties in school, provides instruction in programs at ISCED Level 2. In the United States, ISCED Level 2 teachers are those who provide any instruction for grades 7, 8, and/or 9. Teachers who taught a mixture of programs at different levels including ISCED Level 2 programs in the target school were included in the TALIS universe, as well as teachers who engaged with individual or small groups of students in "pull in" or "push out" programs. There was no minimum cut-off for how much ISCED Level 2 teaching—that is, either the number of classes or students—these teachers need to be engaged in to be included.

2.1 International Requirements

The Technical Standards for the TALIS 2013 main study included the following:

- The teacher sample size must be a *minimum* of 3,400 surveyed ISCED Level 2 teachers for the main study, or the National Defined Target Population.
- The school sample size must be a *minimum* of 200 schools for the main study, or all schools that have ISCED Level 2 teachers in the National Defined Target Population.
- The minimum number of teachers required within each sampled school is suggested to be 20 to allow for reliable estimation and modeling, while allowing for some amount of nonresponse. In schools where fewer than 20 teachers of ISCED Level 2 are found, all will be in the sample. In schools where the number of teachers of ISCED Level 2 is between 21 and 30, it is suggested that all the available teachers be sampled. However, each country will have the choice to determine the sample size cutoff. The United States decided to select 22 teachers from any schools with 22 or more eligible teachers. This number was based on calculations which estimated the total number of TALIS-eligible teachers at 201 sample schools, and anticipated a yield of at least 3,500 teachers (before refusals). Based on the experience from the previous TALIS, this would provide a sufficient level of precision for the analysis (after refusals).

- School response rates must be at least 75 percent of sampled schools. If a response rate is below 75 percent then an acceptable response rate can still be achieved through agreed upon use of substitute schools. Two substitute schools will be preselected to replace each sample school. Although substitute schools could be called upon to replace nonresponding schools, countries are encouraged to do all they can to obtain the participation of the schools in the original sample. Responding schools that yield at least 50 percent of sampled teachers will be considered as participating schools; schools that fail to meet that threshold will be considered as "nonparticipating" even though the number of responding teachers may be enough to contribute to some of the analyses. Countries must obtain participation by 50 percent or more of the original sampled schools. Countries that experience less than 75 percent sample school participation after substitution have to demonstrate convincingly that their sample is not significantly biased. TALIS establishes three response rate zones—good, fair, or poor. "Good" means the country's data will be included in the international database. "Fair" means that the country's data may not be recommended for full inclusion in international comparisons. "Poor" means that the country's data will not be included in the international comparisons. The TALIS Board of Participating Countries makes the final decision on whether to include the country's data in international comparisons while taking into account various other factors.
- The overall teacher response rates must be at least 75 percent of sampled teachers in participating schools (original sample or substitute school).

TALIS's intent was to be as inclusive as possible. Guidelines allowed for schools to be excluded for approved reasons (e.g., remote regions, very small schools, or special needs-only schools). Schools used the following guidelines on teacher exclusions:

- Substitute, emergency, or occasional teachers are defined as teachers who fill in on a temporary basis (no longer than six consecutive weeks) for a teacher who is still employed as either a full-time or part-time teacher at the school. A common example would be the replacement of a teacher who is on sick leave.
- Teachers teaching exclusively to adults are defined as teachers who teach only to adults, whether the adult students follow a standard or an adapted curriculum.
- Teachers on long-term leave are defined as teachers "on long-term leave" who are absent and not expected to be back during the survey administration period (for example teachers on sabbatical, education, or maternity/parental leave).
- Teacher aides are typically non-professional or paraprofessional staff who support teachers in providing instruction to students.
- Pedagogical support staff includes those who provide services to students to support the instructional program, such as guidance counselors or librarians.
- Health and social support staff includes health professionals such as doctors, nurses, psychiatrists, psychologists, occupational therapists, and social workers.

2.2 School Sampling in the United States

The TALIS 2013 school sample was drawn for the United States in August 2012. The sample design for this school sample was developed to follow international requirements as given in the *TALIS 2013 Sampling Manual-Main Survey Version* (OECD 2012).

The school universe includes all educational institutions that employ TALIS eligible teachers.

The U.S. school sampling frame was developed from two national databases in the National Center for Education Statistics—public schools in the Common Core of Data (CCD, http://nces.ed.gov/ccd/) and private schools in the Private School Universe Survey (PSS, http://nces.ed.gov/surveys/pss/). These sources provide full coverage of all TALIS-eligible teachers in the education system in the United States. The TALIS school frame was constructed using the 2010-11 CCD and the 2009-10 PSS, the most current data at the time of the TALIS frame construction.

The sampling frame for the main study used two **explicit strata**: school control (i.e., public/private) and grade structure. The grade structure is defined with the following categories:

1. Middle-Junior, which includes middle school (grades 6 to 8) or junior high (grades 7 to 9, or grades 7 and 8);
2. High school (grades 9 to 12); and
3. Other (any other grade structure that includes at least one ISCED Level 2 grade).

The sampling specifications for selecting the schools for the main study specified the following three **implicit stratification** variables: (1) region (Northeast, Midwest, South, and West), (2) percent minority students, and (3) number of ISCED Level 2 teachers (measure of size). Within each explicit stratum the schools were sorted by a hierarchical combination of the implicit stratum variables in order to improve the representativeness of the sample across these variables. In the final sample implementation the urbanicity variable was inadvertently dropped from the implicit stratification sort. Table 2-1 presents the distribution of the eligible schools in the combined main study sampling frame by explicit strata (school control and grade structure).

Table 2-1. Distribution of eligible schools in TALIS Main Study sampling frame, by school control and grade structure strata: 2013

Grade structure	Total	Public	Private
Total	44,236	36,122	8,114
1 - Middle-Junior	9,868	9,788	80
2 - High school	12,374	11,248	1,126
3 - Other	21,994	15,086	6,908

NOTE: Other includes all schools with any other grade structure that includes at least one ISCED Level 2 grade, that is, grades 7, 8, or 9.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), 2010-11, and Private School Universe Survey (PSS), 2009-10.

Given the small number of private schools with a middle-junior grade structure, this stratum was collapsed (combined) with the private schools with the high school grade structure. The sample schools were allocated to the different explicit strata proportionally to the total number of ISCED Level 2 teachers. Given the small proportion of the schools in the combined private middle-

junior and high school stratum, the proportional allocation for this combined stratum was increased from 3 to 4 schools, resulting in a final sample of 201 schools. During the data collection, three schools were found to be out-of-scope, reducing the sample to 198 schools.

At the first sampling stage the schools were selected within each explicit stratum systematically with probability proportional to size, where the measure of size was based on the estimated number of ISCED Level 2 teachers. Since the number of ISCED Level 2 teachers was not available in the CCD and PSS databases, it was necessary to estimate the approximate number of teachers based on the proportion of the total students in each school who attended grades 7 to 9, multiplied by the total number of teachers. In the case of schools with more than 3 and fewer than 20 teachers, the measure of size was changed to the average number of teachers for these schools within the explicit stratum. This was the equivalent of selecting the schools in this group with equal probability within each stratum. This was done in order to stabilize the weights, since all ISCED 2 Level teachers in these schools would be selected at the second sampling stage with certainty.

Table 2-2 shows the distribution of the 201 main study sample schools by two explicit strata: school control and grade structure.

Table 2-2. Distribution of sample schools selected for TALIS Main Study, by school control and grade structure strata: 2013

Grade structure	Total	Public	Private
Total	201	183	18
1 - Middle-Junior	71	71	0
2 - High school	53	49	4
3 - Other	77	63	14

NOTE: Other includes all schools with any other grade structure that includes at least one ISCED Level 2 grade, that is, grades 7, 8, or 9.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), 2010-11, and Private School Universe Survey (PSS), 2009-10.

Per international guidelines, any school declining to participate is replaced by a pre-selected similar school. This was to be implemented by selecting two potential substitutes, the school preceding the sample school in the sampling frame sorted by implicit stratum as well as the one following the sample school. These were designated as the first and second substitute schools to be available in case the original sample school declined to participate. This sampling strategy—of having two substitute schools for each original school—is used in other international education studies such as the Program for International Student Assessment (PISA).

There were several constraints on the assignment of substitutes. A sampled school was not allowed to be a substitute for another, and a given school could not be assigned to be a substitute for more than one sampled school. Furthermore, substitutes were required to be in the same explicit stratum as the sampled school. If the sampled school was the first or last school in the stratum, then the second school following or preceding the sampled school was identified as the substitute. Under these rules, it was possible to identify two substitutes for each sampled school.

2.3 Teacher Sampling

To allow for reliable estimation and modeling, while taking into account the expected levels of nonresponse, the sample size for the U.S. TALIS main study was set at 22 ISCED Level 2 teachers within each participating school, or all of the eligible teachers when the school had 22 or fewer. In schools with more than 22 eligible teachers, a random sample of 22 eligible teachers was drawn. The distribution of eligible teachers at eligible schools is an estimate since teacher lists were not available. The estimate calculated ISCED Level 2 teachers based upon the proportion of students in the school in ISCED Level 2 grades are shown in table 2-3.

Table 2-3. Estimated distribution of eligible teachers in TALIS Main Study sampling frame, by school control and grade structure strata: 2013

Grade structure	Total	Public	Private
Total	783,137	716,180	66,957
1 - Middle-Junior	279,392	278,594	798
2 - High school	201,184	189,867	11,317
3 - Other	302,561	247,719	54,842

NOTE: Other includes all schools with any other grade structure that includes at least one ISCED Level 2 grade, that is, grades 7, 8, or 9. Excludes schools with 3 or less teachers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), 2010-11, and Private School Universe Survey (PSS), 2009-10.

School coordinators were asked to provide lists of all eligible teachers in the school (using a standardized Teacher Listing Form). To reduce burden, a Teacher Listing Form was provided to the school coordinators both in hard copy and in electronic form (exhibit 2-1).

Once the Teacher Listing Form was received from a school, it was formatted for importing into *WinW3S*, the sampling software developed by the International Association for the Evaluation of Educational Achievement (IEA) and provided by OECD for use on this project. After importing the list from a school, the appropriate validation checks were run, the teachers were sampled, and the Teacher Tracking Forms were output from *WinW3S*.

Exhibit 2-1. OECD TALIS 2013 Main Study – Lower Secondary Education (i.e., 7th, 8th, and/or 9th grades) Teacher Listing Form

TALIS Country/Region:	United States
School Name:	Example School
School ID:	1234

(1) Teacher Name	(2) Sequential Number	(3) Exemption	(4) Year of Birth	(5) Gender	(6) Main Subject Domain in Grades 7, 8, or 9
Example Teacher 1	1		1951	1	1
Example Teacher 2	2		1964	2	2
Example Teacher 3	3		1972	2	3
Example Teacher 4	4	1	1958	1	4
Example Teacher 5	5		1971	2	2
Example Teacher 6	6		1979	2	1
Example Teacher 7	7		1969	1	3
…	…	…	…	…	…

Use additional sheets if necessary!

③ **Exemption:** Mark with the following code if applicable, otherwise leave blank: 1 = This teacher is also the Principal of this school

④ **Year of Birth: YYYY** ⑤ **Gender:** 1 = Female; 2 = Male; 9 = Not specified

⑥ **Main Subject Domain when teaching in grades 7, 8 and/or 9 (See pages 6 and 23 of the teacher questionnaire in appendix C for a complete list of these different categories):**

1 = Language/Language Arts (English or any foreign language); 2 = Social Science (History, Geography, Civics, Economics...); 3 = Mathematics & Science (Physics, Chemistry, Geology, Biology...); 4 = Any Other (IT/Computer Studies, etc., Music, Art, Religion, Physical Education, Home Economics, Vocational, Special Education...); 9 = Not specified

3 Instrument Development

3.1 Instrument Content Development and Field Testing

Instrument development began with a revision of the TALIS 2008 conceptual framework for 2013 (OECD 2013). Development of the survey instruments involved both refinement of 2008 survey items and development of new measures. The TALIS 2013 survey instruments were designed and field tested in spring 2012, and subsequently revised and refined for the main study data collection.

Countries were permitted to add "national only" questions/answers and answer categories. Also, each country adapted the international questionnaire to fit national terms, definitions, spelling, and punctuation.

The principal and teacher questionnaires were designed to be completed online or on paper. They went through several reviews by OECD staff to ensure international consistency of items, design, and instructions. These included the following steps:

- Make changes to OECD developed questionnaires to account for U.S. adaptations to questions (approved August 2012).
- Translate the wording of questions, answer categories, and instructions into American English (approved September 2012).
- Approve paper questionnaire layout (approved September 2012).
- Modify the OECD developed online versions to questionnaires to incorporate all U.S. changes (approved December 2012).
- Modify the OECD developed codebook to incorporate all U.S. changes (approved April 2013).

3.2 Questionnaire Preparation

The final U.S. versions of the questionnaires are contained in appendix C.[2] The principal questionnaire includes sections on principal's personal background information, school background information, school climate, school leadership, teacher appraisal and feedback, principal continuous professional development, and teacher induction and mentoring. The teacher questionnaire includes sections on teacher's background information, teacher continuous professional development, teacher appraisal and feedback, mentoring and induction, teaching practices, beliefs and attitudes, school climate, and job satisfaction.

The U.S. questionnaires differed from the international questionnaires as follows:

- Teacher questions 13 and 21 were new U.S.-only questions that were added.
- Numerous questions had additional U.S.-only answer categories: principal questions 3, 8, 17, and 19; teacher questions 10, 15, 16, 19, 24, 28, 29, 33, and 46.

[2] The international version of the questionnaires can be accessed at http://www.oecd.org/edu/school/talis.htm.

- Two international questions on teacher mobility were not included in the U.S. version.
- Numerous questions had U.S. language adaptations.

Appendix D provides full details of differences between the international and U.S. versions of the principal and teacher questionnaires.

4 School and Teacher Recruitment

The TALIS 2013 school recruitment strategy included: (1) starting recruitment at the beginning of the school year in 2012; (2) approaching schools directly, and sending information to relevant school districts and states; and (3) providing cash incentives at both the school and teacher levels.

4.1 Recruitment Materials

The materials used for recruitment included a TALIS brochure; the Summary of Activities for School Coordinators; frequently asked questions; letters to states, districts, and schools; and a list of agencies endorsing the survey. Examples of materials used at the state, district, and school level are provided in appendix A. The list of the 13 agencies endorsing TALIS 2013 is provided in appendix B.

4.2 Recruitment of Schools

Strategic Research Group (SRG) staff initiated school recruitment activities on September 10, 2012. These began with mail outs to Chief State School Officers in the states with TALIS sampled schools and school district superintendents in districts with sampled schools. Fifty-two other school districts required the review and approval of a research proposal before schools could be contacted. Formal research requests were prepared and sent to these districts. These efforts are described in section 4.4.

Mail out packages that were sent to the Chief State School Officers and school district superintendents contained the following materials:

- a letter from the NCES Commissioner;
- a TALIS brochure;
- a list of frequently asked questions; and
- a list of agencies endorsing the survey.

School packages were mailed to principals on September 10, 2012, with phone contact from SRG recruiters beginning a few days after the mailing. The materials included

- a letter from the NCES Commissioner;
- a TALIS brochure;
- a summary of activities for school coordinators;
- a list of frequently asked questions; and
- a list of agencies endorsing the survey.

Schools were asked to identify school coordinators for the TALIS data collection. The school coordinators of participating schools were offered $50, principals were offered $50 to complete the questionnaire, and teachers were offered $20 to complete the questionnaire.

Recruiters continued to contact schools by telephone and e-mail to request their participation in TALIS 2013. Substitute sample schools were contacted to participate when selected sample schools declined to participate. Recruitment efforts directed to selected schools originally were scheduled to be completed before January 2013 (at schools in districts without a formal approval process). Reluctance from schools required the recruitment period to be extended beyond what was planned, and many schools were still being recruited after data collection began in March 2013. Ultimately recruiting efforts continued into May 2013. A recurring problem that staff encountered was that some schools that approved the survey in the fall of 2012 subsequently declined participation once data collection began in 2013. Table 4-1 shows the timing of selected schools and substitute schools that agreed to participate in TALIS 2013, and those that initially agreed but subsequently declined during data collection.

Table 4-1. Number of original and substitute schools agreeing to participate in TALIS main study, by date: 2012-13

	Total schools			Original schools			Substitute schools		
Date	Agreed	Refused during data collection	Net number agreed	Agreed	Refused during data collection	Net number agreed	Agreed	Refused during data collection	Net number agreed
10/8/2012	53	†	53	53	†	53	0	†	0
11/5/2012	81	†	81	76	†	76	5	†	5
12/3/2012	88	†	88	79	†	79	9	†	9
1/7/2013	102	†	102	86	†	86	16	†	16
2/4/2013	127	†	127	93	†	93	34	†	34
3/4/2013	138	12	126	96	8	88	42	4	38
4/1/2013	148	14	134	103	8	95	45	6	39
5/13/2013	168	16	152	105	8	97	63	8	55

† Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teaching and Learning International Survey (TALIS), 2013.

The most common reasons mentioned by school staff for not participating were that they already were participating in other surveys and that schools/districts were undergoing various changes (i.e., organizational change, curriculum, etc.). In a number of cases, schools that did not participate never provided answers. SRG staff referred schools that were difficult to contact and that refused participation to NCES staff who sent e-mails and letters to schools and school districts. Beginning in March 2013, Strategic Analytics staff attempted to reach the principals of schools that refused participation in the fall of 2012 to ask them to reconsider. They also called each of the schools that approved participation in the fall but subsequently refused once data collection began in 2013. These efforts resulted in three schools agreeing to participate.

4.3 Results of School Recruitment

Of the 201 schools included in the original sample, 3 were found to be ineligible (i.e., they did not include any of grades 7, 8, or 9 or were closed). Under the sampling rules, schools that are found to be ineligible are not replaced, effectively reducing the number of original sample schools to 198. At one point, a total of 168 schools (105 original schools and 63 substitute schools) agreed to participate in TALIS 2013 as presented in table 4-1 above. However, as the study progressed, 16 school principals (8 original schools and 8 substitute schools) changed their minds during data collection, leaving 152 schools that agreed to participate. Table 4-2 summarizes participation by original and substitute schools.

Table 4-2. TALIS schools, by response status: 2013

Schools	Total schools recruited		Original schools		Substitute schools	
	Number	Percent	Number	Percent	Number	Percent
Total	302	100.0	201	100.0	101*	100.0
Participating	152	50.3	97	48.3	55	54.5
Declining	147	48.7	101	50.2	46	45.5
Ineligible	3	1.0	3	1.5	0	0.0

* Although 163 substitute schools were contacted, ultimately, only 101 were needed as original schools agreed to participate.
NOTE: Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Teaching and Learning International Survey (TALIS), 2013.

4.4 School Districts With Special Requirements

Before many schools could be contacted, approval for conducting TALIS needed to be obtained from school districts that were known to have a formal approval process in order for their schools to participate. These efforts began in September 2012 and continued throughout data collection. Depending upon the requirements of each district, a cover letter, a research application or standard proposal for research, and copies of the TALIS questionnaires were sent to each district.

For the TALIS 2013, NCES and Strategic Analytics identified 52 districts that required prior approval to conduct surveys with schools in their district based on past administrations of other NCES sponsored surveys. Twenty-five of these districts had selected schools, and the other 27 had only substitute schools. Included in these districts were 32 of 201 selected schools and 70 of 402 substitute schools.

SRG staff conducted web searches and calls to districts in August 2012 to determine what requirements needed to be satisfied before the district would approve administration of TALIS. Generally, districts required either research applications or research proposals. Often these applications requested background on the study, information on the sampling plan, instruments to be administered, school resources required, and a plan for protecting the confidentiality of data. For districts that had research requirements, applications and proposals were prepared by NCES and SRG staff based on information obtained during the initial contact with the district. The applications were submitted directly to the district by NCES and SRG. Applications were sent to all of the districts with selected schools (25) and to 14 of 27 districts with substitute schools only. By May 2013, 30 of these districts approved TALIS 2013 and nine districts refused participation. Some districts required that special procedures be followed when contacting their schools. These procedures included, but were not limited to, sending the district's letter granting permission when sending materials to the school, altering the text of the letters, and having principals formally approve survey participation in their schools.

Once districts approved the participation of their school(s), recruitment of the schools began.

4.5 Principal and Teacher Recruitment

After schools were recruited, the principal was asked to identify a school coordinator. In some cases the principal chose to serve as the school coordinator. All first contacts to school

coordinators were via e-mail, which included the school coordinator manual and a Teacher Listing Form. The e-mail included general information about the role of the school coordinator and instructions for completing the Teacher Listing Form.

Once the Teacher Listing Form was returned and teachers were selected, SRG sent principal and teacher packets to the school coordinators to be distributed. These packages contained the following:

- a cover letter to school coordinators with instructions for distributing the survey invitations and materials;
- a cover letter to principals and teachers providing instructions to access the online questionnaire; and
- to teachers only, a TALIS brochure, a list of frequently asked questions, and a list of agencies endorsing the survey (principals had received these materials previously).

The principal and teacher cover letters

- described the survey;
- provided instructions on how to access the online questionnaire (link to the NCES website, username, and password);
- explained that the confidentiality of the information collected would be protected;
- mentioned the incentive payment; and
- provided contact information to reach SRG staff to ask about the questionnaire or study.

Respondents who preferred to complete a paper version of the questionnaire were instructed to contact SRG for a copy. Four principals and 58 teachers completed paper versions of the questionnaire; 107 principals and 1,976 teachers completed online questionnaires.

Copies of the U.S. version of the questionnaires are included in appendix C.

Based on the international data collection specifications, a school needed to have at least 50 percent participation among selected teachers for it to count as a "participating" school. (Under this condition, a school would count against the overall participation rate but the collected data would nonetheless be used in analysis and reporting.) SRG staff followed up with school coordinators by telephone and e-mail to encourage participation of principals and teachers. The results of these efforts are described in greater detail in chapter 5 (Data Collection) and chapter 6 (Response Rates).

5 Data Collection

Data collection included the following steps:

- identifying a school coordinator at each school;
- obtaining a Teacher Listing Form from each school and sampling teachers;
- sending the principal and selected teachers the questionnaire packet and following up to ensure completion of the online or paper questionnaire;
- providing incentive payments to school coordinators and to principals and teachers completing questionnaires; and
- working with school coordinators to track teacher survey completion status using a Teacher Tracking Form.

All data collection activities were conducted by mail, e-mail, and telephone. Quality control activities were performed by Strategic Research Group (SRG) and Strategic Analytics staff, as well as an international quality control monitor appointed by OECD.

5.1 Identifying and Working With School Coordinators

Each participating school was required to designate a staff member to serve as school coordinator. School coordinators received a School Coordinator Manual to use in performing their activities. A significant portion of this document provided instruction on assembling a list of eligible teachers. The manual also covered distribution of the questionnaires, completing the Teacher Tracking Form, quality control that would be conducted during TALIS, and returning materials to SRG.

School coordinators were identified during recruiting (see chapter 4). Beginning on February 7, 2013, and continuing as schools agreed to participate, the school coordinators were contacted, and mailed and/or e-mailed an introductory letter along with the School Coordinator Manual and Teacher Listing Form. The Teacher Listing Form was offered as an Excel file delivered by e-mail, but was available on paper as well. SRG staff contacted school coordinators by telephone and e-mail to obtain the completed Teacher Listing Forms. Following teacher sampling, SRG mailed the principal and teacher packets to the school coordinator, who was responsible for distributing them. SRG staff remained in contact with school coordinators by telephone and e-mail to encourage the completion of the questionnaires.

5.2 Teacher Listing Form Operations

SRG received completed Teacher Listing Forms by mail or e-mail. Once received, they were reviewed for completeness and accuracy. One key check involved the number of teachers listed on the form. This was compared to an estimate of teachers from the sampling frame, and if the number differed by more than 25 percent, the school coordinator was contacted to resolve the discrepancy. As problems were discovered, school coordinators were asked to resubmit a corrected Teacher Listing Form.

Once the Teacher Listing Form was deemed to be complete and accurate, the data were entered into *WinW3S*, the sampling software provided by OECD. After importing the list from a school, the appropriate validation checks were run, the teachers were sampled, and the Teacher Tracking Forms were output from *WinW3S*. A total of 2,628 teachers (an average of 18.6 per school) were sampled. In schools with 22 or fewer eligible teachers, all were selected; in schools with 23 or more eligible teachers, 22 were randomly selected.

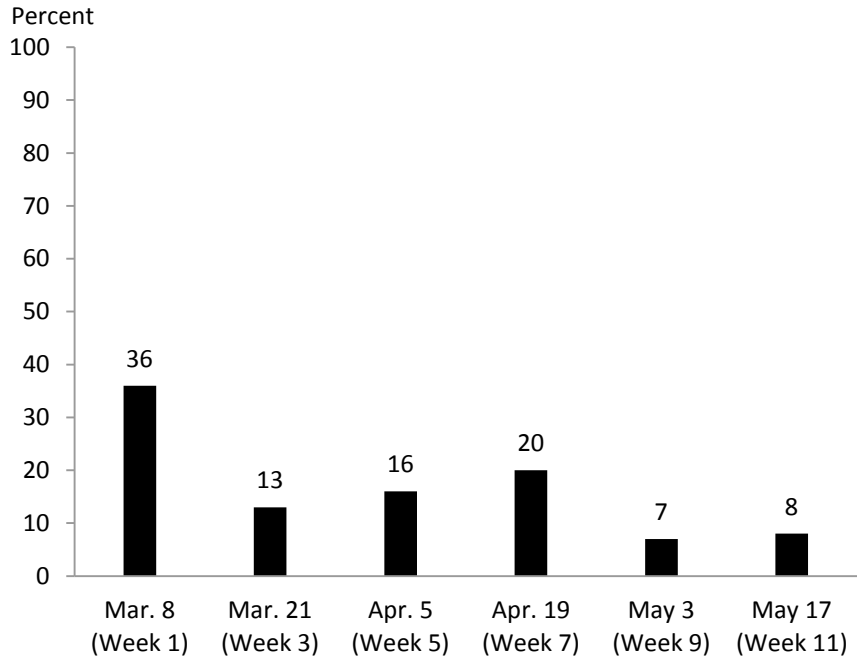
5.3 Principal and Teacher Data Collection

Following sampling, SRG staff mailed the school coordinator materials needed for the data collection. The mail out included

- a letter to the school coordinator providing information and instructions;
- the principal packet; and
- a teacher packet for each selected teacher.

As schools received these packages, data collection began. The first packages were sent at the beginning of March 2013. Because of the length of time it took to recruit many of the schools, and in some cases, receive completed Teacher Listing Forms, data collection could not be started until much later. Figure 5-1 shows the timing of the data collection mail outs. Data collection did not begin in many schools until mid-way or very late into the data collection phase. For this reason as well as the continued push to recruit additional schools, the deadline for data collection was extended from April 30, 2013, to May 31, 2013, with the approval of OECD.

Figure 5-1. Percentage of schools sent data collection materials, by time period: 2013



SOURCE: U.S. Department of Education, National Center for Education Statistics, Teaching and Learning International Survey (TALIS), 2013.

SRG staff continued to contact schools on a regular basis throughout the data collection period. The first follow-up calls began on March 21, 2013. Subsequently, the school coordinator was called and/or e-mailed at least once a week. These contacts continued until all sampled teachers had responded or data collection ended. From mid-April through May, NCES staff also contacted schools to encourage participation.

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6 Response Rates

6.1 School Participation

As described in chapter 2, TALIS international requirements stipulate that the weighted school response rate target is a minimum of 75 percent (after substitution). A minimum of 50 percent of schools from the original sample of schools are required to participate for data to be included in the international database. Substitute schools are allowed to be used (selected during the sampling process) to increase the response rate. TALIS 2013 also requires a minimum participation rate of 50 percent of sampled teachers from each school in order for that school and its respondents to be included.

One-hundred fifty-two schools were recruited to participate in TALIS 2013. (See section 4.3, table 4-2.) One of these schools never identified a school coordinator, leaving 151 schools. A further 11 of these schools did not return their Teacher Listing Form, resulting in a final total of 140 participating schools. Of these, 122 schools had 50 percent or more response among teachers (78 original schools and 44 substitute schools). This resulted in the unweighted and weighted school response rates shown below in table 6-1.

Table 6-1. TALIS school response rates: 2013

School response rates*	Unweighted response rate	Weighted response rate
Before substitution	39.4**	36.9
After substitution	61.6***	60.8

* To be a counted as a responding school, at least 50 percent of selected teachers had to return questionnaires.

** Based on 78 original schools out of 198 in-scope schools.

*** Based on 78 original schools plus 44 substitute schools out of 198 in-scope schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teaching and Learning International Survey (TALIS), 2013.

The TALIS 2013 standards also require that nonresponse bias analyses need to be conducted if weighted school response rates are less than 75 percent (after substitution). NCES statistical standards for surveys stipulate that a nonresponse bias analysis is required at any stage of data collection with a weighted unit response rate less than 85 percent (without substitution). The nonresponse bias analyses are provided in appendix E.

6.2 Principal and Teacher Participation

Table 6-2 reports the participation status of principals and teachers.

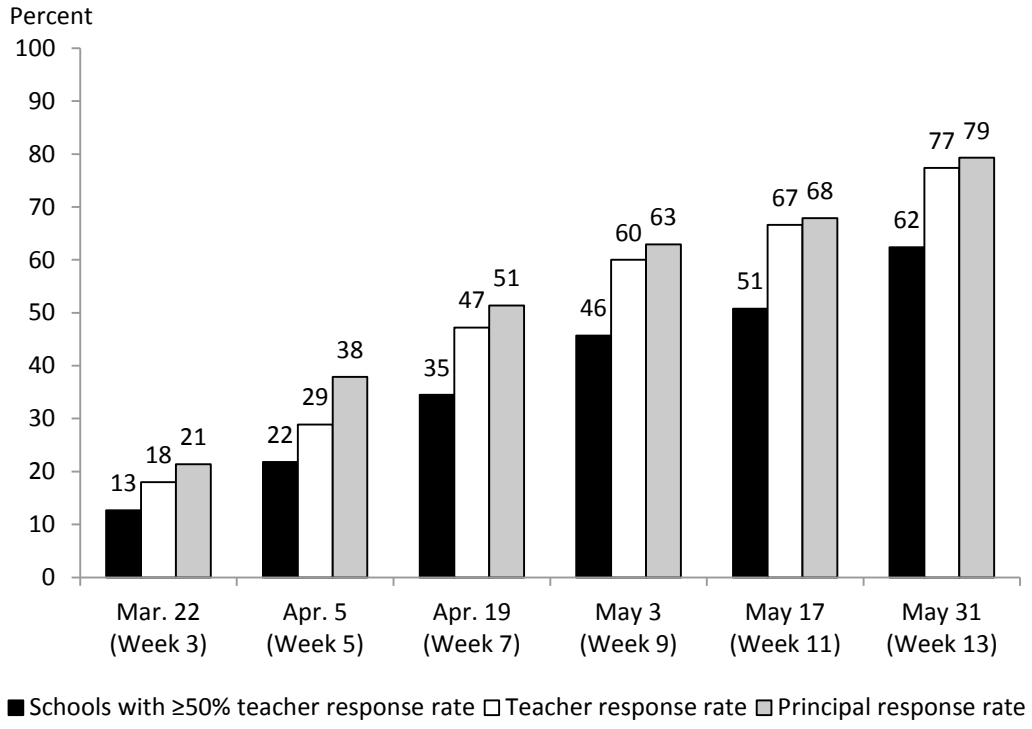
Table 6-2. TALIS principal and teacher participation: 2013

Task	Number	Out of a possible	Percent
Teacher listing forms sent to school coordinators	151	152	99
Teacher listing forms completed	140	151	92
Selected schools	89	97	92
Substitute schools	51	55	93
Schools sent principal and teacher surveys	140	140	100
Teacher surveys completed	2,034	2,628	77
Principal surveys completed	111	140	79
Schools with at least 50 percent teacher response	122	140	87
Selected schools	78	89	88
Substitute schools	44	51	86

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teaching and Learning International Survey (TALIS), 2013.

Figure 6-1 shows the response rates of principals and teachers among the 140 participating schools, as well as the percentage of schools with at least 50 percent teacher response, throughout the 13 weeks of data collection. The left-hand column, March 22 (Week 3), shows the response after the third week of data collection, and subsequent columns show progress over the following 10 weeks. By the close of data collection close to 80 percent of principals and teachers responded.

Figure 6-1. TALIS response rates in participating schools, by time period: 2013



SOURCE: U.S. Department of Education, National Center for Education Statistics, Teaching and Learning International Survey (TALIS), 2013.

Figure 6-2 lays out the OECD participation rates and standards for inclusion in TALIS.

Figure 6-2. OECD participation standards for TALIS: 2013

School participation		After substitution		
		≥ 75 percent	≥ 50 percent but < 75 percent with low response bias	≥ 50 percent but < 75 percent with high response bias
Before substitution	≥ 75 percent	Good	†	†
	≥ 50 percent but < 75 percent	Fair	Fair	Poor
	< 50 percent	Insufficient	Insufficient	Insufficient

† = not applicable.
SOURCE: Organization for Economic Cooperation and Development (OECD). (2014). *TALIS 2013 Technical Report*.

6.3 Item Response Rates

NCES standards require nonresponse bias analysis when unit-level nonresponse is less than 85 percent as well as item-level analysis for all items with an item-level response rate below this same threshold. The full nonresponse bias analyses for each are included as appendix E. This section provides a summary of the findings of the analysis.

In examining school-level nonresponse, the chi-square analysis results showed that one of the variables examined (grade structure) had a statistically significant relationship with school participation. The chi-square test used in this analysis was the Rao-Scott Adjusted chi-square test that accounts for the complex sample design used to collect the data. It is also referred to as the Satterthwaite-adjusted chi-square. The number of degrees of freedom for the chi-square test, normally given as (c - 1), where c is the number of categories of the categorical variable for each distribution, is also modified on account of the complex design. The modified test statistic is then compared to the chi-square distribution with the appropriate number of degrees of freedom to determine whether the difference in the two distributions is statistically significant. For a detailed description of the technique, see Rao and Scott (1984) or Rao and Thomas (2003).

Based on the results of row-level *t*-tests, middle or junior high schools were found to be overrepresented among participating original schools while schools organized around other grade combinations were underrepresented among participating original schools. In addition, row-level *t*-tests indicated public schools were also overrepresented among participating original schools while private schools were underrepresented. These results held for schools in the original sample but not when all participating schools (original and substitute) were considered. In the logistic regression analysis, none of the stratification variables were found to be significantly related to participation status, nor was the overall measure of fit of the model. Thus, the overall regression equation did not provide statistically significant evidence of differences between school-level respondents and nonrespondents when all participating schools were taken into consideration.

Indeed, when the TALIS school estimates were computed using adjusted weights, the results were similar: neither the chi-square tests of independence nor row-level *t*-tests showed evidence of significant differences between all participating schools and sampled eligible schools by school control, grade structure, urbanicity, Census region, or percent minority students in school at the $p < .05$ percent level.

The investigation into nonresponse bias at the school level for the U.S. TALIS 2013 school sample showed that there was no statistically significant relationship detected between participation status and the school characteristics that were available for analysis. It also suggested that there was evidence that the use of substitute schools reduced the potential for bias, based on an examination of the relative bias between estimates across the variables examined here. The application of nonresponse adjusted weights appears to have reduced, but certainly not eliminated, the potential for bias as evidenced by the smaller measures of bias in most categories.

The investigation into nonresponse bias at the teacher level, which is the unit level of analytic interest in TALIS, revealed that two of the variables examined (school control and grade structure) showed statistically significant relationships with teacher participation when examining base-weighted distributions. Based on the results of row-level *t*-tests, public school teachers were overrepresented among participating teachers in original schools while private school teachers were underrepresented among participating teachers. When taking into consideration all participating teachers at both original and substitute schools, and accounting for the nonresponse adjustments, these results did not hold. The multivariate results were consistent with the bivariate findings in most respects. Neither school control nor grade structure were significant in the multivariate setting, but the percent of minority students was significantly related to nonresponse in the regression model in spite of the nonsignificant results for the model.

Further evidence of potential bias in the U.S. TALIS teacher sample came from a comparison to a similar sample of teachers in the Schools and Staffing Survey (SASS). Based on comparisons of a limited number of key demographic characteristics shared between the two studies, the U.S. TALIS teacher sample appears to overrepresent teachers who report a full-time contract status and those that have the most number of years of teaching experience (i.e., 10+ years) while it underrepresents teachers who report a part-time contract status and those with the fewest years of teaching experience (i.e., less than 4 years).

Taken all together, the investigation of unit-level nonresponse in the U.S. TALIS sample reveals there is potential for nonresponse bias in some estimates at the school and teacher level, although the amount of bias varies greatly depending on the unit level (school or teacher) and the variable being examined.

The item-level nonresponse bias analysis was limited to the single item with less than an 85 percent response rate that required analysis, item 24O2 in the teacher questionnaire. The analysis of the item on professional development in the area of implementation of national/state curriculum standards showed evidence of potential bias, particularly with respect to several categories of age and experience. There was little evidence of bias with respect to gender and full-time teaching status, but part-time teachers were less likely to respond to this item. Care should be taken when analyzing this item, particularly with respect to the variables that showed evidence of potential bias.

7 Data Processing and Weighting

This chapter provides an overview of the data processing and weighting procedures for the U.S. component of TALIS 2013. The data processing section begins with a section on the processing that occurred at Strategic Research Group (SRG), the National Processing Center for the United States. The U.S. efforts followed the instructions of the primary processing agent for all of the international components, the IEA-Data Processing and Research Center (IEA-DPC) group in Hamburg, Germany. The second section provides an overview of the primary tasks performed by the IEA-DPC for data from all participating countries. Following the data processing, an overview of the weighting and sampling error details are provided. Significantly more detail on each of these topics may be found in the OECD's *TALIS 2013 Technical Report* (2014b).

7.1 Data Entry and Verification

The data collection in the United States was led by the staff at SRG. The SRG staff were responsible for processing the Teacher Tracking Forms and entering them into the *WinW3S* software for teacher sampling. The primary data collection mode in the United States was through online instruments. The online instruments were administered using the Online Data Collection (ODC) software provided by the IEA-DPC, but that resided on an NCES server for the U.S. collection. Paper responses were entered and verified using the Data Management Expert (DME) software, also provided by the IEA-DPC. The data entry and verification steps consisted of SRG staff entering the paper responses, as well as managing the collection of the online and paper responses. In the case of paper responses, SRG staff entered and verified the data and, at the end of collection produced a DME file for both the teacher and school file.

The verification steps handled by SRG staff included an automatic validation of the paper surveys entered into the DME, as well as data checks that checked for duplicate codes and data output outside the expected valid range or values defined as valid. SRG staff reviewed the reports and verified that invalid entries had been correctly entered and that the available data corresponded to the expected based upon the participation indicators and entries on the tracking forms. The SRG staff provided the IEA-DPC staff with detailed documentation but did not make any changes to the data other than correcting data entry errors.

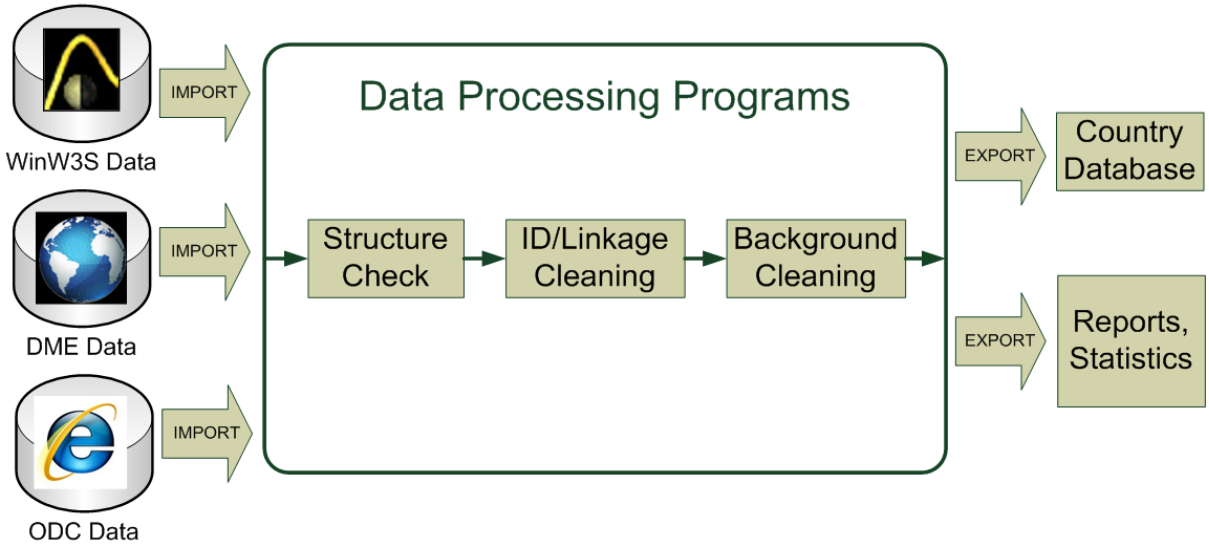
The U.S. staff provided the IEA-DPC with the three components that were merged to provide the U.S. data file. The first piece was the *WinW3S* file that produced the teacher sample file from the Teacher Listing Forms that were input into it as described in chapter 5. The second and third files were the survey data from the paper and online collections. For each of the teacher and principal data collections, the paper surveys were entered and verified in the DME and online responses were output and verified using the ODC software. Additional details on the steps performed at the U.S. national data center are detailed in chapter 8 of the *TALIS 2013 Technical Report* (OECD 2014b).

7.2 Data File Cleaning and Editing

The majority of data file cleaning and editing was performed by the IEA-DPC. The three primary components of the final files as described above are displayed in figure 7-1 below. As can be

seen in the figure, the primary data processing actions occurred at the DPC. The DPC staff contacted the U.S. staff to investigate discrepancies or confirm paper responses had been entered correctly, but all of the data editing and data file production occurred at the DPC.

Figure 7-1. IEA-DPC Data Cleaning Process: 2013



SOURCE: Organization for Economic Cooperation and Development (OECD). (2014). *TALIS 2013 Technical Report*.

Upon receipt of the *WinW3S*, DME, and ODC data, the data processing proceeded as indicated in the figure and described below.

- Identification variable and linkage cleaning: The initial step of data processing included confirming that data were consistent and correct across the teacher listing, sampling and tracking, and questionnaire data. Duplicate cases were investigated and inconsistent data were checked against the different sources of data to resolve any problems. This represents the first two steps in figure 7-1.
- Resolving inconsistencies in questionnaire data: The second step of data processing involved identifying and resolving inconsistencies in the questionnaire data. Examples of this type of processing included resolving discrepancies between filter questions and follow-up questions; investigating implausible or out of range values; and resolving discrepancies between respondent answers and Teacher Tracking Form information. Questions may have been forwarded to SRG staff and discrepancies without apparent answers based upon the standard rules were resolved after consultation with the U.S. staff. The full set of data cleaning steps are documented in chapter 8 of the *TALIS 2013 Technical Report* (OECD 2014b).
- Handling of missing data: The final step in the data processing included the handling of missing data and assigning the appropriate missing data values. Four missing data codes were used:
    - Omitted/invalid (9). Respondent had an opportunity to answer question but did not or did provided an invalid response.

- Not administered (8). If all responses were empty, all values were assigned this code. This code is the missing value assigned to all items on the school file when there was unit-level nonresponse, but the school case was placed on the file because more than 50 percent of the teachers at the school responded.
- Not reached (7). This represents the same as an omitted/invalid response, but is assigned to all items after the last valid response.
- Logically not applicable (6). This represents a valid skip.

More details on this process, as well as examples of each type of data edit and missing value code are available in chapter 8 of the *TALIS 2013 Technical Report* (OECD 2014b).

7.3 Interim Data Products and the International Database

Data processing of the TALIS database was an iterative process and the IEA-DPC provided the OECD and each country's National Project Managers (NPMs) with a new version of their data file after each step in the process. This process ensured that the NPMs had a chance to review their data and run additional analysis to investigate issues and validate the data. The first file was received in September 2013, and these files were used to produce the preliminary analysis tables reviewed at the NPM meeting in Bucharest, Romania, in October 2013. NPMs were allowed time to review their files and raise any issues concerning their data. A second file was issued in November 2013, and an updated version was delivered in January 2014. The interim products included detailed data processing and weighting documentation and summary statistics.

The International Database

The interim products described above included observations for each sampled unit, regardless of response. The draft and final international database included only records that met the sampling standards. Cases were removed for respondent-level nonparticipation, as well as for within-school nonparticipation. For example, principal respondents that participated were removed when fewer than 50 percent of the teachers responded from their school. The international database also included confidentiality measures to protect respondents including scrambled IDs as well as the removal of detailed stratification information. Final weights and replicate weights were included, but the various weighting factors described below were not included in the final database.

7.4 Weighting and Sampling Errors

This section provides an overview of the weighting of the data to produce estimates as well as the estimation of sampling error. The use of sampling weights is necessary for the computation of statistically sound, nationally representative estimates when using a complex survey sampling procedure. Survey weights adjust for the probabilities of selection for individual schools and teachers. TALIS used a stratified multi-stage probability sampling plan with unequal probabilities of selection. The school sampling included a probability proportional to size systematic sample, while the teacher sample was a simple random sample within selected schools. Survey weighting for all participating countries was carried out by Statistics Canada, as part of the TALIS consortium. Detailed descriptions of the sampling and weighting process,

including formulas for the basic weights and all adjustment factors are included in chapter 9 of the *2013 TALIS Technical Report* (OECD 2014b).

7.4.1 School Weights

The schools weights were a function of the school base weight, or design weight, and a nonresponse adjustment factor.

The final school weight is the product of

(School Base Weight) and (Nonresponse Adjustment Factor)

where:

> *School Base Weight* is the probability of selection using the systematic random sampling scheme with probability proportional to size.
>
> *Nonresponse Adjustment Factor* is an adjustment that allocates the weight of the nonresponding schools to responding schools so that estimates reflected the population the sample was intended to represent.

7.4.2 Teacher Weights

The teacher weighting was more complicated than the school weighting because, while it was a simple random sample at the school level, it included the school base weight as well as four additional adjustment factors. The final teacher weight adjusted for school nonresponse, teacher nonresponse, and incidental inclusions, and included a multiplicity adjustment. The school base weight incorporates the probability of selection of the school into the teacher weight and the nonresponse adjustments account for participation, or lack of participation, at each level. The incidental inclusion adjustment accounts for teachers who are also principals in the U.S. case. The multiplicity adjustment factor adjusts for the fact that teachers working in more than one ISCED Level 2 school had more chance of being selected in the sample.

The final teacher weight is the product of

(School Base Weight) and (School Nonresponse Adjustment) and (Teacher Base Weight) and (Teacher Nonresponse Adjustment) and (Adjustment for Incidental Exclusions) and (Multiplicity Adjustment)

where:

> *School Base Weight* is the probability of selection using the systematic random sampling scheme with probability proportional to size.
>
> *School Nonresponse Adjustment* is an adjustment that accounts for nonresponse at the school level. School nonresponse adjustments were applied within the explicit strata, reallocating the weight of nonresponding schools within each stratum to the responding schools.

Teacher Base Weight is the inverse of the probability of selection of the teacher at the time of selection.

Teacher Nonresponse Adjustment is an adjustment that allocates the weight of the nonresponding teachers to responding teachers so that estimates reflected the population the sample was intended to represent. The teacher nonresponse adjustment included adjustments within each explicit strata that accounted for nonresponding teachers as well as teachers that left the school after having been selected for the sample.

Adjustment for Incidental Exclusions is an adjustment to account for teachers who are also principals in the U.S. case.

Multiplicity Adjustment is an adjustment that accounts for the fact that teachers working in more than one ISCED Level 2 school had more chance of being selected in the sample.

Additional details and specific formulas are available in chapter 9 of the *TALIS 2013 Technical Report* (OECD 2014b).

7.5 Sampling Error with Balanced Repeated Replication (BRR)

Estimating sampling errors when dealing with a complex design like TALIS must incorporate the survey design and unequal weights to obtain unbiased estimates. Not accounting for either may lead to significant underestimation of the sampling error. There are a number of methods that take into account the complex sample design and provide appropriate estimates of sampling errors. The Balanced Repeated Replication (BRR) method is used for TALIS and 100 replicate weights are provided for the implementation of this method in the estimation of standard errors for all analysis when using the appropriate software and commands. The *TALIS 2013 Technical Manual* (OECD 2014b) covers this in greater detail and the IEA International Database (IDB) Analyzer software, available on the Internet (http://www.iea.nl/data.html), uses the replicate weights to produce the appropriate standard errors when used in conjunction with SPSS.

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8 Data Availability

8.1 TALIS 2013 International Datasets

Data from TALIS 2013 for all countries can be obtained from the OECD. At the time of this report's printing, these data were available from http://www.oecd.org/edu/school/talis.htm. Users can either select the entire international database or individual country files. Additional details on the international database, appropriate analysis using these data files, and detailed documentation on all aspects of the collection, processing, and production of the TALIS data files is available in the *TALIS 2013 Technical Report* (OECD 2014b).

Files available for downloading include the following:

Questionnaires

- International teacher questionnaire
- International principal questionnaire
- U.S. teacher questionnaire
- U.S. principal questionnaire

Codebooks

- Codebook for teacher questionnaire data file
- Codebook for school questionnaire data file

Data sets in SPSS format

- SPSS teacher questionnaire data file
- SPSS school questionnaire data file

Data sets in CSV format

- Teacher questionnaire data file
- School questionnaire data file

Technical Documentation

- *TALIS 2013 Technical Report* (OECD 2014b)

8.2 TALIS 2013 U.S. National Data Files

Data collected in the United States for TALIS 2013 can be downloaded from the international site (http://www.oecd.org/edu/school/talis.htm) or from the NCES website (http://nces.ed.gov/surveys/talis/talis2013/index.asp) when the U.S. data are released in late 2014. The files on the international website contain data for all countries, including the United States. The NCES files will include several national variables not included in the international file. Details on the U.S. national variables are included in appendix D. Details on the data files available are as follows:

Teacher Data

- **ASCII Data File:** The ASCII data are comma-delimited files that include items from the teacher questionnaire. The file includes derived variables, but not the indexes because the United States did not meet participation requirements to be included in the international analysis.
- **ASCII File Layout:** The ASCII file layout includes variable names, variable location, and variable format information.
- **SPSS Data File:** The SPSS data file includes all variables on the international file release with appropriate labels and formats including the U.S.-specific variables, in an SPSS file version 22.
- **Codebook File:** The codebook file includes variable names, questionnaire item numbers, variable location and format information, variable label, question text, values, and frequencies.

School Data

- **ASCII Data File:** The ASCII data are comma-delimited files that include items from the school questionnaire. The file includes derived variables, but not the indexes because the United States did not meet participation requirements to be included in the international analysis.
- **ASCII File Layout:** The ASCII file layout includes variable names, variable location, and variable format information.
- **SPSS Data File:** The SPSS data file includes all variables on the international file release with appropriate labels and formats including the U.S.-specific variables, in an SPSS file version 22.
- **Codebook File:** The codebook file includes variable names, questionnaire item numbers, variable location and format information, variable label, question text, values, and frequencies.

8.3 Confidentiality

The TALIS 2013 data are hierarchical and include principal and teacher data from the participating schools. Confidentiality analyses for the United States were designed to provide reasonable assurance that public-use data files issued by the TALIS consortium and NCES would not allow identification of individual U.S. school principals or teachers when compared against other public-use data collections. Disclosure limitations included identifying and masking potential disclosure risks to TALIS school principals and including an additional measure of uncertainty to school and student identification through random swapping of data elements within the student and school files.

8.4 Restricted-Use Data Availability

The international database and U.S. public-use data files have undergone the confidentiality procedures described in section 8.3 to protect the confidentiality of participating principals and teachers. Researchers with an NCES restricted-use license may obtain a restricted-use version of the TALIS data files that includes school identification information that allows researchers to link TALIS school-level information to other NCES databases.

9 Selected Tables

The TALIS study was based on scientifically drawn samples of schools and teachers designed to be representative of each country's teachers of ISCED Level 2 students. In the United States, these are teachers of students in grades 7 through 9 (here labeled lower secondary education teachers for convenience). Data standards set by the TALIS Board of Participating Countries to ensure valid and reliable comparisons across education systems required each system to have valid responses from at least 50 percent of original schools and at least 75 percent of all sampled schools (both original and substitute schools; see chapter 6 for details on U.S. response rates). In addition, at least 50 percent of sampled teachers within each school had to respond to the questionnaire in order for the school to count toward the overall response rate. The U.S. response rate was 36.9 percent of original schools (before substitution; weighted) and 60.8 percent after substitution (weighted). Based on these international criteria, the United States did not achieve an acceptable level of response, the only country of 34 participating education systems to be so designated. As allowed under the international technical standards, the TALIS Board agreed that the U.S. response rate and quality of collected data were nonetheless of sufficiently high quality to report based, in part, on an initial nonresponse bias analysis conducted by the United States and submitted to the OECD for consideration. However, because of the low U.S. response rate, the U.S. data are shown separately from the other participating education systems that achieved acceptable response rates and the U.S. data are also not included in international averages. One additional consequence is that the U.S. data are not included in any of the indices or figures created for and included in the international TALIS database available from the OECD (http://www.oecd.org) and reported in the international TALIS 2013 report, *TALIS 2013 Results: An International Perspective on Teaching and Learning* (OECD 2014a).

The following tables are a subset of those published in the international TALIS 2013 report. These data tables have been reviewed and are being presented here to provide interested data users with a preview of the kinds of data available for secondary analysis. Data users are cautioned that the U.S. TALIS 2013 data may require confirmation of the estimates using other data sources, such as the Schools and Staffing Survey (SASS), when possible. Those interested in complex statistical techniques should note the potential for bias in estimates using the U.S. TALIS data file with the included weights. It is recommended that data users make it clear in all analyses that the United States did not meet the international participation rate standards which may introduce bias in the estimates. More information on the potential biases currently known in the U.S. data are presented in the nonresponse bias analysis in appendix E of this report.

Table 9-1. Percentage of lower secondary education teachers, by sex, age group, average age, and education system: 2013

Education system	Female		Younger than 25 years		Aged 25-29 years		Aged 30-39 years	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	59.2	(1.37)	4.2	(0.47)	11.5	(0.88)	22.9	(1.09)
Brazil	71.1	(0.67)	4.6	(0.41)	13.0	(0.56)	36.2	(0.71)
Bulgaria	81.2	(0.78)	0.6!	(0.20)	2.8	(0.39)	18.3	(0.89)
Chile	62.8	(1.33)	2.9	(0.47)	18.2	(1.12)	28.5	(1.28)
Croatia	74.3	(0.75)	0.4!	(0.15)	13.3	(0.59)	34.4	(0.78)
Cyprus	70.1	(1.14)	0.6!	(0.22)	6.0	(0.51)	37.0	(1.27)
Czech Republic	76.5	(0.69)	0.8	(0.15)	10.0	(0.63)	26.5	(0.95)
Denmark	59.6	(1.23)	0.4!	(0.14)	5.6	(0.77)	29.7	(1.36)
Estonia	84.5	(0.59)	1.3	(0.22)	6.1	(0.55)	17.2	(0.84)
Finland	72.4	(0.75)	0.3!	(0.10)	7.4	(0.55)	28.4	(0.94)
France	66.0	(0.74)	0.7	(0.17)	7.8	(0.69)	32.6	(0.96)
Iceland	71.9	(1.19)	0.6!	(0.20)	5.7	(0.64)	28.2	(1.30)
Israel	76.3	(1.35)	1.6	(0.29)	12.1	(1.20)	29.6	(1.01)
Italy	78.5	(0.75)	#	†	1.0	(0.18)	15.7	(0.69)
Japan	39.0	(0.80)	5.3	(0.41)	13.3	(0.63)	23.4	(0.76)
Korea, Republic of	68.2	(1.07)	1.2	(0.34)	9.7	(0.55)	28.4	(1.21)
Latvia	88.7	(0.62)	1.6	(0.38)	3.3	(0.46)	17.9	(1.17)
Malaysia	70.5	(0.96)	0.6!	(0.19)	17.7	(0.82)	34.2	(0.88)
Mexico	53.8	(1.12)	2.6	(0.41)	10.0	(0.74)	29.2	(1.06)
Netherlands	54.6	(1.27)	4.4	(0.91)	12.7	(0.94)	23.4	(1.19)
Norway	61.0	(1.00)	1.5	(0.38)	9.7	(0.83)	28.5	(1.02)
Poland	74.9	(1.01)	0.8	(0.20)	7.8	(0.57)	35.0	(0.95)
Portugal	73.2	(0.82)	#	†	1.2	(0.24)	24.2	(0.89)
Romania	69.2	(0.99)	3.6	(0.59)	9.9	(0.68)	38.6	(1.14)
Serbia	65.6	(0.74)	1.2	(0.21)	9.1	(0.59)	34.4	(1.01)
Singapore	65.0	(0.89)	5.0	(0.36)	26.8	(0.80)	37.9	(0.88)
Slovak Republic	81.9	(0.75)	0.5	(0.14)	10.8	(0.71)	30.9	(0.95)
Spain	58.8	(0.95)	‡	†	2.6	(0.39)	23.2	(0.99)
Sweden	66.5	(0.80)	0.6	(0.16)	4.4	(0.45)	25.7	(0.99)
Abu Dhabi-United Arab Emirates	58.9	(1.89)	1.4	(0.27)	10.6	(0.89)	45.3	(1.53)
Alberta-Canada	60.3	(1.26)	2.3	(0.47)	16.1	(1.02)	33.3	(1.43)
Belgium-Flemish	68.1	(1.37)	5.8	(0.53)	17.8	(0.73)	30.5	(1.07)
England-United Kingdom	63.2	(1.09)	3.8	(0.36)	17.1	(0.76)	34.4	(1.19)
International average[1]	68.1	(0.18)	1.9	(0.06)	10.0	(0.12)	29.2	(0.18)
United States	64.4	(1.06)	3.1	(0.52)	12.6	(1.30)	28.6	(1.14)

See notes at end of table.

Table 9-1. Percentage of lower secondary education teachers, by sex, age group, average age, and education system: 2013—Continued

	Aged 40-49 years		Aged 50-59 years		Aged 60 or more		Average age	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Average	(S.E.)
Australia	24.3	(1.35)	30.2	(1.45)	6.9	(0.63)	43.4	(0.29)
Brazil	30.2	(0.66)	13.7	(0.53)	2.3	(0.24)	39.2	(0.21)
Bulgaria	31.5	(1.11)	40.9	(1.21)	5.8	(0.52)	47.4	(0.23)
Chile	20.2	(1.09)	23.3	(1.33)	7.1	(0.89)	41.3	(0.45)
Croatia	21.5	(0.78)	17.8	(0.79)	12.6	(0.62)	42.6	(0.23)
Cyprus	26.2	(1.14)	28.2	(1.13)	2.0	(0.34)	42.7	(0.23)
Czech Republic	27.4	(0.91)	27.4	(0.91)	7.8	(0.54)	44.2	(0.24)
Denmark	28.5	(1.47)	24.7	(1.33)	11.1	(0.93)	45.0	(0.29)
Estonia	27.2	(0.91)	31.9	(0.99)	16.3	(1.02)	47.9	(0.31)
Finland	31.0	(0.92)	27.4	(0.98)	5.4	(0.52)	44.1	(0.23)
France	32.7	(0.88)	21.5	(0.82)	4.7	(0.43)	42.6	(0.26)
Iceland	33.8	(1.28)	22.1	(1.15)	9.6	(0.76)	44.6	(0.30)
Israel	29.4	(0.99)	21.3	(0.93)	6.0	(0.61)	42.1	(0.41)
Italy	32.9	(0.92)	39.2	(1.00)	11.1	(0.55)	48.9	(0.20)
Japan	27.1	(1.02)	28.1	(1.06)	2.8	(0.37)	41.9	(0.24)
Korea, Republic of	33.5	(1.09)	26.4	(1.26)	0.9	(0.19)	42.4	(0.28)
Latvia	33.6	(1.57)	33.1	(1.14)	10.5	(0.77)	47.1	(0.32)
Malaysia	34.9	(1.05)	12.6	(0.63)	#	†	38.9	(0.23)
Mexico	32.3	(1.01)	21.9	(1.03)	4.0	(0.47)	42.1	(0.30)
Netherlands	22.6	(1.05)	29.4	(1.37)	7.5	(0.59)	43.2	(0.42)
Norway	26.4	(1.07)	18.8	(0.82)	15.2	(1.25)	44.2	(0.44)
Poland	33.0	(1.16)	21.6	(0.88)	1.8	(0.34)	41.9	(0.20)
Portugal	46.6	(0.93)	25.5	(0.94)	2.4	(0.28)	44.7	(0.19)
Romania	21.0	(0.93)	17.9	(0.78)	9.0	(0.67)	41.6	(0.26)
Serbia	25.1	(0.78)	20.4	(0.72)	9.9	(0.61)	43.1	(0.23)
Singapore	18.6	(0.70)	8.6	(0.51)	3.0	(0.30)	36.0	(0.18)
Slovak Republic	25.3	(0.86)	25.4	(0.95)	7.1	(0.63)	43.4	(0.26)
Spain	38.8	(0.84)	31.8	(0.98)	3.5	(0.35)	45.6	(0.24)
Sweden	31.4	(1.03)	24.5	(0.81)	13.3	(0.70)	46.0	(0.26)
Abu Dhabi-United Arab Emirates	31.0	(1.09)	10.1	(0.82)	1.6	(0.32)	38.7	(0.30)
Alberta-Canada	26.9	(1.29)	18.6	(1.15)	2.8	(0.39)	40.1	(0.32)
Belgium-Flemish	22.0	(0.95)	23.2	(0.89)	0.7	(0.18)	39.3	(0.23)
England-United Kingdom	24.6	(0.85)	17.9	(0.69)	2.2	(0.35)	39.2	(0.26)
International average[1]	28.8	(0.18)	23.8	(0.17)	6.3	(0.10)	42.9	(0.05)
United States	25.4	(1.09)	22.7	(1.05)	7.7	(0.74)	42.2	(0.39)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-2. Percentage of lower secondary education teachers, by highest level of formal education completed and education system: 2013

	Below ISCED level 5[1]		ISCED level 5B[1]		ISCED level 5A[1]		ISCED level 6[1]	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	‡	†	#	†	98.9	(0.21)	0.9	(0.19)
Brazil	4.5	(0.51)	1.8	(0.23)	93.5	(0.60)	0.3	(0.06)
Bulgaria	1.0	(0.23)	7.8	(0.75)	90.8	(0.81)	0.4!	(0.15)
Chile	0.5!	(0.17)	17.9	(1.32)	81.1	(1.30)	0.5!	(0.17)
Croatia	†	†	17.7	(0.77)	81.9	(0.78)	0.4!	(0.11)
Cyprus	†	†	0.7	(0.16)	96.2	(0.51)	3.1	(0.48)
Czech Republic	4.4	(0.44)	1.9	(0.27)	89.2	(0.65)	4.5	(0.42)
Denmark	2.1	(0.45)	0.6	(0.17)	97.1	(0.52)	‡	†
Estonia	5.2	(0.50)	5.9	(0.46)	88.5	(0.73)	0.4	(0.10)
Finland	1.1	(0.20)	2.9	(0.39)	94.5	(0.49)	1.4	(0.27)
France	0.9	(0.18)	3.6	(0.38)	93.4	(0.49)	2.2	(0.29)
Iceland	10.0	(0.91)	4.7	(0.47)	85.3	(0.97)	#	†
Israel	0.8	(0.17)	1.5	(0.30)	96.4	(0.39)	1.3	(0.22)
Italy	3.6	(0.37)	15.8	(0.61)	78.1	(0.70)	2.5	(0.35)
Japan	‡	†	3.5	(0.37)	95.8	(0.42)	0.6!	(0.24)
Korea, Republic of	‡	†	‡	†	98.0	(0.27)	1.8	(0.25)
Latvia	1.4	(0.30)	1.5	(0.33)	97.0	(0.42)	‡	†
Malaysia	1.7	(0.36)	6.8	(0.66)	91.4	(0.74)	‡	†
Mexico	8.7	(0.61)	1.5	(0.24)	89.1	(0.66)	0.7	(0.18)
Netherlands	4.1	(0.77)	0.7!	(0.22)	94.6	(0.77)	0.7	(0.18)
Norway	2.0	(0.42)	†	†	97.9	(0.42)	‡	†
Poland	‡	†	#	†	98.8	(0.25)	1.1	(0.25)
Portugal[2]	0.3!	(0.12)	2.4	(0.24)	84.8	(0.63)	12.4	(0.63)
Romania	1.2	(0.30)	5.4	(0.52)	92.3	(0.64)	1.1	(0.19)
Serbia	1.6	(0.26)	15.5	(0.77)	82.7	(0.84)	0.1!	(0.05)
Singapore	1.8	(0.24)	5.5	(0.42)	92.4	(0.51)	0.3!	(0.11)
Slovak Republic	1.6	(0.31)	‡	†	97.5	(0.37)	0.7	(0.15)
Spain	3.4	(0.31)	1.0	(0.19)	91.4	(0.50)	4.2	(0.35)
Sweden	3.8	(0.37)	7.7	(0.49)	87.9	(0.70)	0.6	(0.14)
Abu Dhabi-United Arab Emirates	1.8!	(0.73)	4.7	(0.59)	92.6	(0.94)	0.9	(0.27)
Alberta-Canada	‡	†	1.0!	(0.31)	97.5	(0.44)	1.4	(0.28)
Belgium-Flemish	2.6	(0.31)	85.4	(0.80)	11.8	(0.76)	0.2!	(0.08)
England-United Kingdom	1.4	(0.30)	1.7	(0.27)	95.2	(0.54)	1.6	(0.30)
International average[3,4]	2.3	(0.07)	7.1	(0.09)	89.5	(0.11)	1.4	(0.04)
United States	‡	†	0.4!	(0.17)	98.0	(0.48)	1.4	(0.42)

† Not applicable or not administered in the country.
# Rounds to zero.
! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.
‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.
[1] Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED 5 represents the first stages of tertiary education and is split between ISCED levels 5A and 5B. ISCED level 5A programs are generally longer and more theory-based, while 5B programs are typically shorter and more practical and skills oriented. ISCED level 5A typically includes Bachelor's degrees and Master's degrees but no distinction was made between ISCED level 5A (Bachelor) and ISCED level 5A (Master) in this table. It should also be noted that ISCED level 5B includes Bachelor's degrees in some countries. ISCED level 6 represents further education at the tertiary level that leads to an advanced research qualification such as a Doctorate degree.
[2] In Portugal, the teachers with a "Pre-Bologna Master's degree" are counted as ISCED level 6. The way the question is presented prevents the disaggregation between "Pre-Bologna Master's degree" and "Doctorate degree."
[3] The averages do not add up to 100 across categories because of the presence of cells that are not applicable (†) in some countries.
[4] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.
NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.
SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-3. Average years of working experience among lower secondary education teachers, by type of working experience and education system: 2013

Education system	Average years of working experience as a teacher at this school		Average years of working experience as a teacher in total		Average years of working experience in other education roles		Average years of working experience in other jobs	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	8.7	(0.22)	16.7	(0.32)	1.8	(0.14)	5.6	(0.21)
Brazil	7.0	(0.17)	13.6	(0.21)	3.7	(0.12)	6.6	(0.15)
Bulgaria	14.5	(0.29)	21.5	(0.24)	3.3	(0.28)	5.7	(0.20)
Chile	9.8	(0.40)	15.1	(0.51)	6.3	(0.31)	4.2	(0.20)
Croatia	12.8	(0.25)	15.7	(0.27)	1.5	(0.16)	3.8	(0.17)
Cyprus	4.8	(0.13)	13.4	(0.21)	4.0	(0.19)	5.9	(0.18)
Czech Republic	12.7	(0.23)	17.7	(0.26)	1.2	(0.09)	1.8	(0.09)
Denmark	12.0	(0.37)	16.1	(0.32)	1.9	(0.12)	4.4	(0.22)
Estonia	14.4	(0.34)	21.6	(0.33)	3.4	(0.16)	4.2	(0.16)
Finland	10.5	(0.24)	15.5	(0.23)	1.2	(0.09)	3.2	(0.10)
France	9.4	(0.20)	17.1	(0.27)	2.0	(0.10)	1.6	(0.09)
Iceland	10.0	(0.21)	14.3	(0.29)	4.0	(0.19)	9.6	(0.26)
Israel	10.7	(0.33)	16.1	(0.36)	3.0	(0.14)	3.6	(0.14)
Italy	8.1	(0.20)	19.8	(0.28)	1.2	(0.09)	2.9	(0.11)
Japan	4.5	(0.14)	17.4	(0.23)	0.6	(0.05)	0.8	(0.05)
Korea, Republic of	3.9	(0.17)	16.4	(0.31)	0.9	(0.06)	0.7	(0.04)
Latvia	15.6	(0.45)	22.0	(0.36)	3.4	(0.24)	3.6	(0.21)
Malaysia	7.2	(0.17)	13.6	(0.25)	1.2	(0.10)	0.7	(0.04)
Mexico	11.3	(0.28)	15.8	(0.33)	4.5	(0.31)	7.4	(0.37)
Netherlands	10.7	(0.33)	15.7	(0.32)	3.3	(0.23)	5.0	(0.26)
Norway	10.8	(0.42)	15.5	(0.40)	1.9	(0.13)	4.2	(0.16)
Poland	11.2	(0.23)	17.1	(0.21)	2.1	(0.13)	1.8	(0.09)
Portugal	10.4	(0.20)	19.4	(0.18)	3.4	(0.17)	1.8	(0.09)
Romania	10.4	(0.25)	16.5	(0.26)	4.5	(0.27)	2.5	(0.14)
Serbia	11.1	(0.22)	14.9	(0.24)	9.6	(0.36)	4.7	(0.18)
Singapore	5.6	(0.10)	9.7	(0.17)	1.2	(0.07)	1.9	(0.07)
Slovak Republic	12.2	(0.27)	17.7	(0.28)	1.4	(0.09)	2.0	(0.10)
Spain	9.2	(0.24)	18.3	(0.27)	2.8	(0.12)	3.2	(0.14)
Sweden	9.8	(0.22)	16.4	(0.28)	2.6	(0.10)	5.7	(0.15)
Abu Dhabi-United Arab Emirates	5.5	(0.24)	12.8	(0.19)	1.4	(0.09)	1.4	(0.12)
Alberta-Canada	7.1	(0.27)	12.9	(0.30)	2.4	(0.12)	7.0	(0.22)
Belgium-Flemish	12.7	(0.22)	15.2	(0.23)	0.8	(0.09)	2.1	(0.13)
England-United Kingdom	7.9	(0.30)	12.4	(0.24)	1.6	(0.09)	5.3	(0.17)
International average[1]	9.8	(0.05)	16.2	(0.05)	2.7	(0.03)	3.8	(0.03)
United States	8.7	(0.34)	13.8	(0.41)	3.0	(0.21)	8.1	(0.29)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-4. Average number of 60-minute hours lower secondary education teachers report having spent on work-related activities during the most recent complete calendar week, by activity and education system: 2013

Education system	Total working hours[1]		Hours spent on teaching		Hours spent on individual planning or preparation of lessons either at school or out of school		Hours spent on team work and dialogue with colleagues within the school	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	42.7	(0.45)	18.6	(0.27)	7.1	(0.14)	3.5	(0.09)
Brazil	36.7	(0.44)	25.4	(0.25)	7.1	(0.14)	3.3	(0.10)
Bulgaria	39.0	(0.36)	18.4	(0.22)	8.1	(0.14)	2.5	(0.07)
Chile	29.2	(0.76)	26.7	(0.41)	5.8	(0.23)	2.8	(0.10)
Croatia	39.6	(0.25)	19.6	(0.12)	9.7	(0.12)	2.1	(0.06)
Cyprus	33.1	(0.30)	16.2	(0.17)	7.3	(0.14)	2.7	(0.06)
Czech Republic	39.4	(0.32)	17.8	(0.14)	8.3	(0.12)	2.2	(0.06)
Denmark	40.0	(0.37)	18.9	(0.14)	7.9	(0.14)	3.3	(0.07)
Estonia	36.1	(0.45)	20.9	(0.21)	6.9	(0.14)	1.9	(0.05)
Finland	31.6	(0.24)	20.6	(0.17)	4.8	(0.09)	1.9	(0.06)
France	36.5	(0.29)	18.6	(0.08)	7.5	(0.13)	1.9	(0.04)
Iceland	35.0	(0.35)	19.0	(0.20)	7.3	(0.19)	3.3	(0.16)
Israel	30.7	(0.48)	18.3	(0.22)	5.2	(0.14)	2.7	(0.08)
Italy	29.4	(0.29)	17.3	(0.11)	5.0	(0.09)	3.1	(0.08)
Japan	53.9	(0.44)	17.7	(0.11)	8.7	(0.15)	3.9	(0.08)
Korea, Republic of	37.0	(0.37)	18.8	(0.16)	7.7	(0.16)	3.2	(0.09)
Latvia	36.1	(0.45)	19.2	(0.31)	6.4	(0.20)	2.3	(0.09)
Malaysia	45.1	(0.73)	17.1	(0.25)	6.4	(0.17)	4.1	(0.13)
Mexico	33.6	(0.60)	22.7	(0.41)	6.2	(0.13)	2.4	(0.10)
Netherlands	35.6	(0.41)	16.9	(0.21)	5.1	(0.11)	3.1	(0.07)
Norway	38.3	(0.53)	15.0	(0.16)	6.5	(0.13)	3.1	(0.06)
Poland	36.8	(0.50)	18.6	(0.20)	5.5	(0.11)	2.2	(0.06)
Portugal	44.7	(0.34)	20.8	(0.12)	8.5	(0.21)	3.7	(0.15)
Romania	35.7	(0.51)	16.2	(0.20)	8.0	(0.17)	2.7	(0.07)
Serbia	34.2	(0.35)	18.4	(0.18)	7.9	(0.14)	2.3	(0.07)
Singapore	47.6	(0.37)	17.1	(0.14)	8.4	(0.14)	3.6	(0.05)
Slovak Republic	37.5	(0.39)	19.9	(0.16)	7.5	(0.13)	2.3	(0.07)
Spain	37.6	(0.40)	18.6	(0.16)	6.6	(0.11)	2.7	(0.06)
Sweden	42.4	(0.21)	17.6	(0.13)	6.7	(0.11)	3.5	(0.07)
Abu Dhabi-United Arab Emirates	36.2	(0.45)	21.2	(0.29)	7.6	(0.34)	3.8	(0.19)
Alberta-Canada	48.2	(0.52)	26.4	(0.28)	7.5	(0.18)	3.0	(0.11)
Belgium-Flemish	37.0	(0.31)	19.1	(0.16)	6.3	(0.12)	2.1	(0.05)
England-United Kingdom	45.9	(0.41)	19.6	(0.19)	7.8	(0.13)	3.3	(0.06)
International average[2]	38.3	(0.08)	19.3	(0.04)	7.1	(0.03)	2.9	(0.02)
United States	44.8	(0.72)	26.8	(0.46)	7.2	(0.21)	3.0	(0.11)

See notes at end of table.

Table 9-4. Average number of 60-minute hours lower secondary education teachers report having spent on work-related activities during the most recent complete calendar week, by activity and education system: 2013—Continued

Education system	Hours spent marking/correcting of student work		Hours spent on student counseling (including student supervision, virtual counseling, career guidance and delinquency guidance)		Hours spent in participation in school management		Hours spent on general administrative work (including communication, paperwork, and other clerical duties you undertake in your job as a teacher)	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	5.1	(0.17)	2.3	(0.16)	3.1	(0.25)	4.3	(0.12)
Brazil	5.7	(0.14)	2.7	(0.10)	1.7	(0.08)	1.8	(0.06)
Bulgaria	4.5	(0.10)	1.7	(0.05)	1.1	(0.10)	2.7	(0.09)
Chile	4.1	(0.17)	2.4	(0.10)	2.3	(0.13)	2.9	(0.13)
Croatia	3.9	(0.08)	1.8	(0.06)	0.5	(0.03)	2.6	(0.08)
Cyprus	4.9	(0.13)	2.0	(0.08)	1.3	(0.09)	2.4	(0.12)
Czech Republic	4.5	(0.07)	2.2	(0.06)	1.1	(0.06)	2.7	(0.08)
Denmark	3.5	(0.10)	1.5	(0.06)	0.9	(0.13)	2.0	(0.06)
Estonia	4.3	(0.10)	2.1	(0.06)	0.8	(0.07)	2.3	(0.07)
Finland	3.1	(0.08)	1.0	(0.05)	0.4	(0.04)	1.3	(0.08)
France	5.6	(0.10)	1.2	(0.03)	0.7	(0.03)	1.3	(0.05)
Iceland	3.2	(0.13)	1.4	(0.08)	1.2	(0.15)	2.0	(0.09)
Israel	4.3	(0.12)	2.1	(0.09)	2.1	(0.11)	1.9	(0.07)
Italy	4.2	(0.08)	1.0	(0.05)	1.0	(0.05)	1.8	(0.05)
Japan	4.6	(0.08)	2.7	(0.07)	3.0	(0.10)	5.5	(0.13)
Korea, Republic of	3.9	(0.10)	4.1	(0.11)	2.2	(0.08)	6.0	(0.16)
Latvia	4.6	(0.14)	3.2	(0.11)	1.0	(0.10)	2.4	(0.11)
Malaysia	7.4	(0.19)	2.9	(0.12)	5.0	(0.16)	5.7	(0.18)
Mexico	4.3	(0.14)	2.8	(0.09)	1.7	(0.11)	2.3	(0.10)
Netherlands	4.2	(0.12)	2.1	(0.08)	1.3	(0.10)	2.2	(0.06)
Norway	5.2	(0.23)	2.1	(0.07)	1.3	(0.10)	2.8	(0.10)
Poland	4.6	(0.11)	2.1	(0.05)	0.9	(0.06)	2.5	(0.09)
Portugal	9.6	(0.23)	2.2	(0.15)	1.8	(0.13)	3.8	(0.18)
Romania	4.0	(0.10)	2.6	(0.07)	0.9	(0.06)	1.5	(0.07)
Serbia	3.4	(0.10)	2.3	(0.06)	0.8	(0.06)	2.4	(0.07)
Singapore	8.7	(0.14)	2.6	(0.04)	1.9	(0.06)	5.3	(0.10)
Slovak Republic	3.5	(0.09)	1.9	(0.08)	1.1	(0.08)	2.7	(0.08)
Spain	6.1	(0.16)	1.5	(0.04)	1.7	(0.07)	1.8	(0.05)
Sweden	4.7	(0.10)	2.7	(0.10)	0.8	(0.07)	4.5	(0.10)
Abu Dhabi-United Arab Emirates	5.4	(0.23)	3.3	(0.14)	2.7	(0.15)	3.3	(0.15)
Alberta-Canada	5.5	(0.19)	2.7	(0.13)	2.2	(0.16)	3.2	(0.11)
Belgium-Flemish	4.5	(0.09)	1.3	(0.05)	0.9	(0.04)	2.4	(0.06)
England-United Kingdom	6.1	(0.13)	1.7	(0.06)	2.2	(0.11)	4.0	(0.09)
International average[2]	4.9	(0.02)	2.2	(0.02)	1.6	(0.02)	2.9	(0.02)
United States	4.9	(0.11)	2.4	(0.15)	1.6	(0.11)	3.3	(0.11)

See notes at end of table.

Table 9-4. Average number of 60-minute hours lower secondary education teachers report having spent on work-related activities during the most recent complete calendar week, by activity and education system: 2013—Continued

Education system	Hours spent on communication and cooperation with parents or guardians		Hours spent engaging in extracurricular activities (e.g., sports and cultural activities after school)		Hours spent on all other tasks	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	1.3	(0.08)	2.3	(0.19)	2.2	(0.12)
Brazil	1.7	(0.06)	2.4	(0.08)	2.2	(0.10)
Bulgaria	1.7	(0.05)	2.0	(0.06)	1.7	(0.07)
Chile	2.0	(0.12)	2.0	(0.11)	2.2	(0.18)
Croatia	1.5	(0.08)	1.9	(0.08)	1.8	(0.07)
Cyprus	1.7	(0.08)	2.5	(0.14)	2.2	(0.15)
Czech Republic	0.9	(0.03)	1.3	(0.06)	1.4	(0.06)
Denmark	1.8	(0.09)	0.9	(0.08)	2.3	(0.14)
Estonia	1.3	(0.05)	1.9	(0.07)	1.5	(0.07)
Finland	1.2	(0.05)	0.6	(0.06)	1.0	(0.07)
France	1.0	(0.04)	1.0	(0.04)	1.1	(0.05)
Iceland	1.4	(0.06)	1.1	(0.09)	2.3	(0.11)
Israel	1.8	(0.07)	1.7	(0.13)	3.8	(0.14)
Italy	1.4	(0.03)	0.8	(0.05)	0.7	(0.06)
Japan	1.3	(0.03)	7.7	(0.19)	2.9	(0.11)
Korea, Republic of	2.1	(0.07)	2.7	(0.11)	2.6	(0.10)
Latvia	1.5	(0.06)	2.1	(0.07)	1.4	(0.08)
Malaysia	2.4	(0.11)	4.9	(0.16)	4.3	(0.16)
Mexico	2.3	(0.08)	2.3	(0.10)	2.0	(0.10)
Netherlands	1.3	(0.04)	1.3	(0.08)	2.5	(0.14)
Norway	1.4	(0.06)	0.8	(0.09)	1.4	(0.17)
Poland	1.3	(0.04)	2.4	(0.06)	1.9	(0.10)
Portugal	1.8	(0.13)	2.4	(0.17)	2.6	(0.16)
Romania	1.8	(0.06)	2.3	(0.08)	1.8	(0.08)
Serbia	1.6	(0.05)	2.2	(0.08)	2.1	(0.07)
Singapore	1.6	(0.03)	3.4	(0.06)	2.7	(0.09)
Slovak Republic	1.3	(0.06)	2.0	(0.08)	1.6	(0.08)
Spain	1.5	(0.04)	0.9	(0.08)	1.5	(0.07)
Sweden	1.8	(0.05)	0.4	(0.03)	1.7	(0.06)
Abu Dhabi-United Arab Emirates	2.6	(0.17)	2.5	(0.13)	2.1	(0.14)
Alberta-Canada	1.7	(0.08)	3.6	(0.17)	1.9	(0.13)
Belgium-Flemish	0.7	(0.03)	1.3	(0.10)	1.4	(0.05)
England-United Kingdom	1.6	(0.04)	2.2	(0.12)	2.3	(0.13)
International average[2]	1.6	(0.01)	2.1	(0.02)	2.0	(0.02)
United States	1.6	(0.08)	3.6	(0.26)	7.0	(0.35)

[1] Including teaching, planning lessons, marking, collaborating with other teachers, participating in staff meetings and other tasks related to the teacher's job at the school.

[2] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: A "complete" calendar week is one that was not shortened by breaks, public holidays, sick leave, etc. Also includes tasks that took place during weekends, evenings, or other off-classroom hours. The sum of hours spent on different tasks may not be equal to the number of total working hours because teachers were asked about these elements separately. It is also important to note that data presented in this table represent the averages from all the teachers surveyed, including part-time teachers. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-5. Average proportion of time lower secondary education teachers report spending on classroom activities in an average lesson, by activity and education system: 2013

	Administrative tasks		Keeping order in the classroom		Actual teaching and learning	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	7.0	(0.25)	14.5	(0.41)	78.1	(0.55)
Brazil	12.2	(0.15)	19.8	(0.30)	66.7	(0.35)
Bulgaria	4.6	(0.11)	8.8	(0.25)	86.6	(0.31)
Chile	10.8	(0.31)	15.3	(0.56)	73.1	(0.77)
Croatia	7.2	(0.11)	9.1	(0.20)	83.4	(0.27)
Cyprus	6.8	(0.16)	12.7	(0.31)	80.2	(0.39)
Czech Republic	6.6	(0.13)	8.8	(0.22)	84.0	(0.32)
Denmark	6.0	(0.20)	9.8	(0.31)	84.1	(0.43)
Estonia	5.5	(0.12)	8.8	(0.28)	84.4	(0.39)
Finland	6.0	(0.10)	13.1	(0.28)	80.6	(0.33)
France	7.9	(0.11)	15.7	(0.31)	76.0	(0.36)
Iceland	8.5	(0.26)	15.7	(0.43)	75.5	(0.58)
Israel	9.2	(0.16)	12.8	(0.31)	76.6	(0.45)
Italy	7.5	(0.17)	13.0	(0.27)	78.5	(0.34)
Japan	7.0	(0.19)	14.6	(0.34)	78.3	(0.46)
Korea, Republic of	8.2	(0.22)	13.6	(0.26)	76.9	(0.43)
Latvia	5.8	(0.20)	9.5	(0.36)	84.5	(0.48)
Malaysia	11.5	(0.32)	17.5	(0.36)	70.8	(0.50)
Mexico	11.6	(0.22)	12.3	(0.27)	75.4	(0.41)
Netherlands	9.5	(0.23)	16.0	(0.44)	73.8	(0.52)
Norway	7.6	(0.18)	8.9	(0.28)	83.0	(0.38)
Poland	8.0	(0.14)	8.5	(0.28)	82.2	(0.38)
Portugal	8.2	(0.11)	15.7	(0.26)	75.8	(0.31)
Romania	8.4	(0.22)	8.7	(0.24)	81.8	(0.44)
Serbia	8.3	(0.13)	9.8	(0.18)	81.7	(0.26)
Singapore	11.1	(0.16)	17.7	(0.25)	70.9	(0.31)
Slovak Republic	7.1	(0.14)	12.1	(0.34)	80.2	(0.40)
Spain	7.4	(0.12)	14.7	(0.29)	77.2	(0.34)
Sweden	6.7	(0.13)	11.5	(0.32)	81.1	(0.40)
Abu Dhabi-United Arab Emirates	8.3	(0.28)	12.6	(0.55)	76.7	(0.81)
Alberta-Canada	7.3	(0.21)	13.6	(0.47)	79.0	(0.56)
Belgium-Flemish	9.3	(0.18)	13.4	(0.46)	77.0	(0.57)
England-United Kingdom	6.7	(0.20)	11.4	(0.42)	81.5	(0.47)
International average[1]	8.0	(0.03)	12.7	(0.06)	78.7	(0.08)
United States	6.5	(0.23)	13.4	(0.61)	79.7	(0.75)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. Detail may not sum to totals because of rounding. Also, the sum of time spent in an average lesson may not add up to 100 percent because some answers that did not add up to 100 percent were accepted. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-6. Average number of students and staff and average staff ratios in schools where lower secondary education teachers work (includes both public and private schools) and average class size in lower secondary education, by education system: 2013

Education system	Number of students in schools[1]		Number of teachers in schools[1]		Ratio of students to number of teachers[2]	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	814.2	(51.46)	66.6	(4.16)	12.3	(0.19)
Brazil	586.0	(12.83)	33.8	(1.28)	19.1	(0.56)
Bulgaria	345.0	(9.68)	25.9	(0.63)	12.5	(0.28)
Chile	483.7	(20.20)	25.7	(1.21)	20.4	(1.83)
Croatia	433.0	(20.59)	39.4	(1.81)	10.8	(0.62)
Cyprus	364.1	(20.02)	49.5	(1.81)	7.1	(0.21)
Czech Republic	341.7	(7.72)	26.0	(0.60)	13.0	(0.17)
Denmark	401.4	(13.16)	32.8	(1.27)	12.1	(0.22)
Estonia	297.3	(17.29)	32.2	(1.23)	7.7	(0.18)
Finland	348.0	(12.27)	33.1	(0.89)	10.0	(0.17)
France	542.9	(16.33)	39.9	(1.06)	13.6	(0.34)
Iceland	247.8	(13.22)	27.0	(1.17)	8.4	(0.24)
Israel	494.2	(35.39)	47.7	(3.36)	10.8	(0.51)
Italy	794.6	(29.28)	85.8	(2.50)	9.8	(0.31)
Japan	357.3	(9.66)	24.2	(0.62)	20.3	(3.58)
Korea, Republic of	567.2	(14.05)	31.7	(0.68)	15.5	(0.33)
Latvia	295.1	(10.25)	32.8	(1.13)	9.1	(0.80)
Malaysia	1,151.1	(20.58)	82.7	(1.05)	13.6	(0.23)
Mexico	416.8	(23.23)	25.4	(0.95)	15.1	(0.70)
Netherlands	869.9	(71.40)	74.4	(6.12)	11.4	(0.24)
Norway	257.0	(13.61)	29.1	(1.51)	8.5	(0.25)
Poland	220.6	(9.35)	27.2	(0.93)	7.9	(0.30)
Portugal	1,152.5	(51.85)	109.5	(4.69)	10.5	(0.21)
Romania	474.0	(21.58)	31.6	(1.44)	15.1	(0.48)
Serbia	554.6	(21.44)	45.1	(1.67)	11.8	(0.41)
Singapore	1,251.4	(34.95)	91.1	(3.19)	14.0	(0.17)
Slovak Republic	314.3	(8.98)	25.0	(0.61)	12.1	(0.20)
Spain	545.4	(26.28)	44.5	(1.76)	11.8	(0.31)
Sweden	373.5	(17.54)	35.1	(1.41)	10.8	(0.41)
Abu Dhabi-United Arab Emirates	887.6	(44.26)	61.6	(2.75)	14.0	(0.68)
Alberta-Canada	334.9	(11.47)	18.4	(0.72)	18.0	(0.61)
Belgium-Flemish	623.7	(49.82)	78.6	(4.92)	7.9	(0.46)
England-United Kingdom	890.2	(27.43)	67.5	(2.83)	13.6	(0.23)
International average[4]	546.4	(4.82)	45.5	(0.41)	12.4	(0.14)
United States	566.5	(43.60)	38.2	(2.27)	14.9	(0.98)

See notes at end of table.

Table 9-6. Average number of students and staff and average staff ratios in schools where lower secondary education teachers work (includes both public and private schools) and average class size in lower secondary education, by education system: 2013—Continued

Education system	Ratio of teachers to number of personnel for pedagogical support		Ratio of teachers to number of school administrative or management personnel		Average class size[3]	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	8.1	(1.01)	4.4	(0.31)	24.7	(0.68)
Brazil	13.8	(0.72)	4.5	(0.20)	30.8	(0.29)
Bulgaria	9.4	(0.71)	2.3	(0.07)	21.7	(0.22)
Chile	5.4	(0.36)	3.7	(0.24)	31.8	(0.61)
Croatia	14.8	(0.49)	11.1	(0.44)	20.0	(0.21)
Cyprus	22.5	(2.10)	4.9	(0.19)	20.7	(0.14)
Czech Republic	16.6	(0.89)	5.3	(0.13)	21.1	(0.21)
Denmark	10.3	(0.88)	6.5	(0.21)	21.2	(0.19)
Estonia	9.5	(0.41)	6.7	(0.20)	17.3	(0.29)
Finland	8.2	(0.51)	12.4	(0.36)	17.8	(0.18)
France	5.6	(0.45)	6.8	(0.20)	25.5	(0.13)
Iceland	4.3	(0.35)	6.9	(0.23)	19.6	(0.30)
Israel	6.8	(0.75)	3.9	(0.27)	27.6	(0.37)
Italy	60.1	(3.63)	11.4	(0.31)	21.8	(0.21)
Japan	11.5	(0.59)	6.0	(0.15)	31.2	(0.34)
Korea, Republic of	8.6	(0.50)	3.8	(0.11)	32.4	(0.28)
Latvia	8.1	(0.41)	5.2	(0.26)	17.7	(0.37)
Malaysia	53.1	(2.78)	5.9	(0.21)	32.1	(0.32)
Mexico	12.1	(0.84)	4.4	(0.35)	33.0	(0.57)
Netherlands	9.8	(1.22)	7.5	(0.48)	25.4	(0.27)
Norway	5.4	(0.35)	5.4	(0.28)	22.5	(0.45)
Poland	11.6	(0.68)	6.2	(0.30)	21.4	(0.25)
Portugal	7.5	(1.21)	8.5	(0.27)	22.6	(0.19)
Romania	22.0	(1.66)	7.9	(0.32)	21.7	(0.35)
Serbia	24.1	(1.26)	9.9	(0.38)	21.9	(0.29)
Singapore	11.9	(1.02)	2.7	(0.09)	35.5	(0.24)
Slovak Republic	16.9	(0.66)	4.0	(0.18)	19.1	(0.24)
Spain	19.2	(1.11)	5.6	(0.15)	23.6	(0.25)
Sweden	7.1	(0.41)	10.5	(0.43)	21.4	(0.27)
Abu Dhabi-United Arab Emirates	12.7	(1.58)	5.9	(0.33)	25.1	(0.58)
Alberta-Canada	3.8	(0.24)	4.2	(0.14)	25.8	(0.37)
Belgium-Flemish	31.3	(3.48)	10.0	(0.57)	17.3	(0.26)
England-United Kingdom	4.1	(0.22)	3.3	(0.17)	23.9	(0.28)
International average[4]	14.4	(0.23)	6.3	(0.05)	24.1	(0.06)
United States	8.0	(1.36)	6.4	(0.29)	27.0	(0.61)

[1] These data are reported by principals and represent the average of school-level data in each education system. For example, in Australia, 814 represents the average number of students per school where lower secondary teachers work and 67 represents the average number of teachers in schools where lower secondary teachers work. The education provision in these schools may extend across ISCED levels (e.g., in schools that offer both lower and upper secondary education) and therefore may not apply only to teachers or students in lower secondary education.

[2] The average ratio of students to number of teachers is derived from the principal questionnaire. It is calculated by making the average of the school ratios in each education system and can therefore be different from the ratio of the averages calculated from this table.

[3] These data are reported by lower secondary teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[4] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-7. Percentage of lower secondary education teachers who "agree" or "strongly agree" that statements about school climate and teacher-student relations apply to their school and who work in schools where the principal "agrees" or "strongly agrees" that the relationships between teachers and students are good, by education system: 2013

	Teachers report that "In this school, teachers and students usually get on well with each other"		Teachers report that "Most teachers in this school believe that the students' well-being is important"		Teachers report that "Most teachers in this school are interested in what students have to say"		Teachers report that "If a student from this school needs extra assistance, the school provides it"		Principals report that "The relationships between teachers and students are good"	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	96.9	(0.59)	98.5	(0.29)	95.4	(0.48)	94.3	(0.75)	100.0	(0.00)
Brazil	91.9	(0.46)	94.5	(0.35)	85.9	(0.56)	76.7	(0.87)	94.1	(1.29)
Bulgaria	95.2	(0.60)	96.3	(0.44)	94.1	(0.60)	98.5	(0.27)	96.6	(1.34)
Chile	94.2	(0.79)	95.8	(0.56)	90.5	(0.89)	89.8	(1.08)	95.0	(2.28)
Croatia	93.8	(0.61)	96.7	(0.39)	87.7	(0.81)	93.6	(0.59)	98.1	(1.13)
Cyprus	93.0	(0.66)	95.5	(0.51)	87.4	(0.86)	93.9	(0.60)	96.4	(0.09)
Czech Republic	95.6	(0.49)	94.6	(0.47)	89.4	(0.78)	98.0	(0.31)	98.4	(0.88)
Denmark	99.2	(0.22)	99.5	(0.18)	95.5	(0.71)	80.7	(1.51)	100.0	(0.00)
Estonia	96.3	(0.36)	96.9	(0.35)	91.8	(0.55)	97.4	(0.49)	98.0	(0.79)
Finland	96.5	(0.46)	98.1	(0.33)	94.9	(0.53)	97.2	(0.33)	98.0	(1.13)
France	93.7	(0.63)	93.5	(0.50)	89.7	(0.68)	92.8	(0.64)	96.5	(1.43)
Iceland	98.2	(0.42)	98.8	(0.36)	96.4	(0.58)	88.2	(0.89)	99.0	(0.00)
Israel	95.0	(0.59)	91.5	(0.60)	88.9	(0.73)	92.6	(0.92)	99.2	(0.60)
Italy	91.3	(0.67)	95.9	(0.42)	89.5	(0.61)	87.3	(0.74)	97.9	(1.06)
Japan	94.8	(0.58)	93.6	(0.52)	94.2	(0.53)	93.9	(0.46)	97.1	(1.19)
Korea, Republic of	94.5	(0.62)	90.6	(0.65)	92.2	(0.59)	76.5	(0.93)	99.3	(0.66)
Latvia	95.9	(0.63)	96.5	(0.52)	94.5	(0.63)	98.1	(0.40)	99.1	(0.86)
Malaysia	95.8	(0.47)	98.7	(0.22)	89.5	(0.63)	94.7	(0.55)	100.0	(0.00)
Mexico	88.0	(0.80)	94.0	(0.59)	81.3	(0.90)	71.7	(1.46)	93.7	(2.01)
Netherlands	98.4	(0.61)	98.6	(0.40)	95.2	(1.05)	91.8	(1.33)	96.8	(2.25)
Norway	99.2	(0.25)	99.5	(0.21)	97.9	(0.79)	90.3	(0.89)	100.0	(0.00)
Poland	94.9	(0.49)	91.8	(0.72)	91.9	(0.67)	97.5	(0.44)	99.0	(0.74)
Portugal	97.8	(0.29)	98.3	(0.22)	92.7	(0.51)	96.1	(0.42)	99.4	(0.63)
Romania	95.7	(0.60)	96.4	(0.42)	89.4	(0.80)	91.1	(0.78)	98.9	(0.68)
Serbia	93.1	(0.54)	96.6	(0.32)	88.0	(0.64)	91.8	(0.56)	96.4	(1.39)
Singapore	96.4	(0.35)	97.6	(0.26)	91.8	(0.48)	98.3	(0.22)	100.0	(0.00)
Slovak Republic	92.2	(0.79)	95.5	(0.43)	89.7	(0.72)	97.0	(0.35)	98.0	(1.21)
Spain	96.0	(0.44)	96.2	(0.42)	89.8	(0.51)	88.3	(0.69)	97.0	(1.15)
Sweden	98.2	(0.24)	99.2	(0.21)	94.7	(0.45)	74.2	(1.66)	98.4	(1.16)
Abu Dhabi-United Arab Emirates	93.5	(0.72)	97.5	(0.43)	91.8	(0.69)	93.3	(0.81)	97.2	(1.78)
Alberta-Canada	97.0	(0.45)	99.2	(0.23)	98.0	(0.41)	95.9	(0.71)	98.0	(1.27)
Belgium-Flemish	97.3	(0.40)	98.4	(0.20)	94.9	(0.50)	98.2	(0.27)	99.5	(0.33)
England-United Kingdom	96.8	(0.38)	98.7	(0.32)	96.7	(0.49)	95.7	(0.57)	99.3	(0.65)
International average[1]	95.3	(0.09)	96.5	(0.07)	91.8	(0.12)	91.4	(0.14)	98.0	(0.19)
United States	94.6	(0.79)	98.4	(0.42)	94.4	(0.76)	95.3	(0.63)	96.9	(1.56)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-8. Percentage of lower secondary education teachers whose school principal "agrees" or "strongly agrees" that statements about professional climate, shared beliefs, and respect among colleagues apply to their school, by education system: 2013

	The school staff share a common set of beliefs about schooling/learning		There is a high level of co-operation between the school and the local community		School staff have an open discussion about difficulties		There is mutual respect for colleagues' ideas		There is a culture of sharing success	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	89.2	(4.95)	82.1	(5.62)	87.3	(4.85)	95.2	(2.19)	92.1	(4.34)
Brazil	91.1	(1.60)	70.3	(2.04)	96.4	(1.01)	92.7	(1.48)	90.7	(1.54)
Bulgaria	80.9	(3.00)	89.1	(2.46)	96.0	(1.54)	79.6	(2.57)	86.9	(2.79)
Chile	91.2	(2.46)	71.1	(4.07)	96.0	(1.94)	90.3	(2.54)	87.7	(2.47)
Croatia	57.0	(3.82)	88.0	(2.28)	91.0	(2.05)	90.7	(2.29)	93.4	(1.90)
Cyprus	93.5	(0.13)	84.6	(0.16)	96.0	(0.09)	95.3	(0.09)	96.9	(0.08)
Czech Republic	91.6	(1.91)	75.5	(3.16)	92.3	(2.15)	93.9	(1.84)	89.0	(2.30)
Denmark	76.3	(4.19)	45.6	(5.33)	92.5	(2.25)	93.3	(2.26)	89.1	(2.83)
Estonia	95.2	(2.52)	75.4	(3.22)	89.3	(2.94)	92.7	(1.97)	84.4	(2.97)
Finland	89.7	(2.26)	66.1	(3.96)	94.6	(2.23)	92.8	(2.53)	84.6	(3.24)
France	75.4	(3.32)	77.8	(3.07)	81.7	(3.21)	87.1	(2.59)	78.9	(3.17)
Iceland	86.3	(0.14)	81.0	(0.11)	95.1	(0.08)	90.6	(0.15)	93.1	(0.10)
Israel	94.6	(2.28)	84.7	(3.23)	98.2	(1.24)	94.7	(2.12)	96.1	(1.74)
Italy	90.6	(2.26)	74.2	(3.44)	87.7	(2.41)	86.0	(2.41)	81.1	(2.82)
Japan	98.1	(1.00)	75.3	(3.24)	96.1	(1.42)	95.2	(1.62)	96.4	(1.42)
Korea, Republic of	96.2	(1.56)	91.4	(2.27)	93.5	(2.11)	100.0	(0.00)	96.2	(1.55)
Latvia	96.2	(2.00)	85.1	(3.63)	95.6	(2.06)	96.7	(1.95)	97.4	(1.51)
Malaysia	83.1	(2.61)	86.4	(2.70)	87.5	(2.67)	98.0	(0.78)	100.0	(0.00)
Mexico	66.2	(3.57)	70.1	(3.58)	88.4	(2.59)	91.6	(2.38)	87.2	(2.77)
Netherlands	72.2	(4.92)	21.2	(4.15)	79.0	(4.81)	87.5	(4.50)	75.5	(5.11)
Norway	87.1	(3.58)	40.8	(5.27)	96.7	(1.56)	97.5	(1.34)	86.0	(4.47)
Poland	91.6	(1.99)	85.1	(3.05)	92.2	(2.06)	91.6	(1.87)	88.6	(2.35)
Portugal	89.9	(2.45)	86.7	(2.83)	88.8	(2.64)	92.0	(2.04)	84.2	(2.82)
Romania	93.6	(1.90)	97.7	(1.15)	99.2	(0.54)	99.1	(0.88)	97.6	(1.17)
Serbia	72.4	(3.43)	81.0	(3.10)	92.3	(2.17)	90.6	(2.45)	82.4	(3.60)
Singapore	97.4	(0.05)	85.8	(0.20)	96.1	(0.13)	99.3	(0.02)	97.3	(0.04)
Slovak Republic	78.4	(2.83)	77.5	(3.38)	100.0	(0.00)	97.3	(1.20)	97.8	(1.05)
Spain	87.3	(2.93)	64.9	(3.91)	92.6	(2.47)	91.6	(2.51)	84.7	(2.92)
Sweden	80.5	(3.03)	33.5	(3.57)	94.3	(1.83)	87.1	(2.77)	76.3	(2.95)
Abu Dhabi-United Arab Emirates	94.2	(2.47)	88.5	(3.49)	95.2	(2.49)	95.7	(2.21)	92.2	(2.74)
Alberta-Canada	96.3	(1.88)	88.6	(3.16)	95.0	(2.16)	95.5	(1.51)	95.6	(1.79)
Belgium-Flemish	96.1	(1.64)	61.5	(5.16)	91.7	(2.04)	95.3	(1.56)	93.5	(2.06)
England-United Kingdom	96.0	(1.76)	87.5	(3.65)	90.2	(2.94)	96.7	(1.70)	96.2	(1.71)
International average[1]	87.1	(0.47)	75.0	(0.59)	92.7	(0.40)	93.1	(0.36)	90.0	(0.45)
United States	97.6	(1.26)	83.2	(3.90)	83.4	(4.96)	92.6	(2.64)	88.7	(3.75)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-9. Percentage of principals in lower secondary education, by sex, average age, age group, and education system: 2013

Education system	Female		Average age		Younger than 30 years		Aged 30-39 years		Aged 40-49 years		Aged 50-59 years		Aged 60 or more	
	Percent	(S.E.)	Average	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	38.6	(5.52)	53.2	(1.04)	#	†	‡	†	21.8	(5.23)	55.2	(6.27)	18.3	(4.46)
Brazil	74.5	(2.08)	45.0	(0.38)	2.0!	(0.73)	27.8	(1.88)	39.7	(2.33)	24.3	(1.85)	6.2	(1.40)
Bulgaria	71.5	(3.46)	51.1	(0.52)	#	†	4.6!	(1.62)	35.2	(3.04)	47.2	(3.89)	13.0	(2.56)
Chile	53.4	(3.94)	53.7	(0.73)	#	†	6.4!	(2.06)	24.2	(3.33)	39.3	(3.91)	30.2	(3.98)
Croatia	59.9	(3.72)	52.0	(0.68)	#	†	8.7	(2.09)	25.5	(3.75)	43.7	(4.02)	22.2	(3.49)
Cyprus	53.1	(4.33)	55.2	(0.54)	#	†	‡	†	8.5!	(2.61)	73.4	(4.35)	14.9	(3.37)
Czech Republic	48.4	(3.59)	50.3	(0.51)	#	†	6.3	(1.80)	38.8	(3.05)	44.6	(3.37)	10.3	(2.19)
Denmark	32.4	(4.41)	52.9	(0.62)	#	†	4.1!	(1.84)	24.3	(3.66)	52.1	(4.89)	19.5	(3.90)
Estonia	60.2	(3.37)	52.2	(0.57)	#	†	5.1!	(1.57)	29.4	(3.35)	43.2	(3.50)	22.3	(2.94)
Finland	40.6	(3.98)	51.2	(0.57)	‡	†	8.0	(2.33)	33.0	(3.76)	45.6	(4.08)	12.8	(2.99)
France	41.7	(3.74)	52.0	(0.53)	#	†	‡	†	32.0	(4.14)	56.0	(4.58)	10.3	(2.31)
Iceland	54.6	(4.70)	50.9	(0.79)	#	†	7.4!	(2.61)	36.1	(4.46)	40.7	(4.55)	15.7	(3.80)
Israel	52.6	(5.96)	48.9	(0.88)	‡	†	11.8	(3.52)	45.5	(6.73)	32.8	(5.80)	9.7	(2.65)
Italy	55.2	(4.25)	57.0	(0.53)	#	†	‡	†	13.2	(2.40)	39.4	(4.80)	46.5	(4.88)
Japan	6.0!	(1.89)	57.0	(0.26)	#	†	#	†	‡	†	80.4	(2.96)	18.0	(3.11)
Korea, Republic of	13.3	(2.25)	58.8	(0.21)	#	†	#	†	#	†	54.4	(4.25)	45.6	(4.25)
Latvia	77.0	(4.20)	52.9	(0.77)	#	†	4.1!	(1.75)	26.9	(5.11)	51.9	(4.54)	17.1	(3.45)
Malaysia	49.1	(4.65)	53.5	(0.28)	#	†	#	†	13.1	(3.25)	86.9	(3.25)	#	†
Mexico	40.8	(3.73)	51.9	(0.63)	#	†	8.7	(2.53)	28.2	(3.56)	46.7	(4.27)	16.3	(2.82)
Netherlands	30.8	(7.68)	52.2	(1.14)	#	†	‡	†	26.4!	(8.05)	49.2	(6.95)	18.0	(5.14)
Norway	58.2	(7.97)	52.1	(1.03)	#	†	3.7!	(1.60)	39.8	(8.06)	35.9	(7.97)	20.6	(5.42)
Poland	66.6	(4.26)	49.9	(0.59)	‡	†	5.6!	(2.64)	38.5	(4.54)	48.4	(4.80)	6.8!	(2.43)
Portugal	39.4	(4.35)	52.1	(0.54)	#	†	4.9!	(1.55)	24.9	(3.89)	57.4	(3.89)	12.8	(3.15)
Romania	63.9	(4.35)	46.7	(0.90)	‡	†	30.6	(4.04)	26.9	(3.71)	36.9	(4.58)	5.0!	(1.74)
Serbia	55.3	(3.38)	49.0	(0.58)	#	†	13.8	(2.75)	39.2	(4.32)	35.1	(4.09)	11.9	(2.25)
Singapore	52.5	(4.76)	48.3	(0.54)	#	†	10.7	(2.69)	39.4	(4.50)	47.9	(4.27)	‡	†
Slovak Republic	60.0	(4.16)	52.5	(0.65)	#	†	9.7	(2.53)	23.3	(3.51)	49.6	(3.68)	17.4	(3.02)
Spain	44.7	(5.01)	49.4	(0.84)	#	†	13.8	(3.67)	33.7	(4.94)	44.7	(5.13)	7.8	(1.90)
Sweden	54.9	(4.92)	50.7	(0.74)	#	†	4.2!	(1.81)	45.0	(5.04)	38.0	(4.57)	12.9	(2.97)
Abu Dhabi-United Arab Emirates	60.9	(3.59)	49.0	(0.82)	#	†	9.2	(2.73)	49.1	(4.28)	27.4	(4.05)	14.3	(3.83)
Alberta-Canada	43.1	(3.77)	49.3	(0.66)	#	†	10.9	(2.40)	41.4	(3.59)	39.3	(4.02)	8.4!	(2.58)
Belgium-Flemish	38.8	(5.10)	49.5	(0.59)	‡	†	9.8	(2.43)	30.8	(4.97)	53.6	(4.65)	4.8!	(2.24)
England-United Kingdom	38.1	(4.08)	49.4	(0.53)	#	†	7.8!	(2.44)	43.7	(3.93)	45.7	(3.54)	2.8!	(1.18)
International average[1]	49.4	(0.78)	51.5	(0.12)	0.2!	(0.05)	7.7	(0.42)	29.7	(0.75)	47.5	(0.79)	15.0	(0.55)
United States	48.6	(5.74)	48.3	(1.12)	‡	†	19.2	(5.00)	32.9	(3.99)	36.1	(5.66)	10.7!	(4.12)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-10. Percentage of principals in lower secondary education, by highest level of formal education completed and education system: 2013

Education system	Below ISCED level 5[1]		ISCED level 5B[1]		ISCED level 5A[1]		ISCED level 6[1]	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	#	†	#	†	97.0	(1.56)	‡	†
Brazil	2.1!	(0.80)	1.8!	(0.56)	96.1	(0.99)	#	†
Bulgaria	#	†	#	†	99.2	(0.61)	‡	†
Chile	#	†	24.5	(3.56)	73.4	(3.58)	‡	†
Croatia	†	†	18.0	(3.05)	81.1	(3.17)	‡	†
Cyprus	#	†	#	†	87.8	(3.53)	12.2	(3.53)
Czech Republic	#	†	#	†	91.8	(1.80)	8.2	(1.80)
Denmark	‡	†	#	†	99.2	(0.81)	#	†
Estonia	#	†	2.5!	(1.14)	95.9	(1.44)	‡	†
Finland	#	†	#	†	95.5	(1.67)	4.5!	(1.67)
France	‡	†	12.9	2.69	84.8	(2.81)	‡	†
Iceland	8.3!	(2.65)	‡	†	89.8	(2.97)	#	†
Israel	#	†	‡	†	94.8	(1.95)	4.7!	(1.88)
Italy	#	†	‡	†	95.2	(1.51)	3.6!	(1.25)
Japan	‡	†	‡	†	98.4	(0.63)	0.7	(0.02)
Korea, Republic of	#	†	#	†	96.5	(0.97)	3.5	(0.97)
Latvia	#	†	#	†	100.0	(0.00)	#	†
Malaysia	#	†	#	†	100.0	(0.00)	#	†
Mexico	‡	†	#	†	93.5	(1.72)	5.7	(1.52)
Netherlands	#	†	#	†	98.5	(0.64)	1.5!	(0.64)
Norway	#	†	†	†	100.0	(0.00)	#	†
Poland	#	†	#	†	99.2	(0.63)	‡	†
Portugal[2]	#	†	‡	†	70.4	(4.28)	26.8	(4.34)
Romania	#	†	4.6!	(1.92)	94.1	(2.02)	1.3!	(0.64)
Serbia	#	†	‡	†	97.1	(1.75)	‡	†
Singapore	#	†	#	†	97.3	(1.33)	2.7!	(1.33)
Slovak Republic	#	†	#	†	98.1	(0.91)	1.9!	(0.91)
Spain	†	†	‡	†	94.2	(2.21)	4.3!	(1.37)
Sweden	‡	†	7.9	(2.02)	89.0	(3.15)	‡	†
Abu Dhabi-United Arab Emirates	#	†	‡	†	92.2	(2.94)	7.0!	(2.81)
Alberta-Canada	#	†	#	†	95.8	(1.79)	4.2!	(1.79)
Belgium-Flemish	‡	†	39.7	(4.57)	58.6	(4.74)	‡	†
England-United Kingdom	‡	†	#	†	97.1	(1.39)	‡	†
International average[3]	0.6	(0.13)	3.9	(0.27)	92.5	(0.38)	3.2	(0.25)
United States	#	†	#	†	84.3	(4.60)	15.7	(4.60)

† Not applicable or not administered in the country.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED 5 represents the first stages of tertiary education and is split between ISCED levels 5A and 5B. ISCED level 5A programs are generally longer and more theory-based, while 5B programs are typically shorter and more practical and skills oriented. ISCED level 5A typically includes Bachelor's degrees and Master's degrees but no distinction was made between ISCED level 5A (Bachelor) and ISCED level 5A (Master) in this table. It should also be noted that ISCED level 5B includes Bachelor's degrees in some countries. ISCED level 6 represents further education at the tertiary level that leads to an advanced research qualification such as a Doctorate degree.

[2] In Portugal, the principals with a "Pre-Bologna Master's degree" are counted as ISCED level 6. The way the question is presented prevents the disaggregation between "Pre-Bologna Master's degree" and "Doctorate degree."

[3] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-11. Principals in lower secondary education, by average years of experience working as a principal, percentage with specific years of experience in that role, and education system: 2013

	Average years of experience		Less than 3 years experience		3-10 years experience		11-20 years experience		More than 20 years experience	
Education system	Average	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	8.0	(0.55)	14.9	(3.00)	57.3	(5.68)	23.7	(5.08)	4.2!	(1.71)
Brazil	7.3	(0.38)	24.9	(2.37)	51.5	(2.87)	17.1	(2.27)	6.4	(1.61)
Bulgaria	12.5	(0.73)	16.0	(3.09)	27.3	(3.29)	37.6	(4.36)	19.1	(3.54)
Chile	11.3	(0.94)	17.3	(3.24)	44.4	(5.01)	19.1	(3.08)	19.2	(3.76)
Croatia	10.4	(0.59)	13.9	(2.92)	46.5	(3.81)	26.3	(3.65)	13.3	(2.81)
Cyprus	4.7	(0.52)	43.3	(4.86)	45.4	(5.28)	8.2!	(2.89)	‡	†
Czech Republic	9.7	(0.52)	18.4	(2.62)	42.1	(3.70)	27.5	(3.39)	12.0	(2.34)
Denmark	12.6	(0.55)	‡	†	36.7	(4.60)	48.3	(4.60)	12.4	(2.74)
Estonia	12.1	(0.67)	19.3	(2.85)	34.0	(3.27)	23.3	(2.82)	23.3	(2.91)
Finland	11.3	(0.60)	13.7	(2.65)	37.1	(4.36)	36.4	(4.09)	12.8	(2.86)
France	7.5	(0.45)	19.3	(3.17)	56.3	(4.04)	20.4	(3.54)	4.0	(1.03)
Iceland	10.6	(0.85)	21.2	(4.29)	38.5	(5.23)	26.9	(4.50)	13.5	(3.75)
Israel	9.8	(0.88)	17.9	(3.79)	42.3	(5.80)	30.5	(7.12)	9.4	(2.44)
Italy	10.8	(0.78)	14.6	(3.23)	53.4	(4.56)	11.8	(2.53)	20.2	(3.80)
Japan	4.5	(0.20)	29.7	(3.24)	67.5	(3.31)	2.8!	(1.09)	#	†
Korea, Republic of	3.1	(0.18)	46.5	(5.09)	53.5	(5.09)	#	†	#	†
Latvia	13.0	(0.78)	9.2!	(2.84)	31.7	(6.00)	43.2	(6.45)	15.9	(3.57)
Malaysia	6.5	(0.44)	28.1	(4.30)	52.3	(4.81)	17.3	(3.08)	‡	†
Mexico	10.8	(0.76)	14.8	(2.99)	46.2	(4.22)	24.5	(3.49)	14.5	(3.38)
Netherlands	10.0	(1.31)	16.6!	(5.77)	42.9	(7.93)	31.5	(5.27)	8.9!	(3.81)
Norway	8.7	(1.15)	17.7	(4.66)	48.9	(7.58)	20.0	(5.70)	13.3!	(6.18)
Poland	11.2	(0.95)	14.9	(3.73)	34.1	(4.47)	38.0	(4.38)	12.9	(3.80)
Portugal	6.6	(0.72)	39.0	(4.84)	36.0	(4.04)	18.5	(3.56)	6.5	(1.89)
Romania	7.0	(0.57)	33.5	(3.97)	38.8	(3.93)	24.2	(4.08)	3.5!	(1.45)
Serbia	7.4	(0.39)	15.9	(2.94)	56.1	(4.28)	26.2	(3.81)	‡	†
Singapore	7.7	(0.40)	17.0	(3.28)	54.1	(4.37)	27.6	(3.72)	‡	†
Slovak Republic	11.0	(0.59)	8.6	(1.90)	47.9	(3.83)	26.7	(3.57)	16.9	(2.99)
Spain	7.9	(0.75)	21.0	(3.72)	50.7	(4.52)	24.4	(4.11)	‡	†
Sweden	7.0	(0.51)	18.3	(3.62)	57.7	(5.02)	23.6	(4.62)	‡	†
Abu Dhabi-United Arab Emirates	10.9	(0.77)	12.5	(3.13)	44.5	(4.84)	30.0	(4.35)	13.0	(3.66)
Alberta-Canada	8.0	(0.53)	16.6	(2.85)	57.0	(3.62)	21.0	(3.35)	5.4!	(2.24)
Belgium-Flemish	7.3	(0.42)	22.2	(4.06)	48.8	(5.23)	28.5	(3.86)	‡	†
England-United Kingdom	7.5	(0.51)	20.3	(2.91)	54.5	(4.69)	23.7	(4.34)	‡	†
International average[1]	8.9	(0.12)	20.0	(0.62)	46.5	(0.83)	24.5	(0.71)	9.0	(0.47)
United States	7.2	(0.62)	19.8	(5.28)	57.5	(5.69)	22.7	(5.91)	#	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-12. Principals in lower secondary education, by average years of experience working in school management roles other than principal, percentage with specific years of experience in those roles, and education system: 2013

	Average years of experience		Less than 3 years experience		3-10 years experience		11-20 years experience		More than 20 years experience	
Education system	Average	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	10.5	(0.64)	7.2!	(3.58)	48.2	(6.00)	36.8	(5.40)	7.8	(2.34)
Brazil	6.0	(0.46)	41.8	(3.01)	39.2	(2.64)	14.1	(1.89)	4.9	(1.28)
Bulgaria	2.0	(0.35)	79.3	(3.59)	13.7	(3.16)	6.1!	(2.12)	‡	†
Chile	5.7	(0.72)	55.9	(4.14)	26.0	(3.88)	9.3	(2.70)	8.7!	(2.61)
Croatia	3.9	(0.72)	75.0	(3.76)	11.5	(2.81)	5.1!	(2.01)	8.3	(2.38)
Cyprus	9.4	(0.70)	7.4!	(2.35)	71.3	(4.28)	9.6	(2.82)	11.7	(3.16)
Czech Republic	3.6	(0.34)	57.5	(3.52)	32.2	(3.41)	10.2	(2.02)	‡	†
Denmark	3.3	(0.46)	62.0	(4.25)	28.8	(3.79)	7.6	(2.13)	‡	†
Estonia	4.1	(0.47)	59.9	(3.61)	24.4	(2.87)	11.2	(2.36)	4.6!	(1.52)
Finland	2.9	(0.46)	68.8	(4.10)	22.8	(3.72)	6.1!	(2.05)	‡	†
France	6.0	(0.40)	27.2	(2.91)	57.7	(3.78)	12.7	(2.65)	‡	†
Iceland	4.7	(0.57)	45.3	(5.18)	43.4	(5.11)	10.4	(2.84)	‡	†
Israel	7.1	(0.75)	27.9	(4.64)	49.4	(6.50)	17.4	(4.55)	5.3!	(2.37)
Italy	8.7	(0.56)	21.1	(4.19)	47.4	(4.57)	25.9	(4.08)	5.5!	(1.98)
Japan	4.9	(0.24)	19.6	(3.18)	77.0	(3.43)	3.5!	(1.48)	#	†
Korea, Republic of	4.6	(0.67)	39.2	(4.73)	56.8	(5.33)	‡	†	‡	†
Latvia	6.5	(1.02)	48.0	(4.89)	28.3	(5.75)	14.2!	(4.28)	9.5!	(3.72)
Malaysia	9.4	(0.54)	17.0	(3.04)	42.7	(4.06)	36.5	(3.92)	3.7!	(1.14)
Mexico	6.6	(0.83)	46.2	(4.19)	31.8	(3.80)	13.4	(3.27)	8.6!	(2.68)
Netherlands	7.6	(0.68)	14.2	(2.57)	59.9	(6.51)	24.2	(5.91)	‡	†
Norway	3.8	(0.38)	49.4	(6.73)	42.0	(6.74)	8.6!	(2.62)	#	†
Poland	2.3	(0.36)	73.0	(4.02)	19.2	(3.32)	7.4	(2.06)	‡	†
Portugal	6.8	(0.53)	24.8	(4.06)	50.4	(4.92)	23.4	(4.03)	‡	†
Romania	6.2	(0.60)	40.0	(4.21)	41.1	(4.49)	13.4	(2.84)	5.4!	(2.15)
Serbia	2.7	(0.55)	69.1	(5.08)	21.7	(4.44)	7.4!	(2.71)	‡	†
Singapore	7.7	(0.46)	8.8	(2.45)	70.9	(4.04)	18.3	(3.44)	‡	†
Slovak Republic	3.6	(0.43)	61.2	(4.13)	27.0	(3.67)	11.1	(2.57)	‡	†
Spain	4.5	(0.59)	45.4	(4.47)	43.9	(4.41)	7.3!	(2.39)	‡	†
Sweden	3.5	(0.36)	54.1	(4.48)	38.0	(4.47)	7.2	(1.94)	‡	†
Abu Dhabi-United Arab Emirates	7.0	(0.69)	23.5	(4.20)	54.9	(4.80)	14.5	(3.75)	7.1!	(2.66)
Alberta-Canada	5.6	(0.39)	33.0	(3.51)	52.9	(3.80)	12.5	(2.25)	‡	†
Belgium-Flemish	4.2	(0.50)	46.1	(4.95)	44.9	(4.93)	8.2!	(2.97)	‡	†
England-United Kingdom	11.8	(0.58)	‡	†	45.4	(4.95)	39.1	(5.60)	11.3	(2.47)
International average[1]	5.7	(0.10)	41.0	(0.71)	41.4	(0.78)	13.7	(0.56)	3.9	(0.31)
United States	4.4	(0.64)	44.6	(6.79)	45.8	(7.00)	‡	†	‡	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-13. Principals in lower secondary education, by average years of experience working as a teacher, percentage with specific years of experience in that role, and education system: 2013

	Average years of experience		Less than 3 years experience		3-10 years experience		11-20 years experience		More than 20 years experience	
Education system	Average	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	26.7	(1.04)	‡	†	6.9	(1.89)	15.5!	(5.31)	76.4	(5.29)
Brazil	14.2	(0.53)	7.2	(1.66)	31.2	(2.48)	37.6	(2.26)	23.9	(2.26)
Bulgaria	20.2	(0.88)	‡	†	20.5	(3.44)	28.5	(3.46)	49.5	(4.25)
Chile	25.2	(0.98)	3.2!	(1.61)	8.3	(2.22)	22.4	(3.62)	66.1	(4.18)
Croatia	15.9	(0.73)	7.6	(2.15)	24.2	(3.42)	37.0	(3.73)	31.2	(3.57)
Cyprus	27.8	(0.63)	‡	†	‡	†	15.5	(3.04)	80.4	(3.03)
Czech Republic	17.7	(0.73)	‡	†	26.4	(3.32)	35.5	(3.59)	36.1	(3.58)
Denmark	18.1	(0.88)	‡	†	27.2	(4.04)	31.4	(4.49)	39.8	(4.77)
Estonia	22.4	(0.82)	5.1!	(1.69)	12.7	(2.22)	24.5	(3.06)	57.7	(3.32)
Finland	17.2	(0.85)	3.1!	(1.40)	25.9	(4.00)	36.3	(4.05)	34.7	(4.02)
France	14.8	(0.79)	19.7	(3.09)	18.5	(2.73)	33.4	(4.04)	28.4	(3.95)
Iceland	14.5	(0.90)	3.8!	(1.89)	39.0	(5.09)	35.2	(4.85)	21.9	(4.30)
Israel	23.4	(0.81)	#	†	8.8!	(3.04)	25.4	(4.79)	65.8	(5.63)
Italy	22.2	(0.75)	#	†	9.7	(2.67)	31.9	(4.40)	58.4	(4.58)
Japan	29.6	(0.56)	‡	†	‡	†	6.3!	(2.07)	92.3	(2.14)
Korea, Republic of	29.2	(0.64)	‡	†	‡	†	8.8!	(3.08)	89.6	(3.28)
Latvia	25.0	(1.19)	‡	†	8.6!	(3.59)	21.4	(4.42)	66.4	(5.24)
Malaysia	26.4	(0.61)	#	†	5.2!	(1.89)	11.2	(2.61)	83.5	(3.20)
Mexico	23.8	(0.85)	‡	†	12.4	(2.64)	23.6	(3.30)	61.8	(3.91)
Netherlands	19.9	(1.46)	‡	†	14.7	(2.23)	35.7	(5.49)	45.1	(7.69)
Norway	15.4	(0.69)	‡	†	30.5	(4.23)	46.1	(4.39)	22.4	(3.23)
Poland	25.5	(0.70)	‡	†	‡	†	17.4	(3.86)	79.0	(4.10)
Portugal	21.5	(0.67)	‡	†	12.5	(2.87)	30.0	(3.57)	56.3	(3.83)
Romania	23.3	(0.96)	‡	†	2.1!	(1.04)	37.0	(4.41)	59.1	(4.63)
Serbia	14.7	(0.56)	‡	†	31.0	(4.03)	44.7	(3.81)	22.5	(3.12)
Singapore	14.5	(0.79)	‡	†	38.6	(4.19)	35.8	(3.78)	24.2	(3.57)
Slovak Republic	21.2	(0.83)	‡	†	18.8	(2.71)	30.8	(3.51)	49.9	(3.77)
Spain	23.2	(0.99)	‡	†	8.7!	(2.92)	29.0	(4.53)	61.8	(4.93)
Sweden	13.9	(0.73)	7.0!	(2.90)	31.9	(4.34)	40.5	(5.09)	20.6	(3.12)
Abu Dhabi-United Arab Emirates	11.5	(0.89)	11.3	(3.19)	51.5	(4.49)	19.3	(3.42)	17.9	(3.71)
Alberta-Canada	20.8	(0.76)	#	†	18.2	(3.30)	29.1	(3.49)	52.7	(3.79)
Belgium-Flemish	17.9	(0.70)	‡	†	17.6	(3.74)	51.3	(6.15)	30.6	(5.20)
England-United Kingdom	24.5	(0.71)	‡	†	5.6!	(2.62)	23.1	(3.60)	69.2	(3.99)
International average[1]	20.7	(0.14)	3.0	(0.27)	17.4	(0.54)	28.8	(0.70)	50.8	(0.73)
United States	13.3	(0.93)	‡	†	51.8	(6.60)	30.6	(7.52)	16.5	(4.92)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-14. Principals in lower secondary education, by average years of experience working in jobs other than principal or any other school management role or as a teacher, percentage with specific years of experience in that role, and education system: 2013

	Average years of experience		Less than 3 years experience		3-10 years experience		11-20 years experience		More than 20 years experience	
Education system	Average	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	2.7	(0.53)	69.7	(6.04)	24.4	(5.73)	4.8!	(2.25)	‡	†
Brazil	4.7	(0.38)	55.0	(3.26)	29.2	(3.01)	11.8	(1.72)	4.0	(1.00)
Bulgaria	3.4	(0.46)	61.2	(3.54)	33.4	(4.02)	3.1!	(1.48)	‡	†
Chile	3.1	(0.61)	74.9	(3.95)	11.4	(2.75)	9.7	(2.61)	4.0!	(1.76)
Croatia	4.1	(0.66)	72.0	(3.76)	12.3	(2.86)	7.5!	(2.43)	8.3	(2.31)
Cyprus	2.6	(0.59)	82.4	(3.51)	10.6	(3.09)	‡	†	‡	†
Czech Republic	1.3	(0.21)	83.1	(2.76)	14.3	(2.63)	2.1	(0.62)	‡	†
Denmark	3.6	(0.45)	65.6	(4.34)	24.0	(4.26)	6.9!	(2.43)	3.5!	(1.24)
Estonia	5.5	(0.62)	57.9	(3.90)	21.3	(3.15)	13.2	(2.33)	7.6	(1.94)
Finland	2.2	(0.24)	70.4	(3.99)	26.6	(3.69)	‡	†	#	†
France	5.6	(0.66)	57.3	(4.54)	22.0	(3.98)	13.4	(2.76)	7.3	(2.01)
Iceland	4.8	(0.62)	53.5	(4.92)	33.7	(4.74)	9.9	(2.78)	‡	†
Israel	3.6	(0.56)	63.4	(5.49)	27.9	(5.34)	3.0!	(1.26)	5.7!	(2.36)
Italy	2.0	(0.39)	80.7	(3.28)	14.0	(2.72)	3.1!	(1.24)	‡	†
Japan	1.7!	(0.65)	86.0	(3.22)	10.1	(2.63)	‡	†	‡	†
Korea, Republic of	1.4!	(0.41)	86.1	(3.57)	11.8	(3.33)	‡	†	‡	†
Latvia	4.6	(0.70)	61.2	(3.99)	22.3	(5.12)	10.1!	(3.73)	6.4!	(2.82)
Malaysia	1.0!	(0.36)	93.6	(1.80)	‡	†	‡	†	‡	†
Mexico	6.4	(0.92)	58.9	(4.60)	18.0	(3.91)	12.6	(2.88)	10.4!	(3.17)
Netherlands	1.5	(0.40)	83.9	(2.54)	12.9	(1.92)	‡	†	#	†
Norway	5.8	(1.47)	47.3	(7.04)	31.8	(5.72)	16.0!	(5.46)	‡	†
Poland	1.8	(0.40)	80.3	(3.93)	13.8	(3.36)	4.5!	(1.81)	‡	†
Portugal	1.9	(0.41)	80.3	(3.90)	14.7	(3.63)	‡	†	‡	†
Romania	2.8	(0.65)	78.2	(3.33)	11.9	(2.76)	5.8!	(2.36)	4.0!	(1.73)
Serbia	2.8	(0.49)	71.3	(4.25)	20.2	(3.89)	7.7!	(2.57)	‡	†
Singapore	1.0	(0.21)	87.0	(2.82)	11.6	(2.65)	‡	†	#	†
Slovak Republic	2.0	(0.48)	84.3	(2.78)	9.6	(2.14)	‡	†	3.2!	(1.51)
Spain	3.9	(0.54)	65.0	(4.03)	23.7	(3.82)	5.3	(1.58)	6.0!	(1.98)
Sweden	6.7	(0.75)	44.7	(4.32)	28.8	(3.79)	19.6	(4.69)	6.9!	(2.96)
Abu Dhabi-United Arab Emirates	1.5!	(0.48)	85.7	(3.77)	10.6	(3.16)	‡	†	‡	†
Alberta-Canada	5.3	(0.66)	52.2	(3.91)	33.9	(3.68)	7.2!	(2.34)	6.7!	(2.14)
Belgium-Flemish	1.9	(0.38)	78.8	(4.15)	14.4	(3.30)	6.4!	(2.54)	‡	†
England-United Kingdom	2.4	(0.46)	77.0	(3.80)	17.6	(3.45)	‡	†	3.3!	(1.37)
International average[1]	3.2	(0.10)	71.2	(0.70)	19.0	(0.63)	6.3	(0.40)	3.6	(0.32)
United States	3.7	(0.72)	60.3	(5.14)	31.4	(4.14)	‡	†	‡	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-15. Participation rates and reported personal financial cost of professional development activity undertaken by lower secondary education teachers in the 12 months prior to the survey, by education system: 2013

	Undertook some professional development activities in the previous 12 months[1]		Undertook some professional development activities in the previous 12 months without any type of support[2]	
Education system	Percent	(S.E.)	Percent	(S.E.)
Australia	96.6	(0.48)	1.2!	(0.38)
Brazil	91.5	(0.49)	14.7	(0.90)
Bulgaria	85.2	(1.09)	1.4	(0.31)
Chile	71.7	(1.77)	11.2	(1.09)
Croatia	96.8	(0.33)	1.3	(0.24)
Cyprus	89.1	(0.75)	4.7	(0.71)
Czech Republic	82.5	(1.02)	2.3	(0.43)
Denmark	86.4	(1.15)	1.5	(0.33)
Estonia	93.0	(0.52)	0.4!	(0.14)
Finland	79.3	(1.04)	4.1	(0.52)
France	76.4	(0.89)	2.7	(0.36)
Iceland	91.1	(0.78)	2.6	(0.57)
Israel	91.1	(0.63)	10.0	(0.66)
Italy	75.4	(0.91)	9.5	(0.79)
Japan	83.2	(0.76)	6.7	(0.60)
Korea, Republic of	91.4	(0.61)	7.5	(0.61)
Latvia	96.1	(0.60)	2.1	(0.46)
Malaysia	96.6	(0.45)	0.3!	(0.13)
Mexico	95.6	(0.43)	10.0	(0.75)
Netherlands	93.2	(0.56)	2.5	(0.55)
Norway	87.0	(0.88)	2.5	(0.40)
Poland	93.7	(0.67)	7.8	(0.65)
Portugal	88.5	(0.66)	28.6	(1.14)
Romania	83.3	(1.22)	20.9	(1.09)
Serbia	92.9	(0.54)	5.5	(0.61)
Singapore	98.0	(0.26)	0.2!	(0.08)
Slovak Republic	73.3	(1.02)	6.8	(0.93)
Spain	84.3	(1.04)	10.5	(0.68)
Sweden	83.4	(1.04)	1.6	(0.33)
Abu Dhabi-United Arab Emirates	92.0	(1.33)	1.7	(0.33)
Alberta-Canada	97.7	(0.42)	1.1	(0.25)
Belgium-Flemish	88.2	(0.85)	2.4	(0.34)
England-United Kingdom	91.7	(0.74)	0.8!	(0.25)
International average[3]	88.4	(0.15)	5.7	(0.10)
United States	95.2	(0.79)	1.7	(0.48)

See notes at end of table.

Table 9-15. Participation rates and reported personal financial cost of professional development activity undertaken by lower secondary education teachers in the 12 months prior to the survey, by education system: 2013—Continued

	Had to pay for none, some, or all of the professional development activities undertaken					
	None		Some		All	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	75.0	(1.53)	23.5	(1.33)	1.5	(0.41)
Brazil	58.4	(1.11)	21.8	(0.72)	19.8	(0.95)
Bulgaria	84.9	(1.18)	12.1	(1.00)	3.0	(0.52)
Chile	58.9	(1.83)	23.9	(1.64)	17.2	(1.48)
Croatia	73.3	(0.94)	22.9	(0.83)	3.8	(0.39)
Cyprus	81.8	(1.18)	9.7	(0.87)	8.5	(0.87)
Czech Republic	77.2	(1.06)	17.5	(0.90)	5.4	(0.59)
Denmark	84.9	(1.22)	13.3	(1.09)	1.8	(0.46)
Estonia	69.1	(1.06)	29.0	(1.01)	1.9	(0.33)
Finland	72.6	(1.14)	21.6	(1.01)	5.8	(0.61)
France	75.8	(1.07)	18.8	(0.96)	5.4	(0.57)
Iceland	60.8	(1.39)	32.9	(1.38)	6.3	(0.80)
Israel	45.0	(1.13)	40.0	(1.21)	15.0	(0.74)
Italy	69.2	(1.21)	16.6	(0.94)	14.2	(0.91)
Japan	56.4	(1.35)	32.9	(1.20)	10.7	(0.78)
Korea, Republic of	25.2	(1.12)	64.1	(1.32)	10.8	(0.77)
Latvia	71.1	(1.68)	24.7	(1.63)	4.3	(0.62)
Malaysia	46.8	(1.37)	49.7	(1.39)	3.5	(0.33)
Mexico	59.5	(1.22)	26.3	(1.11)	14.3	(0.90)
Netherlands	77.5	(1.07)	18.0	(0.94)	4.5	(0.64)
Norway	81.0	(1.25)	15.3	(1.04)	3.7	(0.43)
Poland	60.9	(1.23)	26.9	(1.06)	12.2	(0.83)
Portugal	42.8	(1.27)	24.4	(0.80)	32.8	(1.14)
Romania	30.7	(1.17)	41.0	(1.25)	28.3	(1.37)
Serbia	52.7	(1.43)	36.7	(1.10)	10.6	(0.95)
Singapore	89.7	(0.49)	9.5	(0.47)	0.8	(0.15)
Slovak Republic	54.3	(1.80)	31.6	(1.38)	14.0	(1.35)
Spain	57.0	(1.24)	30.9	(1.03)	12.1	(0.77)
Sweden	86.3	(0.70)	10.7	(0.62)	3.0	(0.39)
Abu Dhabi-United Arab Emirates	62.5	(1.75)	33.9	(1.77)	3.6	(0.49)
Alberta-Canada	61.9	(1.54)	36.3	(1.50)	1.8	(0.35)
Belgium-Flemish	86.8	(0.72)	9.7	(0.66)	3.5	(0.41)
England-United Kingdom	92.7	(0.70)	6.4	(0.56)	0.9	(0.26)
International average3	66.1	(0.22)	25.2	(0.20)	8.6	(0.13)
United States	74.1	(1.48)	22.8	(1.17)	3.2	(0.61)

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

[1] Percentage of teachers who report having participated in at least one of the following professional development activities in the 12 months prior to the survey: "courses/workshops," "education conferences or seminars," "observation visits to other schools," "observation visits to business premises, public organizations or nongovernmental organizations," "in-service training courses in business premises, public organizations or nongovernmental organizations," "qualification program (e.g., a degree program)," "participation in a network of teachers formed specifically for the professional development of teachers," "individual or collaborative research," or "mentoring and/or peer observation and coaching."

[2] Percentage of teachers participating in professional development activities without receiving financial support, time for activities that took place during the regular working hours at their school, or nonmonetary support for activities outside working hours.

[3] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-16. Participation rates for each type of professional development reported to be undertaken by lower secondary education teachers in the 12 months prior to the survey, by education system: 2013

Education system	Courses/workshops		Education conferences or seminars where teachers and/or researchers present their research results and discuss educational issues		Observation visits to other schools		Observation visits to business premises, public organizations, nongovernmental organizations	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	85.7	(0.86)	56.3	(1.56)	14.7	(0.99)	13.6	(0.87)
Brazil	65.8	(0.88)	38.9	(0.93)	12.2	(0.68)	16.5	(0.72)
Bulgaria	60.3	(1.61)	39.8	(1.20)	15.2	(1.20)	7.3	(0.72)
Chile	55.3	(1.89)	29.8	(1.49)	9.0	(0.96)	9.4	(0.89)
Croatia	79.1	(0.88)	79.4	(0.79)	6.7	(0.49)	6.1	(0.47)
Cyprus	60.6	(1.24)	63.0	(1.33)	18.3	(0.91)	11.4	(0.76)
Czech Republic	69.7	(1.53)	22.4	(0.97)	13.9	(0.86)	18.3	(0.75)
Denmark	72.9	(1.72)	36.4	(1.26)	5.7	(0.79)	12.4	(1.08)
Estonia	82.0	(0.75)	51.3	(1.21)	31.5	(1.26)	15.8	(0.83)
Finland	60.1	(1.32)	35.5	(1.22)	20.0	(1.14)	15.9	(1.09)
France	53.7	(1.24)	19.8	(0.94)	9.2	(0.68)	5.3	(0.47)
Iceland	70.0	(1.33)	58.2	(1.40)	52.1	(1.26)	15.1	(1.18)
Israel	76.3	(1.00)	45.0	(1.07)	14.3	(1.10)	7.2	(0.55)
Italy	50.9	(1.38)	31.3	(1.03)	12.5	(0.70)	5.2	(0.46)
Japan	59.8	(0.99)	56.5	(1.07)	51.4	(1.30)	6.5	(0.48)
Korea, Republic of	78.1	(0.89)	45.3	(1.16)	31.9	(1.29)	10.2	(0.64)
Latvia	88.8	(1.08)	60.1	(1.46)	52.4	(1.60)	20.6	(1.09)
Malaysia	91.3	(0.70)	32.9	(1.34)	19.9	(1.38)	19.2	(1.06)
Mexico	90.3	(0.71)	38.6	(1.21)	10.7	(0.71)	11.7	(0.75)
Netherlands	78.4	(1.17)	45.7	(1.69)	15.8	(1.28)	20.1	(1.30)
Norway	64.2	(1.44)	40.0	(2.50)	7.5	(1.04)	8.2	(1.31)
Poland	81.0	(1.01)	52.4	(1.17)	11.7	(0.89)	9.0	(0.66)
Portugal	66.5	(1.09)	40.4	(1.20)	16.7	(0.83)	39.1	(1.06)
Romania	51.9	(1.41)	28.6	(1.27)	33.3	(1.23)	12.4	(0.82)
Serbia	69.9	(1.07)	60.4	(1.17)	14.6	(0.79)	12.4	(0.75)
Singapore	92.9	(0.46)	61.4	(0.96)	24.1	(0.81)	20.8	(0.78)
Slovak Republic	38.5	(1.21)	25.0	(0.92)	4.1	(0.39)	2.1	(0.30)
Spain	66.6	(1.36)	24.4	(0.89)	9.1	(0.52)	8.4	(0.53)
Sweden	58.1	(1.29)	45.1	(1.27)	13.5	(0.90)	9.5	(0.91)
Abu Dhabi-United Arab Emirates	81.6	(2.18)	49.8	(1.40)	28.1	(1.67)	28.8	(1.52)
Alberta-Canada	84.9	(0.98)	73.6	(1.26)	19.8	(1.46)	8.1	(0.67)
Belgium-Flemish	78.8	(1.22)	23.0	(1.00)	8.2	(0.91)	9.2	(0.65)
England-United Kingdom	75.0	(1.30)	29.4	(1.18)	19.5	(1.09)	5.6	(0.55)
International average[1]	70.9	(0.22)	43.6	(0.22)	19.0	(0.18)	12.8	(0.15)
United States	84.2	(1.42)	48.8	(2.25)	13.3	(1.21)	7.0	(0.71)

See notes at end of table.

Table 9-16. Participation rates for each type of professional development reported to be undertaken by lower secondary education teachers in the 12 months prior to the survey, by education system: 2013—Continued

Education system	In-service training courses in business premises, public organizations, nongovernmental organizations		Qualification program (e.g., a degree program)		Participation in a network of teachers formed specifically for the professional development of teachers		Individual or collaborative research on a topic of interest to the teacher		Mentoring and/or peer observation and coaching, as part of a formal school arrangement	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	24.4	(1.75)	10.0	(0.73)	51.5	(1.63)	37.4	(1.42)	44.4	(1.79)
Brazil	37.7	(1.00)	36.5	(0.93)	25.6	(0.76)	46.5	(0.84)	34.9	(0.97)
Bulgaria	23.8	(0.95)	49.0	(1.68)	21.6	(1.13)	22.6	(1.20)	30.9	(1.40)
Chile	8.1	(0.82)	16.7	(1.14)	21.7	(1.38)	32.8	(1.29)	14.1	(1.10)
Croatia	6.6	(0.43)	6.5	(0.43)	62.6	(0.93)	35.0	(0.80)	19.7	(0.82)
Cyprus	13.2	(0.95)	8.7	(0.71)	24.7	(1.14)	24.5	(1.01)	18.7	(0.88)
Czech Republic	14.4	(0.74)	17.6	(0.84)	17.4	(0.87)	15.8	(0.66)	34.3	(1.45)
Denmark	5.3	(0.58)	10.2	(0.88)	40.8	(1.90)	19.0	(1.18)	18.3	(1.51)
Estonia	22.8	(0.96)	19.1	(0.84)	51.3	(0.90)	34.0	(1.06)	21.8	(1.42)
Finland	8.8	(0.69)	11.3	(0.67)	20.5	(0.99)	7.6	(0.63)	5.1	(0.66)
France	2.7	(0.26)	5.5	(0.47)	18.3	(0.77)	41.2	(1.01)	13.4	(0.85)
Iceland	9.3	(0.86)	10.6	(0.87)	56.6	(1.30)	20.7	(1.19)	15.2	(0.99)
Israel	5.4	(0.61)	26.4	(1.17)	40.3	(1.12)	26.0	(1.01)	32.4	(1.07)
Italy	3.4	(0.30)	9.8	(0.63)	21.8	(0.88)	45.6	(1.16)	12.3	(0.66)
Japan	4.6	(0.43)	6.2	(0.50)	23.1	(0.96)	22.6	(0.98)	29.8	(1.13)
Korea, Republic of	13.9	(0.71)	18.9	(0.79)	54.6	(1.06)	43.2	(1.17)	52.8	(1.22)
Latvia	9.3	(0.90)	12.7	(1.30)	36.6	(1.52)	28.6	(1.13)	17.4	(1.28)
Malaysia	23.7	(0.94)	10.1	(0.70)	55.6	(1.17)	24.9	(1.06)	34.9	(1.23)
Mexico	19.1	(0.90)	42.7	(1.20)	41.1	(1.21)	48.9	(1.07)	21.4	(1.02)
Netherlands	23.4	(1.18)	20.0	(1.09)	30.3	(1.33)	38.3	(1.49)	33.6	(2.01)
Norway	3.9	(0.37)	17.9	(1.16)	37.8	(1.66)	15.1	(1.04)	32.4	(1.88)
Poland	16.3	(0.82)	30.6	(0.96)	40.6	(1.32)	37.8	(1.32)	44.7	(1.23)
Portugal	12.8	(0.64)	28.6	(0.98)	19.1	(0.76)	36.6	(0.95)	12.9	(0.72)
Romania	16.3	(0.98)	37.5	(1.14)	50.4	(1.28)	39.2	(1.24)	39.3	(1.49)
Serbia	11.1	(0.61)	7.6	(0.58)	33.1	(0.94)	31.9	(0.87)	28.2	(1.02)
Singapore	16.5	(0.71)	10.1	(0.52)	52.7	(0.95)	45.4	(0.90)	65.2	(0.98)
Slovak Republic	4.0	(0.40)	23.2	(0.91)	34.3	(1.38)	11.2	(0.63)	40.4	(1.31)
Spain	7.6	(0.45)	21.2	(0.78)	28.3	(1.04)	41.5	(1.07)	21.3	(0.89)
Sweden	7.4	(0.65)	10.4	(0.81)	41.5	(1.69)	9.6	(0.56)	17.5	(1.31)
Abu Dhabi-United Arab Emirates	31.7	(1.40)	16.8	(1.19)	44.6	(1.69)	48.9	(1.86)	60.5	(2.15)
Alberta-Canada	21.4	(1.03)	10.8	(0.89)	62.9	(1.47)	48.9	(1.61)	35.0	(1.50)
Belgium-Flemish	11.3	(0.64)	16.5	(0.78)	23.4	(1.01)	18.8	(0.77)	12.7	(0.80)
England-United Kingdom	22.4	(1.15)	10.0	(0.89)	33.3	(1.16)	26.6	(1.11)	57.0	(1.19)
International average[1]	14.0	(0.15)	17.9	(0.16)	36.9	(0.21)	31.1	(0.19)	29.5	(0.22)
United States	15.4	(1.06)	16.4	(1.16)	47.4	(1.75)	41.1	(1.63)	32.5	(1.83)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-17. Percentage of lower secondary education teachers indicating they have a high level of need for professional development, by area of need and education system: 2013

Education system	Knowledge and understanding of the subject field(s)		Pedagogical competencies in teaching subject field(s)		Knowledge of the curriculum		Student evaluation and assessment practice		Information and communication technology (ICT) skills for teaching	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	2.4	(0.45)	2.8	(0.47)	3.7	(0.54)	3.3	(0.40)	13.6	(0.88)
Brazil	6.7	(0.39)	6.9	(0.39)	7.0	(0.48)	10.2	(0.44)	27.5	(0.75)
Bulgaria	12.4	(0.80)	11.8	(0.79)	14.5	(0.97)	13.4	(0.84)	20.3	(0.94)
Chile	5.7	(0.69)	6.1	(0.61)	7.0	(0.69)	9.7	(0.75)	12.8	(0.94)
Croatia	5.7	(0.43)	8.6	(0.50)	3.6	(0.32)	13.5	(0.68)	19.7	(0.87)
Cyprus	2.4	(0.36)	4.3	(0.57)	8.3	(0.81)	4.8	(0.59)	12.5	(0.68)
Czech Republic	8.5	(0.54)	6.1	(0.40)	3.0	(0.35)	5.3	(0.46)	14.8	(0.71)
Denmark	6.4	(0.78)	6.0	(0.65)	3.2	(0.44)	7.5	(0.76)	18.7	(1.15)
Estonia	11.5	(0.66)	11.9	(0.70)	12.7	(0.74)	13.8	(0.79)	24.1	(0.92)
Finland	3.8	(0.39)	3.4	(0.38)	3.4	(0.34)	3.9	(0.45)	17.5	(0.96)
France	5.4	(0.44)	9.2	(0.65)	2.9	(0.33)	13.6	(0.70)	25.1	(0.87)
Iceland	9.0	(0.85)	8.5	(0.84)	22.7	(1.19)	18.2	(1.11)	28.6	(1.46)
Israel	9.3	(0.63)	10.5	(0.74)	7.9	(0.55)	10.2	(0.61)	24.5	(1.16)
Italy	16.6	(0.74)	23.5	(0.97)	11.3	(0.63)	22.9	(0.96)	35.9	(0.83)
Japan	51.0	(0.91)	56.9	(0.91)	20.6	(0.86)	39.6	(0.92)	25.9	(0.88)
Korea, Republic of	25.2	(0.93)	31.3	(1.04)	23.5	(0.91)	25.3	(1.07)	24.9	(1.06)
Latvia	3.7	(0.52)	4.3	(0.50)	3.2	(0.48)	6.3	(0.62)	19.4	(1.11)
Malaysia	28.8	(1.01)	25.2	(1.02)	23.4	(0.87)	39.7	(1.26)	37.6	(1.19)
Mexico	4.4	(0.56)	8.0	(0.77)	5.0	(0.51)	8.0	(0.62)	21.0	(0.98)
Netherlands	6.9	(0.66)	5.6	(0.52)	4.3	(0.51)	6.6	(0.76)	14.9	(1.11)
Norway	7.1	(0.73)	7.9	(0.74)	4.5	(0.44)	12.4	(1.20)	18.3	(1.40)
Poland	1.8	(0.27)	1.8	(0.32)	2.1	(0.32)	3.3	(0.36)	10.6	(0.80)
Portugal	4.7	(0.41)	4.2	(0.45)	2.9	(0.32)	4.8	(0.42)	9.2	(0.51)
Romania	5.4	(0.53)	7.2	(0.49)	6.7	(0.57)	7.5	(0.49)	18.6	(0.92)
Serbia	5.4	(0.38)	6.6	(0.45)	7.1	(0.47)	9.1	(0.60)	19.5	(0.79)
Singapore	6.2	(0.44)	9.9	(0.55)	7.1	(0.44)	11.9	(0.58)	11.8	(0.62)
Slovak Republic	9.1	(0.57)	8.0	(0.57)	11.9	(0.81)	9.3	(0.63)	18.6	(0.86)
Spain	1.8	(0.23)	5.0	(0.46)	1.3	(0.23)	4.3	(0.58)	14.1	(0.68)
Sweden	9.6	(0.58)	9.1	(0.57)	16.5	(0.79)	26.4	(0.90)	25.5	(0.84)
Abu Dhabi-United Arab Emirates	2.3	(0.41)	4.0	(0.56)	3.3	(0.40)	4.7	(0.47)	9.5	(0.79)
Alberta-Canada	2.6	(0.45)	2.4	(0.47)	2.3	(0.42)	4.5	(0.58)	9.3	(0.77)
Belgium-Flemish	3.0	(0.34)	2.9	(0.40)	2.7	(0.34)	6.9	(0.62)	10.5	(0.70)
England-United Kingdom	1.8	(0.30)	1.6	(0.29)	1.9	(0.52)	2.4	(0.31)	7.7	(0.66)
International average[2]	8.7	(0.10)	9.7	(0.11)	7.9	(0.11)	11.6	(0.13)	18.9	(0.16)
United States	1.6	(0.32)	2.2	(0.36)	3.3	(0.54)	4.2	(0.67)	8.1	(0.77)

See notes at end of table.

Table 9-17. Percentage of lower secondary education teachers indicating they have a high level of need for professional development, by area of need and education system: 2013—Continued

Education system	Student behavior and classroom management		School management and administration		Approaches to individualized learning		Teaching students with special needs[1]		Teaching in a multicultural or multilingual setting	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	3.8	(0.56)	4.9	(0.74)	6.2	(0.85)	8.2	(0.79)	4.4	(0.68)
Brazil	19.6	(0.80)	25.5	(0.72)	12.0	(0.44)	60.1	(0.94)	46.4	(0.91)
Bulgaria	15.8	(0.79)	9.1	(0.65)	10.1	(0.89)	22.8	(0.95)	16.6	(1.01)
Chile	12.1	(0.88)	16.5	(1.06)	12.6	(0.83)	25.8	(1.50)	24.4	(1.32)
Croatia	19.9	(0.80)	5.8	(0.45)	19.0	(0.70)	32.7	(0.92)	11.3	(0.67)
Cyprus	7.5	(0.79)	11.7	(0.88)	9.2	(0.78)	27.0	(1.01)	17.5	(0.92)
Czech Republic	13.6	(0.73)	4.0	(0.40)	5.6	(0.40)	8.0	(0.50)	5.1	(0.45)
Denmark	6.9	(0.71)	3.1	(0.60)	4.3	(0.63)	27.7	(1.33)	6.8	(0.68)
Estonia	16.7	(1.03)	3.5	(0.31)	9.9	(0.60)	19.7	(0.87)	9.2	(0.70)
Finland	7.8	(0.64)	1.9	(0.27)	8.3	(0.55)	12.6	(0.82)	5.4	(0.61)
France	9.3	(0.71)	4.2	(0.39)	19.1	(0.90)	27.4	(0.88)	11.4	(0.74)
Iceland	14.2	(1.05)	4.9	(0.75)	11.8	(0.98)	16.1	(1.11)	8.9	(0.79)
Israel	12.3	(0.62)	10.0	(0.64)	12.7	(0.62)	22.8	(0.99)	13.0	(0.80)
Italy	28.6	(1.04)	9.9	(0.71)	22.1	(0.83)	32.3	(1.02)	27.4	(0.89)
Japan	43.0	(0.92)	14.6	(0.67)	40.2	(0.93)	40.6	(1.08)	10.7	(0.56)
Korea, Republic of	30.4	(1.14)	17.5	(0.79)	25.1	(0.95)	36.0	(1.05)	18.9	(0.88)
Latvia	15.0	(0.98)	4.3	(0.52)	13.6	(0.96)	12.1	(1.34)	4.8	(0.71)
Malaysia	21.3	(1.07)	17.8	(0.94)	22.4	(0.99)	10.0	(0.69)	10.4	(0.81)
Mexico	8.6	(0.56)	15.4	(0.83)	13.6	(0.83)	47.4	(1.21)	33.2	(1.00)
Netherlands	9.0	(0.96)	4.2	(0.46)	14.0	(1.02)	10.7	(1.03)	3.1	(0.50)
Norway	4.3	(0.48)	2.5	(0.25)	5.2	(0.52)	12.4	(0.86)	7.4	(1.04)
Poland	13.1	(0.67)	6.0	(0.37)	9.2	(0.52)	14.4	(0.75)	5.5	(0.46)
Portugal	10.4	(0.63)	14.1	(0.61)	8.4	(0.54)	26.5	(0.98)	16.8	(0.72)
Romania	13.6	(0.72)	18.2	(0.86)	15.1	(0.85)	27.0	(1.02)	19.7	(0.90)
Serbia	14.5	(0.77)	6.9	(0.47)	15.1	(0.73)	35.4	(1.13)	10.2	(0.60)
Singapore	9.3	(0.50)	7.4	(0.44)	10.1	(0.60)	15.0	(0.54)	4.9	(0.39)
Slovak Republic	14.5	(0.75)	7.9	(0.54)	10.6	(0.58)	18.8	(0.87)	7.8	(0.59)
Spain	8.4	(0.62)	10.2	(0.55)	8.5	(0.53)	21.8	(1.01)	19.0	(0.97)
Sweden	9.1	(0.60)	3.1	(0.35)	15.3	(0.86)	19.8	(0.96)	11.3	(0.85)
Abu Dhabi-United Arab Emirates	6.1	(0.61)	12.2	(0.75)	8.2	(0.64)	22.6	(1.14)	12.9	(0.89)
Alberta-Canada	3.8	(0.52)	4.1	(0.53)	5.3	(0.62)	8.7	(0.70)	3.8	(0.55)
Belgium-Flemish	4.9	(0.41)	1.8	(0.30)	6.6	(0.62)	5.3	(0.53)	3.1	(0.49)
England-United Kingdom	2.9	(0.33)	3.5	(0.45)	3.4	(0.41)	6.4	(0.57)	6.9	(0.63)
International average[2]	13.1	(0.13)	8.7	(0.11)	12.5	(0.13)	22.3	(0.17)	12.7	(0.14)
United States	5.1	(0.60)	4.1	(0.49)	5.1	(0.65)	8.2	(1.03)	5.0	(0.67)

See notes at end of table.

Table 9-17. Percentage of lower secondary education teachers indicating they have a high level of need for professional development, by area of need and education system: 2013—Continued

Education system	Teaching cross-curricular skills (e.g., problem solving, learning-to-learn)		Approaches to developing cross-occupational competencies for future work or future studies		New technologies in the workplace		Student career guidance and counselling	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	3.1	(0.40)	4.2	(0.54)	12.5	(0.78)	5.9	(1.03)
Brazil	19.0	(0.61)	21.7	(0.69)	36.9	(0.86)	36.0	(0.78)
Bulgaria	9.1	(0.72)	13.2	(0.92)	22.7	(1.31)	9.5	(0.59)
Chile	11.6	(0.96)	11.9	(0.95)	16.7	(1.09)	17.4	(1.18)
Croatia	13.1	(0.72)	13.0	(0.68)	23.8	(0.87)	10.6	(0.61)
Cyprus	9.0	(0.72)	15.2	(0.93)	20.0	(0.96)	17.1	(0.78)
Czech Republic	5.6	(0.46)	4.5	(0.38)	10.2	(0.66)	3.7	(0.40)
Denmark	5.1	(0.62)	5.6	(0.66)	14.0	(1.13)	3.6	(0.53)
Estonia	14.7	(0.78)	8.0	(0.58)	20.9	(0.95)	7.9	(0.74)
Finland	4.3	(0.48)	1.3	(0.19)	13.9	(0.85)	1.5	(0.25)
France	11.2	(0.66)	11.6	(0.65)	17.0	(0.71)	20.5	(0.92)
Iceland	6.6	(0.74)	7.8	(0.81)	19.1	(1.19)	6.4	(0.75)
Israel	14.4	(0.78)	13.2	(0.79)	22.9	(0.94)	13.9	(0.71)
Italy	22.3	(0.75)	16.4	(0.79)	32.2	(0.91)	18.7	(0.81)
Japan	34.5	(0.96)	22.0	(0.79)	16.0	(0.73)	42.9	(0.93)
Korea, Republic of	27.5	(1.03)	25.0	(0.95)	18.9	(0.96)	42.6	(1.11)
Latvia	11.3	(0.88)	5.0	(0.62)	24.3	(1.02)	9.7	(0.71)
Malaysia	23.7	(1.07)	21.1	(0.96)	30.8	(1.03)	17.3	(0.98)
Mexico	11.2	(0.67)	17.8	(0.84)	28.1	(1.12)	21.2	(0.98)
Netherlands	6.8	(0.88)	4.3	(0.54)	11.5	(1.17)	6.4	(0.67)
Norway	8.0	(0.90)	6.7	(0.51)	8.7	(0.52)	5.0	(0.58)
Poland	7.2	(0.64)	3.9	(0.34)	13.2	(0.75)	7.2	(0.58)
Portugal	6.8	(0.52)	10.5	(0.53)	9.2	(0.58)	6.9	(0.45)
Romania	13.7	(0.79)	17.4	(0.80)	22.0	(0.95)	15.2	(0.84)
Serbia	10.0	(0.47)	7.4	(0.49)	21.4	(0.76)	12.2	(0.66)
Singapore	8.3	(0.49)	9.2	(0.62)	9.8	(0.60)	7.8	(0.50)
Slovak Republic	9.0	(0.55)	6.6	(0.45)	14.5	(0.72)	6.6	(0.50)
Spain	7.9	(0.52)	9.4	(0.70)	14.0	(0.70)	8.1	(0.53)
Sweden	12.0	(0.65)	7.7	(0.48)	18.1	(0.78)	2.8	(0.43)
Abu Dhabi-United Arab Emirates	7.1	(0.58)	11.1	(0.78)	17.7	(1.26)	11.8	(0.86)
Alberta-Canada	3.3	(0.46)	3.6	(0.51)	11.8	(0.93)	3.9	(0.51)
Belgium-Flemish	3.2	(0.34)	2.1	(0.31)	4.8	(0.51)	2.1	(0.32)
England-United Kingdom	3.6	(0.52)	4.1	(0.51)	8.4	(0.58)	5.7	(0.42)
International average[2]	11.0	(0.12)	10.4	(0.12)	17.8	(0.16)	12.4	(0.13)
United States	4.7	(0.75)	7.0	(0.87)	14.6	(1.03)	4.3	(0.67)

[1] Special needs students are not well defined internationally but usually cover those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged. Often, special needs students will be those for whom additional public or private resources (personnel, material, or financial) have been provided to support their education. "Gifted students" are not considered to have special needs under the definition used here and in other OECD studies.

[2] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-18. Percentage of lower secondary education teachers who "agree" or "strongly agree" that specific issues present barriers to their participation in professional development, by education system: 2013

Education system	Do not have the prerequisites (e.g., qualifications, experience, seniority)		Professional development is too expensive/ unaffordable		There is a lack of employer support		Professional development conflicts with my work schedule	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	6.5	(0.50)	38.8	(1.59)	23.9	(1.43)	58.0	(1.38)
Brazil	8.1	(0.41)	44.0	(0.84)	61.2	(0.98)	54.8	(0.90)
Bulgaria	10.4	(0.97)	58.1	(1.27)	12.7	(0.94)	51.3	(1.46)
Chile	24.8	(1.60)	72.8	(1.41)	52.8	(2.03)	62.3	(1.61)
Croatia	3.8	(0.36)	47.9	(1.14)	19.5	(0.90)	22.3	(0.88)
Cyprus	12.2	(0.83)	44.1	(1.29)	41.3	(1.23)	45.1	(1.29)
Czech Republic	7.2	(0.53)	36.1	(1.28)	21.1	(1.40)	45.0	(1.21)
Denmark	11.0	(0.75)	55.6	(1.34)	26.0	(1.28)	40.2	(1.49)
Estonia	12.0	(0.81)	37.3	(1.11)	16.4	(0.91)	35.4	(1.25)
Finland	7.1	(0.61)	23.1	(1.26)	23.2	(1.59)	51.9	(1.16)
France	9.8	(0.68)	24.4	(0.91)	14.3	(0.67)	42.6	(0.97)
Iceland	5.5	(0.68)	43.1	(1.44)	14.5	(1.16)	57.9	(1.29)
Israel	8.3	(0.58)	28.8	(1.09)	25.9	(1.29)	50.4	(1.25)
Italy	14.0	(0.63)	53.0	(1.08)	39.8	(1.11)	59.6	(1.10)
Japan	26.7	(0.83)	62.1	(1.12)	59.5	(0.97)	86.4	(0.64)
Korea, Republic of	29.6	(0.99)	47.9	(0.94)	70.2	(1.05)	83.1	(0.83)
Latvia	4.7	(0.48)	30.0	(1.48)	11.2	(0.94)	28.8	(1.19)
Malaysia	9.3	(0.59)	21.8	(0.96)	17.7	(1.00)	55.5	(1.11)
Mexico	26.5	(1.02)	53.7	(1.26)	63.6	(1.15)	53.6	(1.17)
Netherlands	8.2	(0.79)	26.3	(1.53)	26.9	(1.38)	38.3	(1.30)
Norway	8.7	(0.67)	37.1	(1.74)	28.5	(2.06)	48.6	(2.12)
Poland	4.0	(0.38)	53.1	(1.14)	19.9	(1.01)	33.0	(1.19)
Portugal	13.2	(0.59)	80.7	(0.91)	92.1	(0.54)	74.8	(0.88)
Romania	13.1	(1.02)	55.5	(1.30)	18.8	(1.00)	41.8	(1.26)
Serbia	8.7	(0.64)	58.1	(1.17)	34.5	(1.20)	27.4	(0.97)
Singapore	15.6	(0.79)	19.8	(0.71)	21.0	(0.76)	62.2	(0.82)
Slovak Republic	11.0	(0.64)	49.7	(1.49)	17.5	(1.13)	34.2	(1.10)
Spain	7.8	(0.47)	38.1	(1.03)	30.6	(0.98)	59.7	(1.15)
Sweden	7.7	(0.51)	60.6	(1.22)	35.4	(1.28)	58.1	(1.09)
Abu Dhabi-United Arab Emirates	4.5	(0.51)	41.2	(1.48)	39.6	(1.78)	45.2	(1.52)
Alberta-Canada	5.8	(0.66)	42.4	(1.63)	21.6	(1.34)	61.2	(1.46)
Belgium-Flemish	9.1	(0.51)	16.8	(0.86)	15.3	(0.93)	42.0	(1.16)
England-United Kingdom	10.1	(0.77)	43.4	(1.66)	27.4	(1.40)	60.4	(1.43)
International average[1]	11.1	(0.13)	43.8	(0.22)	31.6	(0.21)	50.6	(0.21)
United States	5.3	(0.79)	30.7	(2.24)	20.7	(1.45)	45.6	(1.40)

See notes at end of table.

Table 9-18. Percentage of lower secondary education teachers who "agree" or "strongly agree" that specific issues present barriers to their participation in professional development, by education system: 2013—Continued

Education system	Lack of time due to family responsibilities		There is no relevant professional development offered		There are no incentives for participating in such activities	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	32.7	(1.77)	24.6	(1.10)	39.6	(1.52)
Brazil	25.8	(0.75)	39.8	(0.91)	52.8	(1.09)
Bulgaria	28.8	(1.13)	45.4	(1.44)	65.7	(1.46)
Chile	45.8	(1.58)	63.6	(1.45)	73.1	(1.51)
Croatia	21.8	(0.92)	34.9	(0.88)	39.8	(0.89)
Cyprus	52.3	(1.34)	43.0	(1.16)	61.3	(1.23)
Czech Republic	31.8	(0.87)	25.9	(0.81)	37.8	(1.20)
Denmark	20.3	(1.17)	38.3	(1.28)	39.2	(1.49)
Estonia	24.0	(1.07)	29.4	(1.03)	19.3	(0.94)
Finland	37.0	(1.18)	39.8	(1.22)	42.9	(1.39)
France	43.9	(1.13)	42.5	(1.25)	49.8	(1.05)
Iceland	40.7	(1.43)	40.7	(1.39)	40.7	(1.71)
Israel	49.5	(1.03)	27.3	(0.92)	57.2	(1.09)
Italy	39.2	(1.10)	66.6	(1.01)	83.4	(0.76)
Japan	52.4	(0.87)	37.3	(0.95)	38.0	(0.88)
Korea, Republic of	47.4	(1.03)	43.4	(1.07)	57.0	(1.07)
Latvia	21.6	(1.14)	23.2	(1.15)	22.0	(1.14)
Malaysia	26.6	(0.88)	23.4	(0.82)	36.8	(1.25)
Mexico	27.6	(1.03)	56.2	(1.38)	63.7	(1.28)
Netherlands	26.9	(1.51)	39.3	(1.47)	30.9	(1.78)
Norway	38.2	(1.58)	19.3	(1.01)	31.8	(1.36)
Poland	43.9	(1.03)	46.6	(1.64)	39.0	(1.17)
Portugal	48.2	(0.99)	67.5	(1.13)	85.2	(0.74)
Romania	35.0	(1.35)	21.5	(1.04)	59.9	(1.30)
Serbia	22.3	(0.96)	47.7	(0.88)	51.9	(1.27)
Singapore	45.2	(0.91)	22.4	(0.79)	37.3	(0.95)
Slovak Republic	36.3	(1.06)	43.0	(1.34)	41.6	(1.31)
Spain	57.5	(1.04)	61.5	(1.14)	80.3	(1.17)
Sweden	22.6	(0.81)	46.1	(1.21)	38.2	(1.33)
Abu Dhabi-United Arab Emirates	27.1	(1.19)	40.9	(1.87)	57.9	(1.68)
Alberta-Canada	44.1	(1.27)	32.0	(1.41)	47.6	(1.42)
Belgium-Flemish	34.3	(1.07)	28.6	(0.97)	25.0	(0.92)
England-United Kingdom	27.0	(1.10)	24.8	(1.07)	38.1	(1.21)
International average[1]	35.7	(0.20)	39.0	(0.21)	48.0	(0.22)
United States	38.7	(1.17)	27.6	(1.62)	44.0	(1.62)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-19. Participation rates, types, and average number of days of professional development aimed at principals reported to be undertaken by principals in lower secondary education in the 12 months prior to the survey, by education system: 2013

	Did not participate in any professional development[1]		Participated in a professional network, mentoring, or research activity		Average number of days among principals who participated in activity	
Education system	Percent	(S.E.)	Percent	(S.E.)	Average	(S.E.)
Australia	‡	†	84.2	(3.73)	7.6	(0.63)
Brazil	14.5	(1.82)	39.1	(2.56)	50.5	(6.52)
Bulgaria	6.0!	(2.09)	37.1	(3.57)	13.1	(2.46)
Chile	23.5	(3.09)	35.0	(3.62)	51.2	(13.71)
Croatia	‡	†	68.8	(3.49)	4.9	(0.39)
Cyprus	32.6	(4.78)	21.1	(3.66)	‡	†
Czech Republic	13.4	(2.40)	28.1	(3.31)	11.8	(2.54)
Denmark	10.7	(2.90)	54.4	(4.35)	6.5	(0.79)
Estonia	5.1!	(1.69)	54.1	(3.67)	7.7	(0.76)
Finland	8.3	(2.36)	48.1	(4.10)	4.4	(0.30)
France	24.1	(3.63)	46.2	(4.41)	7.2	(1.56)
Iceland	3.7!	(1.85)	37.0	(4.34)	‡	†
Israel	6.2!	(1.91)	59.1	(6.57)	13.4	(2.41)
Italy	5.4	(1.57)	40.2	(4.11)	28.2!	(10.67)
Japan	14.6	(3.33)	56.9	(4.18)	6.1	(0.71)
Korea, Republic of	5.6!	(2.29)	65.6	(5.24)	11.9	(1.66)
Latvia	‡	†	53.6	(5.30)	12.0	(2.20)
Malaysia	‡	†	78.0	(3.27)	12.1	(1.63)
Mexico	5.3!	(1.83)	33.6	(3.69)	56.3	(10.60)
Netherlands	‡	†	87.5	(6.61)	10.8	(2.52)
Norway	9.5!	(3.85)	54.1	(5.57)	9.2	(0.80)
Poland	‡	†	31.2	(5.08)	14.5!	(6.16)
Portugal	23.5	(3.97)	10.8	(2.72)	‡	†
Romania	12.5	(2.90)	29.4	(3.66)	24.6	(3.95)
Serbia	24.2	(3.87)	20.6	(3.37)	26.3!	(12.60)
Singapore	#	†	92.5	(2.06)	15.5	(2.57)
Slovak Republic	16.4	(3.05)	63.6	(3.48)	10.1	(1.05)
Spain	22.9	(3.73)	27.8	(3.16)	25.7!	(9.61)
Sweden	‡	†	41.6	(4.63)	6.6	(1.20)
Abu Dhabi-United Arab Emirates	4.7!	(1.85)	64.2	(5.08)	26.5!	(11.10)
Alberta-Canada	4.3!	(1.54)	76.5	(3.35)	10.0	(1.78)
Belgium-Flemish	‡	†	67.3	(4.54)	6.2	(0.61)
England-United Kingdom	3.2!	(1.41)	78.7	(3.50)	6.4	(0.61)
International average[2]	9.5	(0.43)	51.1	(0.73)	20.2	(2.49)
United States	‡	†	68.2	(5.44)	23.6!	(9.70)

See notes at end of table.

Table 9-19. Participation rates, types, and average number of days of professional development aimed at principals reported to be undertaken by principals in lower secondary education in the 12 months prior to the survey, by education system: 2013—Continued

Education system	Participated in courses, conferences, or observational visits		Average number of days among principals who participated in activity		Participated in other types of professional development activities		Average number of days among principals who participated in activity	
	Percent	(S.E.)	Average	(S.E.)	Percent	(S.E.)	Average	(S.E.)
Australia	93.4	(3.49)	8.1	(0.63)	36.4	(5.06)	4.5	(0.70)
Brazil	71.0	(2.24)	37.4	(3.98)	36.8	(2.56)	29.2	(5.61)
Bulgaria	93.5	(2.13)	9.8	(1.50)	15.3	(2.93)	7.8	(1.16)
Chile	64.9	(3.74)	24.8	(5.30)	24.0	(3.51)	31.2!	(10.26)
Croatia	81.0	(3.12)	7.3	(0.61)	39.0	(3.49)	4.2	(0.85)
Cyprus	51.6	(5.23)	21.9!	(9.11)	16.3	(3.64)	‡	†
Czech Republic	82.2	(2.74)	9.0	(1.16)	33.7	(3.63)	7.1	(1.84)
Denmark	82.0	(2.92)	6.4	(0.51)	26.1	(4.03)	8.1	(1.90)
Estonia	93.9	(1.84)	10.2	(0.74)	48.0	(3.69)	6.9	(1.00)
Finland	87.7	(2.87)	5.8	(0.43)	36.2	(3.84)	3.7	(0.38)
France	54.5	(4.34)	3.8	(0.35)	21.8	(3.58)	8.5!	(3.33)
Iceland	94.4	(1.73)	7.1	(0.65)	42.6	(4.59)	9.6!	(3.86)
Israel	86.2	(2.92)	13.1	(2.08)	26.6	(4.52)	10.6	(2.43)
Italy	93.5	(1.74)	9.0	(0.90)	19.1	(3.37)	8.0	(1.23)
Japan	83.1	(3.43)	9.5	(0.74)	17.7	(2.77)	3.8	(0.67)
Korea, Republic of	86.6	(3.60)	14.1	(2.35)	48.8	(4.97)	7.6	(1.14)
Latvia	98.0	(1.24)	15.2	(3.13)	52.2	(6.00)	8.6	(1.88)
Malaysia	98.1	(0.97)	14.8	(1.76)	58.4	(4.08)	9.8	(1.54)
Mexico	87.2	(2.68)	24.3	(3.03)	27.4	(3.70)	37.3	(11.00)
Netherlands	97.4	(0.93)	7.3	(1.02)	22.9	(6.05)	5.1	(0.87)
Norway	83.3	(5.13)	8.6	(0.76)	33.0	(4.89)	8.3	(1.12)
Poland	95.6	(2.35)	9.1	(1.44)	51.2	(5.11)	8.0	(1.46)
Portugal	67.1	(4.25)	23.9	(5.86)	24.3	(3.61)	17.6!	(6.52)
Romania	75.0	(4.21)	21.9	(2.89)	41.8	(3.70)	14.8	(2.50)
Serbia	57.5	(4.56)	11.2	(2.84)	38.4	(4.27)	8.6	(1.76)
Singapore	99.3	(0.68)	13.4	(1.33)	44.0	(4.19)	14.1!	(5.77)
Slovak Republic	62.2	(4.04)	7.8	(0.93)	28.4	(3.74)	6.2	(1.13)
Spain	67.6	(4.01)	11.8	(2.32)	39.5	(4.43)	10.4	(2.82)
Sweden	93.5	(2.34)	7.7	(0.62)	30.3	(3.96)	7.2	(1.57)
Abu Dhabi-United Arab Emirates	91.0	(2.40)	17.6!	(7.07)	45.1	(5.22)	8.0	(1.21)
Alberta-Canada	88.4	(2.76)	9.3	(1.18)	30.1	(3.59)	6.5	(0.98)
Belgium-Flemish	97.4	(1.32)	8.3	(0.46)	24.3	(3.97)	4.9	(0.71)
England-United Kingdom	94.4	(1.90)	5.3	(0.32)	26.1	(4.01)	4.1	(0.83)
International average[2]	83.4	(0.54)	12.6	(0.51)	33.5	(0.72)	10.4	(0.65)
United States	91.0	(4.76)	18.4!	(6.85)	42.3	(6.33)	‡	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] This represents the percentage of principals who answered they did not participate in "a professional network, mentoring, or research activity," "courses, conferences, or observational visits," or "other types of professional development activities" aimed at principals.

[2] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-20. Percentage of principals in lower secondary education who "agree" or "strongly agree" that specific issues present barriers to their participation in professional development, by education system: 2013

	Missing prerequisites		Too expensive		Lack of employer support		Conflicts with work schedule	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	‡	†	31.6	(6.09)	9.2!	(2.92)	60.9	(5.89)
Brazil	7.5	(1.43)	24.1	(2.10)	33.4	(2.08)	38.6	(2.61)
Bulgaria	7.0	(1.85)	38.0	(3.71)	3.6!	(1.43)	59.0	(4.31)
Chile	13.0	(2.79)	53.7	(4.25)	35.1	(3.93)	50.7	(3.93)
Croatia	4.7!	(1.68)	49.4	(4.23)	13.6	(2.57)	6.3!	(1.93)
Cyprus	13.7	(3.17)	34.7	(4.93)	38.3	(4.71)	48.4	(4.69)
Czech Republic	2.6!	(1.06)	20.5	(2.80)	8.7	(2.11)	34.3	(3.57)
Denmark	5.0!	(2.00)	25.4	(4.06)	10.8	(2.67)	29.5	(4.55)
Estonia	7.1	(1.91)	22.5	(3.06)	9.2	(2.05)	14.8	(2.63)
Finland	‡	†	9.8	(2.65)	8.8	(2.31)	42.2	(4.02)
France	6.9	(1.97)	18.8	(3.40)	13.8	(2.27)	59.9	(4.56)
Iceland	6.5!	(2.50)	27.1	(4.47)	14.0	(3.54)	56.1	(4.94)
Israel	‡	†	5.1!	(1.93)	12.0	(2.67)	56.8	(6.84)
Italy	3.9!	(1.52)	32.8	(4.71)	57.7	(4.20)	56.6	(4.45)
Japan	11.4	(2.33)	43.1	(4.79)	35.0	(4.31)	78.2	(3.52)
Korea, Republic of	31.2	(4.73)	17.5	(4.10)	36.3	(4.42)	67.3	(4.69)
Latvia	‡	†	20.6	(6.00)	9.6!	(3.59)	26.2	(5.61)
Malaysia	9.6	(2.58)	8.9	(2.29)	6.9!	(2.15)	42.4	(4.32)
Mexico	22.5	(3.52)	36.9	(3.88)	46.6	(3.97)	41.3	(4.14)
Netherlands	‡	†	19.4!	(8.00)	‡	†	20.8!	(6.64)
Norway	‡	†	24.0	(3.44)	20.1!	(7.33)	44.9	(4.80)
Poland	6.6!	(3.02)	42.7	(4.48)	19.8	(2.87)	29.6	(4.68)
Portugal	23.1	(3.07)	64.2	(3.87)	81.8	(3.64)	41.1	(4.30)
Romania	7.6!	(2.33)	40.4	(4.27)	7.5!	(2.26)	28.6	(4.10)
Serbia	4.2!	(2.06)	70.1	(3.72)	39.6	(4.12)	8.4	(2.18)
Singapore	‡	†	3.4!	(1.52)	‡	†	42.9	(3.94)
Slovak Republic	4.0!	(1.74)	18.6	(3.16)	2.8!	(1.31)	22.4	(3.40)
Spain	3.6!	(1.78)	33.2	(4.12)	27.4	(3.21)	56.2	(4.28)
Sweden	1.7!	(0.78)	27.5	(4.71)	14.8	(3.11)	61.3	(5.01)
Abu Dhabi-United Arab Emirates	6.6!	(2.74)	41.1	(5.07)	25.4	(4.14)	33.7	(4.29)
Alberta-Canada	4.2!	(2.04)	32.2	(3.83)	15.2	(3.14)	63.0	(3.53)
Belgium-Flemish	4.9!	(1.63)	21.1	(3.88)	8.1!	(2.70)	43.4	(4.53)
England-United Kingdom	‡	†	29.7	(3.99)	‡	†	56.8	(5.93)
International average[1]	7.2	(0.39)	29.9	(0.73)	20.7	(0.61)	43.1	(0.78)
United States	‡	†	39.1	(7.71)	11.0!	(3.40)	66.9	(5.39)

See notes at end of table.

Table 9-20. Percentage of principals in lower secondary education who "agree" or "strongly agree" that specific issues present barriers to their participation in professional development, by education system: 2013—Continued

Education system	Conflicts with family responsibilities		No relevant opportunities available		No incentives	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	28.2	(6.14)	10.5!	(4.73)	34.2	(5.48)
Brazil	13.1	(1.86)	20.7	(1.94)	31.5	(2.51)
Bulgaria	8.1	(2.31)	19.3	(2.89)	54.1	(3.30)
Chile	20.6	(3.29)	44.0	(4.20)	58.9	(3.99)
Croatia	2.4!	(1.14)	23.5	(3.32)	29.2	(3.02)
Cyprus	22.6	(4.13)	47.4	(4.85)	53.6	(4.64)
Czech Republic	6.8	(1.65)	9.1	(1.97)	20.0	(3.07)
Denmark	15.6	(3.42)	18.3	(3.14)	18.9	(3.51)
Estonia	5.6	(1.57)	16.3	(2.45)	9.7	(2.16)
Finland	17.8	(2.70)	16.1	(2.99)	30.1	(3.62)
France	9.9	(2.77)	19.8	(3.10)	37.5	(3.59)
Iceland	22.4	(4.23)	16.8	(3.53)	29.0	(4.39)
Israel	21.9	(4.63)	20.9	(4.58)	42.0	(5.68)
Italy	5.2!	(1.56)	51.7	(4.72)	73.3	(4.29)
Japan	15.3	(3.06)	29.8	(3.97)	26.3	(3.94)
Korea, Republic of	‡	†	18.0	(4.28)	40.9	(4.14)
Latvia	10.9	(3.24)	8.6	(2.14)	13.9	(3.21)
Malaysia	‡	†	15.4	(2.72)	18.7	(3.13)
Mexico	13.0	(2.79)	37.2	(3.77)	47.5	(3.93)
Netherlands	‡	†	13.6	(3.72)	17.5!	(6.77)
Norway	15.1	(4.30)	5.5!	(2.14)	18.7	(5.54)
Poland	15.0	(3.10)	36.8	(5.14)	36.9	(4.69)
Portugal	12.3	(2.75)	54.1	(4.27)	71.4	(4.25)
Romania	14.9	(3.40)	3.9!	(1.18)	43.5	(4.63)
Serbia	6.4!	(1.97)	41.4	(3.29)	55.3	(3.89)
Singapore	8.2	(2.37)	8.7	(2.36)	7.5!	(2.28)
Slovak Republic	5.1!	(1.80)	25.8	(3.65)	40.2	(3.20)
Spain	29.0	(4.20)	53.3	(4.68)	79.1	(4.16)
Sweden	12.1	(2.71)	6.8	(1.99)	10.5	(2.72)
Abu Dhabi-United Arab Emirates	9.1!	(2.80)	24.4	(3.78)	50.9	(4.65)
Alberta-Canada	35.8	(3.78)	11.6	(2.75)	39.9	(3.83)
Belgium-Flemish	9.2!	(2.91)	‡	†	10.8	(2.46)
England-United Kingdom	17.0	(2.79)	7.7	(2.14)	18.1	(2.93)
International average[1]	13.3	(0.54)	22.4	(0.60)	35.4	(0.70)
United States	24.3	(5.34)	‡	†	25.8	(4.59)

† Not applicable.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-21. Percentage of lower secondary education teachers whose school principal reports induction programs for new teachers in the school, by education system: 2013

	Formal induction					
	For all new teachers to the school[1]		Only for teachers new to teaching[1]		No formal induction program for new teachers[1]	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	91.5	(2.56)	‡	†	4.9!	(1.63)
Brazil	22.8	(2.25)	4.5	(0.87)	72.7	(2.13)
Bulgaria	62.5	(3.77)	22.7	(3.03)	14.8	(2.98)
Chile	37.1	(4.60)	‡	†	59.9	(4.58)
Croatia	30.5	(3.39)	60.3	(3.59)	9.2	(2.21)
Cyprus	22.8	(0.17)	38.1	(0.23)	39.1	(0.25)
Czech Republic	30.9	(3.67)	7.4	(1.87)	61.7	(3.76)
Denmark	55.7	(5.71)	6.4!	(2.45)	37.9	(5.68)
Estonia	31.9	(4.46)	9.5	(2.42)	58.6	(4.31)
Finland	52.6	(4.57)	‡	†	46.5	(4.44)
France	20.0	(3.13)	57.8	(3.95)	22.3	(3.25)
Iceland	26.9	(0.15)	26.8	(0.14)	46.2	(0.15)
Israel	63.4	(4.29)	18.9	(2.97)	17.7	(3.77)
Italy	11.4	(2.46)	74.7	(3.14)	14.0	(2.21)
Japan	17.2	(2.60)	70.6	(2.77)	12.2	(2.20)
Korea, Republic of	58.0	(3.83)	22.0	(3.18)	20.0	(3.33)
Latvia	22.9	(4.30)	12.7	(3.19)	64.4	(5.17)
Malaysia	50.7	(4.54)	45.3	(4.47)	4.0!	(1.65)
Mexico	24.2	(3.09)	3.8!	(1.61)	72.0	(3.09)
Netherlands	93.3	(3.19)	‡	†	‡	†
Norway	28.9	(7.09)	26.5	(4.99)	44.6	(7.78)
Poland	16.2	(2.99)	7.3!	(2.90)	76.5	(3.93)
Portugal	17.5	(2.79)	‡	†	79.7	(2.96)
Romania	19.0	(2.98)	26.6	(3.22)	54.3	(3.83)
Serbia	30.4	(3.93)	53.3	(4.27)	16.2	(3.24)
Singapore	99.3	(0.01)	0.7	(0.01)	#	†
Slovak Republic	35.9	(3.86)	46.9	(3.83)	17.2	(3.03)
Spain	21.9	(3.10)	2.7!	(1.21)	75.4	(3.27)
Sweden	29.8	(3.55)	33.5	(3.65)	36.7	(3.64)
Abu Dhabi-United Arab Emirates	73.6	(4.36)	4.5!	(1.81)	21.9	(4.04)
Alberta-Canada	51.5	(4.65)	33.5	(3.97)	15.0	(3.15)
Belgium-Flemish	93.3	(2.00)	‡	†	5.2!	(1.75)
England-United Kingdom	94.3	(2.00)	5.2!	(1.89)	‡	†
International average[2]	43.6	(0.63)	22.3	(0.48)	34.2	(0.60)
United States	68.7	(4.80)	19.0	(3.61)	12.3!	(4.26)

See notes at end of table.

Table 9-21. Percentage of lower secondary education teachers whose school principal reports induction programs for new teachers in the school, by education system: 2013—Continued

	Informal induction activities (not part of an induction program) for new teachers		General and/or administrative introduction to the school for new teachers	
Education system	Percent	(S.E.)	Percent	(S.E.)
Australia	90.3	(3.10)	97.2	(1.29)
Brazil	48.3	(2.76)	65.6	(2.28)
Bulgaria	87.9	(1.90)	96.4	(1.06)
Chile	64.0	(4.09)	79.6	(3.38)
Croatia	73.7	(3.32)	94.6	(1.78)
Cyprus	77.8	(0.20)	74.0	(0.21)
Czech Republic	81.2	(2.78)	97.1	(1.18)
Denmark	78.3	(4.25)	85.1	(3.45)
Estonia	88.4	(2.30)	84.2	(2.82)
Finland	92.7	(2.51)	89.7	(2.20)
France	49.9	(3.63)	95.0	(1.64)
Iceland	95.1	(0.06)	97.1	(0.11)
Israel	76.2	(3.56)	94.9	(2.23)
Italy	68.5	(3.32)	63.0	(3.58)
Japan	37.0	(3.39)	81.5	(2.78)
Korea, Republic of	69.9	(3.66)	92.5	(2.17)
Latvia	84.1	(3.87)	98.0	(1.67)
Malaysia	91.8	(2.39)	99.0	(0.33)
Mexico	38.8	(3.31)	49.1	(3.69)
Netherlands	88.8	(2.73)	100.0	(0.00)
Norway	83.5	(4.13)	55.0	(6.51)
Poland	88.9	(2.24)	79.3	(3.34)
Portugal	84.4	(2.91)	87.2	(2.85)
Romania	65.5	(3.76)	59.6	(4.00)
Serbia	74.8	(3.30)	83.4	(2.65)
Singapore	98.6	(0.01)	100.0	(0.00)
Slovak Republic	81.8	(3.02)	87.1	(2.85)
Spain	54.3	(3.57)	79.1	(3.01)
Sweden	63.5	(3.67)	80.2	(3.49)
Abu Dhabi-United Arab Emirates	85.1	(3.02)	96.4	(1.02)
Alberta-Canada	80.9	(3.59)	93.8	(2.02)
Belgium-Flemish	90.7	(2.59)	99.2	(0.58)
England-United Kingdom	88.4	(2.87)	94.6	(2.05)
International average[2]	76.5	(0.54)	85.7	(0.45)
United States	82.0	(3.78)	94.6	(1.97)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The column entitled "For all new teachers to the school" presents the percentage of teachers working in schools where the principal reports that there is an induction program for new teachers and who reports that all teachers who are new to the school are offered an induction program. The column entitled "Only for teachers new to teaching" presents the percentage of teachers working in schools where the principal reports that there is an induction program for new teachers and who reports that only teachers who are new to teaching are offered an induction program). The column entitled "No formal induction program for new teachers" presents the percentage of teachers working in schools where the principal reports that there is no induction program for new teachers. The percentages presented in these three columns add up to 100 percent.

[2] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-22. Percentage of lower secondary education teachers who report having taken part in an induction program during their first regular employment as a teacher, by education system: 2013

Education system	Took part in a formal induction program		Took part in informal induction activities not part of an induction program		Took part in a general and/or administrative introduction to the school	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	52.6	(1.58)	51.4	(1.21)	61.1	(1.05)
Brazil	32.4	(0.85)	33.0	(0.90)	32.8	(1.00)
Bulgaria	68.9	(1.55)	62.0	(1.28)	81.3	(1.13)
Chile	36.6	(1.96)	39.6	(1.74)	36.4	(1.45)
Croatia	68.0	(0.82)	54.0	(0.90)	59.7	(0.87)
Cyprus	51.1	(1.20)	35.4	(1.22)	30.9	(0.98)
Czech Republic	45.2	(1.12)	55.6	(1.06)	45.0	(1.05)
Denmark	26.6	(1.56)	39.5	(1.61)	27.8	(1.28)
Estonia	19.4	(1.10)	34.8	(1.06)	37.3	(1.21)
Finland	16.3	(1.15)	51.5	(1.04)	42.5	(1.21)
France	55.1	(1.24)	41.9	(0.93)	49.0	(1.08)
Iceland	29.5	(1.19)	34.6	(1.33)	36.4	(1.38)
Israel	51.5	(1.23)	29.5	(1.08)	30.1	(0.93)
Italy	49.4	(1.10)	32.7	(1.00)	49.7	(0.95)
Japan	83.3	(0.82)	18.4	(0.76)	69.3	(1.01)
Korea, Republic of	72.3	(0.82)	60.1	(0.94)	71.1	(0.95)
Latvia	35.9	(1.19)	46.3	(1.23)	40.8	(1.27)
Malaysia	87.4	(0.76)	60.6	(1.33)	80.8	(0.93)
Mexico	57.2	(1.16)	52.4	(1.07)	44.9	(1.09)
Netherlands	45.6	(1.47)	46.5	(1.33)	60.0	(1.73)
Norway	10.3	(1.52)	35.5	(1.44)	20.0	(1.39)
Poland	37.8	(1.43)	59.7	(1.22)	50.3	(1.12)
Portugal	35.5	(0.96)	39.6	(1.00)	21.0	(0.82)
Romania	51.2	(1.24)	58.7	(1.40)	59.4	(1.19)
Serbia	59.1	(1.09)	35.7	(0.88)	44.0	(1.08)
Singapore	80.0	(0.80)	60.3	(0.99)	82.6	(0.80)
Slovak Republic	60.5	(1.16)	46.0	(1.11)	31.2	(1.06)
Spain	35.3	(1.17)	35.0	(1.03)	21.8	(1.03)
Sweden	10.7	(0.67)	19.1	(0.79)	22.8	(0.94)
Abu Dhabi-United Arab Emirates	70.9	(2.03)	53.7	(1.44)	58.7	(1.26)
Alberta-Canada	51.0	(1.68)	42.7	(1.42)	55.4	(1.31)
Belgium-Flemish	42.5	(1.03)	40.4	(0.93)	54.4	(1.12)
England-United Kingdom	75.8	(0.88)	46.5	(1.27)	57.5	(1.20)
International average[1]	48.6	(0.22)	44.0	(0.20)	47.5	(0.20)
United States	59.3	(1.95)	44.1	(2.10)	57.6	(1.25)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-23. Percentage of lower secondary education teachers whose school principal reports the existence of a mentoring system in the school, by education system: 2013

Education system	Access to mentoring programs only for teachers who are new to teaching		Access to mentoring programs for all teachers who are new to the school		Access to mentoring programs for all teachers in the school		No access to a mentoring system for teachers in the school	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	18.6	(4.46)	39.3	(5.63)	39.5	(5.97)	‡	†
Brazil	3.6	(0.96)	10.3	(1.83)	59.7	(2.32)	26.4	(2.25)
Bulgaria	16.5	(2.78)	27.3	(3.12)	43.3	(3.58)	12.9	(2.43)
Chile	‡	†	13.9	(3.46)	10.2	(2.60)	74.3	(3.97)
Croatia	68.7	(3.33)	14.0	(2.56)	16.2	(2.68)	1.1!	(0.38)
Cyprus	40.3	(0.23)	12.7	(0.13)	13.2	(0.13)	33.8	(0.24)
Czech Republic	16.5	(2.66)	21.8	(2.87)	29.3	(3.25)	32.3	(3.91)
Denmark	23.4	(4.12)	45.0	(5.48)	5.7!	(2.00)	25.8	(4.92)
Estonia	31.3	(4.04)	28.0	(4.00)	15.1	(3.14)	25.6	(3.43)
Finland	5.4!	(1.90)	23.2	(3.80)	6.0!	(2.13)	65.4	(3.65)
France	68.5	(3.43)	5.4!	(1.65)	‡	†	23.6	(3.28)
Iceland	36.6	(0.15)	19.2	(0.13)	36.5	(0.12)	7.7	(0.04)
Israel	26.2	(3.78)	49.7	(4.38)	10.9	(2.29)	13.2	(3.03)
Italy	60.5	(3.59)	6.7	(1.88)	‡	†	31.2	(3.59)
Japan	50.3	(3.29)	10.1	(2.28)	19.4	(2.75)	20.2	(2.65)
Korea, Republic of	34.0	(3.54)	20.8	(2.89)	31.1	(3.78)	14.1	(2.80)
Latvia	16.4	(3.89)	18.6	(4.02)	23.6	(4.55)	41.4	(5.63)
Malaysia	48.6	(4.41)	25.0	(3.99)	18.4	(3.44)	8.0	(2.15)
Mexico	8.1!	(2.56)	7.2	(1.94)	24.4	(3.37)	60.3	(4.28)
Netherlands	‡	†	25.4	(4.56)	70.6	(4.97)	‡	†
Norway	29.4	(4.27)	20.1	(5.23)	‡	†	40.0	(7.57)
Poland	20.4	(3.86)	24.2	(3.21)	21.4	(3.44)	34.0	(4.29)
Portugal	4.0!	(1.54)	11.4	(2.70)	18.8	(3.18)	65.7	(3.77)
Romania	10.7	(2.19)	15.0	(2.78)	53.2	(3.91)	21.0	(3.32)
Serbia	86.4	(2.82)	9.8	(2.46)	#	†	3.8!	(1.56)
Singapore	20.5	(0.14)	47.1	(0.26)	31.6	(0.22)	0.8	(0.02)
Slovak Republic	16.8	(2.50)	18.5	(3.16)	47.1	(3.73)	17.6	(2.94)
Spain	15.1	(2.41)	10.7	(2.16)	15.5	(2.59)	58.7	(3.41)
Sweden	46.8	(3.79)	12.4	(2.36)	#	†	40.8	(3.68)
Abu Dhabi-United Arab Emirates	7.6!	(2.77)	17.8	(4.22)	63.2	(4.83)	11.4	(3.20)
Alberta-Canada	27.0	(4.07)	26.7	(3.68)	33.4	(4.40)	12.9	(3.70)
Belgium-Flemish	6.1	(1.80)	65.0	(3.99)	7.4!	(2.23)	21.4	(2.96)
England-United Kingdom	26.1	(4.29)	30.6	(3.60)	42.7	(4.82)	‡	†
International average[1]	27.0	(0.53)	22.2	(0.58)	24.9	(0.58)	25.8	(0.59)
United States	29.8	(5.24)	45.3	(5.34)	18.1	(3.80)	6.8!	(2.69)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. Mentoring activities refers to mentoring by or for teachers at the school. It does not refer to students within teacher education programs who are practicing as teachers at the school. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-24. Percentage of lower secondary education teachers whose school principal reports the subject field(s) of mentor is same as that of teacher being mentored, by education system: 2013

	Most of the time		Sometimes		Rarely or never	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	55.3	(6.46)	42.8	(6.55)	‡	†
Brazil	40.2	(2.94)	42.7	(3.18)	17.2	(2.56)
Bulgaria	73.0	(3.66)	23.5	(3.79)	3.6!	(1.19)
Chile	49.7	(8.47)	46.8	(8.98)	‡	†
Croatia	98.4	(0.82)	‡	†	#	†
Cyprus	96.6	(0.09)	1.2	(0.05)	2.2	(0.07)
Czech Republic	87.8	(2.36)	10.4	(2.16)	‡	†
Denmark	45.2	(5.78)	53.3	(5.88)	‡	†
Estonia	68.7	(4.79)	21.8	(3.99)	9.5	(2.69)
Finland	76.6	(6.46)	19.0!	(5.91)	‡	†
France	95.2	(1.81)	4.8!	(1.81)	#	†
Iceland	52.0	(0.16)	45.2	(0.16)	2.8	(0.01)
Israel	85.3	(3.44)	12.9	(3.28)	‡	†
Italy	88.8	(2.81)	9.2	(2.67)	2.0!	(0.93)
Japan	57.9	(3.88)	33.2	(3.85)	8.8	(2.19)
Korea, Republic of	75.9	(3.82)	13.5	(3.15)	10.7	(2.54)
Latvia	57.5	(7.14)	39.8	(7.03)	‡	†
Malaysia	71.0	(4.16)	29.0	(4.16)	#	†
Mexico	55.2	(6.54)	39.5	(6.34)	‡	†
Netherlands	19.2	(4.44)	47.9	(6.24)	32.9	(5.77)
Norway	45.1	(8.49)	45.9	(8.20)	9.0!	(4.47)
Poland	81.1	(4.22)	17.2	(4.10)	‡	†
Portugal	82.5	(5.86)	17.5!	(5.86)	#	†
Romania	77.1	(3.88)	15.3	(3.20)	7.6!	(2.62)
Serbia	98.1	(1.10)	‡	†	#	†
Singapore	85.5	(0.12)	13.2	(0.11)	1.3	(0.01)
Slovak Republic	94.9	(2.09)	3.9!	(1.73)	‡	†
Spain	68.0	(5.33)	24.7	(4.69)	7.3!	(3.32)
Sweden	60.3	(4.68)	32.1	(4.84)	7.5!	(2.68)
Abu Dhabi-United Arab Emirates	74.3	(5.04)	24.6	(5.05)	‡	†
Alberta-Canada	67.6	(4.61)	30.0	(4.55)	2.5!	(1.14)
Belgium-Flemish	25.0	(4.58)	41.3	(4.89)	33.7	(4.50)
England-United Kingdom	39.7	(4.31)	53.7	(4.09)	6.6!	(2.29)
International average[1]	68.1	(0.80)	26.0	(0.80)	5.8	(0.40)
United States	71.4	(5.93)	26.0	(5.78)	‡	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. Mentoring activities refers to mentoring by or for teachers at the school. It does not refer to students within teacher education programs who are practicing as teachers at the school. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-25. Percentage of lower secondary education teachers who report participating in mentoring programs, by education system: 2013

	Teachers who presently have an assigned mentor to support them		Teachers who serve as an assigned mentor for one or more teachers	
Education system	Percent	(S.E.)	Percent	(S.E.)
Australia	16.7	(1.42)	28.0	(1.13)
Brazil	33.7	(0.98)	6.4	(0.42)
Bulgaria	6.1	(0.72)	10.2	(0.75)
Chile	4.5	(0.89)	6.6	(0.72)
Croatia	5.6	(0.44)	13.8	(0.73)
Cyprus	6.4	(0.50)	5.2	(0.53)
Czech Republic	3.8	(0.44)	7.7	(0.68)
Denmark	4.2	(0.68)	12.7	(0.92)
Estonia	3.3	(0.47)	9.1	(0.81)
Finland	2.8	(0.55)	3.8	(0.55)
France	3.5	(0.42)	5.5	(0.45)
Iceland	5.8	(0.66)	12.3	(0.84)
Israel	20.2	(0.85)	23.3	(0.96)
Italy	4.5	(0.44)	5.1	(0.43)
Japan	33.2	(1.08)	16.5	(0.82)
Korea, Republic of	18.5	(0.74)	34.3	(0.94)
Latvia	4.1	(0.56)	7.0	(0.67)
Malaysia	26.5	(1.36)	26.5	(1.20)
Mexico	17.0	(1.04)	10.9	(0.78)
Netherlands	16.6	(1.24)	19.4	(1.38)
Norway	6.9!	(2.83)	7.7	(0.71)
Poland	11.6	(0.58)	14.9	(0.72)
Portugal	4.3	(0.40)	7.6	(0.49)
Romania	8.0	(0.72)	8.2	(0.75)
Serbia	8.2	(0.51)	13.5	(0.56)
Singapore	39.6	(0.89)	39.4	(0.88)
Slovak Republic	4.2	(0.41)	8.9	(0.54)
Spain	3.8	(0.43)	6.8	(0.50)
Sweden	3.7	(0.38)	5.5	(0.44)
Abu Dhabi-United Arab Emirates	51.9	(1.78)	29.2	(1.11)
Alberta-Canada	13.0	(1.31)	20.7	(1.27)
Belgium-Flemish	10.2	(0.79)	10.2	(1.01)
England-United Kingdom	19.1	(1.18)	31.4	(0.96)
International average[1]	12.8	(0.17)	14.2	(0.14)
United States	12.2	(1.09)	16.8	(1.26)

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. Mentoring activities refers to mentoring by or for teachers at the school. It does not refer to students within teacher education programs who are practicing as teachers at the school. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-26. Percentage of lower secondary education teachers whose school principal reports that their teachers were never appraised by specific bodies or never appraised at all, by education system: 2013

Education system	Never formally appraised by school principal		Never formally appraised by other members of school management team		Never formally appraised by teacher's mentor	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	28.5	(5.80)	7.1!	(2.34)	25.9	(4.38)
Brazil	19.6	(1.57)	25.9	(2.04)	41.0	(2.52)
Bulgaria	18.0	(3.16)	25.7	(3.24)	50.6	(3.63)
Chile	7.3!	(2.25)	13.6	(2.96)	60.3	(4.14)
Croatia	7.8	(1.89)	38.1	(3.25)	21.2	(2.89)
Cyprus	3.7	(0.10)	43.3	(0.23)	46.3	(0.21)
Czech Republic	‡	†	7.7	(1.58)	67.2	(4.07)
Denmark	10.3!	(3.18)	30.7	(4.41)	82.0	(4.13)
Estonia	2.4!	(1.14)	8.1	(1.69)	30.8	(3.41)
Finland	27.6	(3.85)	85.8	(3.18)	92.4	(2.51)
France	6.2!	(2.01)	72.7	(3.26)	62.2	(4.08)
Iceland	30.0	(0.15)	43.8	(0.14)	84.4	(0.13)
Israel	‡	†	12.8	(2.61)	24.4	(3.91)
Italy	74.7	(3.11)	88.0	(2.17)	89.9	(2.18)
Japan	6.8	(1.70)	27.6	(3.28)	44.4	(4.14)
Korea, Republic of	‡	†	16.9	(2.98)	35.8	(4.03)
Latvia	‡	†	5.3!	(2.43)	53.5	(5.22)
Malaysia	‡	†	6.8!	(2.13)	15.7	(3.17)
Mexico	11.7	(2.87)	21.2	(3.18)	53.3	(3.97)
Netherlands	48.6	(5.68)	7.9!	(2.67)	84.3	(3.81)
Norway	5.9!	(2.01)	17.7	(4.36)	52.6	(5.35)
Poland	‡	†	53.0	(4.28)	75.5	(3.17)
Portugal	17.1	(2.82)	56.0	(4.10)	26.1	(3.83)
Romania	#	†	5.5!	(1.71)	42.9	(4.07)
Serbia	3.3!	(1.28)	23.9	(3.23)	9.9	(2.30)
Singapore	0.6	(0.02)	#	†	46.3	(0.26)
Slovak Republic	‡	†	4.5!	(1.76)	61.5	(3.32)
Spain	61.5	(3.39)	71.3	(3.29)	80.7	(2.79)
Sweden	9.2	(2.43)	58.7	(3.05)	75.4	(3.09)
Abu Dhabi-United Arab Emirates	‡	†	7.2!	(2.43)	25.5	(4.43)
Alberta-Canada	18.3	(3.91)	48.6	(4.81)	77.3	(3.64)
Belgium-Flemish	11.6	(3.13)	43.9	(4.54)	40.7	(3.66)
England-United Kingdom	16.7	(3.98)	‡	†	22.0	(4.19)
International average[1]	13.8	(0.45)	29.8	(0.51)	51.6	(0.62)
United States	‡	†	31.9	(6.60)	48.6	(5.97)

See notes at end of table.

Table 9-26. Percentage of lower secondary education teachers whose school principal reports that their teachers were never appraised by specific bodies or never appraised at all, by education system: 2013—Continued

Education system	Never formally appraised by other teachers		Never formally appraised by external individuals or bodies		Generally never formally appraised	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	50.1	(6.41)	77.9	(4.36)	2.8!	(1.35)
Brazil	53.9	(2.55)	58.0	(2.69)	13.4	(1.35)
Bulgaria	39.3	(3.65)	14.7	(2.78)	10.2	(2.41)
Chile	45.1	(4.98)	52.9	(3.99)	4.1!	(1.69)
Croatia	64.3	(3.97)	13.9	(2.58)	2.6!	(0.98)
Cyprus	59.5	(0.20)	19.7	(0.15)	#	†
Czech Republic	55.4	(3.99)	6.9	(1.69)	‡	†
Denmark	62.6	(4.95)	76.1	(4.26)	9.0!	(3.04)
Estonia	25.1	(3.16)	8.4	(2.36)	‡	†
Finland	91.9	(2.52)	77.7	(4.04)	25.9	(4.16)
France	81.4	(3.08)	7.2	(2.03)	‡	†
Iceland	76.5	(0.10)	52.3	(0.15)	20.7	(0.14)
Israel	48.2	(4.15)	28.5	(3.92)	‡	†
Italy	89.7	(1.99)	88.8	(2.16)	70.1	(3.23)
Japan	40.8	(3.68)	32.4	(3.23)	3.8	(1.10)
Korea, Republic of	6.2!	(1.95)	42.7	(4.16)	#	†
Latvia	24.3	(3.94)	10.9!	(3.55)	‡	†
Malaysia	12.5	(2.44)	‡	†	‡	†
Mexico	49.4	(3.91)	19.4	(3.02)	4.6!	(1.93)
Netherlands	71.0	(5.08)	46.8	(5.41)	‡	†
Norway	60.1	(7.51)	56.3	(7.92)	5.9!	(2.01)
Poland	74.1	(3.45)	16.0	(3.29)	#	†
Portugal	28.9	(3.58)	62.2	(4.15)	2.4!	(1.11)
Romania	28.5	(3.34)	5.3!	(1.74)	#	†
Serbia	33.2	(4.21)	8.7	(2.27)	2.2!	(1.03)
Singapore	73.1	(0.16)	53.4	(0.24)	#	†
Slovak Republic	42.4	(3.83)	17.8	(2.48)	#	†
Spain	83.1	(2.66)	52.8	(3.45)	36.3	(3.50)
Sweden	69.9	(3.40)	29.3	(3.21)	3.6!	(1.52)
Abu Dhabi-United Arab Emirates	46.2	(4.61)	36.6	(4.24)	#	†
Alberta-Canada	74.5	(3.74)	81.4	(3.20)	16.1	(3.69)
Belgium-Flemish	60.8	(4.19)	38.7	(3.96)	‡	†
England-United Kingdom	10.9	(2.37)	41.8	(5.14)	#	†
International average[1]	52.5	(0.66)	37.5	(0.61)	7.4	(0.30)
United States	63.7	(5.20)	72.5	(4.65)	#	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-27. Percentage of lower secondary education teachers whose principal reports that appraisal is used in their schools and teachers are appraised by specific appraisal methods, by education system: 2013

Education system	Appraisal used in the school where the teacher works		Direct observation of classroom teaching		Student surveys about teaching		Assessment of teachers' content knowledge	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	97.2	(1.35)	94.6	(2.34)	75.9	(4.16)	76.6	(5.54)
Brazil	86.6	(1.35)	92.9	(1.33)	88.4	(1.78)	78.9	(2.21)
Bulgaria	89.8	(2.41)	100.0	(0.00)	82.6	(3.09)	85.0	(3.00)
Chile	95.9	(1.69)	100.0	(0.00)	58.2	(4.79)	80.1	(4.02)
Croatia	97.4	(0.98)	99.6	(0.45)	95.0	(1.61)	†	†
Cyprus	100.0	(0.00)	97.6	(0.05)	50.5	(0.21)	83.5	(0.17)
Czech Republic	99.8	(0.21)	100.0	(0.00)	96.8	(1.26)	74.7	(3.34)
Denmark	91.0	(3.04)	90.7	(3.13)	78.8	(5.56)	66.5	(5.35)
Estonia	98.3	(1.01)	98.6	(1.03)	96.6	(1.07)	88.9	(2.65)
Finland	74.1	(4.16)	78.3	(4.03)	85.3	(4.02)	37.8	(4.94)
France	99.3	(0.67)	95.5	(1.53)	29.9	(3.83)	74.0	(3.56)
Iceland	79.3	(0.14)	72.0	(0.14)	71.8	(0.15)	41.3	(0.16)
Israel	99.1	(0.65)	97.9	(1.38)	84.1	(3.28)	83.4	(3.74)
Italy	29.9	(3.23)	73.7	(5.86)	52.3	(7.47)	45.2	(7.04)
Japan	96.2	(1.10)	98.4	(1.19)	86.5	(2.68)	63.6	(3.70)
Korea, Republic of	100.0	(0.00)	100.0	(0.00)	93.8	(1.97)	82.2	(3.29)
Latvia	98.0	(1.53)	100.0	(0.00)	100.0	(0.00)	76.5	(4.81)
Malaysia	99.1	(0.90)	100.0	(0.00)	78.9	(3.51)	92.6	(2.32)
Mexico	95.4	(1.93)	99.5	(0.53)	88.2	(2.37)	89.5	(2.59)
Netherlands	97.6	(1.24)	98.8	(1.19)	94.4	(2.63)	88.6	(3.53)
Norway	94.1	(2.01)	96.0	(1.52)	76.7	(5.30)	69.3	(6.24)
Poland	100.0	(0.00)	100.0	(0.00)	99.1	(0.62)	88.1	(2.37)
Portugal	97.6	(1.11)	96.2	(1.81)	48.2	(3.58)	56.8	(3.99)
Romania	100.0	(0.00)	100.0	(0.00)	94.3	(1.76)	98.6	(0.70)
Serbia	97.8	(1.03)	97.6	(1.20)	57.0	(4.05)	80.2	(2.90)
Singapore	100.0	(0.00)	100.0	(0.00)	74.5	(0.25)	96.8	(0.08)
Slovak Republic	100.0	(0.00)	100.0	(0.00)	92.5	(2.26)	78.9	(3.14)
Spain	63.7	(3.50)	59.3	(4.72)	72.4	(4.37)	34.3	(4.08)
Sweden	96.4	(1.52)	96.3	(1.56)	91.5	(2.24)	63.4	(3.80)
Abu Dhabi-United Arab Emirates	100.0	(0.00)	100.0	(0.00)	92.6	(2.83)	97.7	(1.62)
Alberta-Canada	83.9	(3.69)	99.8	(0.18)	69.7	(4.61)	80.9	(3.76)
Belgium-Flemish	97.9	(1.33)	99.2	(0.83)	61.2	(4.83)	81.5	(3.70)
England-United Kingdom	100.0	(0.00)	100.0	(0.00)	81.7	(3.42)	84.2	(3.30)
International average[1]	92.6	(0.30)	94.9	(0.32)	78.8	(0.59)	75.6	(0.65)
United States	100.0	(0.00)	100.0	(0.00)	60.1	(5.74)	72.1	(5.23)

See notes at end of table.

Table 9-27. Percentage of lower secondary education teachers whose principal reports that appraisal is used in their schools and teachers are appraised by specific appraisal methods, by education system: 2013—Continued

Education system	Analysis of student test scores		Discussion of teachers' self-assessments of their work		Discussion about feedback received from parents or guardians	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	94.2	(2.29)	87.9	(2.65)	86.9	(3.37)
Brazil	98.1	(0.63)	79.6	(1.92)	91.6	(1.08)
Bulgaria	97.1	(1.76)	68.5	(3.98)	85.1	(2.43)
Chile	97.4	(1.30)	83.6	(3.61)	90.8	(2.67)
Croatia	93.7	(1.73)	80.0	(2.74)	92.9	(1.79)
Cyprus	84.0	(0.20)	61.3	(0.21)	62.7	(0.23)
Czech Republic	99.6	(0.36)	93.5	(1.98)	97.8	(1.12)
Denmark	95.7	(1.31)	79.1	(4.22)	95.3	(1.91)
Estonia	98.0	(2.06)	96.0	(1.46)	98.8	(0.84)
Finland	73.8	(4.99)	60.1	(4.55)	97.9	(1.58)
France	93.5	(2.05)	43.7	(4.23)	85.2	(3.10)
Iceland	92.1	(0.11)	61.3	(0.15)	77.4	(0.13)
Israel	97.9	(1.59)	91.5	(2.16)	80.3	(4.00)
Italy	88.4	(4.29)	62.2	(7.24)	82.8	(5.26)
Japan	97.6	(1.12)	92.1	(2.23)	86.8	(2.43)
Korea, Republic of	98.7	(0.92)	79.9	(3.28)	81.4	(3.17)
Latvia	100.0	(0.00)	99.1	(0.91)	100.0	(0.00)
Malaysia	100.0	(0.00)	93.4	(2.02)	98.1	(1.16)
Mexico	99.1	(0.69)	89.4	(2.35)	90.9	(1.83)
Netherlands	94.3	(2.08)	88.0	(3.89)	74.7	(5.04)
Norway	99.8	(0.17)	84.0	(3.59)	90.3	(4.35)
Poland	100.0	(0.00)	89.9	(1.79)	98.0	(0.88)
Portugal	90.3	(2.13)	85.3	(3.06)	72.5	(3.35)
Romania	100.0	(0.00)	97.6	(1.14)	100.0	(0.00)
Serbia	86.8	(2.60)	70.6	(4.16)	86.3	(2.96)
Singapore	98.5	(0.02)	97.1	(0.05)	92.6	(0.13)
Slovak Republic	100.0	(0.00)	85.1	(2.79)	95.3	(1.60)
Spain	97.1	(1.50)	78.9	(3.41)	90.1	(2.51)
Sweden	99.4	(0.63)	69.3	(3.86)	87.4	(2.73)
Abu Dhabi-United Arab Emirates	99.1	(0.91)	92.3	(3.14)	99.8	(0.23)
Alberta-Canada	92.4	(2.28)	85.7	(3.30)	92.8	(2.96)
Belgium-Flemish	87.3	(3.37)	60.6	(4.06)	87.0	(2.95)
England-United Kingdom	99.4	(0.57)	88.6	(2.34)	79.1	(4.10)
International average[1]	95.3	(0.32)	81.1	(0.55)	88.7	(0.46)
United States	93.3	(3.81)	73.7	(5.47)	90.5	(3.22)

† Not applicable or was not administered in the country.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Percentage of teachers working in schools where the principal reports that teachers are appraised with the above specific methods by at least one body, including: external individuals or bodies, principal, member(s) of school management team, assigned mentors or other teachers. Data derived from the principal questionnaire (question 28). Please note that schools not using formal teacher appraisal are not included here. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-28. Percentage of lower secondary education teachers who report receiving or not receiving feedback in their school, by feedback method and education system: 2013

Education system	Received feedback from external individuals or bodies[1]		Received feedback from school principal[1]		Received feedback from members of school management team[1]	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	14.8	(0.97)	27.2	(1.57)	57.0	(2.04)
Brazil	27.6	(0.93)	54.8	(1.05)	68.3	(1.11)
Bulgaria	56.6	(1.59)	94.5	(0.66)	31.1	(1.28)
Chile	20.1	(1.29)	34.1	(1.82)	60.6	(1.92)
Croatia	36.4	(0.92)	74.3	(1.28)	52.5	(1.41)
Cyprus	46.5	(1.12)	47.0	(1.26)	35.1	(1.18)
Czech Republic	48.1	(1.23)	73.2	(1.42)	64.2	(1.61)
Denmark	19.2	(1.32)	43.7	(2.46)	14.9	(1.08)
Estonia	28.2	(1.06)	52.3	(2.02)	80.1	(1.29)
Finland	18.5	(0.86)	42.4	(1.43)	6.6	(0.74)
France	70.3	(1.07)	43.1	(1.26)	18.2	(0.91)
Iceland	11.8	(1.00)	21.0	(1.34)	31.8	(1.32)
Israel	34.2	(1.14)	68.7	(1.32)	50.3	(1.47)
Italy	21.9	(0.82)	27.8	(1.05)	15.2	(0.78)
Japan	30.9	(1.17)	75.2	(1.19)	64.5	(1.08)
Korea, Republic of	13.0	(0.72)	29.8	(1.32)	29.3	(1.10)
Latvia	34.2	(1.33)	61.3	(1.99)	89.8	(1.38)
Malaysia	25.6	(1.15)	46.3	(1.50)	90.5	(0.71)
Mexico	38.9	(1.09)	56.3	(1.80)	60.1	(1.41)
Netherlands	18.1	(1.66)	26.4	(1.69)	80.7	(1.68)
Norway	9.8	(1.18)	45.3	(1.66)	43.9	(2.82)
Poland	32.3	(1.18)	93.0	(0.80)	38.2	(1.82)
Portugal	9.9	(0.62)	42.1	(1.13)	31.4	(1.04)
Romania	64.5	(1.30)	89.4	(0.88)	58.2	(1.55)
Serbia	34.5	(0.94)	70.2	(1.23)	30.1	(1.02)
Singapore	10.8	(0.60)	50.4	(0.88)	82.6	(0.78)
Slovak Republic	32.3	(1.36)	65.2	(1.50)	72.4	(1.10)
Spain	17.3	(0.92)	21.8	(1.27)	42.4	(1.33)
Sweden	10.4	(0.72)	46.4	(1.46)	13.0	(1.18)
Abu Dhabi-United Arab Emirates	25.0	(1.65)	75.6	(2.87)	67.9	(1.51)
Alberta-Canada	28.9	(1.42)	81.4	(1.31)	39.7	(1.72)
Belgium-Flemish	33.8	(2.03)	69.8	(1.73)	19.6	(1.29)
England-United Kingdom	28.9	(1.57)	41.9	(1.58)	85.2	(0.94)
International average[3]	28.9	(0.21)	54.3	(0.26)	49.3	(0.24)
United States	23.6	(1.27)	84.6	(2.46)	48.2	(2.40)

See notes at end of table.

Table 9-28. Percentage of lower secondary education teachers who report receiving or not receiving feedback in their school, by feedback method and education system: 2013—Continued

Education system	Received feedback from assigned mentors[1]		Received feedback from other teachers[1]		Have never received feedback in their current school[2]	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	24.1	(1.53)	50.6	(1.95)	14.1	(1.48)
Brazil	37.8	(1.19)	29.0	(0.82)	8.7	(0.54)
Bulgaria	16.0	(0.94)	43.5	(1.66)	1.8	(0.36)
Chile	13.6	(1.07)	23.4	(1.49)	14.0	(1.37)
Croatia	14.4	(0.74)	31.7	(1.04)	5.6	(0.49)
Cyprus	15.6	(0.97)	38.1	(1.51)	17.5	(0.95)
Czech Republic	7.9	(0.59)	52.5	(1.39)	3.3	(0.52)
Denmark	5.6	(0.89)	58.2	(1.59)	22.3	(1.29)
Estonia	5.8	(0.76)	45.8	(1.39)	7.0	(0.67)
Finland	0.7	(0.17)	43.0	(1.12)	36.9	(1.22)
France	6.1	(0.58)	20.7	(0.96)	16.1	(0.82)
Iceland	4.6	(0.60)	23.8	(1.25)	45.4	(1.55)
Israel	29.5	(1.18)	29.7	(1.21)	10.0	(0.66)
Italy	2.4	(0.28)	39.2	(0.96)	42.8	(0.88)
Japan	39.1	(1.15)	47.2	(0.96)	6.3	(0.51)
Korea, Republic of	9.4	(0.62)	84.4	(0.73)	6.0	(0.59)
Latvia	6.5	(0.57)	57.5	(1.62)	2.9	(0.44)
Malaysia	28.8	(1.41)	33.3	(0.95)	1.1	(0.21)
Mexico	24.0	(1.16)	34.7	(0.99)	9.5	(0.77)
Netherlands	19.1	(1.61)	57.0	(1.46)	6.1	(0.76)
Norway	3.2	(0.80)	57.4	(2.07)	16.2	(1.19)
Poland	26.2	(1.14)	50.7	(1.16)	1.7	(0.26)
Portugal	45.4	(1.17)	55.4	(0.94)	16.2	(0.84)
Romania	43.0	(1.42)	47.3	(1.20)	2.7	(0.44)
Serbia	12.0	(0.67)	37.5	(1.25)	4.4	(0.42)
Singapore	38.3	(0.92)	42.6	(0.97)	1.2	(0.24)
Slovak Republic	14.1	(0.72)	54.6	(1.33)	3.6	(0.43)
Spain	25.9	(1.12)	34.7	(0.93)	31.5	(1.13)
Sweden	3.3	(0.48)	33.7	(1.18)	32.5	(1.24)
Abu Dhabi-United Arab Emirates	54.4	(1.87)	19.9	(1.25)	2.6	(0.56)
Alberta-Canada	9.4	(1.05)	35.8	(1.34)	7.1	(0.51)
Belgium-Flemish	18.2	(1.29)	19.7	(1.02)	14.3	(1.08)
England-United Kingdom	28.9	(1.01)	51.1	(1.40)	0.9!	(0.31)
International average[3]	19.2	(0.18)	41.9	(0.22)	12.5	(0.15)
United States	10.5	(1.03)	27.4	(2.04)	1.9!	(0.74)

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

[1] Referring to the percentage of teachers receiving feedback from respective bodies for at least one item from question 28 of the international version of the teacher questionnaire. The same teacher can receive feedback from different bodies via different methods.

[2] Referring to the percentage of teachers reporting never having received feedback in their school for any of the items surveyed in question 28 from the international version of the teacher questionnaire.

[3] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Feedback is defined broadly as any communication of the results of a review of an individual's work, often with the purpose of noting good performance or identifying areas for development. The feedback may be provided formally or informally. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-29. Percentage of lower secondary education teachers who work in schools where principals report that specific outcomes occurred "sometimes," "most of the time," or "always" after formal teacher appraisal, by outcome and education system: 2013

Education system	Measures to remedy any weaknesses in teaching are discussed with the teacher		A development or training plan is developed for each teacher		Material sanctions (e.g., reduced annual increases in pay) are imposed on poor performers		A mentor is appointed to help the teacher improve his/her teaching	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	100.0	(0.00)	92.4	(3.20)	5.4!	(2.27)	98.3	(1.22)
Brazil	100.0	(0.03)	87.9	(1.80)	11.5	(1.68)	82.9	(2.17)
Bulgaria	96.2	(1.87)	85.3	(3.07)	22.6	(3.45)	65.6	(3.99)
Chile	98.0	(1.65)	91.1	(2.73)	20.4	(4.07)	66.2	(5.22)
Croatia	100.0	(0.00)	88.7	(2.41)	†	†	53.0	(3.73)
Cyprus	100.0	(0.00)	88.0	(0.15)	8.2	(0.08)	85.1	(0.16)
Czech Republic	100.0	(0.00)	85.3	(2.97)	60.6	(3.70)	73.1	(3.20)
Denmark	99.7	(0.26)	92.6	(1.98)	†	†	61.5	(5.69)
Estonia	99.7	(0.25)	81.7	(2.84)	15.6	(3.00)	77.2	(3.46)
Finland	100.0	(0.00)	65.3	(5.20)	6.4!	(2.76)	48.3	(5.00)
France	97.3	(1.24)	67.2	(3.73)	11.2	(2.58)	85.9	(2.79)
Iceland	98.2	(0.09)	62.1	(0.16)	6.1	(0.06)	59.1	(0.17)
Israel	99.5	(0.46)	99.0	(0.71)	5.1!	(1.74)	91.7	(1.90)
Italy	94.2	(2.90)	75.4	(5.61)	6.5!	(3.03)	71.4	(6.41)
Japan	98.3	(1.00)	83.4	(2.85)	8.7	(1.78)	44.5	(3.47)
Korea, Republic of	99.4	(0.63)	100.0	(0.00)	5.1!	(1.73)	91.1	(2.40)
Latvia	100.0	(0.00)	91.7	(2.92)	34.4	(4.61)	62.7	(4.66)
Malaysia	99.7	(0.33)	96.7	(1.67)	10.5	(2.44)	92.6	(2.21)
Mexico	97.0	(1.41)	83.1	(2.99)	8.5	(2.01)	48.4	(3.91)
Netherlands	100.0	(0.00)	96.8	(2.04)	18.5	(4.36)	99.4	(0.56)
Norway	100.0	(0.00)	68.0	(7.10)	‡	†	63.0	(7.24)
Poland	98.3	(1.01)	80.7	(3.61)	12.3	(2.74)	61.4	(3.81)
Portugal	90.7	(2.55)	64.1	(3.81)	#	†	54.7	(4.31)
Romania	98.9	(0.82)	90.4	(1.95)	47.7	(3.69)	78.3	(3.11)
Serbia	100.0	(0.00)	95.4	(1.28)	26.3	(3.43)	65.1	(3.24)
Singapore	100.0	(0.00)	100.0	(0.00)	78.6	(0.21)	100.0	(0.00)
Slovak Republic	100.0	(0.00)	73.9	(3.52)	56.3	(3.97)	57.3	(3.74)
Spain	85.9	(3.45)	48.8	(4.71)	‡	†	25.4	(3.72)
Sweden	100.0	(0.00)	90.3	(2.17)	78.8	(2.84)	80.3	(3.41)
Abu Dhabi-United Arab Emirates	98.5	(1.15)	96.2	(2.17)	21.7	(4.26)	79.9	(4.14)
Alberta-Canada	99.9	(0.12)	95.6	(1.71)	4.5!	(1.56)	88.9	(3.04)
Belgium-Flemish	100.0	(0.00)	71.3	(3.71)	‡	†	81.0	(3.39)
England-United Kingdom	100.0	(0.00)	100.0	(0.00)	78.2	(3.18)	100.0	(0.00)
International average[1]	98.5	(0.20)	84.5	(0.53)	21.9	(0.50)	72.5	(0.63)
United States	100.0	(0.00)	96.6	(2.47)	23.2	(5.89)	86.5	(3.99)

See notes at end of table.

Table 9-29. Percentage of lower secondary education teachers who work in schools where principals report that specific outcomes occurred "sometimes," "most of the time," or "always" after formal teacher appraisal, by outcome and education system: 2013—Continued

Education system	A change in teachers' work responsibilities		A change in teacher's salary or a payment of a financial bonus		A change in the likelihood of career advancement		Dismissal or nonrenewal of contract	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	79.8	(4.70)	14.2!	(5.22)	80.4	(3.80)	68.3	(5.38)
Brazil	50.4	(2.40)	25.4	(2.34)	46.7	(3.14)	59.4	(2.41)
Bulgaria	71.4	(3.56)	83.5	(2.88)	63.9	(3.95)	76.8	(3.50)
Chile	61.5	(4.82)	22.8	(4.47)	47.1	(5.41)	68.6	(4.82)
Croatia	56.1	(3.57)	†	†	62.7	(3.84)	13.9	(2.75)
Cyprus	50.0	(0.25)	6.6	(0.08)	69.9	(0.23)	40.4	(0.20)
Czech Republic	59.8	(4.18)	93.6	(1.81)	55.1	(3.69)	78.6	(3.36)
Denmark	86.7	(3.16)	7.3	(2.17)	54.4	(5.72)	68.8	(4.23)
Estonia	90.2	(2.36)	73.9	(3.32)	63.7	(3.97)	69.9	(3.68)
Finland	73.4	(4.51)	49.1	(5.52)	39.2	(5.22)	70.3	(4.96)
France	48.9	(3.98)	26.5	(3.21)	65.8	(3.72)	27.1	(3.42)
Iceland	62.3	(0.16)	16.6	(0.11)	55.2	(0.16)	76.6	(0.18)
Israel	90.3	(2.53)	14.1	(3.24)	72.3	(4.16)	72.7	(3.99)
Italy	50.0	(7.31)	22.9	(5.42)	6.0!	(2.21)	29.4	(5.60)
Japan	52.7	(3.64)	11.4	(2.11)	14.5	(2.36)	9.0	(2.15)
Korea, Republic of	96.7	(1.36)	49.3	(4.38)	68.2	(3.90)	23.2	(3.72)
Latvia	93.9	(1.99)	68.0	(4.10)	57.0	(5.67)	58.4	(4.63)
Malaysia	97.9	(1.11)	19.9	(3.72)	54.2	(4.49)	‡	†
Mexico	37.0	(3.55)	15.5	(2.54)	39.9	(3.81)	23.5	(2.79)
Netherlands	82.8	(4.16)	39.2	(5.44)	71.9	(5.61)	96.2	(2.75)
Norway	87.9	(2.89)	‡	†	29.7	(7.24)	59.4	(7.96)
Poland	66.3	(4.19)	62.7	(4.35)	37.7	(3.58)	79.8	(2.90)
Portugal	48.9	(3.81)	‡	†	35.6	(3.86)	24.2	(3.49)
Romania	55.7	(3.58)	38.2	(3.25)	87.9	(2.26)	49.3	(3.93)
Serbia	64.0	(4.28)	11.5	(2.54)	38.0	(4.14)	22.2	(3.36)
Singapore	100.0	(0.00)	87.6	(0.22)	96.7	(0.10)	86.7	(0.23)
Slovak Republic	65.3	(3.81)	75.7	(3.54)	57.1	(3.96)	83.2	(2.58)
Spain	42.3	(4.51)	‡	†	26.9	(3.93)	28.3	(3.64)
Sweden	86.8	(3.01)	45.4	(3.83)	63.0	(4.17)	73.5	(3.97)
Abu Dhabi-United Arab Emirates	76.4	(3.75)	38.1	(4.11)	60.7	(4.01)	55.1	(4.61)
Alberta-Canada	71.3	(4.16)	‡	†	69.3	(4.62)	80.3	(3.38)
Belgium-Flemish	65.3	(3.94)	‡	†	50.1	(4.67)	89.3	(3.11)
England-United Kingdom	91.1	(2.17)	66.1	(4.98)	96.6	(1.69)	81.4	(4.05)
International average[1]	70.1	(0.62)	34.3	(0.60)	55.7	(0.71)	56.0	(0.65)
United States	66.4	(5.37)	14.0!	(4.40)	68.1	(6.00)	94.6	(2.05)

† Not applicable or was not administered in the country.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Data derived from the principal questionnaire (question 29). Please note that schools not using formal teacher appraisal are not included here. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-30. Percentage of lower secondary education teachers who report the feedback they received emphasized specific issues with a moderate or high importance, by issue and education system: 2013

	Student performance		Knowledge and understanding of the subject field(s)		Pedagogical competencies in teaching the subject field(s)		Student assessment practices	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	87.5	(1.41)	69.1	(1.45)	74.9	(1.16)	76.5	(1.55)
Brazil	95.8	(0.31)	92.6	(0.37)	92.7	(0.42)	93.6	(0.39)
Bulgaria	91.9	(0.67)	89.1	(0.84)	90.2	(0.73)	83.3	(0.94)
Chile	90.1	(0.91)	91.8	(0.85)	92.3	(0.86)	90.1	(0.96)
Croatia	92.1	(0.47)	83.7	(0.79)	89.1	(0.66)	91.2	(0.56)
Cyprus	91.2	(0.89)	91.7	(0.81)	93.8	(0.63)	87.2	(0.83)
Czech Republic	94.4	(0.59)	88.7	(0.72)	91.4	(0.57)	90.7	(0.67)
Denmark	71.6	(1.95)	80.9	(1.17)	83.5	(1.25)	60.9	(1.55)
Estonia	87.4	(0.84)	83.2	(0.95)	87.3	(0.76)	81.2	(0.91)
Finland	75.0	(1.16)	77.4	(1.06)	79.0	(1.02)	63.5	(1.63)
France	69.7	(0.93)	86.1	(0.90)	93.5	(0.53)	83.4	(0.73)
Iceland	77.5	(1.77)	67.7	(1.91)	71.8	(1.75)	68.0	(1.90)
Israel	88.7	(0.75)	87.4	(0.78)	88.8	(0.77)	76.8	(1.14)
Italy	95.1	(0.69)	89.9	(0.78)	89.8	(0.85)	87.3	(0.76)
Japan	77.6	(0.93)	85.6	(0.68)	92.7	(0.55)	82.5	(0.77)
Korea, Republic of	82.2	(0.89)	85.4	(0.75)	88.5	(0.66)	84.3	(0.85)
Latvia	96.4	(0.39)	92.4	(0.82)	95.5	(0.60)	94.5	(0.54)
Malaysia	99.7	(0.10)	99.6	(0.12)	98.9	(0.20)	98.8	(0.20)
Mexico	90.8	(0.79)	86.3	(0.77)	85.6	(0.87)	85.0	(0.89)
Netherlands	81.6	(1.08)	75.6	(1.40)	94.6	(0.77)	73.8	(1.45)
Norway	73.0	(1.21)	71.8	(1.46)	73.4	(1.45)	68.0	(1.38)
Poland	90.8	(0.79)	85.9	(0.83)	85.6	(0.67)	88.5	(0.79)
Portugal	94.8	(0.49)	89.4	(0.62)	93.1	(0.55)	92.6	(0.49)
Romania	97.6	(0.33)	96.3	(0.42)	95.5	(0.46)	95.5	(0.45)
Serbia	95.2	(0.43)	92.0	(0.54)	91.8	(0.54)	91.6	(0.51)
Singapore	94.7	(0.40)	87.6	(0.62)	91.0	(0.56)	88.2	(0.59)
Slovak Republic	94.9	(0.42)	92.7	(0.66)	93.7	(0.53)	92.4	(0.52)
Spain	87.9	(0.81)	63.8	(1.36)	63.6	(1.42)	66.8	(1.38)
Sweden	74.7	(1.30)	59.0	(1.35)	72.3	(1.21)	68.7	(1.33)
Abu Dhabi-United Arab Emirates	88.9	(0.73)	84.2	(0.83)	84.3	(1.03)	86.0	(0.77)
Alberta-Canada	87.6	(0.77)	75.1	(1.11)	78.6	(1.06)	86.1	(0.85)
Belgium-Flemish	74.6	(1.16)	76.5	(1.13)	85.8	(0.74)	72.9	(1.21)
England-United Kingdom	96.9	(0.42)	75.8	(1.27)	80.4	(0.86)	90.4	(0.80)
International average[1]	87.5	(0.16)	83.5	(0.17)	86.8	(0.15)	83.0	(0.17)
United States	91.6	(0.72)	78.1	(1.38)	80.4	(1.44)	81.2	(1.45)

See notes at end of table.

Table 9-30. Percentage of lower secondary education teachers who report the feedback they received emphasized specific issues with a moderate or high importance, by issue and education system: 2013—Continued

	Student behavior and classroom management		Teaching of students with special learning needs		Teaching in a multicultural or multilingual setting		Feedback provided to other teachers to help their teaching	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	70.0	(1.58)	50.8	(1.79)	30.1	(1.87)	46.6	(1.42)
Brazil	91.2	(0.46)	76.6	(0.87)	64.7	(0.91)	79.3	(0.74)
Bulgaria	80.2	(1.19)	56.2	(1.96)	52.8	(1.82)	62.6	(1.61)
Chile	91.2	(1.02)	79.7	(1.48)	58.6	(2.06)	69.6	(1.56)
Croatia	89.6	(0.61)	82.3	(0.87)	32.1	(1.19)	64.9	(1.10)
Cyprus	92.0	(0.78)	68.3	(1.34)	67.4	(1.31)	59.4	(1.62)
Czech Republic	93.5	(0.47)	81.6	(1.23)	47.8	(1.28)	65.1	(1.22)
Denmark	84.8	(1.18)	60.6	(1.56)	34.8	(2.17)	58.8	(1.72)
Estonia	87.3	(0.89)	64.8	(1.37)	35.1	(1.88)	50.4	(1.35)
Finland	82.0	(1.07)	58.6	(1.27)	25.6	(1.97)	34.4	(1.40)
France	94.2	(0.54)	65.6	(1.02)	22.7	(1.01)	26.5	(0.94)
Iceland	75.6	(1.71)	62.8	(1.87)	33.9	(2.04)	36.3	(1.89)
Israel	86.7	(0.84)	60.2	(1.25)	39.1	(1.46)	48.5	(1.38)
Italy	92.7	(0.81)	87.5	(0.84)	68.4	(1.36)	69.8	(1.27)
Japan	86.4	(0.67)	71.4	(1.13)	28.4	(1.02)	56.6	(1.09)
Korea, Republic of	85.5	(0.65)	83.5	(0.72)	60.0	(0.98)	74.4	(1.00)
Latvia	91.4	(0.76)	65.7	(2.03)	44.6	(2.49)	71.2	(1.39)
Malaysia	97.9	(0.30)	69.7	(1.29)	70.2	(1.14)	93.2	(0.44)
Mexico	82.9	(0.94)	51.1	(1.49)	38.9	(1.23)	53.5	(1.18)
Netherlands	92.6	(0.74)	60.9	(2.31)	23.7	(1.88)	40.2	(1.23)
Norway	87.3	(0.98)	60.2	(2.55)	24.3	(1.41)	43.8	(1.85)
Poland	87.4	(0.67)	79.5	(1.07)	18.1	(0.76)	53.0	(1.16)
Portugal	93.7	(0.46)	84.2	(0.81)	61.5	(1.15)	76.7	(0.80)
Romania	95.8	(0.48)	73.4	(1.49)	59.2	(1.35)	77.0	(0.93)
Serbia	91.9	(0.47)	90.4	(0.63)	66.0	(1.12)	73.8	(1.04)
Singapore	86.3	(0.66)	47.2	(0.96)	39.6	(0.98)	58.2	(0.99)
Slovak Republic	93.7	(0.46)	85.0	(0.76)	57.0	(1.26)	72.3	(0.87)
Spain	79.8	(0.88)	66.9	(1.42)	49.5	(1.68)	55.1	(1.24)
Sweden	77.7	(1.16)	60.0	(1.47)	27.5	(1.82)	36.3	(1.44)
Abu Dhabi-United Arab Emirates	84.9	(0.70)	65.1	(1.53)	62.5	(1.63)	74.6	(1.41)
Alberta-Canada	75.7	(1.18)	65.2	(1.89)	36.2	(1.81)	37.8	(1.67)
Belgium-Flemish	81.2	(0.86)	57.3	(1.26)	29.1	(1.83)	29.7	(1.04)
England-United Kingdom	85.3	(1.12)	73.7	(1.15)	33.2	(1.69)	44.2	(1.30)
International average[1]	86.9	(0.15)	68.7	(0.25)	43.7	(0.27)	57.4	(0.22)
United States	81.8	(1.18)	63.4	(1.58)	38.2	(2.28)	31.9	(1.52)

See notes at end of table.

Table 9-30. Percentage of lower secondary education teachers who report the feedback they received emphasized specific issues with a moderate or high importance, by issue and education system: 2013—Continued

	Feedback from parents or guardians		Student feedback		Collaboration or working with other teachers	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	55.1	(1.97)	62.9	(2.21)	71.3	(1.36)
Brazil	85.2	(0.68)	87.6	(0.56)	90.3	(0.48)
Bulgaria	64.3	(1.49)	76.6	(1.25)	82.7	(1.10)
Chile	68.3	(1.60)	82.4	(1.46)	78.5	(1.65)
Croatia	81.3	(0.77)	87.0	(0.68)	82.1	(0.65)
Cyprus	66.5	(1.44)	77.1	(1.35)	81.8	(1.15)
Czech Republic	83.1	(0.85)	88.3	(0.79)	87.5	(0.76)
Denmark	72.3	(1.47)	83.5	(1.29)	88.3	(1.05)
Estonia	71.9	(1.24)	82.0	(1.08)	80.4	(1.00)
Finland	76.2	(1.20)	78.2	(0.95)	80.2	(0.96)
France	49.7	(1.18)	55.9	(1.26)	77.2	(1.03)
Iceland	58.8	(2.03)	61.2	(2.15)	73.1	(1.55)
Israel	55.6	(1.25)	76.0	(1.08)	79.7	(1.01)
Italy	89.9	(0.89)	91.2	(0.79)	90.5	(0.79)
Japan	70.9	(0.89)	80.9	(0.84)	79.9	(0.87)
Korea, Republic of	69.1	(1.08)	82.2	(0.87)	80.5	(0.94)
Latvia	85.3	(1.05)	90.6	(0.73)	88.4	(1.03)
Malaysia	95.6	(0.42)	98.0	(0.24)	98.8	(0.25)
Mexico	62.8	(1.24)	79.4	(0.98)	70.9	(1.15)
Netherlands	57.8	(1.48)	83.5	(1.58)	82.7	(1.13)
Norway	63.9	(2.07)	75.2	(1.33)	77.8	(1.22)
Poland	70.1	(1.08)	74.6	(1.11)	75.4	(1.12)
Portugal	84.3	(0.74)	91.2	(0.55)	94.1	(0.52)
Romania	91.7	(0.59)	96.9	(0.45)	94.4	(0.51)
Serbia	87.8	(0.66)	92.6	(0.47)	89.8	(0.58)
Singapore	64.6	(0.84)	74.2	(0.84)	75.2	(0.90)
Slovak Republic	87.2	(0.68)	93.1	(0.46)	91.2	(0.54)
Spain	72.3	(1.14)	72.3	(1.13)	71.7	(1.26)
Sweden	61.4	(1.41)	75.3	(1.13)	71.4	(1.26)
Abu Dhabi-United Arab Emirates	82.9	(1.44)	81.8	(1.29)	85.3	(1.17)
Alberta-Canada	62.5	(1.49)	67.6	(1.52)	68.1	(1.50)
Belgium-Flemish	44.7	(1.09)	55.9	(1.43)	74.5	(1.08)
England-United Kingdom	43.2	(1.18)	55.4	(1.58)	48.8	(1.49)
International average[1]	70.8	(0.22)	79.1	(0.20)	80.7	(0.18)
United States	47.7	(1.34)	47.7	(1.57)	60.7	(1.82)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-31. Percentage of lower secondary education teachers who report a moderate or large positive change in specific issues after they received feedback on their work at their school, by issue and education system: 2013

Education system	Public recognition		Role in school development initiatives		Likelihood of career advancement		Amount of professional development		Job responsibilities	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	39.9	(1.30)	38.6	(1.47)	30.8	(1.33)	31.2	(1.20)	39.5	(1.32)
Brazil	71.3	(0.88)	66.9	(0.89)	50.0	(1.00)	70.1	(0.79)	80.3	(0.70)
Bulgaria	79.6	(1.23)	60.1	(1.54)	32.0	(1.38)	54.1	(1.61)	82.1	(1.07)
Chile	70.3	(1.90)	64.3	(1.87)	64.1	(1.84)	68.3	(1.69)	74.9	(1.69)
Croatia	55.7	(1.12)	45.0	(1.13)	33.0	(0.93)	47.4	(1.01)	52.3	(1.03)
Cyprus	61.2	(1.46)	55.6	(1.37)	39.3	(1.48)	52.7	(1.68)	59.3	(1.50)
Czech Republic	57.3	(1.27)	38.6	(1.08)	21.6	(1.01)	30.3	(1.12)	43.6	(1.15)
Denmark	56.2	(1.69)	44.4	(1.66)	22.7	(1.52)	47.9	(1.82)	47.7	(1.79)
Estonia	56.4	(1.38)	43.4	(1.36)	27.8	(1.64)	46.4	(1.51)	47.3	(1.37)
Finland	55.9	(1.46)	33.0	(1.40)	14.5	(1.32)	26.9	(1.14)	34.4	(1.41)
France	54.2	(1.17)	43.6	(1.14)	36.5	(1.11)	22.0	(0.95)	39.4	(1.05)
Iceland	42.9	(2.27)	40.9	(2.26)	13.0	(1.42)	31.8	(1.94)	34.4	(2.06)
Israel	70.4	(1.17)	55.5	(1.19)	54.0	(1.53)	50.5	(1.32)	58.4	(1.21)
Italy	54.3	(1.25)	45.3	(1.16)	†	†	46.2	(1.24)	†	†
Japan	83.0	(0.86)	63.4	(1.10)	33.6	(1.07)	41.9	(1.08)	71.1	(0.99)
Korea, Republic of	59.9	(1.09)	52.9	(1.18)	37.4	(1.15)	55.0	(1.23)	65.1	(1.18)
Latvia	58.2	(1.37)	46.3	(1.61)	37.0	(1.57)	45.0	(1.55)	48.6	(1.24)
Malaysia	89.8	(0.75)	87.2	(0.76)	81.8	(0.84)	85.5	(0.69)	93.0	(0.61)
Mexico	62.0	(1.36)	62.6	(1.31)	51.3	(1.24)	67.8	(1.21)	82.0	(0.97)
Netherlands	52.2	(1.70)	45.3	(1.43)	31.1	(1.92)	36.6	(1.56)	44.1	(1.80)
Norway	58.9	(1.83)	34.9	(2.12)	15.2	(1.32)	25.4	(1.40)	32.0	(1.76)
Poland	72.1	(0.97)	64.4	(0.98)	51.0	(1.06)	53.1	(1.13)	53.3	(1.08)
Portugal	47.9	(1.16)	46.2	(1.15)	23.7	(0.98)	38.5	(0.97)	44.9	(1.08)
Romania	80.8	(1.04)	68.7	(1.24)	60.0	(1.54)	58.8	(1.30)	76.1	(1.04)
Serbia	68.1	(0.91)	51.1	(1.02)	36.2	(1.05)	55.8	(1.00)	66.2	(1.02)
Singapore	49.1	(0.90)	49.1	(0.90)	44.3	(0.93)	47.0	(0.92)	57.9	(1.00)
Slovak Republic	68.5	(1.00)	62.6	(1.00)	39.6	(1.08)	47.4	(1.20)	60.1	(1.11)
Spain	50.8	(1.18)	45.8	(1.15)	28.9	(1.02)	38.2	(0.99)	42.2	(1.17)
Sweden	60.0	(1.14)	37.6	(1.25)	20.4	(1.17)	23.6	(1.12)	38.3	(1.50)
Abu Dhabi-United Arab Emirates	74.8	(1.84)	72.7	(1.63)	49.8	(1.77)	67.7	(1.78)	73.2	(1.62)
Alberta-Canada	44.3	(1.55)	43.7	(1.54)	33.7	(1.53)	36.6	(1.56)	44.1	(1.55)
Belgium-Flemish	52.4	(1.37)	34.5	(1.17)	17.5	(0.81)	34.0	(1.04)	43.1	(1.01)
England-United Kingdom	40.6	(1.29)	36.1	(1.38)	33.0	(1.37)	28.0	(1.49)	35.0	(1.35)
International average[1]	60.6	(0.23)	50.9	(0.24)	36.4	(0.23)	45.8	(0.23)	55.1	(0.23)
United States	42.3	(1.32)	40.2	(1.47)	26.4	(1.03)	31.4	(1.32)	39.4	(1.47)

See notes at end of table.

Table 9-31. Percentage of lower secondary education teachers who report a moderate or large positive change in specific issues after they received feedback on their work at their school, by issue and education system: 2013—Continued

Education system	Confidence as a teacher		Salary and/or financial bonus		Classroom management practices		Knowledge and understanding of main subject field(s)		Teaching practices	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	56.5	(1.72)	11.9	(0.98)	39.5	(1.67)	33.5	(1.46)	45.0	(1.65)
Brazil	85.8	(0.62)	27.0	(0.77)	75.3	(0.73)	77.2	(0.77)	79.9	(0.73)
Bulgaria	87.0	(0.87)	47.0	(1.65)	80.4	(1.22)	77.0	(1.14)	80.3	(1.18)
Chile	86.1	(1.33)	47.0	(2.36)	84.1	(1.34)	78.7	(1.51)	82.0	(1.34)
Croatia	73.3	(0.86)	15.4	(0.72)	56.3	(0.96)	52.6	(1.00)	65.1	(1.03)
Cyprus	78.5	(1.10)	10.7	(0.92)	62.0	(1.47)	52.4	(1.57)	65.0	(1.58)
Czech Republic	62.4	(1.15)	27.3	(1.13)	52.7	(1.35)	45.5	(1.14)	56.9	(1.02)
Denmark	64.7	(1.50)	11.2	(0.89)	41.5	(1.37)	43.4	(1.50)	49.9	(1.70)
Estonia	64.3	(1.29)	27.2	(1.18)	44.2	(1.34)	50.4	(1.22)	54.1	(1.42)
Finland	63.5	(1.44)	13.1	(1.08)	32.8	(1.18)	32.8	(1.12)	37.7	(1.17)
France	64.7	(1.13)	22.5	(1.01)	42.1	(1.17)	34.9	(1.24)	51.5	(1.22)
Iceland	58.9	(2.03)	16.5	(1.65)	39.7	(1.92)	37.4	(2.18)	44.7	(2.07)
Israel	73.1	(1.10)	24.0	(1.15)	56.1	(1.19)	54.6	(1.36)	60.3	(1.17)
Italy	71.9	(1.13)	†	†	67.4	(1.21)	61.8	(1.19)	67.9	(1.12)
Japan	85.1	(0.71)	27.9	(0.95)	71.2	(0.94)	86.2	(0.70)	88.6	(0.61)
Korea, Republic of	65.8	(1.02)	38.4	(1.04)	57.8	(1.11)	62.8	(1.12)	64.4	(1.09)
Latvia	63.7	(1.61)	21.5	(1.22)	44.3	(1.61)	55.1	(1.37)	62.1	(1.31)
Malaysia	96.0	(0.39)	78.0	(0.95)	92.4	(0.64)	95.5	(0.45)	95.2	(0.47)
Mexico	89.0	(0.80)	30.9	(1.29)	82.9	(0.93)	83.4	(0.94)	86.3	(0.86)
Netherlands	58.7	(1.97)	19.9	(1.55)	38.9	(1.58)	30.2	(1.44)	43.8	(1.75)
Norway	68.0	(1.32)	19.9	(1.45)	47.1	(1.98)	39.7	(1.39)	52.2	(1.49)
Poland	69.2	(0.82)	32.6	(0.96)	58.6	(0.98)	52.4	(0.99)	63.5	(1.05)
Portugal	58.8	(1.03)	6.5	(0.64)	50.0	(1.13)	37.7	(0.99)	48.9	(1.06)
Romania	88.1	(0.64)	27.8	(1.31)	78.6	(1.05)	72.0	(1.00)	80.7	(0.91)
Serbia	75.7	(0.86)	20.5	(0.85)	60.9	(1.09)	57.8	(1.09)	67.4	(0.96)
Singapore	69.2	(0.86)	38.0	(0.96)	61.6	(0.89)	61.5	(0.97)	69.1	(0.85)
Slovak Republic	71.9	(0.94)	37.0	(1.35)	52.5	(1.10)	61.5	(1.12)	68.7	(0.95)
Spain	59.0	(1.10)	10.5	(0.93)	44.8	(1.20)	33.4	(1.25)	45.4	(1.33)
Sweden	61.4	(1.22)	33.2	(1.24)	45.0	(1.23)	36.7	(1.10)	47.5	(1.18)
Abu Dhabi-United Arab Emirates	81.3	(1.35)	31.3	(1.37)	76.2	(1.62)	70.7	(1.81)	79.1	(1.64)
Alberta-Canada	60.5	(1.55)	10.7	(0.92)	39.0	(1.73)	37.2	(1.66)	52.0	(1.85)
Belgium-Flemish	63.0	(1.10)	7.0	(0.62)	37.7	(1.19)	32.6	(0.92)	44.1	(1.11)
England-United Kingdom	53.0	(1.33)	18.4	(1.09)	41.7	(1.45)	26.7	(1.08)	48.1	(1.66)
International average[1]	70.6	(0.21)	25.3	(0.21)	56.2	(0.23)	53.5	(0.22)	62.0	(0.22)
United States	60.8	(1.55)	12.9	(1.18)	41.5	(1.37)	35.8	(1.29)	54.5	(1.55)

See notes at end of table.

Table 9-31. Percentage of lower secondary education teachers who report a moderate or large positive change in specific issues after they received feedback on their work at their school, by issue and education system: 2013—Continued

Education system	Methods for teaching students with special needs		Student assessments to improve student learning		Job satisfaction		Motivation	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	29.0	(1.39)	42.9	(1.22)	46.9	(1.45)	50.0	(1.51)
Brazil	45.9	(0.90)	78.5	(0.73)	72.4	(0.90)	72.5	(0.90)
Bulgaria	47.4	(1.94)	76.6	(1.18)	78.4	(1.05)	78.9	(1.02)
Chile	69.3	(1.84)	80.9	(1.44)	82.8	(1.67)	83.4	(1.70)
Croatia	56.6	(1.02)	65.1	(1.05)	63.5	(1.07)	66.8	(1.09)
Cyprus	44.7	(1.46)	60.4	(1.53)	69.6	(1.43)	61.1	(1.58)
Czech Republic	43.5	(1.35)	50.5	(1.24)	55.7	(1.04)	55.2	(1.03)
Denmark	36.0	(1.73)	40.4	(1.53)	58.6	(1.88)	61.7	(1.65)
Estonia	37.4	(1.47)	47.9	(1.53)	54.7	(1.19)	55.7	(1.21)
Finland	30.3	(1.22)	31.8	(1.21)	59.6	(1.35)	61.0	(1.67)
France	33.5	(1.17)	44.5	(1.21)	59.3	(1.06)	62.0	(1.13)
Iceland	36.7	(2.13)	49.5	(2.09)	58.3	(2.20)	57.2	(2.11)
Israel	42.2	(1.33)	55.1	(1.30)	72.4	(1.08)	73.8	(0.98)
Italy	65.9	(1.17)	69.0	(1.12)	75.3	(1.11)	75.0	(1.06)
Japan	63.2	(1.23)	75.5	(0.95)	77.4	(1.00)	81.5	(0.89)
Korea, Republic of	61.4	(1.10)	58.4	(1.14)	53.0	(1.13)	57.4	(1.12)
Latvia	37.3	(1.81)	59.4	(1.53)	53.6	(1.38)	56.2	(1.42)
Malaysia	60.7	(1.31)	94.2	(0.49)	94.1	(0.46)	94.7	(0.48)
Mexico	49.3	(1.11)	81.6	(0.85)	89.3	(0.71)	86.6	(0.85)
Netherlands	25.1	(1.69)	31.4	(1.26)	45.2	(1.55)	51.6	(1.81)
Norway	33.5	(2.38)	47.9	(2.25)	54.6	(1.24)	52.9	(1.52)
Poland	61.6	(0.88)	67.3	(1.04)	67.8	(0.93)	69.1	(0.81)
Portugal	40.1	(1.17)	53.1	(1.09)	54.7	(1.11)	54.1	(1.01)
Romania	56.7	(1.46)	82.9	(0.83)	84.6	(0.78)	83.6	(0.91)
Serbia	59.5	(1.20)	67.9	(0.92)	67.5	(1.05)	68.4	(0.98)
Singapore	39.7	(0.93)	63.4	(0.86)	61.2	(0.93)	63.2	(0.96)
Slovak Republic	56.9	(1.26)	66.6	(1.07)	68.4	(1.06)	68.9	(1.10)
Spain	40.5	(1.30)	53.2	(1.15)	53.5	(1.24)	55.3	(1.34)
Sweden	37.2	(1.23)	44.7	(1.08)	50.6	(1.36)	53.7	(1.26)
Abu Dhabi-United Arab Emirates	52.6	(1.66)	77.4	(1.54)	68.0	(1.49)	74.6	(1.54)
Alberta-Canada	38.6	(1.78)	53.6	(1.67)	51.4	(1.43)	53.2	(1.40)
Belgium-Flemish	32.8	(1.26)	39.9	(1.24)	52.3	(1.17)	55.6	(1.22)
England-United Kingdom	29.6	(1.63)	49.5	(1.48)	38.9	(1.47)	41.3	(1.50)
International average[1]	45.3	(0.25)	59.4	(0.22)	63.4	(0.22)	64.7	(0.22)
United States	34.9	(1.36)	49.5	(1.64)	48.9	(1.24)	52.8	(1.52)

† Not applicable or not administered in the country.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-32. Percentage of lower secondary education teachers who "agree" or "strongly agree" with specific statements about teacher appraisal and feedback systems in their school, by statement and education system: 2013

Education system	The best performing teachers in this school receive the greatest recognition		Teacher appraisal and feedback have little impact upon the way teachers teach in the classroom		Teacher appraisal and feedback are largely done to fulfil administrative requirements		A development or training plan is established to improve their work as a teacher	
	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	31.3	(1.98)	43.2	(1.15)	61.8	(1.56)	50.5	(1.64)
Brazil	18.4	(0.65)	33.9	(1.01)	42.8	(0.92)	69.4	(1.06)
Bulgaria	62.4	(1.67)	38.3	(1.40)	25.8	(1.37)	79.3	(1.27)
Chile	54.1	(2.33)	63.4	(1.82)	68.7	(1.64)	58.3	(2.08)
Croatia	27.0	(0.95)	51.5	(1.14)	56.0	(1.24)	59.3	(1.05)
Cyprus	27.9	(1.07)	47.3	(1.36)	57.8	(1.28)	64.7	(1.37)
Czech Republic	55.5	(1.67)	48.6	(1.15)	35.2	(1.43)	59.1	(1.60)
Denmark	21.1	(1.36)	31.1	(1.55)	49.6	(1.51)	40.5	(1.72)
Estonia	42.7	(1.48)	47.2	(1.22)	43.3	(1.27)	57.4	(1.35)
Finland	25.3	(1.35)	49.9	(1.04)	62.0	(1.32)	38.5	(1.54)
France	13.6	(0.77)	48.6	(1.06)	61.3	(1.18)	42.2	(1.04)
Iceland	17.8	(1.24)	42.0	(1.57)	45.8	(1.54)	35.5	(1.60)
Israel	28.0	(1.27)	40.9	(0.95)	45.9	(1.37)	63.4	(1.49)
Italy	30.5	(0.98)	45.5	(1.00)	42.1	(1.19)	69.8	(1.19)
Japan	37.1	(1.05)	32.4	(0.96)	47.3	(1.10)	45.6	(1.23)
Korea, Republic of	51.0	(1.24)	40.6	(1.00)	59.8	(1.24)	69.4	(1.14)
Latvia	58.1	(1.51)	43.8	(1.60)	48.3	(1.73)	48.0	(1.77)
Malaysia	90.1	(0.80)	44.5	(1.10)	76.2	(1.12)	95.9	(0.45)
Mexico	36.3	(1.22)	40.0	(1.03)	44.1	(1.33)	63.9	(1.33)
Netherlands	24.2	(1.23)	40.6	(2.04)	37.6	(1.93)	53.6	(2.61)
Norway	14.9	(0.87)	50.7	(1.79)	38.6	(1.84)	52.4	(2.85)
Poland	63.9	(1.30)	40.5	(1.11)	43.5	(1.37)	83.1	(1.13)
Portugal	17.9	(0.89)	52.9	(0.95)	69.5	(0.94)	39.7	(1.08)
Romania	57.2	(1.27)	28.8	(1.21)	43.8	(1.27)	68.9	(1.33)
Serbia	28.9	(1.28)	49.6	(0.95)	49.6	(1.15)	72.4	(0.95)
Singapore	71.2	(0.86)	38.6	(0.97)	52.6	(0.93)	79.6	(0.80)
Slovak Republic	48.4	(1.33)	58.7	(0.97)	44.3	(0.93)	66.3	(1.26)
Spain	17.6	(0.88)	47.1	(1.08)	50.5	(1.26)	50.5	(1.27)
Sweden	36.8	(1.33)	51.1	(1.14)	54.9	(1.23)	49.2	(1.32)
Abu Dhabi-United Arab Emirates	52.5	(2.11)	30.6	(1.57)	57.3	(1.90)	77.4	(1.75)
Alberta-Canada	28.6	(1.68)	35.9	(1.28)	50.9	(1.78)	51.8	(1.47)
Belgium-Flemish	15.0	(0.72)	40.6	(1.14)	51.3	(1.59)	28.9	(1.34)
England-United Kingdom	40.1	(1.60)	34.0	(1.58)	51.1	(1.73)	65.5	(1.31)
International average[1]	37.7	(0.23)	43.4	(0.22)	50.6	(0.24)	59.1	(0.26)
United States	40.8	(2.13)	39.4	(1.49)	60.1	(1.61)	56.6	(2.01)

See notes at end of table.

Table 9-32. Percentage of lower secondary education teachers who "agree" or "strongly agree" with specific statements about teacher appraisal and feedback systems in their school, by statement and education system: 2013—Continued

	Feedback is provided to teachers based on a thorough assessment of their teaching		If a teacher is consistently underperforming, he/she would be dismissed		Measures to remedy any weaknesses in teaching are discussed with the teacher		A mentor is appointed to help teachers improve his/her teaching	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	29.1	(1.73)	24.2	(1.42)	63.2	(1.90)	53.6	(2.06)
Brazil	45.0	(1.00)	36.8	(0.93)	76.7	(0.81)	63.1	(1.00)
Bulgaria	64.0	(1.59)	47.7	(1.66)	87.2	(0.96)	65.5	(1.56)
Chile	60.1	(2.00)	59.6	(1.95)	74.2	(1.60)	48.2	(2.18)
Croatia	45.2	(1.14)	†	†	65.6	(1.29)	30.7	(1.17)
Cyprus	42.8	(1.27)	49.5	(1.49)	78.9	(1.08)	65.2	(1.26)
Czech Republic	51.8	(1.64)	45.9	(1.30)	83.8	(1.16)	39.4	(1.43)
Denmark	22.6	(1.33)	35.6	(2.07)	66.8	(1.71)	33.5	(1.63)
Estonia	50.3	(1.47)	32.8	(1.53)	79.7	(0.95)	40.2	(2.01)
Finland	16.8	(0.83)	16.4	(1.03)	65.2	(1.22)	16.5	(1.26)
France	19.4	(0.91)	12.0	(0.73)	57.8	(1.10)	40.8	(1.28)
Iceland	15.4	(1.13)	24.1	(1.23)	49.1	(1.62)	28.0	(1.48)
Israel	50.0	(1.53)	40.8	(1.56)	70.6	(1.07)	58.5	(1.07)
Italy	†	†	†	†	69.2	(1.07)	38.3	(1.01)
Japan	31.6	(1.08)	13.9	(0.86)	70.6	(0.93)	31.4	(1.15)
Korea, Republic of	50.1	(1.20)	18.9	(0.99)	75.4	(0.98)	46.1	(1.32)
Latvia	73.6	(1.21)	38.7	(2.19)	88.9	(0.97)	36.9	(1.87)
Malaysia	89.3	(0.77)	17.3	(0.83)	93.4	(0.49)	86.2	(0.73)
Mexico	42.9	(1.17)	26.0	(1.17)	76.6	(0.94)	50.9	(1.42)
Netherlands	44.1	(2.46)	34.9	(1.50)	74.3	(1.60)	65.5	(2.39)
Norway	21.6	(3.24)	11.3	(1.74)	56.0	(2.08)	24.8	(3.51)
Poland	66.5	(1.44)	17.5	(1.00)	76.6	(1.39)	42.1	(1.66)
Portugal	53.4	(1.10)	37.3	(1.02)	66.3	(1.12)	49.8	(1.14)
Romania	72.8	(1.31)	42.9	(1.28)	89.8	(0.83)	66.9	(1.43)
Serbia	56.5	(1.29)	18.5	(0.74)	80.1	(0.88)	52.5	(1.08)
Singapore	68.2	(0.87)	45.5	(0.86)	88.0	(0.55)	83.8	(0.65)
Slovak Republic	65.5	(1.18)	30.8	(1.07)	86.7	(0.78)	35.7	(1.32)
Spain	17.3	(1.05)	15.2	(1.10)	63.2	(1.04)	14.4	(0.90)
Sweden	15.4	(1.09)	26.9	(1.25)	61.7	(1.25)	26.8	(1.20)
Abu Dhabi-United Arab Emirates	76.2	(1.40)	46.0	(1.48)	82.6	(1.16)	68.2	(1.49)
Alberta-Canada	45.6	(1.45)	26.3	(1.29)	69.1	(1.46)	47.3	(1.61)
Belgium-Flemish	46.9	(1.39)	33.0	(1.44)	68.0	(1.44)	53.0	(1.51)
England-United Kingdom	54.8	(1.49)	42.6	(1.46)	83.1	(1.14)	73.0	(1.27)
International average[1]	47.0	(0.26)	31.3	(0.24)	73.9	(0.21)	47.8	(0.27)
United States	53.2	(2.16)	46.9	(2.27)	70.8	(2.03)	53.3	(2.03)

† Not applicable or not administered in the country.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-33. Percentage of lower secondary education teachers who "agree" or "strongly agree" with specific statements about job satisfaction, by statement and education system: 2013

	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 would like to change to another school if that were possible		I regret that I decided to become a teacher		I enjoy working at this school	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	88.6	(0.83)	81.1	(1.04)	23.0	(1.67)	7.2	(0.64)	91.7	(1.12)
Brazil	60.5	(0.91)	69.7	(0.88)	15.0	(0.69)	13.5	(0.61)	93.7	(0.40)
Bulgaria	62.8	(1.32)	70.2	(1.20)	19.8	(1.16)	14.6	(1.03)	90.6	(0.88)
Chile	78.9	(1.43)	83.8	(1.19)	34.0	(1.88)	13.9	(1.55)	88.2	(1.09)
Croatia	71.9	(0.82)	80.4	(0.74)	16.0	(1.04)	5.7	(0.41)	85.5	(0.76)
Cyprus	86.9	(0.84)	85.3	(0.81)	23.2	(1.13)	7.1	(0.62)	84.8	(0.95)
Czech Republic	53.0	(1.11)	73.3	(0.85)	10.5	(0.76)	8.2	(0.57)	88.8	(0.80)
Denmark	89.2	(0.85)	78.3	(1.39)	11.2	(1.05)	5.2	(0.73)	94.9	(0.67)
Estonia	69.3	(1.11)	70.3	(0.84)	15.7	(1.10)	10.2	(0.74)	80.7	(0.95)
Finland	95.3	(0.39)	85.3	(0.83)	16.2	(1.05)	5.0	(0.37)	90.8	(0.80)
France	58.5	(1.05)	76.1	(0.85)	26.7	(1.15)	9.4	(0.52)	90.6	(0.66)
Iceland	91.4	(0.85)	70.4	(1.35)	18.3	(1.17)	11.6	(0.94)	94.2	(0.75)
Israel	85.8	(0.67)	82.9	(0.75)	14.3	(0.94)	9.1	(0.57)	91.8	(0.62)
Italy	62.1	(1.02)	86.3	(0.76)	16.4	(1.05)	7.4	(0.55)	90.6	(0.71)
Japan	74.4	(0.93)	58.1	(1.07)	30.3	(1.23)	7.0	(0.47)	78.1	(1.00)
Korea, Republic of	85.8	(0.76)	63.4	(1.02)	31.2	(1.16)	20.1	(0.80)	74.4	(1.15)
Latvia	60.7	(1.48)	67.6	(1.43)	15.7	(1.09)	12.0	(0.81)	92.4	(0.78)
Malaysia	98.3	(0.23)	92.8	(0.59)	41.3	(1.28)	5.4	(0.45)	94.2	(0.52)
Mexico	80.3	(0.93)	95.5	(0.42)	28.6	(1.33)	3.1	(0.36)	94.4	(0.55)
Netherlands	87.0	(1.03)	81.9	(1.13)	17.2	(1.61)	4.9	(0.80)	93.5	(0.99)
Norway	91.2	(1.06)	76.7	(1.42)	11.6	(1.04)	8.3	(0.58)	96.8	(0.38)
Poland	76.4	(1.00)	79.9	(0.87)	17.1	(0.99)	10.3	(0.56)	90.3	(0.65)
Portugal	70.5	(0.93)	71.6	(0.87)	24.0	(1.11)	16.2	(0.75)	92.8	(0.56)
Romania	64.3	(1.48)	78.5	(1.19)	15.3	(0.85)	10.9	(0.91)	91.3	(0.72)
Serbia	81.4	(0.80)	81.4	(0.72)	21.3	(1.04)	7.0	(0.55)	85.1	(0.83)
Singapore	83.6	(0.63)	82.1	(0.73)	35.1	(0.84)	10.7	(0.54)	85.9	(0.58)
Slovak Republic	58.0	(1.18)	71.5	(0.92)	12.7	(0.89)	13.8	(0.70)	90.5	(0.77)
Spain	79.5	(0.95)	88.2	(0.61)	20.1	(1.17)	6.3	(0.49)	89.4	(0.62)
Sweden	71.2	(1.02)	53.4	(1.11)	21.5	(0.97)	17.8	(0.81)	91.6	(0.64)
Abu Dhabi-United Arab Emirates	80.1	(1.42)	77.5	(1.44)	30.7	(1.30)	11.7	(0.82)	86.8	(1.03)
Alberta-Canada	89.7	(0.79)	82.9	(0.94)	23.1	(1.31)	5.6	(0.53)	95.0	(0.84)
Belgium-Flemish	84.6	(0.87)	85.4	(0.81)	12.8	(0.86)	5.1	(0.56)	94.5	(0.53)
England-United Kingdom	83.6	(0.74)	79.5	(0.91)	31.0	(1.29)	7.9	(0.54)	87.2	(0.79)
International average[1]	77.4	(0.17)	77.6	(0.17)	21.2	(0.20)	9.5	(0.12)	89.7	(0.14)
United States	87.1	(1.31)	84.0	(1.34)	20.4	(1.49)	6.0	(0.99)	91.2	(1.03)

See notes at end of table.

Table 9-33. Percentage of lower secondary education teachers who "agree" or "strongly agree" with specific statements about job satisfaction, by statement and education system: 2013—Continued

	I wonder whether it would have been better to choose another profession		I would recommend my school as a good place to work		I think that the teaching profession is valued in society		I am satisfied with my performance in this school		All in all, I am satisfied with my job	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	33.7	(1.65)	85.5	(1.53)	38.5	(1.35)	94.2	(0.52)	90.0	(1.03)
Brazil	32.3	(0.88)	88.0	(0.55)	12.6	(0.52)	90.6	(0.48)	87.0	(0.53)
Bulgaria	42.6	(1.44)	89.4	(0.90)	19.6	(1.12)	93.9	(0.60)	94.6	(0.57)
Chile	31.9	(1.59)	85.1	(1.30)	33.6	(2.25)	94.6	(0.61)	94.6	(0.64)
Croatia	31.7	(0.99)	85.4	(1.01)	9.6	(0.55)	93.2	(0.53)	91.4	(0.52)
Cyprus	25.9	(1.10)	83.4	(0.92)	48.9	(1.23)	96.0	(0.50)	92.9	(0.61)
Czech Republic	29.8	(0.92)	84.5	(1.18)	12.2	(0.60)	95.2	(0.46)	88.6	(0.66)
Denmark	34.1	(1.69)	88.2	(1.39)	18.4	(0.95)	98.3	(0.33)	92.9	(0.93)
Estonia	37.0	(0.96)	79.9	(1.23)	13.7	(0.96)	88.6	(0.69)	90.0	(0.77)
Finland	27.5	(0.92)	87.5	(1.01)	58.6	(1.20)	95.0	(0.45)	91.0	(0.61)
France	26.0	(0.89)	80.1	(1.33)	4.9	(0.39)	87.5	(0.71)	86.4	(0.76)
Iceland	45.4	(1.50)	90.5	(0.94)	17.5	(1.10)	98.1	(0.33)	94.5	(0.77)
Israel	23.8	(0.86)	86.7	(1.01)	33.7	(1.20)	95.2	(0.48)	94.4	(0.58)
Italy	17.6	(0.85)	87.3	(0.89)	12.5	(0.74)	94.7	(0.46)	94.4	(0.50)
Japan	23.3	(0.84)	62.2	(1.71)	28.1	(0.95)	50.5	(1.29)	85.1	(0.70)
Korea, Republic of	40.2	(0.99)	65.6	(1.56)	66.5	(1.06)	79.4	(0.98)	86.6	(0.82)
Latvia	36.5	(1.09)	86.2	(1.20)	22.8	(1.51)	92.9	(0.59)	91.0	(0.95)
Malaysia	8.8	(0.66)	89.3	(0.80)	83.8	(0.99)	94.7	(0.41)	97.0	(0.30)
Mexico	10.2	(0.73)	89.2	(0.87)	49.5	(1.28)	97.1	(0.32)	97.8	(0.31)
Netherlands	18.5	(1.09)	84.4	(2.28)	40.4	(1.47)	95.3	(0.77)	90.8	(1.12)
Norway	38.2	(1.53)	91.3	(0.86)	30.6	(1.52)	96.0	(0.64)	94.9	(0.71)
Poland	35.3	(0.96)	84.5	(1.13)	17.9	(0.85)	93.5	(0.63)	92.7	(0.57)
Portugal	44.5	(0.98)	88.1	(0.88)	10.5	(0.57)	97.4	(0.28)	94.1	(0.41)
Romania	29.4	(1.33)	87.4	(0.92)	34.7	(1.41)	97.0	(0.38)	91.1	(0.80)
Serbia	27.1	(0.95)	86.1	(0.86)	20.4	(0.90)	93.3	(0.43)	89.5	(0.58)
Singapore	45.9	(0.86)	73.2	(0.83)	67.6	(0.89)	87.1	(0.51)	88.4	(0.63)
Slovak Republic	45.4	(1.21)	81.4	(1.11)	4.0	(0.42)	94.8	(0.46)	89.0	(0.64)
Spain	21.2	(0.87)	86.6	(0.98)	8.5	(0.81)	95.8	(0.38)	95.1	(0.42)
Sweden	50.4	(1.15)	80.1	(1.25)	5.0	(0.47)	95.9	(0.40)	85.4	(0.86)
Abu Dhabi-United Arab Emirates	35.1	(1.69)	81.9	(1.27)	66.5	(1.67)	96.3	(0.44)	88.9	(0.89)
Alberta-Canada	34.6	(1.28)	88.8	(1.18)	47.0	(1.41)	97.0	(0.46)	91.9	(0.85)
Belgium-Flemish	22.7	(0.93)	88.1	(1.15)	45.9	(1.12)	94.8	(0.55)	95.3	(0.52)
England-United Kingdom	34.6	(1.22)	77.7	(1.22)	35.4	(1.45)	92.5	(0.62)	81.8	(0.84)
International average[1]	31.6	(0.20)	84.0	(0.20)	30.9	(0.20)	92.6	(0.10)	91.2	(0.12)
United States	33.5	(1.53)	85.5	(1.53)	33.7	(1.39)	95.0	(0.89)	89.1	(1.14)

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-34. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "The advantages of the profession clearly outweigh the disadvantages," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	2.5!	(1.22)	‡	†	26.5	(5.05)	67.3	(5.66)
Brazil	6.3	(1.04)	21.6	(2.07)	50.7	(2.72)	21.4	(2.06)
Bulgaria	4.9!	(1.54)	30.5	(3.86)	52.7	(3.94)	12.0	(2.19)
Chile	‡	†	8.2	(2.42)	43.3	(4.37)	47.7	(4.27)
Croatia	2.9!	(1.15)	23.5	(3.28)	61.2	(3.60)	12.4	(2.66)
Cyprus	#	†	‡	†	52.6	(5.38)	44.3	(5.48)
Czech Republic	3.8!	(1.42)	25.0	(3.16)	59.4	(3.72)	11.7	(2.32)
Denmark	#	†	3.3!	(1.65)	40.9	(4.68)	55.7	(4.55)
Estonia	2.1!	(1.03)	18.5	(2.90)	61.9	(3.56)	17.5	(2.83)
Finland	#	†	4.5!	(1.65)	49.3	(4.19)	46.2	(4.31)
France	4.8!	(1.56)	20.4	(3.70)	49.4	(3.81)	25.4	(3.62)
Iceland	‡	†	‡	†	45.2	(4.70)	51.0	(4.92)
Israel	#	†	4.5!	(1.64)	46.6	(6.29)	48.8	(6.27)
Italy	5.2	(1.17)	27.9	(4.93)	49.2	(4.44)	17.6	(3.29)
Japan	2.7!	(1.33)	36.2	(3.20)	50.3	(3.63)	10.8	(2.35)
Korea, Republic of	‡	†	5.8!	(1.82)	50.9	(5.59)	42.4	(5.55)
Latvia	#	†	29.8	(5.24)	59.4	(5.70)	10.8	(3.19)
Malaysia	‡	†	‡	†	32.2	(3.79)	66.6	(3.81)
Mexico	‡	†	‡	†	26.7	(3.83)	70.2	(4.01)
Netherlands	#	†	‡	†	57.9	(6.37)	37.2	(5.97)
Norway	#	†	‡	†	58.6	(6.85)	36.0	(6.77)
Poland	‡	†	13.8	(2.43)	58.8	(5.21)	25.6	(4.54)
Portugal	#	†	14.7	(2.59)	56.8	(4.84)	28.6	(4.57)
Romania	‡	†	32.6	(4.33)	48.6	(4.61)	17.1	(3.08)
Serbia	8.1	(2.23)	23.3	(3.43)	48.7	(4.19)	19.9	(3.56)
Singapore	‡	†	‡	†	42.5	(4.33)	55.4	(4.35)
Slovak Republic	5.6!	(1.92)	34.2	(3.60)	45.9	(3.50)	14.2	(2.88)
Spain	‡	†	9.6	(2.51)	45.6	(4.08)	42.6	(4.22)
Sweden	‡	†	10.7	(2.57)	54.1	(4.92)	31.8	(4.30)
Abu Dhabi-United Arab Emirates	4.0!	(1.85)	16.8	(3.86)	39.6	(4.24)	39.5	(4.09)
Alberta-Canada	‡	†	4.9!	(1.60)	47.8	(3.78)	45.7	(3.73)
Belgium-Flemish	‡	†	23.5	(4.49)	59.6	(5.67)	12.0	(2.96)
England-United Kingdom	‡	†	5.4!	(1.74)	26.8	(4.19)	62.0	(3.73)
International average[1]	2.4	(0.24)	14.3	(0.51)	48.5	(0.81)	34.8	(0.73)
United States	#	†	10.0!	(3.78)	45.3	(6.54)	44.7	(6.74)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-35. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "If I could decide again, I would still choose this job/position," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	‡	†	‡	†	30.3	(5.31)	65.2	(5.21)
Brazil	3.6	(0.79)	12.4	(1.45)	50.4	(2.70)	33.5	(2.44)
Bulgaria	3.0!	(1.48)	26.5	(3.39)	49.1	(3.58)	21.5	(3.33)
Chile	‡	†	5.0!	(1.85)	31.9	(3.97)	61.6	(4.27)
Croatia	2.9!	(1.17)	18.5	(3.20)	60.3	(3.97)	18.2	(3.20)
Cyprus	#	†	‡	†	42.1	(5.42)	55.8	(5.63)
Czech Republic	‡	†	9.2	(2.07)	62.7	(3.74)	26.4	(3.16)
Denmark	#	†	5.0!	(2.02)	40.1	(4.56)	54.9	(4.64)
Estonia	‡	†	13.9	(2.51)	56.9	(3.30)	27.2	(3.08)
Finland	‡	†	6.5!	(2.00)	48.7	(4.45)	42.9	(4.16)
France	‡	†	8.6	(2.41)	35.8	(3.84)	53.5	(4.43)
Iceland	‡	†	7.7!	(2.84)	53.8	(4.35)	35.6	(4.44)
Israel	‡	†	7.4!	(2.42)	39.0	(6.03)	53.4	(6.53)
Italy	‡	†	7.2	(1.85)	52.7	(4.78)	39.4	(4.92)
Japan	7.3	(2.05)	31.4	(3.89)	45.2	(4.31)	16.0	(2.74)
Korea, Republic of	‡	†	7.8	(1.91)	53.7	(5.21)	38.2	(5.21)
Latvia	‡	†	26.2	(5.15)	51.4	(4.39)	21.7	(4.39)
Malaysia	‡	†	‡	†	26.1	(3.86)	70.6	(4.22)
Mexico	‡	†	‡	†	21.6	(3.42)	75.6	(3.55)
Netherlands	#	†	4.5!	(1.84)	52.5	(6.27)	43.0	(6.22)
Norway	#	†	4.6!	(1.80)	62.8	(5.15)	32.6	(4.91)
Poland	‡	†	9.0	(2.02)	48.1	(4.38)	42.0	(4.36)
Portugal	3.2!	(1.44)	9.1	(2.39)	43.1	(4.69)	44.5	(4.73)
Romania	3.0!	(1.42)	15.4	(3.47)	57.0	(4.32)	24.6	(2.92)
Serbia	5.9	(1.73)	26.5	(3.88)	48.2	(4.58)	19.5	(3.20)
Singapore	‡	†	4.8!	(1.81)	34.6	(3.89)	60.0	(4.27)
Slovak Republic	‡	†	17.3	(2.72)	57.0	(4.12)	24.0	(3.36)
Spain	‡	†	9.7!	(3.09)	43.0	(4.65)	46.9	(4.46)
Sweden	‡	†	19.4	(3.55)	43.2	(4.07)	35.7	(4.72)
Abu Dhabi-United Arab Emirates	3.7!	(1.71)	14.4	(3.46)	38.0	(4.54)	43.8	(4.57)
Alberta-Canada	3.2!	(1.32)	10.5	(2.08)	42.9	(4.13)	43.4	(4.04)
Belgium-Flemish	‡	†	10.8	(2.83)	56.8	(4.53)	30.2	(4.94)
England-United Kingdom	‡	†	7.5!	(2.92)	21.5	(3.08)	63.9	(3.53)
International average[1]	2.2	(0.24)	11.0	(0.46)	45.5	(0.77)	41.4	(0.76)
United States	‡	†	‡	†	39.3	(6.08)	53.4	(5.91)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-36. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "I would like to change to another school if that were possible," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	59.1	(5.72)	33.8	(5.71)	5.2!	(2.49)	‡	†
Brazil	52.7	(2.15)	37.8	(2.19)	7.2	(1.37)	2.3	(0.65)
Bulgaria	43.6	(3.45)	41.2	(3.75)	14.6	(2.81)	‡	†
Chile	52.1	(4.26)	32.8	(3.85)	12.3	(2.81)	2.9!	(1.35)
Croatia	54.7	(3.66)	39.0	(3.51)	4.4!	(1.58)	‡	†
Cyprus	39.2	(4.86)	38.1	(5.17)	18.6	(3.81)	‡	†
Czech Republic	59.4	(3.52)	38.7	(3.50)	‡	†	‡	†
Denmark	51.8	(4.33)	37.7	(4.36)	5.7!	(2.14)	4.9!	(1.99)
Estonia	51.8	(3.49)	41.1	(3.51)	5.7	(1.67)	‡	†
Finland	55.3	(3.98)	33.8	(3.95)	9.0	(2.07)	‡	†
France	15.8	(3.12)	36.8	(4.07)	29.7	(3.91)	17.8	(3.43)
Iceland	37.5	(5.14)	46.2	(5.18)	10.6	(2.93)	5.8!	(2.38)
Israel	56.2	(6.58)	33.5	(5.78)	‡	†	‡	†
Italy	33.3	(4.44)	46.7	(4.74)	18.1	(2.87)	‡	†
Japan	25.6	(3.44)	60.1	(3.55)	12.4	(2.66)	‡	†
Korea, Republic of	33.1	(4.28)	56.6	(4.45)	8.6!	(2.96)	‡	†
Latvia	42.9	(6.16)	49.7	(6.14)	5.0!	(1.69)	‡	†
Malaysia	21.6	(4.09)	44.6	(4.12)	28.2	(4.56)	5.5!	(2.16)
Mexico	47.9	(3.77)	30.3	(3.67)	16.7	(2.57)	5.0!	(1.76)
Netherlands	38.6	(6.15)	48.9	(6.51)	10.5!	(3.96)	‡	†
Norway	47.0	(7.00)	41.7	(7.01)	10.4	(0.97)	‡	†
Poland	44.1	(5.13)	42.3	(5.05)	7.0!	(2.49)	6.7!	(2.33)
Portugal	62.1	(3.92)	30.3	(3.77)	6.8	(1.74)	‡	†
Romania	54.5	(4.78)	42.2	(4.66)	‡	†	‡	†
Serbia	53.0	(4.56)	35.4	(3.77)	9.4	(2.70)	‡	†
Singapore	46.6	(4.03)	45.3	(4.54)	4.0!	(1.84)	4.1!	(1.67)
Slovak Republic	55.2	(3.93)	41.4	(4.01)	‡	†	‡	†
Spain	57.4	(4.56)	23.5	(3.22)	11.4	(2.90)	7.7!	(2.53)
Sweden	51.3	(4.57)	33.1	(4.19)	9.3	(1.87)	6.3!	(2.08)
Abu Dhabi-United Arab Emirates	36.3	(4.81)	40.5	(5.22)	13.5	(3.35)	9.7!	(3.21)
Alberta-Canada	35.6	(4.11)	36.9	(3.96)	21.2	(3.54)	6.3	(1.68)
Belgium-Flemish	63.1	(4.43)	32.7	(4.52)	‡	†	‡	†
England-United Kingdom	49.6	(4.49)	37.8	(4.62)	8.8	(2.32)	‡	†
International average[1]	46.3	(0.79)	39.7	(0.79)	10.4	(0.47)	3.6	(0.29)
United States	50.8	(7.13)	39.1	(6.86)	9.6!	(3.26)	‡	†

† Not applicable.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-37. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "I regret that I decided to become a principal," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	77.1	(4.96)	19.7	(4.38)	‡	†	‡	†
Brazil	53.6	(2.47)	40.7	(2.64)	2.7	(0.60)	3.1	(0.78)
Bulgaria	30.3	(3.88)	53.3	(4.41)	13.8	(2.89)	‡	†
Chile	62.7	(4.07)	29.6	(3.93)	6.3!	(2.06)	‡	†
Croatia	37.8	(3.28)	55.1	(3.50)	6.8	(1.84)	‡	†
Cyprus	75.0	(4.17)	21.9	(4.03)	‡	†	#	†
Czech Republic	48.5	(3.78)	47.0	(3.70)	3.8!	(1.38)	‡	†
Denmark	78.5	(3.76)	17.3	(3.48)	‡	†	‡	†
Estonia	68.7	(3.44)	29.2	(3.37)	‡	†	‡	†
Finland	58.1	(3.41)	39.0	(3.27)	2.9!	(1.29)	#	†
France	68.9	(4.06)	23.9	(3.65)	5.0!	(1.90)	‡	†
Iceland	59.6	(4.40)	35.6	(4.16)	‡	†	‡	†
Israel	66.5	(5.57)	28.8	(5.35)	‡	†	‡	†
Italy	57.7	(4.58)	34.7	(4.58)	6.9!	(2.78)	‡	†
Japan	48.6	(3.74)	47.8	(3.92)	2.9!	(1.31)	‡	†
Korea, Republic of	50.3	(5.57)	43.1	(4.95)	4.7!	(2.03)	‡	†
Latvia	33.6	(5.01)	61.9	(5.90)	‡	†	‡	†
Malaysia	70.3	(3.69)	29.1	(3.65)	#	†	‡	†
Mexico	83.3	(2.91)	12.5	(2.70)	#	†	4.2!	(1.81)
Netherlands	59.2	(6.30)	39.8	(6.27)	‡	†	#	†
Norway	67.6	(6.26)	30.6	(6.29)	‡	†	‡	†
Poland	29.6	(4.24)	57.7	(4.68)	5.1!	(1.65)	7.5!	(3.32)
Portugal	67.5	(4.05)	30.1	(4.06)	‡	†	‡	†
Romania	34.3	(4.01)	54.2	(4.17)	9.6	(2.83)	‡	†
Serbia	42.6	(4.66)	44.2	(4.55)	10.0	(2.39)	3.3!	(1.51)
Singapore	62.1	(4.51)	34.5	(4.46)	‡	†	‡	†
Slovak Republic	39.9	(4.06)	49.5	(4.08)	8.0	(2.05)	2.6!	(1.28)
Spain	57.9	(4.82)	30.1	(4.39)	7.6!	(2.41)	4.5	(1.08)
Sweden	60.2	(4.36)	31.1	(4.12)	7.0!	(2.14)	‡	†
Abu Dhabi-United Arab Emirates	60.0	(4.54)	30.6	(4.41)	7.6!	(2.92)	‡	†
Alberta-Canada	55.0	(4.24)	38.4	(4.32)	3.8!	(1.74)	2.8!	(1.18)
Belgium-Flemish	48.7	(5.14)	43.5	(4.96)	6.4!	(2.96)	‡	†
England-United Kingdom	65.3	(3.97)	28.4	(3.63)	3.1!	(1.36)	‡	†
International average[1]	56.9	(0.76)	36.8	(0.75)	4.4	(0.33)	1.9	(0.21)
United States	67.8	(5.57)	26.6	(5.37)	‡	†	‡	†

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-38. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "I enjoy working at this school," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	‡	†	‡	†	18.8	(4.80)	79.9	(4.88)
Brazil	0.8!	(0.33)	0.5!	(0.21)	27.4	(2.37)	71.4	(2.40)
Bulgaria	‡	†	4.8!	(1.94)	45.8	(4.18)	48.1	(4.02)
Chile	‡	†	‡	†	26.6	(3.88)	71.3	(4.03)
Croatia	‡	†	3.5	(1.02)	49.8	(4.14)	46.3	(4.13)
Cyprus	‡	†	#	†	46.4	(5.19)	52.6	(5.29)
Czech Republic	‡	†	‡	†	46.2	(3.67)	51.0	(3.60)
Denmark	‡	†	#	†	32.2	(4.67)	67.0	(4.74)
Estonia	2.1!	(0.96)	5.6	(1.53)	56.4	(3.40)	35.9	(3.45)
Finland	#	†	7.5	(2.14)	54.8	(4.21)	37.7	(3.86)
France	#	†	5.1	(1.35)	43.0	(3.91)	51.9	(3.86)
Iceland	‡	†	‡	†	27.9	(4.08)	68.3	(4.24)
Israel	‡	†	‡	†	23.3	(4.26)	67.2	(4.92)
Italy	‡	†	3.6	(1.02)	54.5	(5.20)	40.9	(5.02)
Japan	2.3!	(1.05)	14.8	(2.45)	57.2	(4.07)	25.7	(3.76)
Korea, Republic of	‡	†	4.7!	(1.62)	48.0	(5.00)	46.3	(4.95)
Latvia	‡	†	‡	†	40.3	(4.82)	57.7	(4.97)
Malaysia	‡	†	‡	†	29.2	(3.84)	69.4	(3.96)
Mexico	‡	†	#	†	13.2	(2.65)	86.2	(2.68)
Netherlands	‡	†	‡	†	35.3	(5.54)	61.3	(5.58)
Norway	‡	†	‡	†	25.6	(5.97)	72.1	(6.08)
Poland	#	†	‡	†	41.5	(4.24)	56.6	(4.29)
Portugal	‡	†	‡	†	27.7	(3.23)	69.8	(3.54)
Romania	‡	†	#	†	36.6	(4.38)	61.8	(4.27)
Serbia	‡	†	8.0	(2.21)	53.7	(3.98)	37.9	(4.44)
Singapore	#	†	‡	†	32.4	(3.89)	65.5	(3.72)
Slovak Republic	‡	†	‡	†	44.9	(3.87)	54.1	(3.78)
Spain	‡	†	3.5!	(1.57)	28.7	(4.21)	67.3	(4.37)
Sweden	‡	†	‡	†	35.2	(4.64)	61.5	(4.71)
Abu Dhabi-United Arab Emirates	‡	†	4.5!	(2.15)	41.6	(5.10)	51.6	(4.88)
Alberta-Canada	#	†	‡	†	29.7	(3.69)	69.2	(3.71)
Belgium-Flemish	‡	†	‡	†	46.2	(4.43)	52.4	(4.37)
England-United Kingdom	‡	†	‡	†	27.5	(4.35)	68.3	(3.65)
International average[1]	1.0	(0.18)	2.9	(0.28)	37.8	(0.75)	58.3	(0.75)
United States	#	†	‡	†	27.1	(5.10)	71.0	(5.45)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-39. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "I would recommend my school as a good place to work," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	‡	†	‡	†	10.1	(2.81)	88.6	(2.99)
Brazil	0.5!	(0.23)	1.6!	(0.49)	34.8	(2.57)	63.0	(2.59)
Bulgaria	#	†	5.3!	(1.78)	55.0	(4.18)	39.6	(3.94)
Chile	‡	†	‡	†	29.5	(3.74)	68.3	(3.90)
Croatia	#	†	‡	†	50.1	(3.63)	48.9	(3.55)
Cyprus	#	†	‡	†	42.3	(5.18)	54.6	(5.07)
Czech Republic	‡	†	‡	†	47.7	(3.74)	50.1	(3.70)
Denmark	#	†	‡	†	23.7	(4.07)	75.4	(3.99)
Estonia	‡	†	3.1!	(1.26)	42.6	(3.66)	53.8	(3.62)
Finland	#	†	‡	†	46.8	(4.04)	51.8	(4.16)
France	‡	†	7.0	(1.73)	45.8	(3.53)	46.3	(3.43)
Iceland	‡	†	‡	†	18.3	(3.41)	76.0	(4.10)
Israel	‡	†	2.0!	(0.95)	25.0	(4.40)	71.2	(4.80)
Italy	‡	†	6.7	(1.83)	55.2	(5.37)	37.2	(5.14)
Japan	‡	†	10.3	(2.28)	59.1	(3.97)	29.1	(3.66)
Korea, Republic of	‡	†	6.4	(1.81)	48.9	(5.32)	42.9	(5.24)
Latvia	‡	†	‡	†	58.6	(3.30)	39.0	(3.56)
Malaysia	‡	†	1.8!	(0.56)	29.0	(3.84)	68.6	(3.86)
Mexico	‡	†	‡	†	18.7	(3.56)	79.4	(3.47)
Netherlands	‡	†	‡	†	45.0	(6.36)	51.2	(6.37)
Norway	‡	†	‡	†	24.2	(5.92)	73.0	(6.06)
Poland	‡	†	‡	†	45.0	(4.41)	53.5	(4.50)
Portugal	#	†	‡	†	30.7	(3.54)	68.1	(3.77)
Romania	‡	†	#	†	47.6	(4.25)	50.8	(4.14)
Serbia	#	†	‡	†	49.3	(4.13)	48.5	(4.25)
Singapore	#	†	‡	†	32.4	(3.78)	64.9	(3.54)
Slovak Republic	#	†	‡	†	44.8	(3.99)	54.4	(3.90)
Spain	‡	†	4.0!	(1.97)	26.7	(3.46)	68.9	(3.88)
Sweden	‡	†	‡	†	30.2	(4.23)	66.0	(4.42)
Abu Dhabi-United Arab Emirates	‡	†	8.7!	(2.95)	40.3	(5.04)	48.4	(5.03)
Alberta-Canada	#	†	2.6!	(0.84)	24.7	(3.73)	72.8	(3.83)
Belgium-Flemish	#	†	‡	†	37.8	(4.90)	61.2	(4.89)
England-United Kingdom	‡	†	#	†	25.0	(4.26)	71.7	(3.50)
International average[1]	0.8	(0.16)	2.8	(0.24)	37.7	(0.73)	58.7	(0.74)
United States	#	†	‡	†	27.6	(6.07)	66.7	(6.30)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-40. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "I think that the teaching profession is valued in society," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	12.3!	(5.19)	30.8	(5.40)	43.5	(4.84)	13.4	(4.00)
Brazil	19.8	(1.75)	55.4	(2.79)	21.5	(2.40)	3.3	(0.77)
Bulgaria	14.3	(2.92)	54.3	(4.01)	26.5	(3.13)	4.9!	(1.63)
Chile	21.6	(3.71)	41.9	(4.07)	31.2	(3.73)	5.3!	(1.68)
Croatia	25.5	(3.36)	56.3	(3.93)	15.9	(3.09)	‡	†
Cyprus	‡	†	25.8	(4.20)	55.7	(4.87)	15.5	(4.00)
Czech Republic	17.2	(2.41)	58.2	(3.49)	24.5	(2.90)	‡	†
Denmark	7.4!	(2.44)	53.0	(4.56)	38.8	(4.47)	‡	†
Estonia	28.7	(3.15)	59.5	(3.60)	8.7	(2.02)	3.1!	(1.25)
Finland	‡	†	19.1	(3.50)	64.5	(3.65)	14.1	(3.17)
France	30.8	(4.05)	53.0	(4.19)	14.8	(2.85)	‡	†
Iceland	15.4	(3.22)	40.4	(4.70)	41.3	(4.32)	‡	†
Israel	‡	†	43.7	(5.90)	47.4	(6.39)	5.9!	(2.18)
Italy	34.4	(4.53)	57.5	(4.60)	6.5!	(1.98)	‡	†
Japan	6.2!	(1.92)	49.5	(3.94)	38.3	(3.87)	6.0!	(1.94)
Korea, Republic of	3.9!	(1.31)	6.4	(1.80)	40.3	(5.58)	49.3	(5.61)
Latvia	7.9!	(3.10)	54.3	(4.40)	35.2	(4.69)	‡	†
Malaysia	‡	†	4.7!	(1.54)	51.8	(4.22)	42.8	(4.23)
Mexico	11.6	(2.82)	29.7	(3.63)	30.8	(3.83)	27.9	(3.36)
Netherlands	‡	†	49.7	(6.14)	46.6	(6.23)	‡	†
Norway	‡	†	44.7	(7.25)	43.6	(8.20)	‡	†
Poland	15.3	(3.32)	48.4	(4.67)	31.6	(4.97)	4.7!	(1.57)
Portugal	18.5	(3.72)	51.0	(4.86)	28.0	(4.19)	2.5!	(1.20)
Romania	5.8!	(1.82)	39.7	(4.24)	46.5	(4.31)	8.0	(2.03)
Serbia	25.1	(3.93)	56.8	(4.38)	17.4	(3.37)	‡	†
Singapore	#	†	4.7!	(1.97)	56.0	(4.29)	39.3	(4.11)
Slovak Republic	54.3	(4.04)	44.2	(4.13)	‡	†	#	†
Spain	27.4	(4.24)	61.6	(4.72)	9.7	(2.22)	‡	†
Sweden	29.0	(3.91)	61.5	(4.60)	8.7	(2.59)	‡	†
Abu Dhabi-United Arab Emirates	8.6	(2.49)	20.7	(3.52)	38.5	(4.57)	32.2	(4.26)
Alberta-Canada	5.2!	(1.70)	26.1	(3.40)	57.7	(3.86)	11.0	(2.68)
Belgium-Flemish	‡	†	38.5	(4.88)	54.8	(4.85)	4.0!	(1.89)
England-United Kingdom	7.2!	(3.42)	32.5	(5.13)	53.3	(4.82)	7.1	(1.69)
International average[1]	14.4	(0.52)	41.6	(0.76)	34.3	(0.74)	9.7	(0.43)
United States	10.2!	(3.49)	41.0	(6.66)	38.7	(6.43)	10.1!	(3.18)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-41. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "I am satisfied with my performance in this school," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	#	†	2.5!	(1.20)	68.7	(5.21)	28.8	(5.10)
Brazil	‡	†	5.7	(1.24)	66.7	(2.52)	27.2	(2.39)
Bulgaria	‡	†	3.0!	(0.89)	75.5	(3.52)	21.0	(3.40)
Chile	#	†	3.6!	(1.61)	55.3	(4.03)	41.1	(3.74)
Croatia	#	†	1.9!	(0.86)	76.7	(3.06)	21.5	(2.98)
Cyprus	‡	†	‡	†	59.8	(4.88)	38.1	(4.66)
Czech Republic	#	†	4.4!	(1.50)	84.8	(2.51)	10.9	(2.16)
Denmark	#	†	‡	†	58.9	(4.38)	40.2	(4.30)
Estonia	‡	†	11.3	(2.29)	81.0	(2.92)	6.1	(1.73)
Finland	#	†	3.6!	(1.42)	73.3	(3.67)	23.0	(3.43)
France	#	†	9.1	(2.59)	80.3	(3.29)	10.5	(2.81)
Iceland	‡	†	‡	†	68.3	(4.36)	27.9	(3.99)
Israel	#	†	‡	†	54.3	(6.00)	44.3	(6.05)
Italy	‡	†	4.5	(1.32)	81.3	(3.47)	13.9	(3.25)
Japan	‡	†	38.6	(3.73)	54.9	(3.79)	4.9	(1.29)
Korea, Republic of	‡	†	3.9!	(1.45)	57.2	(5.12)	37.2	(4.94)
Latvia	#	†	3.9!	(1.72)	82.0	(3.69)	14.1	(3.52)
Malaysia	‡	†	‡	†	39.5	(4.32)	57.0	(4.48)
Mexico	#	†	2.6!	(1.15)	35.9	(3.76)	61.5	(3.93)
Netherlands	‡	†	‡	†	89.0	(3.23)	8.1!	(2.88)
Norway	‡	†	‡	†	84.0	(4.71)	9.7!	(3.03)
Poland	‡	†	5.0!	(1.77)	82.1	(2.87)	12.3	(2.44)
Portugal	#	†	‡	†	67.2	(4.27)	30.9	(4.21)
Romania	#	†	2.7!	(1.23)	64.2	(3.69)	33.1	(3.65)
Serbia	‡	†	2.6!	(0.97)	68.8	(4.29)	28.3	(4.18)
Singapore	#	†	3.4!	(1.53)	55.3	(4.06)	41.3	(4.12)
Slovak Republic	#	†	4.2!	(1.61)	82.4	(3.17)	13.4	(2.78)
Spain	#	†	4.8!	(2.11)	57.5	(4.17)	37.7	(4.17)
Sweden	‡	†	7.4!	(2.40)	76.7	(3.96)	15.6	(3.30)
Abu Dhabi-United Arab Emirates	‡	†	‡	†	58.1	(4.92)	36.8	(4.86)
Alberta-Canada	‡	†	‡	†	56.8	(3.75)	41.6	(3.72)
Belgium-Flemish	#	†	6.6!	(3.11)	82.5	(3.62)	10.9	(2.84)
England-United Kingdom	‡	†	7.2!	(3.42)	66.4	(4.98)	25.8	(5.48)
International average[1]	0.4	(0.10)	5.0	(0.33)	68.0	(0.70)	26.5	(0.66)
United States	#	†	‡	†	67.0	(6.21)	27.6	(6.04)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

Table 9-42. Percentage of principals in lower secondary education who "strongly disagree," "disagree," "agree," or "strongly agree" with the statement "All in all, I am satisfied with my job," by education system: 2013

	Strongly disagree		Disagree		Agree		Strongly agree	
Education system	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)	Percent	(S.E.)
Australia	#	†	‡	†	46.0	(5.89)	51.8	(5.89)
Brazil	0.7!	(0.36)	7.1	(1.43)	57.3	(2.44)	34.9	(2.41)
Bulgaria	‡	†	2.7!	(1.31)	72.8	(3.47)	23.9	(3.27)
Chile	#	†	‡	†	36.0	(3.58)	62.0	(3.58)
Croatia	‡	†	5.1!	(1.71)	67.0	(3.61)	27.2	(3.54)
Cyprus	#	†	#	†	50.5	(5.68)	49.5	(5.68)
Czech Republic	#	†	5.3!	(1.66)	77.1	(3.20)	17.5	(2.92)
Denmark	#	†	‡	†	44.2	(4.81)	54.1	(4.75)
Estonia	‡	†	3.1!	(1.26)	77.4	(3.01)	19.0	(2.78)
Finland	#	†	6.2!	(1.94)	61.6	(4.00)	32.1	(3.87)
France	#	†	8.9	(2.42)	56.6	(3.26)	34.5	(3.68)
Iceland	‡	†	‡	†	52.9	(5.37)	44.2	(5.21)
Israel	#	†	‡	†	44.1	(6.16)	53.6	(6.32)
Italy	‡	†	10.3!	(3.44)	55.4	(4.68)	34.0	(4.85)
Japan	‡	†	7.9	(2.15)	74.2	(3.43)	17.2	(2.79)
Korea, Republic of	‡	†	‡	†	54.3	(5.25)	42.6	(5.16)
Latvia	#	†	‡	†	81.2	(4.03)	16.7	(3.74)
Malaysia	‡	†	‡	†	33.7	(3.97)	63.1	(4.26)
Mexico	#	†	‡	†	28.3	(3.49)	71.5	(3.47)
Netherlands	‡	†	‡	†	52.2	(6.72)	42.9	(6.71)
Norway	#	†	‡	†	60.2	(6.33)	36.2	(5.50)
Poland	‡	†	‡	†	71.6	(4.56)	26.2	(4.67)
Portugal	#	†	1.9!	(0.87)	62.6	(4.41)	35.5	(4.30)
Romania	‡	†	‡	†	62.8	(4.16)	36.3	(4.21)
Serbia	‡	†	5.9!	(1.85)	64.5	(4.10)	29.0	(4.09)
Singapore	#	†	‡	†	42.5	(4.40)	56.1	(4.40)
Slovak Republic	#	†	4.8!	(1.76)	78.4	(3.22)	16.8	(3.02)
Spain	‡	†	‡	†	52.3	(4.50)	45.3	(4.41)
Sweden	‡	†	9.0!	(2.69)	62.9	(5.05)	27.8	(4.56)
Abu Dhabi-United Arab Emirates	‡	†	6.1!	(2.22)	50.6	(4.78)	41.5	(4.52)
Alberta-Canada	‡	†	‡	†	48.4	(4.19)	47.8	(4.06)
Belgium-Flemish	‡	†	4.4!	(1.93)	57.0	(4.93)	36.6	(4.54)
England-United Kingdom	‡	†	4.2!	(1.37)	50.9	(5.44)	43.3	(5.46)
International average[1]	0.5	(0.11)	3.8	(0.30)	57.2	(0.79)	38.5	(0.77)
United States	#	†	7.3!	(3.18)	56.7	(6.61)	35.9	(6.51)

† Not applicable.

Rounds to zero.

! Interpret data with caution. The standard error is at least 30 percent but less than 50 percent of the estimate.

‡ Reporting standards not met. The standard error is 50 percent or more of the estimate.

[1] The international average is the average of the education systems that met the qualifying conditions, with each education system weighted equally. The United States did not meet the international standards for participation rates and, as a result, is not included in the international average and is shown separately from other education system estimates.

NOTE: Detail may not sum to totals because of rounding. S.E. means standard error. TALIS sampled teachers at ISCED Level 2, which in the United States is grades 7, 8, and 9. Education systems are listed alphabetically by nation and then by subnational entities.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS), 2013.

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Appendix A. Recruitment Materials

This appendix contains the following materials:

- Council of Chief State School Officers (CCSSO) Advance Letter
- Regular District Advance Letter
- Regular School Advance Letter (Sample)
- TALIS Frequently Asked Questions
- Summary of TALIS Activities for School Coordinators
- TALIS brochure

A.1 Council of Chief State School Officers (CCSSO) Advance Letter

U.S. DEPARTMENT OF EDUCATION
INSTITUTE OF EDUCATION SCIENCES
NATIONAL CENTER FOR EDUCATION STATISTICS

September 10, 2012

«FullName», «Title»
«Department»
«Address1»
«Address2»
«City», «State» «Zip»

Dear «Title» «LastName»:

The United States will participate for the first time in TALIS (the Teaching and Learning International Survey), an international survey of principals and teachers at grades 7, 8, and 9. TALIS provides comparative information about teaching and the teaching profession around the world. TALIS is coordinated by the Organization for Economic Cooperation and Development (OECD), and 33 countries, including the United States, have committed to participate in TALIS 2013. «NumberSchools» in your state «HasHave» been randomly selected to participate, and I am writing to ask your agency to support the participation of «ThisSchoolTheseSchools» in TALIS.

TALIS and the associated process for participating schools are described in more detail in materials enclosed with this letter. The study is sponsored in the United States by the National Center for Education Statistics (NCES) in the U.S. Department of Education and will be conducted by Strategic Research Group (SRG). The U.S. Office of Management and Budget has approved the data collection under OMB #1850-0888. While participation in this study is entirely voluntary, we ask your agency to support the participation of schools in your state in the study so that the United States has a representative sample of schools from across the country.

NCES is authorized to conduct this study under the Education Sciences Reform Act of 2002 (20 U.S. Code, Section 9543). The data provided by schools and staff may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S. Code, Section 9573). Reports of the findings from the study will not identify participating districts, schools, or individual staff. Individual responses will be combined with those from other participants to produce summary statistics and reports.

Within the next few weeks, a representative of SRG will contact sampled school districts and schools to discuss conducting the data collection in the winter/spring of 2013. In the meantime, if you have questions about the study, please do not hesitate to call SRG at 1-800-341-3660 or send an email to talis@websrg.com. You may also obtain more information about the study by contacting Patrick Gonzales at NCES (415-920-9229 or patrick.gonzales@ed.gov) or visiting the TALIS website at: http://nces.ed.gov/surveys/talis.

Thank you for your time and support. TALIS is a crucial element in an ongoing effort to understand how the U.S. education system compares to those of other countries.

Sincerely,

Jack Buckley
Commissioner

Enclosures

A.2 Regular District Advance Letter

U.S. DEPARTMENT OF EDUCATION
INSTITUTE OF EDUCATION SCIENCES

NATIONAL CENTER FOR EDUCATION STATISTICS

September 10, 2012

«FullName», «Title»
«DistrictName»
«Address1»
«City», «State1» «Zip»

Dear «Title» «LastName»:

The United States will participate for the first time in TALIS (the Teaching and Learning International Survey), an international survey of principals and teachers at grades 7, 8, and 9. TALIS provides comparative information about teaching and the teaching profession around the world. TALIS is coordinated by the Organization for Economic Cooperation and Development (OECD), and 33 countries, including the United States, have committed to participate in TALIS 2013. «NumberSchools» in your district «HasHave» been randomly selected to participate, and I am writing to ask your agency to support the participation of «ThisSchoolTheseSchools» in your district in TALIS.

The support of your agency is vital to the successful participation of schools in your district in TALIS. Schools that participate in TALIS will be compensated for their assistance; participating school principals will receive $50.00, the school-level coordinator will receive $50.00, and each teacher who completes the questionnaire will receive $20.00.

Materials enclosed with this letter describe TALIS and the process for participating schools in more detail. TALIS is sponsored by the National Center for Education Statistics (NCES) in the U.S. Department of Education and will be conducted by Strategic Research Group (SRG). The U.S. Office of Management and Budget has approved this data collection under OMB #1850-0888. While participation in this study is entirely voluntary, we ask your agency to support the participation of schools and teachers in your district in the study so that the United States has a representative sample of schools and teachers from across the country.

Within the next few days, a representative of SRG will contact the following school or schools in your district that have been selected for the study in the winter/spring of 2013: «SelectedSchools».

NCES is authorized to conduct this study under the Education Sciences Reform Act of 2002 (20 U.S. Code, Section 9543). The data provided by schools and staff may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S. Code, Section 9573). We disclose the names of schools only to the governing district for each school, and we ask that each district maintain the confidentiality of the sampled schools in TALIS. Reports of the findings from TALIS will not identify participating districts, schools, or individual staff. Individual responses will be combined with those from other participants to produce summary statistics and reports.

If you have any questions, please do not hesitate to call SRG at 1-800-341-3660 or send an email to talis@websrg.com. You may also obtain more information about TALIS by contacting Patrick Gonzales at NCES (415-920-9229 or patrick.gonzales@ed.gov) or visiting the TALIS website at: http://nces.ed.gov/surveys/talis.

Thank you for your time and support. TALIS is an important element in an ongoing effort to understand how the U.S. education system compares to those of other countries.

Sincerely,

Jack Buckley
Commissioner

Enclosures

A.3 Regular School Advance Letter (Sample)

U.S. DEPARTMENT OF EDUCATION
INSTITUTE OF EDUCATION SCIENCES

NATIONAL CENTER FOR EDUCATION STATISTICS

September 10, 2012
«FullName», «Title»
«SchoolName»
«Address1»
«City», «State» «Zip»

Dear «Title» «LastName»:

The United States will participate for the first time in TALIS (the Teaching and Learning International Survey), an international survey of principals and teachers at grades 7, 8, and 9. TALIS provides comparative information about teaching and the teaching profession around the world. TALIS is coordinated by the Organization for Economic Cooperation and Development (OECD), and 33 countries, including the United States, have committed to participate in TALIS 2013. Your school has been randomly selected to participate, and I am writing to strongly encourage your school to take part.

U.S. participation in TALIS provides its school leaders and teachers with the opportunity to contribute to an international dialogue on the conditions of teaching in our country relative to conditions elsewhere. Schools that participate in TALIS will be compensated in part for their time and effort; participating school principals will receive $50.00, the school-level coordinator will receive $50.00, and each teacher who completes the questionnaire will receive $20.00.

Materials enclosed with this letter describe TALIS and the process for participating schools in more detail. TALIS is sponsored by the National Center for Education Statistics (NCES) in the U.S. Department of Education and will be conducted by Strategic Research Group (SRG). The U.S. Office of Management and Budget has approved this data collection under OMB #1850-0888. While participation in this study is entirely voluntary, we hope you will participate so that the United States has a representative sample of public and private schools and teachers from across the country.

NCES is authorized to conduct this study under the Education Sciences Reform Act of 2002 (20 U.S. Code, Section 9543). The data provided by schools and staff may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S. Code, Section 9573). We only disclose the names of schools to the governing district for each school, and we have asked that each district maintain the confidentiality of the sampled schools in TALIS. Reports of the findings from TALIS will not identify participating districts, schools, or individual staff. Individual responses will be combined with those from other participants to produce summary statistics and reports.

Within the next few days, a representative of SRG will call you to discuss your participation in the study. In the meantime, if you have any questions about TALIS or your school's participation, please feel free to call SRG at 1-800-341-3660 or send an email to talis@websrg.com. You may also obtain more information about TALIS by contacting Patrick Gonzales at NCES (415-920-9229 or patrick.gonzales@ed.gov) or visiting the TALIS website at: http://nces.ed.gov/surveys/talis.

Thank you for your time and support. TALIS is a crucial element in an ongoing effort to understand how the U.S. education system compares to those of other countries.

Sincerely,

Jack Buckley
Commissioner

Enclosures

A.4 TALIS Frequently Asked Questions

U.S. DEPARTMENT OF EDUCATION
INSTITUTE OF EDUCATION SCIENCES
NATIONAL CENTER FOR EDUCATION STATISTICS

TALIS Frequently Asked Questions

What is TALIS?

TALIS (Teaching and Learning International Survey) is an international survey of the teaching workforce, teaching as a profession, and the learning environments of schools based on questionnaire responses from nationally representative samples of teachers and their school principals. TALIS' main objective is to provide accurate and relevant international indicators on teachers and teaching towards the goal of helping countries review current conditions and develop informed education policy. TALIS offers an opportunity for teachers and school principals to provide their perspectives on the state of education in their own countries, allowing for a global view of teachers and the education systems in which they work.

TALIS is being conducted in grades 7, 8, and 9 in the United States.

Why was my school selected for participation?

Schools with varying demographics and in different locales were randomly selected so that the U.S. sample is representative of the overall U.S. school population, both public and private. The random selection process is important for ensuring that a country's sample accurately reflects its schools and therefore can be compared fairly with samples of schools from other countries.

Will all teachers in the school be asked to participate?

It depends on the number of teachers in the school. The study requires a random sample of up to 22 teachers who teach at least one class/course to 7th, 8th, or 9th graders in each school, regardless of subject matter. In schools with 22 or fewer eligible teachers, all teachers who teach at target grades will be asked to participate. In schools with 23 or more eligible teachers, 22 teachers who teach at target grades will be sampled to participate.

Who conducts the study?

The study will be undertaken by trained staff from Strategic Research Group (SRG) under contract to the National Center for Education Statistics (NCES) in the U.S. Department of Education. NCES conducts this study under authorization in the Education Sciences Reform Act of 2002 (20 U.S. Code, Section 9543). The U.S. Office of Management and Budget has approved the data collection under OMB #1850-0888.

What are schools and teachers asked to do?

TALIS is composed of two questionnaires: one for the school principal and another for teachers. Both teacher and principal questionnaires include questions about the following core components:

- teacher and principal background and characteristics;
- teacher and principal professional development;
- school leadership and management;
- teacher appraisal and feedback;
- teachers' instructional approaches and pedagogical practices;
- teacher efficacy and job satisfaction; and
- school climate.

When will the study be conducted?

The study will be conducted in the winter/spring of 2013. Both the principal and selected teachers will receive instructions on how to complete the questionnaires. To make responding easier, the questionnaires will be available online, although a paper-based version will also be available.

How long do the questionnaires take to complete?

The principal and teacher questionnaires are designed to be completed within 45 minutes, including the time it may take to gather needed information. The online version of the questionnaires will allow respondents to complete the survey questions at a single or multiple sessions.

What will happen with the collected data?

The data from the questionnaires will be used to document the conditions of teaching and schooling that may be related to student learning and to develop comparative education indicators geared toward informing policy discussions about teachers and teaching. The data provided by schools and staff may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S. Code, Section 9573). Reports of the findings from TALIS will not identify participating districts, schools, or individual staff. Individual responses will be combined with those from other participants to produce summary statistics and reports.

Is participation required by federal law?

No. School and teacher participation is voluntary. However, we hope you will participate in this study so that teachers like those in your school are accurately and fairly represented.

How will the study be coordinated in my school?

Schools are asked to designate a *School Coordinator* to assist SRG staff members with distributing materials and gathering information. The School Coordinator will be the main contact at the school through whom SRG will communicate. There is no need for contractor staff to visit the school. The School Coordinator is asked to complete a sampling form listing eligible teachers of 7th, 8th, or 9th graders, distribute information materials to the selected teachers, provide the principal and teachers with the questionnaires or login/password information for the online surveys, and to encourage the completion of the surveys by the agreed upon deadline.

The School Coordinator can be a teacher or any school staff member (e.g., office administrator).

OMB # 1850-0888

A.5 Summary of TALIS Activities for School Coordinators

U.S. DEPARTMENT OF EDUCATION
INSTITUTE OF EDUCATION SCIENCES
NATIONAL CENTER FOR EDUCATION STATISTICS

Summary of TALIS Activities for School Coordinators

What will be asked of the School Coordinator?

Upon the school's agreement to participate, Strategic Research Group (SRG) staff will work with the School Coordinator to:

- ✓ Provide a list of eligible teachers at grades 7, 8, and/or 9 (depending on the grades included in the school). The school coordinator will receive instructions for preparing and submitting the teacher listing form. The teacher listing form will be used to randomly select teachers for participation in the study.
- ✓ Distribute informational materials to the school principal and selected teachers, encouraging their participation in the study.
- ✓ Distribute the principal and teacher questionnaires. The school coordinator will be mailed the principal and teacher questionnaires and asked to distribute them to the school principal and selected teachers. Since the questionnaires will also be made available online, SRG staff will work with the school coordinator to determine the need for paper-based versions of the survey instruments.
- ✓ Encourage the participation of the school principal and selected teachers in the study. The school principal will be compensated $50.00 upon completion of the Principal questionnaire, and each teacher will be compensated $20.00 upon completion of the Teacher questionnaire.
- ✓ In consideration of his/her time and effort, the School Coordinator will be compensated $50.00 upon successful completion of the study in the school.

Please feel free to contact Strategic Research Group with any questions
via e-mail at talis@websrg.com
or by calling 1-800-341-3660

USA TALIS
Teaching and Learning International Survey

OMB # 1850-0888

A.6 TALIS Brochure

USA TALIS

Teaching and Learning International Survey

USA TALIS

For more information

TALIS is sponsored by the Organization for Economic Co-operation and Development (OECD) and managed in the United States by the National Center for Education Statistics (NCES), part of the U.S. Department of Education.

To learn more about TALIS, visit http://nces.ed.gov/surveys/talis and http://www.oecd.org/talis.

For questions about TALIS, contact the TALIS Information Hotline at 202-403-6568 or send email to talis@ed.gov.

ies NATIONAL CENTER FOR EDUCATION STATISTICS
Institute of Education Sciences

DEPARTMENT OF EDUCATION ★ UNITED STATES OF AMERICA ★

OMB #1850-0888

TALIS 2008: Key findings

- Teachers who receive more professional development tend to believe they work more effectively.
- Teachers with stronger beliefs about teaching methods report, on average, more collaborative behavior with colleagues and more positive student-teacher relations.
- Teachers who receive recognition for good performance from their principal or colleagues tend to feel they are more effective.
- Appraisal and feedback are associated positively with teachers' job satisfaction and security, but only a minority of teachers reported that appraisal and evaluation affect professional development, career advancement, or pay.

SOURCE: Organization for Economic Cooperation and Development. (2009). *Creating Effective Teaching and Learning Environments: First Results From TALIS.* Paris: Author.

TALIS 2013: Participants

Australia	Finland	Portugal
Belgium (Flanders)	France	Romania
	Iceland	Serbia
Brazil	Israel	Singapore
Bulgaria	Italy	Spain
Canada (Alberta)	Japan	Sweden
	Korea	United Arab Emirates
Chile	Latvia	
Croatia	Malaysia	(Abu Dhabi)
Czech Republic	Mexico	United Kingdom (England)
	Netherlands	
Denmark	Norway	
Estonia	Poland	United States

What is TALIS?

The Teaching and Learning International Survey (TALIS) is a survey about teachers, teaching, and learning environments. First conducted in 2008, its main objective is to provide international indicators that will help countries develop well-informed education policy. TALIS offers teachers and principals the opportunity to provide their perspectives on education in the United States. The field trial for TALIS 2013 will be conducted from March 1 to April 13, 2012.

Why is TALIS important?

TALIS is an effort by the United States and other countries to better understand the successes and challenges faced by teachers and school leaders. TALIS fills gaps in our knowledge of teacher and principal working conditions, an area that has been under-represented in international studies of education. TALIS aims to inform policy-makers and educators around the world about shared concerns and promising educational approaches.

Who will be surveyed?

TALIS focuses on the lower secondary level: grades 7, 8, and 9 in the United States. Principals and teachers at U.S. schools have been randomly selected to participate.

What will TALIS participants be asked to do?

TALIS is composed of two questionnaires: one for the school principal and another for teachers.

For the field trial, the principal questionnaire is designed to take 45 minutes and the teacher questionnaire is designed take 60 minutes. TALIS is administered online, allowing respondents to complete the survey in multiple sessions.

Both questionnaires include questions about the following topics:

- teacher and principal background and characteristics;
- school leadership and climate;
- teachers' instructional practices;
- teacher and principal professional development; and
- teacher appraisal and feedback.

How will the study be coordinated?

The study will be undertaken by staff from the American Institutes for Research. Principals are asked to designate a School Coordinator who will then provide a list of 7th, 8th, and 9th grade teachers; distribute materials to the principal and selected teachers; and encourage the completion of surveys by the deadline.

What will happen with the collected data?

Data will be used to describe the conditions of teaching and schooling across countries and to develop comparative education indicators. The data provided by principals and teachers may be used only for statistical purposes and may not be disclosed or used in identifiable form for any other purpose except as required by law. Reports of the findings from TALIS will not identify participating districts, schools, or individual staff. Individual responses will be combined to produce summary statistics and reports.

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Appendix B. Agencies Endorsing TALIS 2013

The following agencies endorsed the 2013 Teaching and Learning International Survey:

- American Association of School Administrators
- American Association of School Librarians
- American Association of Teachers of German
- American Council on the Teaching of Foreign Languages
- American Federation of Teachers
- Association of Supervision and Curriculum Development
- International Reading Association
- National Association for Music Education
- National Association of Bilingual Education
- National Association of Secondary School Principals
- National Council of Teachers of English
- National Council of Teachers of Mathematics
- National Education Association

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Appendix C. U.S. Questionnaires

This appendix contains two questionnaires:

- Principal Questionnaire
- Teacher Questionnaire

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Organization for Economic Cooperation and Development (OECD)

Teaching and Learning International Survey (TALIS) 2013

Principal Questionnaire

Principals of Schools including Grades 7, 8, and/or 9

Main Study Version
United States

U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. All information you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is OMB 1850-0888. Approval expires 12/31/2014. The time required to complete this information collection is estimated to average 45 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Teaching and Learning International Survey (TALIS), National Center for Education Statistics, U.S. Department of Education, 1990 K St, NWRoom 9010, Washington, D.C. 20006.

National Center for Education Statistics
U.S. Department of Education
1990 K St. NW
Washington DC 20006

International Project Consortium:

International Association for the Evaluation of Educational Achievement (IEA), The Netherlands
IEA Data Processing and Research Center (IEA DPC), Germany
Statistics Canada, Canada

About TALIS 2013

The second Teaching and Learning International Survey (TALIS 2013) is an international survey that offers the opportunity for teachers and principals to provide input into education analysis and policy development. TALIS is being conducted by the Organization for Economic Cooperation and Development (OECD).The United States, along with more than 30other countries, is taking part in the survey.

Cross-country analysis of this data will allow countries to identify other countries facing similar challenges and to learn from other policy approaches. School principals and teachers will provide information about issues such as the professional development they have received; their teaching beliefs and practices; the review of teachers' work and the feedback and recognition they receive about their work; and various other workplace issues such as school leadership and school climate.

Being an international survey, it is possible that some questions do not fit very well within your national context. In these cases, please answer as best as you can.

Confidentiality

NCES is authorized to collect information from the questionnaire under the Education Sciences Reform Act of 2002 (Public Law 107-279, Section 153). You do not have to provide the information requested. However, the information you provide will help the U.S. Department of Education's ongoing efforts to understand better how the educational system in the United States compares to that in other countries. There are no penalties should you choose not to participate in this study. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose (Public Law 107-279, Section 183 and Title V, subtitle A of the E-Government Act of 2002 (P.L. 107-347)). Your responses will be combined with those from other participants to produce summary statistics and reports.

About the Questionnaire

This questionnaire asks for information about school education and policy matters.

- The person who completes this questionnaire should be the principal of this school. If you do not have the information to answer particular questions, please consult other persons in this school.
- This questionnaire should take approximately 45 minutes to complete.
- When questions refer to 'this school' we mean by 'school': a division of the school system consisting of students in one or more grades and organized to give instruction of a defined type. One school may share a building with another school or one school may be housed in many buildings.
- Guidelines for answering the questions are typed in italics. Most questions can be answered by marking the one most appropriate answer.
- When you have completed this questionnaire, please put the questionnaire in the pre-paid, pre-addressed business reply envelope and mail to Strategic Research Group.
- When in doubt about any aspect of the questionnaire, or if you would like more information about the questionnaire or the study, you can reach us by using the following contact details:

  Strategic Research Group
  Phone Number: 1-800-341-3660
  Email: TALIS@websrg.com

  Or write to us directly at the following mailing address:

  Teaching and Learning International Survey
  National Center for Education Statistics
  Institute of Education Sciences, U.S. Department of Education
  1990 K St, NW, Room 9010
  Washington, DC 20006

Thank you very much for your participation!

Personal Background Information

These questions are about you, your education and your position as school principal. In responding to the questions, please mark the appropriate choice(s) or provide figures where necessary.

1. Are you female or male?

☐ 1 Female

☐ 2 Male

2. How old are you?

Please write a number.

⌊_⌋⌊_⌋ Years

3. What is the highest level of formal education you have completed?

Please mark one choice.

☐ 1 High school and/or some college courses

☐ 2 Associate's degree

☐ 3 Bachelor's degree

☐ 4 Master's degree

☐ 5 Doctoral degree or equivalent (Ph.D., Ed.D., J.D., M.D.)

4. How many years of work experience do you have?

Please write a number in each row. Write 0 (zero) if none.

Count part of a year as 1 year.

a) ⌊_⌋⌊_⌋ Year(s) working as a principal <u>at this school</u>

b) ⌊_⌋⌊_⌋ Year(s) working as a principal <u>in total</u>

c) ⌊_⌋⌊_⌋ Year(s) working in other school management roles (do not include years working as a principal)

d) ⌊_⌋⌊_⌋ Year(s) working as a teacher in total (include any years of teaching)

e) ⌊_⌋⌊_⌋ Year(s) working in other jobs

5. What is your current employment status as a principal?

Please mark one choice.

- ☐ 1 Full-time (90% or more of full-time hours) without teaching obligation
- ☐ 2 Full-time (90% or more of full-time hours) with teaching obligation
- ☐ 3 Part-time (less than 90% of full-time hours) without teaching obligation
- ☐ 4 Part-time (less than 90% of full-time hours) with teaching obligation

6. Did the formal education you completed include the following and, if yes, was this before, after, or before and after you took up a position as principal?

Please mark one choice in each row.

		Before	After	Before and after	Never
a)	School administration or principal training program or course	☐ 1	☐ 2	☐ 3	☐ 4
b)	Teacher training/education program or course	☐ 1	☐ 2	☐ 3	☐ 4
c)	Instructional leadership training or course	☐ 1	☐ 2	☐ 3	☐ 4

7. During the last 12 months, did you participate in any of the following professional development activities aimed at you as a principal, and if yes, for how many days?

Professional development is defined as activities that aim to develop an individual's professional skills and knowledge.

Please indicate 'Yes' or 'No' in part (A) for each of the activities listed below. If 'Yes' in part (A), please specify the number of days spent on the activity in part (B).

Please sum up activities in full days (a full day is 6-8 hours). Please include activities taking place during weekends, evenings or other off work hours.

		(A) Participation		(B) Duration in days
		Yes	No	
a)	In a professional network, mentoring or research activity	☐ 1	☐ 2	⌊_⌊_⌊_⌋
b)	In courses, conferences or observational visits	☐ 1	☐ 2	⌊_⌊_⌊_⌋
c)	Other	☐ 1	☐ 2	⌊_⌊_⌊_⌋

8. How strongly do you agree or disagree that the following present barriers to your participation in professional development?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	I do not have the prerequisites (e.g. qualifications, experience, seniority).	☐ 1	☐ 2	☐ 3	☐ 4
b)	Professional development is too expensive/unaffordable.	☐ 1	☐ 2	☐ 3	☐ 4
c)	There is a lack of employer support.	☐ 1	☐ 2	☐ 3	☐ 4
d)	Professional development conflicts with my work schedule.	☐ 1	☐ 2	☐ 3	☐ 4
e)	I do not have time because of family responsibilities. ...	☐ 1	☐ 2	☐ 3	☐ 4
f)	There is no relevant professional development offered.	☐ 1	☐ 2	☐ 3	☐ 4
g)	There are no incentives for participating in such activities.	☐ 1	☐ 2	☐ 3	☐ 4
h)	The professional development offered is of poor quality.	☐ 1	☐ 2	☐ 3	☐ 4
i)	Professional development is not readily accessible to me.	☐ 1	☐ 2	☐ 3	☐ 4

School Background Information

9. Which best describes the community in which your school is located?

Please mark one choice.

- ☐ 1 Rural area (1,000people or fewer)
- ☐ 2 Village (1,001 to 3,000 people)
- ☐ 3 Small town (3,001 to 15,000 people)
- ☐ 4 Town (15,001 to 100,000 people)
- ☐ 5 City (100,001 to 1,000,000 people)
- ☐ 6 Large city (more than 1,000,000 people)

10. Is this school publicly- or privately-managed?

Please mark one choice.

- ☐ 1 Publicly-managed
  This is a school managed by a public education authority, government agency, or governing board appointed by government or elected by public franchise.
- ☐ 2 Privately-managed
  This is a school managed by a non-government organization; e.g. a religious institution, trade union, business or other private institution.

11. Thinking about the funding of this school in a typical year, which of the following applies?

Please mark one choice in each row.

	Yes	No
a) 50% or more of the school's funding comes from the government. *Includes local, state and national*	☐ 1	☐ 2
b) Teaching personnel are funded by the government. *Includes local, state and national*	☐ 1	☐ 2

12. For each type of position listed below, please indicate the number of staff (head count) currently working in this school.

Staff may fall into multiple categories.

Please write a number in each row. Write 0 (zero) if there are none.

a) ⌊_⌋⌊_⌋⌊_⌋ Teachers, irrespective of the grades/ages they teach

Those whose main professional activity at this school is the provision of instruction to students

b) ⌊_⌋⌊_⌋⌊_⌋ Personnel for pedagogical support, irrespective of the grades/ages they support

Including all teacher aides or other non-teaching professionals who provide instruction or support teachers in providing instruction, professional curriculum/instructional specialists, educational media specialists, and school psychologists

c) ⌊_⌋⌊_⌋⌊_⌋ School administrative personnel

Including receptionists, secretaries, and administrative assistants

d) ⌊_⌋⌊_⌋⌊_⌋ School management personnel

Including principals, assistant principals, and other management staff whose main activity is management

e) ⌊_⌋⌊_⌋⌊_⌋ Other staff

13. Are the following education levels and/or programs taught in this school and, if yes, are there other schools in your area that compete for students at that education level and/or program?

Please indicate 'Yes' or 'No' in part (A) for each of the levels and/or programs listed below.

If 'Yes' in part (A), please indicate in part (B) the number of other schools in this area that compete for your students.

	(A) Level/program taught		(B) Competition		
	Yes	No	Two or more other schools	One other school	No other schools
a) Pre-primary education (pre-kindergarten, preschool, or kindergarten)	☐1	☐2	☐1	☐2	☐3
b) Primary education (any of grades 1-6)	☐1	☐2	☐1	☐2	☐3
c) Lower secondary education (any of grades 7-9)	☐1	☐2	☐1	☐2	☐3
d) Upper secondary (any of grades 10-12) general education programs	☐1	☐2	☐1	☐2	☐3
e) Upper secondary (any of grades 10-12) vocational or technical education programs	☐1	☐2	☐1	☐2	☐3

14. What is the <u>current</u> school enrollment (i.e., the number of students of all grades/ages in this school)?

Please write a number.

⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Students

15. Please <u>estimate</u> the broad percentage of 7th, 8th, and/or 9th grade students in this school who have the following characteristics.

Students with special needs are those for whom a special learning need has been <u>formally identified</u> due to specific mental, physical, or emotional characteristics. Often they will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education.

'Socioeconomically disadvantaged homes' refers to homes lacking the basic necessities or advantages of life, such as adequate income, housing, nutrition or medical care.

Students may fall into multiple categories. Please mark one choice in each row.

	None	1% to 10%	11% to 30%	31% to 60%	More than 60%
a) Students whose first language is not English .	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
b) Students with special needs	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
c) Students from socioeconomically disadvantaged homes	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

School Leadership

16. Do you have a school management team?

'School management team' refers to a group within the school that has responsibilities for leading and managing the school in decisions such as those involving instruction, use of resources, curriculum, assessment and evaluation, and other strategic decisions related to the appropriate functioning of the school.

Please mark one choice.

☐ 1 Yes

☐ 2 No → **Please go to Question 18.**

17. Are the following currently represented on your school management team?

Please mark one choice in each row.

		Yes	No
a)	You, as principal	☐ 1	☐ 2
b)	Vice/deputy principal or assistant principal	☐ 1	☐ 2
c)	Financial manager	☐ 1	☐ 2
d)	Department heads	☐ 1	☐ 2
e)	Teachers	☐ 1	☐ 2
f)	Representative(s) from school governing boards	☐ 1	☐ 2
g)	Parents or guardians	☐ 1	☐ 2
h)	Students	☐ 1	☐ 2
i)	Representatives of businesses, religious institutions, or other private institutions	☐ 1	☐ 2
j)	Other	☐ 1	☐ 2

18. Regarding this school, who has a significant responsibility for the following tasks?

A 'significant responsibility' is one where an active role is played in decision making.
Please mark as many choices as appropriate in each row.

		You, as principal	Other members of the school manage-ment team	Teachers (not as a part of the school manage-ment team)	School governing board	Local school district or state education authority
a)	Appointing or hiring teachers	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
b)	Dismissing or suspending teachers from employment	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
c)	Establishing teachers' starting salaries, including setting payscales	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
d)	Determining teachers' salary increases	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
e)	Deciding on budget allocations within the school	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
f)	Establishing student disciplinary policies and procedures	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
g)	Establishing student assessment policies, including state and district assessments	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
h)	Approving students for admission to the school	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
i)	Choosing which learning materials are used	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
j)	Determining course content, including state and district curricula	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
k)	Deciding which courses are offered	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1

19. On average throughout the school year, what percentage of time in your role as a principal do you spend on the following tasks in this school?

Rough estimates are sufficient. Please write a number in each row. Write 0 (zero) if none.

Please ensure that responses add up to 100%.

a) ⌊_⌋⌊_⌋⌊_⌋ % Administrative and leadership tasks and meetings

Including human resource/personnel issues, regulations, reports, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state, or national education officials

b) ⌊_⌋⌊_⌋⌊_⌋ % Curriculum and teaching-related tasks and meetings

Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development

c) ⌊_⌋⌊_⌋⌊_⌋ % Student interactions

Including counseling and conversations outside structured learning activities, discipline

d) ⌊_⌋⌊_⌋⌊_⌋ % Parent or guardian interactions

Including formal and informal interactions

e) ⌊_⌋⌊_⌋⌊_⌋ % Interactions with local and regional community, businesses and industries

f) ⌊_⌋⌊_⌋⌊_⌋ % Extra-curricular planning and supervision

g) ⌊_⌋⌊_⌋⌊_⌋ % Other

100 % Total

20. Please indicate if you engaged in the following in this school during the last 12 months.

If you have not been a principal in this school for 12 months, please indicate if you engaged in the following since you started working as a principal in this school.

Please mark one choice in each row.

		Yes	No
a)	I used student performance and student evaluation results (including national/international assessments) to develop the school's educational goals and programs.	☐ 1	☐ 2
b)	I worked on a professional development plan for this school.	☐ 1	☐ 2

21. Please indicate how frequently you engaged in the following in this school during the last 12 months.

Please mark one choice in each row.

		Never or rarely	Sometimes	Often	Very often
a)	I collaborated with teachers to solve classroom discipline problems.	☐ 1	☐ 2	☐ 3	☐ 4
b)	I observed instruction in the classroom.	☐ 1	☐ 2	☐ 3	☐ 4
c)	I took actions to support cooperation among teachers to develop new teaching practices.	☐ 1	☐ 2	☐ 3	☐ 4
d)	I took actions to ensure that teachers take responsibility for improving their teaching skills	☐ 1	☐ 2	☐ 3	☐ 4
e)	I took actions to ensure that teachers feel responsible for their students' learning outcomes. ..	☐ 1	☐ 2	☐ 3	☐ 4
f)	I provided parents or guardians with information on the school and student performance.	☐ 1	☐ 2	☐ 3	☐ 4
g)	I checked for mistakes and errors in school administrative procedures and reports.	☐ 1	☐ 2	☐ 3	☐ 4
h)	I resolved problems with the lesson timetable in this school.	☐ 1	☐ 2	☐ 3	☐ 4
i)	I collaborated with principals from other schools. ...	☐ 1	☐ 2	☐ 3	☐ 4

22. How strongly do you agree or disagree with these statements as applied to this school?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	This school provides staff with opportunities to actively participate in school decisions.	☐ 1	☐ 2	☐ 3	☐ 4
b)	This school provides parents or guardians with opportunities to actively participate in school decisions.	☐ 1	☐ 2	☐ 3	☐ 4
c)	This school provides students with opportunities to actively participate in school decisions.	☐ 1	☐ 2	☐ 3	☐ 4
d)	I make the important decisions on my own.	☐ 1	☐ 2	☐ 3	☐ 4
e)	There is a collaborative school culture which is characterized by mutual support.	☐ 1	☐ 2	☐ 3	☐ 4

23. Do you have a school governing board?

Please mark one choice.

☐ 1 Yes

☐ 2 No → **Please go to Question 25.**

24. Are the following currently represented on this school's governing board?

Please mark one choice in each row.

		Yes	No
a)	Representatives of a local school district or state education authority	☐ 1	☐ 2
b)	Members of the school management team	☐ 1	☐ 2
c)	School administrative personnel	☐ 1	☐ 2
d)	Teachers	☐ 1	☐ 2
e)	Parents or guardians	☐ 1	☐ 2
f)	Students	☐ 1	☐ 2
g)	Trade unions	☐ 1	☐ 2
h)	Representatives of businesses, religious institutions, or other private institutions	☐ 1	☐ 2
i)	Others	☐ 1	☐ 2

25. During this school year, does this school provide any of the following to parents or guardians?

Please mark one choice in each row.

		Yes	No
a)	Workshops or courses for parents or guardians	☐ 1	☐ 2
b)	Services to support parents' or guardians' participation, such as providing child care	☐ 1	☐ 2
c)	Support for parental association(s)	☐ 1	☐ 2
d)	Parental meeting(s)	☐ 1	☐ 2

26. To what extent do the following limit your effectiveness as a principal in this school?

'A career-based wage system' is used when an employee's salary is determined mainly by his or her educational level and age or seniority rather than by his or her performance on the job.

Please mark one choice in each row.

		Not at all	Very little	To some extent	A lot
a)	Inadequate school budget and resources	☐ 1	☐ 2	☐ 3	☐ 4
b)	Government regulation and policy	☐ 1	☐ 2	☐ 3	☐ 4
c)	Teachers' absences	☐ 1	☐ 2	☐ 3	☐ 4
d)	Lack of parent or guardian involvement and support	☐ 1	☐ 2	☐ 3	☐ 4
e)	Teachers' career-based wage system	☐ 1	☐ 2	☐ 3	☐ 4
f)	Lack of opportunities and support for my own professional development	☐ 1	☐ 2	☐ 3	☐ 4
g)	Lack of opportunities and support for teachers' professional development	☐ 1	☐ 2	☐ 3	☐ 4
h)	High workload and level of responsibilities in my job	☐ 1	☐ 2	☐ 3	☐ 4
i)	Lack of shared leadership with other school staff members	☐ 1	☐ 2	☐ 3	☐ 4

Teacher Formal Appraisal

In this section, 'appraisal' is defined as when a teacher's work is reviewed by the principal, an external inspector or by his or her colleagues. Here, it is defined as a more formal approach (e.g. as part of a formal performance management system, involving set procedures and criteria) rather than a more informal approach (e.g. through informal discussions).

27. On average, how often is each teacher formally appraised in this school by the following people?

Please mark one choice in each row.

If none of the response choices reflect your school's situation, please choose the one that is closest to it.

		Never	Less than once every two years	Once every two years	Once per year	Twice or more per year
a)	You, as principal	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
b)	Other members of the school management team	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
c)	Assigned mentors	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
d)	Teachers (who are not part of the school management team)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
e)	External individuals or bodies (e.g. inspectors, local or state education authorities, or other persons from outside the school)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

If you answered 'Never' to each of the above → Please go to Question 30.

28. Who performs the following tasks as part of the formal appraisal of teachers' work in this school?

Please mark as many choices as appropriate in each row.

		External individuals or bodies	You, as principal	Member(s) of school manage-ment team	Assigned mentors	Other teachers (not a part of the manage-ment team)	Not used in this school
a)	Direct observation of classroom teaching	☐1	☐1	☐1	☐1	☐1	☐1
b)	Student surveys about teaching	☐1	☐1	☐1	☐1	☐1	☐1
c)	Assessments of teachers' content knowledge	☐1	☐1	☐1	☐1	☐1	☐1
d)	Analysis of students' test scores	☐1	☐1	☐1	☐1	☐1	☐1
e)	Discussion of teachers' self-assessments of their work (e.g. presentation of a portfolio assessment)	☐1	☐1	☐1	☐1	☐1	☐1
f)	Discussion about feedback received by parents or guardians ...	☐1	☐1	☐1	☐1	☐1	☐1

29. Please indicate the frequency that each of the following occurs in this school following a teacher appraisal.

Please mark one choice in each row.

		Never	Sometimes	Most of the time	Always
a)	Measures to remedy any weaknesses in teaching are discussed with the teacher	☐1	☐2	☐3	☐4
b)	A development or training plan is developed for each teacher	☐1	☐2	☐3	☐4
c)	If a teacher is found to be a poor performer, material sanctions such as reduced annual increases in pay are imposed on the teacher	☐1	☐2	☐3	☐4
d)	A mentor is appointed to help the teacher improve his/her teaching	☐1	☐2	☐3	☐4
e)	A change in a teacher's work responsibilities (e.g. increase or decrease in his/her teaching load or administrative/managerial responsibilities)	☐1	☐2	☐3	☐4
f)	A change in a teacher's salary or a payment of a financial bonus	☐1	☐2	☐3	☐4
g)	A change in the likelihood of a teacher's career advancement	☐1	☐2	☐3	☐4
h)	Dismissal or non-renewal of contract	☐1	☐2	☐3	☐4

School Climate

30. How strongly do you agree or disagree with these statements as applied to this school?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	The school staff share a common set of beliefs about schooling/learning.	☐ 1	☐ 2	☐ 3	☐ 4
b)	There is a high level of cooperation between the school and the local community.	☐ 1	☐ 2	☐ 3	☐ 4
c)	School staff have an open discussion about difficulties.	☐ 1	☐ 2	☐ 3	☐ 4
d)	There is mutual respect for colleagues' ideas.	☐ 1	☐ 2	☐ 3	☐ 4
e)	There is a culture of sharing success.	☐ 1	☐ 2	☐ 3	☐ 4
f)	The relationships between teachers and students are good.	☐ 1	☐ 2	☐ 3	☐ 4

31. Is this school's capacity to provide quality instruction currently hindered by any of the following issues?

Please mark one choice in each row.

		Not at all	Very little	To some extent	A lot
a)	Shortage of qualified and/or high-performing teachers	☐ 1	☐ 2	☐ 3	☐ 4
b)	Shortage of teachers with competence in teaching students with special needs	☐ 1	☐ 2	☐ 3	☐ 4
c)	Shortage of vocational teachers	☐ 1	☐ 2	☐ 3	☐ 4
d)	Shortage or inadequacy of instructional materials (e.g. textbooks)	☐ 1	☐ 2	☐ 3	☐ 4
e)	Shortage or inadequacy of computers for instruction	☐ 1	☐ 2	☐ 3	☐ 4
f)	Insufficient internet access	☐ 1	☐ 2	☐ 3	☐ 4
g)	Shortage or inadequacy of computer software for instruction	☐ 1	☐ 2	☐ 3	☐ 4
h)	Shortage or inadequacy of library materials	☐ 1	☐ 2	☐ 3	☐ 4
i)	Shortage of support personnel	☐ 1	☐ 2	☐ 3	☐ 4

32. In this school, how often do the following occur?

Please mark one choice in each row.

By students in this school:	Never	Rarely	Monthly	Weekly	Daily
a) Arriving late at school	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
b) Absenteeism (i.e. unjustified absences)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
c) Cheating	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
d) Vandalism and theft	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
e) Intimidation or verbal abuse among students (or other forms of non-physical bullying)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
f) Physical injury caused by violence among students	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
g) Intimidation or verbal abuse of teachers or staff	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
h) Use/possession of drugs and/or alcohol	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
By teachers in this school:	Never	Rarely	Monthly	Weekly	Daily
i) Arriving late at school	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
j) Absenteeism (i.e. unjustified absences)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
k) Discrimination (e.g. based on gender, ethnicity, religion, or disability, etc.)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Teacher Induction and Mentoring

The following section includes questions on induction and mentoring.

An 'induction program' is defined as a structured range of activities at school to support new teachers' introduction into the teaching profession/school. Student teachers still within the teacher education program are not included. An induction program may include peer work with other new teachers, mentoring by experienced teachers, etc. The formal arrangement maybe defined by your school, in relation to other schools, or by educational authorities/external agencies.

'Mentoring' is defined as a support structure at schools where more experienced teachers support less experienced teachers. This structure may involve all teachers in the school or only new teachers.

33. Do new teachers at this school have access to an induction program?

Please mark one choice in each row.

		Yes	No
a)	There is an induction program for new teachers.	☐ 1	☐ 2
b)	There are informal induction activities for new teachers not part of an induction program.	☐ 1	☐ 2
c)	There is a general and/or administrative introduction to the school for new teachers.	☐ 1	☐ 2

If you answered 'No' to a)→ Please go to Question 36.

34. Which teachers at this school are offered an induction program?

Please mark one choice.

☐ 1 All teachers who are new to this school

☐ 2 Only teachers new to teaching

35. What structures and activities are included in this induction program?

Please mark as many choices as appropriate.

☐ 1 Mentoring by experienced teachers

☐ 1 Courses/seminars

☐ 1 Scheduled meetings with principal and/or colleague teachers

☐ 1 A system of peer review

☐ 1 Networking/virtual communities

☐ 1 Collaboration with other schools

☐ 1 Team teaching (together with more experienced teachers)

☐ 1 A system of diaries/journals, portfolios, etc. to facilitate learning and reflection

☐ 1 None of the above

36. Do teachers at your school have access to a mentoring system?

Please mark one choice.

- ☐ 1 Yes, but only teachers who are new to teaching (i.e. in their first job as teachers) have access
- ☐ 2 Yes, all teachers who are new to this school have access
- ☐ 3 Yes, all teachers at this school have access
- ☐ 4 No, at present there is no access to a mentoring system for teachers in this school
  →If No, please go to Question 38

37. Is the mentor's main subject field(s) the same as that of the teacher being mentored?

Please mark one choice.

- ☐ 1 Yes, most of the time
- ☐ 2 Yes, sometimes
- ☐ 3 No, rarely or never

38. How would you generally rate the importance of mentoring for teachers and schools?

Please mark one choice in each row.

		Not important at all	Of low importance	Of moderate importance	Of high importance
a)	To improve teachers' pedagogical competence	☐ 1	☐ 2	☐ 3	☐ 4
b)	To strengthen teachers' professional identity	☐ 1	☐ 2	☐ 3	☐ 4
c)	To improve teachers' collaboration with colleagues .	☐ 1	☐ 2	☐ 3	☐ 4
d)	To support less experienced teachers in their teaching	☐ 1	☐ 2	☐ 3	☐ 4
e)	To expand teachers' main subject(s) knowledge	☐ 1	☐ 2	☐ 3	☐ 4
f)	To improve students' general performance	☐ 1	☐ 2	☐ 3	☐ 4

Job Satisfaction

39. Finally, we would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	The advantages of this profession clearly outweigh the disadvantages.	☐ 1	☐ 2	☐ 3	☐ 4
b)	If I could decide again, I would still choose this job/position.	☐ 1	☐ 2	☐ 3	☐ 4
c)	I would like to change to another school if that were possible.	☐ 1	☐ 2	☐ 3	☐ 4
d)	I regret that I decided to become a principal.	☐ 1	☐ 2	☐ 3	☐ 4
e)	I enjoy working at this school.	☐ 1	☐ 2	☐ 3	☐ 4
f)	I would recommend my school as a good place to work.	☐ 1	☐ 2	☐ 3	☐ 4
g)	I think that the teaching profession is valued in society.	☐ 1	☐ 2	☐ 3	☐ 4
h)	I am satisfied with my performance in this school. .	☐ 1	☐ 2	☐ 3	☐ 4
i)	All in all, I am satisfied with my job.	☐ 1	☐ 2	☐ 3	☐ 4

This is the end of the questionnaire.

Thank you very much for your participation!

Please put the questionnaire in the pre-paid, pre-addressed business reply envelope and mail to Strategic Research Group.

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Organization for Economic Cooperation and Development (OECD)

Teaching and Learning International Survey (TALIS) 2013

Teacher Questionnaire

Teachers of Students in Grades 7, 8, and/or 9

Main Study Version
United States

U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education. All information you provide may only be used for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S. Code, Section 9573].

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is OMB 1850-0888. Approval expires 12/31/2014. The time required to complete this information collection is estimated to average 45 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Teaching and Learning International Survey (TALIS), National Center for Education Statistics, U.S. Department of Education, 1990 K St, NWRoom 9010, Washington, D.C. 20006.

National Center for Education Statistics
U.S. Department of Education
1990 K St. NW
Washington DC 20006

International Project Consortium:
International Association for the Evaluation of Educational Achievement (IEA), The Netherlands
IEA Data Processing and Research Center (IEA DPC), Germany
Statistics Canada, Canada

About TALIS 2013

The second Teaching and Learning International Survey (TALIS 2013) is an international survey that offers the opportunity for teachers and principals to provide input into education analysis and policy development. TALIS is being conducted by the Organization for Economic Co-operation and Development (OECD). The United States, along with more than 30 other countries, is taking part in the survey.

Cross-country analysis of this data will allow countries to identify other countries facing similar challenges and to learn from other policy approaches. School principals and teachers will provide information about issues such as the professional development they have received; their teaching beliefs and practices; the review of teachers' work and the feedback and recognition they receive about their work; and various other school leadership, management and workplace issues.

In the TALIS study, it is our intention to draw a picture of the different educational practices in all the participating countries. Countries and individuals may differ in their educational approaches. We rely on your expertise to describe us your work and opinion as accurately as possible.

Being an international survey, it is possible that some questions do not fit very well within your national context. In these cases, please answer as best as you can.

Confidentiality

NCES is authorized to collect information from the questionnaire under the Education Sciences Reform Act of 2002 (Public Law 107-279, Section 153). You do not have to provide the information requested. However, the information you provide will help the U.S. Department of Education's ongoing efforts to understand better how the educational system in the United States compares to that in other countries. There are no penalties should you choose not to participate in this study. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose (Public Law 107-279, Section 183 and Title V, subtitle A of the E-Government Act of 2002 (P.L. 107-347)). Your responses will be combined with those from other participants to produce summary statistics and reports.

About the Questionnaire

When questions refer to 'this school' we mean by 'school': a division of the school system consisting of students in one or more grades and organized to give instruction of a defined type. One school may share a building with another school or one school may be housed in many buildings.

This questionnaire should take approximately 45 minutes to complete.

Guidelines for answering the questions are typed in italics. Most questions can be answered by marking the one most appropriate answer.

When you have completed this questionnaire, please put the questionnaire in the pre-paid, pre-addressed business reply envelope and mail to Strategic Research Group.

When in doubt about any aspect of the questionnaire, or if you would like more information about the questionnaire or the study, you can reach us by using the following contact details:

Strategic Research Group
Phone Number: 1-800-341-3660
Email: TALIS@websrg.com

Or write to us directly at the following mailing address:

Teaching and Learning International Survey
National Center for Education Statistics
Institute of Education Sciences, U.S. Department of Education
1990 K St, NW, Room 9010
Washington, DC 20006

Thank you very much for your participation!

Background Information

These questions are about you, your education and the time you have spent in teaching. In responding to the questions, please mark the appropriate choice(s) or provide figures where necessary.

1. Are you female or male?

☐ 1 Female

☐ 2 Male

2. How old are you?

Please write a number.

⌊_⌋⌊_⌋ Years

3. What is your current employment status as a teacher?

Please consider your employment status for all of your current teaching jobs combined.
Please mark one choice.

☐ 1 Full-time (more than 90% of full-time hours) → **Please go to Question 5.**

☐ 2 Part-time (71-90% of full-time hours)

☐ 3 Part-time (50-70% of full-time hours)

☐ 4 Part-time (less than 50% of full-time hours)

4. Why do you work part-time?

Please mark one choice.

☐ 1 I chose to work part-time

☐ 2 There was no possibility to work full-time

5. How many years of work experience do you have?

Please round up to whole years.

a) ⌊_⌋⌊_⌋ Year(s) working as a teacher <u>at this school</u>

b) ⌊_⌋⌊_⌋ Year(s) working as a teacher <u>in total</u>

c) ⌊_⌋⌊_⌋ Year(s) working in other education roles (do not include years working as a teacher)

d) ⌊_⌋⌊_⌋ Year(s) working in other jobs

6. What is your employment status as a teacher <u>at this school</u>?

Please mark one choice.

☐ 1 Permanent employment (an on-going contract with no fixed end-point before the age of retirement)

☐ 2 Fixed-term contract for a period of more than 1 school year

☐ 3 Fixed-term contract for a period of 1 school year or less

7. Do you currently work as a teacher of 7th, 8th, and/or 9th grade students <u>at another school</u>?

Please mark one choice.

☐ 1 Yes

☐ 2 No → **Please go to Question 9.**

8. If 'Yes' in the previous question, please indicate in how many <u>other</u> schools you currently teach 7th, 8th, and/or 9th grade students.

Please write a number.

⌊_⌋⌊_⌋ School(s)

9. Across all your 7th, 8th, and/or 9th grade classes at this school, how many of your students are students with special needs?

Students with special needs are those for whom a special learning need has been <u>formally identified</u> due to mental, physical, or emotional characteristics. Often they will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education.

Please mark one choice.

☐ 1 None

☐ 2 Some

☐ 3 Most

☐ 4 All

10. What is the highest level of formal education you have completed?

Please mark one choice.

- ☐ 1 High school and/or some college courses
- ☐ 2 Associate's degree
- ☐ 3 Bachelor's degree
- ☐ 4 Master's degree
- ☐ 5 Doctoral degree or equivalent (Ph.D., Ed.D., J.D., M.D.)

11. Did you complete a teacher education or training program?

Please mark one choice.

- ☐ 1 Yes
- ☐ 2 No

12. Were the following elements included in your formal education or training?

Please mark one choice in each row.

		Yes, for all subject(s) I teach	Yes, for some subject(s) I teach	No
a)	Content of the subject(s) I teach	☐ 1	☐ 2	☐ 3
b)	Pedagogy of the subject(s) I teach	☐ 1	☐ 2	☐ 3
c)	Classroom practice (practicum, internship or student teaching) in the subject(s) I teach	☐ 1	☐ 2	☐ 3

If your formal education or training did not include classroom practice→ Go to Question 14.

13. How long did your classroom practicum, internship or student teaching last?

Please mark one choice.

- ☐ 1 4 weeks or less
- ☐ 2 5-7 weeks
- ☐ 3 8-11 weeks
- ☐ 4 12 weeks or more

14. In your teaching, to what extent do you feel prepared for the elements below?

Please mark one choice in each row.

		Not at all	Somewhat	Well	Very well
a)	Content of the subject(s) I teach	☐ 1	☐ 2	☐ 3	☐ 4
b)	Pedagogy of the subject(s) I teach	☐ 1	☐ 2	☐ 3	☐ 4
c)	Classroom practice in the subject(s) I teach	☐ 1	☐ 2	☐ 3	☐ 4

15. Were any of the subject categories listed below included in your formal education or training?

Please mark as many choices as appropriate in each row.

Because this is an international survey, we had to categorize many of the actual subjects taught in schools into broad categories. Please refer to the subject examples below. If the exact name of one of your subjects is not listed, please mark the category you think best fits the subject.

Reading, writing and literature: reading and writing (and literature) in English, language arts, public speaking, literature, composition, communications, journalism

English as a Second Language (ESL): ESL or bilingual education in support of students' subject matter learning

Mathematics: basic and general mathematics, geometry, pre-algebra, algebra, business and applied mathematics, statistics and probability, trigonometry, calculus, and pre-calculus.

Science: general or integrated science, physics, physical science, chemistry, biology or life science, human biology, environmental science, Earth science

Social studies/Social science: general social studies, anthropology, economics, geography, government or civics, history, humanities, philosophy, psychology, sociology

Modern foreign languages: languages other than English (e.g., French, German, Spanish, ASL)

Classical Greek and/or Latin

Technology: orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology

Arts: arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework

Physical and health education: physical education, gymnastics, dance, health

Religion and/or ethics: religion, history of religions, religion culture, ethics

Business studies: accounting, business management, business principles and ethics, marketing and distribution

Practical and vocational skills: vocational skills (preparation for a specific occupation), agriculture and natural resources, domestic science, career education, clothing and textiles, construction trades, cosmetology, culinary arts, driving, health occupations, home economics, mechanics and repair, polytechnic courses, secretarial studies, tourism and hospitality, handicraft

Interdisciplinary subject: integration of content and perspective of several traditional school subjects

Special education: education of students with special needs

		Included in high school, vocational certificate, or Associate's degree	Included in Bachelor's degree or above	Included in subject specialization as part of teacher education	Included at the in-service or professional development stage
a)	Reading, writing and literature	☐ 1	☐ 1	☐ 1	☐ 1
b)	English as a Second Language	☐ 1	☐ 1	☐ 1	☐ 1
c)	Mathematics	☐ 1	☐ 1	☐ 1	☐ 1
d)	Science	☐ 1	☐ 1	☐ 1	☐ 1
e)	Social studies/Social science	☐ 1	☐ 1	☐ 1	☐ 1
f)	Modern foreign languages	☐ 1	☐ 1	☐ 1	☐ 1
g)	Classical Greek and/or Latin	☐ 1	☐ 1	☐ 1	☐ 1
h)	Technology	☐ 1	☐ 1	☐ 1	☐ 1
i)	Arts	☐ 1	☐ 1	☐ 1	☐ 1
j)	Physical and health education	☐ 1	☐ 1	☐ 1	☐ 1
k)	Religion and/or ethics	☐ 1	☐ 1	☐ 1	☐ 1
l)	Business studies	☐ 1	☐ 1	☐ 1	☐ 1
m)	Practical and vocational skills	☐ 1	☐ 1	☐ 1	☐ 1
m)	Interdisciplinary subject	☐ 1	☐ 1	☐ 1	☐ 1
n)	Special education	☐ 1	☐ 1	☐ 1	☐ 1
o)	Other (please specify below)	☐ 1	☐ 1	☐ 1	☐ 1

_____

16. During this current school year, do you teach the subjects below to any 7th, 8th, and/or 9th grade students in this school?

Please mark one choice in each row.

		Yes	No
a)	Reading, writing and literature	☐ 1	☐ 2
b)	English as a Second Language	☐ 1	☐ 2
c)	Mathematics	☐ 1	☐ 2
d)	Science	☐ 1	☐ 2
e)	Social studies/Social science	☐ 1	☐ 2
f)	Modern foreign languages	☐ 1	☐ 2
g)	Classical Greek and/or Latin	☐ 1	☐ 2
h)	Technology	☐ 1	☐ 2
i)	Arts	☐ 1	☐ 2
j)	Physical and health education	☐ 1	☐ 2
k)	Religion and/or ethics	☐ 1	☐ 2
l)	Business studies	☐ 1	☐ 2
m)	Practical and vocational skills	☐ 1	☐ 2
o)	Special education	☐ 1	☐ 2
p)	Other	☐ 1	☐ 2

17. During your <u>most recent complete calendar week</u>, approximately how many 60-minute hours did you spend <u>in total</u> on teaching, planning lessons, grading, collaborating with other teachers, participating in staff meetings and on other tasks related to your job at this school?

A 'complete' calendar week is one that <u>was not shortened by breaks, public holidays, sick leave, etc.</u>

Also include tasks that took place during weekends, evenings or other off-classroom hours.

Round to the nearest whole hour.

⌊_⌋⌊_⌋ Hours

18. Of this total, how many 60-minute hours did you spend on teaching during your <u>most recent complete calendar week</u>?

Please only count actual teaching time.

Time spent on preparation, grading, etc. will be recorded in Question 19.

⌊_⌋⌊_⌋ Hours

19. As a teacher of this school, during your <u>most recent complete calendar week</u>, how many 60-minute hours did you spend on the following tasks?

Also include tasks that took place during weekends, evenings or other off-classroom hours. Please exclude all time spent teaching as this was recorded in the previous question.

Rough estimates are sufficient.

If you did not perform the task during the most recent complete calendar week, write 0 (zero).

a) ⌊_⌋⌊_⌋ Individual planning or preparation of lessons either at school or out of school

b) ⌊_⌋⌊_⌋ Teamwork and dialogue with colleagues within this school

c) ⌊_⌋⌊_⌋ Grading/correcting of student work

d) ⌊_⌋⌊_⌋ Student counseling (including student supervision, virtual counseling, career guidance and delinquency guidance)

e) ⌊_⌋⌊_⌋ Participation in school management

f) ⌊_⌋⌊_⌋ General administrative work (including communication, paperwork and other clerical duties you undertake in your job as a teacher)

g) ⌊_⌋⌊_⌋ Communication and cooperation with parents or guardians

h) ⌊_⌋⌊_⌋ Engaging in extracurricular activities (e.g. sports and cultural activities after school)

i) ⌊_⌋⌊_⌋ Developing students' test-taking skills to improve performance on mandated assessments

j) ⌊_⌋⌊_⌋ Administering, proctoring, and scoring mandated assessments

k) ⌊_⌋⌊_⌋ Reviewing and analyzing results of mandated assessments to improve instruction

l) ⌊_⌋⌊_⌋ Other tasks

Teacher Professional Development

In this section, 'professional development' is defined as activities that aim to develop an individual's skills, knowledge, expertise and other characteristics as a teacher.

Please only consider professional development you have taken <u>after</u> your initial teacher training/education.

20. In your <u>first regular employment as a teacher</u>, did/do you take part in any induction program?

An 'induction program' is defined as a range of structured activities to support your introduction into the teaching profession, for example peer work with other new teachers, mentoring by experienced teachers, etc.

Please mark one choice in each row.

		Yes	No
a)	I took/take part in an induction program.	☐ 1	☐ 2
b)	I took/take part in <u>informal</u> induction activities not part of an induction program.	☐ 1	☐ 2
c)	I took/take part in a general and/or administrative introduction to the school.	☐ 1	☐ 2

If you do/did not take part in an induction program or in informal induction activities→ Please go to Question 22.

21. In your <u>first, regular employment as a teacher</u>, how often did/do you take part in the induction program or informal induction activities?

Please mark one choice.

☐ 1 A few occasions

☐ 2 Multiple occasions across several months of my first year of teaching

☐ 3 Consistently throughout my first year of teaching

22. Are you currently involved in any mentoring activities?

This question refers to mentoring by or for teachers at your school. It does not refer to students in teacher education programs who are student teachers practicing at your school.

Please mark one choice in each row.

		Yes	No
a)	I presently have an assigned mentor to support me.	☐ 1	☐ 2
b)	I serve as an assigned mentor for one or more teachers.	☐ 1	☐ 2

23. I. During the last <u>12 months</u>, did you participate in any of the following professional development activities, and if yes, for how many days did they last?

Please indicate 'Yes' or 'No' in part (A) for each of the activities listed below. If 'Yes' in part (A), please specify the number of days spent on the activity in part (B).

Please sum up the activities in full days (a full day is 6-8 hours). Please include activities taking place during weekends, evenings or other off-work hours.

		(A) Participation		(B) Duration in days
		Yes	No	
a)	Courses/workshops (e.g. on subject matter or methods and/or other education-related topics)	☐ 1	☐ 2	⌊_⌊_⌊_⌋
b)	Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues)	☐ 1	☐ 2	⌊_⌊_⌊_⌋
c)	Observation visits to other schools	☐ 1	☐ 2	⌊_⌊_⌊_⌋
d)	Observation visits to business premises, public organizations, non-government organizations	☐ 1	☐ 2	⌊_⌊_⌊_⌋
e)	In-service training courses in business premises, public organizations, non-government organizations	☐ 1	☐ 2	⌊_⌊_⌊_⌋

II. During the last <u>12 months</u>, did you participate in any of these activities?

Please indicate 'Yes' or 'No' for each of the activities listed below.

		Yes	No
f)	Degree program	☐ 1	☐ 2
g)	Participation in a network of teachers formed specifically for the professional development of teachers	☐ 1	☐ 2
h)	Individual or collaborative research on a topic of interest to you professionally ..	☐ 1	☐ 2
i)	Mentoring and/or peer observation and coaching, as part of a formal school arrangement	☐ 1	☐ 2

If you did not participate in any professional development activities during the last 12months → Please go to Question 28.

24. Did the professional development activities you participated in during the last <u>12 months</u> cover the following topics? If so, what <u>positive impact</u> did these have on your teaching?

For each specified alternative please indicate 'Yes' or 'No' in part (A). If 'Yes' in part (A), please estimate the positive impact in part (B).

		(A) Topic		(B) Positive impact			
		Yes	No	No	Small	Moderate	Large
a)	Knowledge and understanding of my subject field(s)	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
b)	Pedagogical competencies in teaching my subject field(s)	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
c)	Knowledge of the curriculum	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
d)	Student evaluation and assessment practices	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
e)	ICT (information and communication technology) skills for teaching	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
f)	Student behavior and classroom management	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
g)	School management and administration	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
h)	Approaches to individualized learning	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
i)	Teaching students with special needs (see Question 9 for the definition)	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
j)	Teaching in a multicultural or multilingual setting	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
k)	Teaching cross-curricular skills (e.g. problem solving, learning-to-learn)	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
l)	Approaches to developing cross-occupational competencies for future work or future studies	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
m)	New technologies in the workplace	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
n)	Student career guidance and counseling	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4
o)	Implementation of national/state curriculum standards or Common Core standards	☐ 1	☐ 2	☐ 1	☐ 2	☐ 3	☐ 4

25. For the professional development in which you participated in the last 12 months, how much did you personally have to pay for?

Please mark one choice.

☐ 1 None

☐ 2 Some

☐ 3 All

26. For the professional development in which you participated in the last 12 months, did you receive any of the following support?

Please mark one choice in each row.

		Yes	No
a)	I received scheduled time off for activities that took place during regular working hours at this school.	☐ 1	☐ 2
b)	I received a salary supplement for activities outside working hours.	☐ 1	☐ 2
c)	I received non-monetary support for activities outside working hours (reduced teaching, days off, study leave, etc.).	☐ 1	☐ 2

27. Considering the professional development activities you took part in during the last 12 months, to what extent have they included the following?

Please mark one choice in each row.

		Not in any activities	Yes, in some activities	Yes, in most activities	Yes, in all activities
a)	A group of colleagues from my school or subject group	☐ 1	☐ 2	☐ 3	☐ 4
b)	Opportunities for active learning methods (not only listening to a lecture)	☐ 1	☐ 2	☐ 3	☐ 4
c)	Collaborative learning activities or research with other teachers	☐ 1	☐ 2	☐ 3	☐ 4
d)	An extended time-period (several occasions spread out over several weeks or months)	☐ 1	☐ 2	☐ 3	☐ 4

28. For each of the areas listed below, please indicate the degree to which you currently need professional development.

Please mark one choice in each row.

		No need at present	Low level of need	Moderate level of need	High level of need
a)	Knowledge and understanding of my subject field(s)	☐ 1	☐ 2	☐ 3	☐ 4
b)	Pedagogical competencies in teaching my subject field(s)	☐ 1	☐ 2	☐ 3	☐ 4
c)	Knowledge of the curriculum	☐ 1	☐ 2	☐ 3	☐ 4
d)	Student evaluation and assessment practice	☐ 1	☐ 2	☐ 3	☐ 4
e)	ICT (information and communication technology) skills for teaching	☐ 1	☐ 2	☐ 3	☐ 4
f)	Student behavior and classroom management	☐ 1	☐ 2	☐ 3	☐ 4
g)	School management and administration	☐ 1	☐ 2	☐ 3	☐ 4
h)	Approaches to individualized learning	☐ 1	☐ 2	☐ 3	☐ 4
i)	Teaching students with special needs (see Question 9 for the definition)	☐ 1	☐ 2	☐ 3	☐ 4
j)	Teaching in a multicultural or multilingual setting	☐ 1	☐ 2	☐ 3	☐ 4
k)	Teaching cross-curricular skills (e.g. problem solving, learning-to-learn)	☐ 1	☐ 2	☐ 3	☐ 4
l)	Approaches to developing cross-occupational competencies for future work or future studies	☐ 1	☐ 2	☐ 3	☐ 4
m)	New technologies in the workplace	☐ 1	☐ 2	☐ 3	☐ 4
n)	Student career guidance and counseling	☐ 1	☐ 2	☐ 3	☐ 4
o)	Implementation of national/state curriculum standards or Common Core standards	☐ 1	☐ 2	☐ 3	☐ 4

29. How strongly do you agree or disagree that the following present barriers to your participation in professional development?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	I do not have the prerequisites (e.g. qualifications, experience, seniority).	☐ 1	☐ 2	☐ 3	☐ 4
b)	Professional development is too expensive/unaffordable.	☐ 1	☐ 2	☐ 3	☐ 4
c)	There is a lack of employer support.	☐ 1	☐ 2	☐ 3	☐ 4
d)	Professional development conflicts with my work schedule.	☐ 1	☐ 2	☐ 3	☐ 4
e)	I do not have time because of family responsibilities.	☐ 1	☐ 2	☐ 3	☐ 4
f)	There is no relevant professional development offered. .	☐ 1	☐ 2	☐ 3	☐ 4
g)	There are no incentives for participating in such activities.	☐ 1	☐ 2	☐ 3	☐ 4
h)	The professional development offered is of poor quality.	☐ 1	☐ 2	☐ 3	☐ 4
i)	Professional development is not readily accessible to me.	☐ 1	☐ 2	☐ 3	☐ 4

Teacher Feedback

We would like to ask you about the feedback you receive about your work in this school.

'Feedback' is defined broadly as including any communication you receive about your teaching, based on some form of interaction with your work (e.g. observing you teach students, discussing your curriculum or students' performance).

Feedback can be provided through informal discussions with you or as part of a more formal and structured arrangement.

30. In this school, who uses the following methods to provide feedback to you?

'External individuals or bodies' as used below refer to, for example, inspectors, local or state education authorities, or other persons from outside the school.

Please mark as many choices as appropriate in each row.

	External individuals or bodies	School principal	Member(s) of the school manage-ment team	Assigned mentors	Other teachers (not a part of the manage-ment team)	I have never received this type of feedback in this school
a) Feedback following direct observation of your classroom teaching	☐1	☐1	☐1	☐1	☐1	☐1
b) Feedback from student surveys about your teaching	☐1	☐1	☐1	☐1	☐1	☐1
c) Feedback following an assessment of your content knowledge	☐1	☐1	☐1	☐1	☐1	☐1
d) Feedback following an analysis of your students' test scores	☐1	☐1	☐1	☐1	☐1	☐1
e) Feedback following your self-assessment of your work (e.g. presentation of a portfolio assessment)	☐1	☐1	☐1	☐1	☐1	☐1
f) Feedback following surveys or discussions with parents or guardians	☐1	☐1	☐1	☐1	☐1	☐1

If you answered 'I have never received this type of feedback in this school' to each of the above → Please go to Question 33.

31. In your opinion, when you receive this feedback, what is the emphasis placed on the following areas?

Please mark one choice in each row.

		Not considered at all	Considered with low importance	Considered with moderate importance	Considered with high importance
a)	Student performance	☐ 1	☐ 2	☐ 3	☐ 4
b)	Knowledge and understanding of my subject field(s) ..	☐ 1	☐ 2	☐ 3	☐ 4
c)	Pedagogical competencies in teaching my subject field(s)	☐ 1	☐ 2	☐ 3	☐ 4
d)	Student assessment practices	☐ 1	☐ 2	☐ 3	☐ 4
e)	Student behavior and classroom management	☐ 1	☐ 2	☐ 3	☐ 4
f)	Teaching of students with special needs (see Question 9 for the definition)	☐ 1	☐ 2	☐ 3	☐ 4
g)	Teaching in a multicultural or multilingual setting	☐ 1	☐ 2	☐ 3	☐ 4
h)	The feedback I provide to other teachers to improve their teaching	☐ 1	☐ 2	☐ 3	☐ 4
i)	Feedback from parents or guardians	☐ 1	☐ 2	☐ 3	☐ 4
j)	Student feedback	☐ 1	☐ 2	☐ 3	☐ 4
k)	Collaboration or working with other teachers	☐ 1	☐ 2	☐ 3	☐ 4

32. Concerning the feedback you have received at this school, to what extent has it directly led to a <u>positive change</u> in any of the following?

Please mark one choice in each row.

		No positive change	A small change	A moderate change	A large change
a)	Your public recognition from the principal and/or your colleagues	☐ 1	☐ 2	☐ 3	☐ 4
b)	Your role in school development initiatives (e.g. curriculum development group, development of school objectives)	☐ 1	☐ 2	☐ 3	☐ 4
c)	The likelihood of your career advancement (e.g. promotion)	☐ 1	☐ 2	☐ 3	☐ 4
d)	The amount of professional development you undertake	☐ 1	☐ 2	☐ 3	☐ 4
e)	Your job responsibilities at this school	☐ 1	☐ 2	☐ 3	☐ 4
f)	Your confidence as a teacher	☐ 1	☐ 2	☐ 3	☐ 4
g)	Your salary and/or financial bonus	☐ 1	☐ 2	☐ 3	☐ 4
h)	Your classroom management practices	☐ 1	☐ 2	☐ 3	☐ 4
i)	Your knowledge and understanding of your main subject field(s)	☐ 1	☐ 2	☐ 3	☐ 4
j)	Your teaching practices	☐ 1	☐ 2	☐ 3	☐ 4
k)	Your methods for teaching students with special needs (see Question 9 for the definition)	☐ 1	☐ 2	☐ 3	☐ 4
l)	Your use of student assessments to improve student learning	☐ 1	☐ 2	☐ 3	☐ 4
m)	Your job satisfaction	☐ 1	☐ 2	☐ 3	☐ 4
n)	Your motivation	☐ 1	☐ 2	☐ 3	☐ 4

33. We would now like to ask you about teacher appraisal and feedback in this school more generally. How strongly do you agree or disagree with the following statements about this school?

Here, 'appraisal' is defined as review of teachers' work. This appraisal can be conducted in a range of ways from a more formal approach (e.g. as part of a formal performance management system, involving set procedures and criteria) to a more informal approach (e.g. through informal discussions).

When a statement does not apply in your context, please skip the item.

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	The best performing teachers in this school receive the greatest recognition (e.g. rewards, additional training or responsibilities).	☐ 1	☐ 2	☐ 3	☐ 4
b)	Teacher appraisal and feedback have little impact on the way teachers teach in the classroom.	☐ 1	☐ 2	☐ 3	☐ 4
c)	Teacher appraisal and feedback are largely done to fulfill administrative requirements.	☐ 1	☐ 2	☐ 3	☐ 4
d)	A development or training plan is established for teachers to improve their work as a teacher.	☐ 1	☐ 2	☐ 3	☐ 4
e)	Feedback is provided to teachers based on a thorough assessment of their teaching.	☐ 1	☐ 2	☐ 3	☐ 4
f)	If a teacher is consistently under-performing, he/she would be dismissed.	☐ 1	☐ 2	☐ 3	☐ 4
g)	Measures to remedy any weaknesses in teaching are discussed with the teacher.	☐ 1	☐ 2	☐ 3	☐ 4
h)	A mentor is appointed to help the teacher improve his/her teaching.	☐ 1	☐ 2	☐ 3	☐ 4
i)	High-performing teachers are promoted to positions of greater influence and authority.	☐ 1	☐ 2	☐ 3	☐ 4
j)	Struggling teachers are provided with additional support to improve their performance.	☐ 1	☐ 2	☐ 3	☐ 4

Your Teaching in General

34. We would like to ask about your personal beliefs on teaching and learning. Please indicate how strongly you agree or disagree with each of the following statements.

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	My role as a teacher is to facilitate students' own inquiry.	☐ 1	☐ 2	☐ 3	☐ 4
b)	Students learn best by finding solutions to problems on their own.	☐ 1	☐ 2	☐ 3	☐ 4
c)	Students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved.	☐ 1	☐ 2	☐ 3	☐ 4
d)	Thinking and reasoning processes are more important than specific curriculum content.	☐ 1	☐ 2	☐ 3	☐ 4

35. On average, how often do you do the following in this school?

Please mark one choice in each row.

		Never	Once a year or less	2-4 times a year	5-10 times a year	1-3 times a month	Once a week or more
a)	Teach jointly as a team in the same class	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
b)	Observe other teachers' classes and provide feedback	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
c)	Engage in joint activities across different classes and age groups (e.g. projects)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
d)	Exchange teaching materials with colleagues	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
e)	Engage in discussions about the learning development of specific students	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
f)	Work with other teachers in my school to ensure the use of common standards in evaluations assessing student progress	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
g)	Attend team conferences	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
h)	Take part in collaborative professional learning	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

36. In your teaching, to what extent can you do the following?

Please mark one choice in each row.

		Not at all	To some extent	Quite a bit	A lot
a)	Get students to believe they can do well in school work ..	☐ 1	☐ 2	☐ 3	☐ 4
b)	Help my students value learning	☐ 1	☐ 2	☐ 3	☐ 4
c)	Craft good questions for my students	☐ 1	☐ 2	☐ 3	☐ 4
d)	Control disruptive behavior in the classroom	☐ 1	☐ 2	☐ 3	☐ 4
e)	Motivate students who show low interest in school work .	☐ 1	☐ 2	☐ 3	☐ 4
f)	Make my expectations about student behavior clear	☐ 1	☐ 2	☐ 3	☐ 4
g)	Help students think critically	☐ 1	☐ 2	☐ 3	☐ 4
h)	Get students to follow classroom rules	☐ 1	☐ 2	☐ 3	☐ 4
i)	Calm a student who is disruptive or noisy	☐ 1	☐ 2	☐ 3	☐ 4
j)	Use a variety of assessment strategies	☐ 1	☐ 2	☐ 3	☐ 4
k)	Provide an alternative explanation (e.g., when students are confused)	☐ 1	☐ 2	☐ 3	☐ 4
l)	Implement alternative instructional strategies in my classroom	☐ 1	☐ 2	☐ 3	☐ 4

Your Teaching in the Target Class

In the following, we want to get into more detail about your teaching practices. Within this questionnaire, we cannot cover the whole scope of your teaching. Therefore, we use an exemplary approach and focus on the teaching of one specific class.

The following questions ask you about a particular class that you teach. The class that we would like you to answer questions about is the first 7th, 8th, or 9th grade class that you taught in this school after 11 a.m. last Tuesday. Please note that if you do not teach a 7th, 8th, or 9th grade class on Tuesday, you can answer the following questions about a class taught on a day following the Tuesday of last week.

In the questions below, this class will be referred to as the target class.

37. We would like to understand the composition of the target class. Please estimate the broad percentage of students who have the following characteristics.

'Socioeconomically disadvantaged homes' refers to homes lacking the basic necessities or advantages of life, such as adequate income, housing, nutrition or medical care.

This question asks about your personal perception of student background. It is acceptable to base your replies on rough estimates.

Students may fall into multiple categories.

Please mark one choice in each row.

		None	1% to 10%	11% to 30%	31% to 60%	More than 60%
a)	Students whose first language is not English	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
b)	Low academic achievers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
c)	Students with special needs (see Question 9 for the definition)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
d)	Students with behavioral problems	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
e)	Students from socioeconomically disadvantaged homes	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
f)	Academically gifted students	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

38. Is your teaching in the target class directed entirely or mainly to students with special needs?

See Question 9 for the definition of students with special needs.

Please mark one choice.

☐ 1 Yes → **Please go to Question 46.**

☐ 2 No

39. Into which subject category does this <u>target class</u> fall?

Please mark one choice.

☐ 1 Reading, writing and literature

Includes reading and writing (and literature) in English language arts, public speaking, literature, composition, communications, journalism

☐ 2 English as a Second Language (ESL)

Includes ESL or bilingual education in support of students' subject matter learning

☐ 3 Mathematics

Includes basic and general mathematics, geometry, pre-algebra, algebra, business and applied mathematics, statistics and probability, trigonometry, calculus, and pre-calculus

☐ 4 Science

Includes general or integrated science, physics, physical science, chemistry, biology or life science, human biology, environmental science, Earth science

☐ 5 Social studies/Social science

Includes general social studies, anthropology, economics, geography, government or civics, history, philosophy, psychology, sociology

☐ 6 Modern foreign languages

Includes languages other than English (e.g., French, German, Spanish, ASL)

☐ 7 Classical Greek and/or Latin

☐ 8 Technology

Includes orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology

☐ 9 Arts

Includes arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework

☐ 10 Physical and health education

Includes physical education, gymnastics, dance, health

☐ 11 Religion and/or ethics

Includes religion, history of religions, religion culture, ethics

☐ 12 Business studies

Includes accounting, business management, business principles and ethics, marketing and distribution

☐ 13 Practical and vocational skills

Includes vocational skills (preparation for a specific occupation), agriculture and natural resources, domestic science, career education, clothing and textiles, construction trades, cosmetology, culinary arts, driving, health occupations, home economics, mechanics and repair, polytechnic courses, secretarial studies, tourism and hospitality, handicraft

☐ 14 Special education

Includes education of students with special needs

☐ 15 Other

40. How many students are currently enrolled in this <u>target class</u>?

Please write a number.

⌊_⌋⌊_⌋ Students

41. For this <u>target class</u>, what percentage of class time is typically spent on each of the following activities?

Write a percentage for each activity. Write 0 (zero) if none.
Please ensure that responses add up to 100%.

a) ⌊_⌋⌊_⌋⌊_⌋ % Administrative tasks (e.g. recording attendance, handing out school information/forms)

b) ⌊_⌋⌊_⌋⌊_⌋ % Keeping order in the classroom (maintaining discipline)

c) ⌊_⌋⌊_⌋⌊_⌋ % Actual teaching and learning

100 % Total

42. Please indicate how representative you feel the <u>target class</u> is of all the classes you teach.

Please mark one choice.

☐1 Very representative

☐2 Representative

☐3 Not representative

43. How strongly do you agree or disagree with the following statements about this <u>target class</u>?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	When the lesson begins, I have to wait quite a long time for students to quiet down.	☐1	☐2	☐3	☐4
b)	Students in this class take care to create a pleasant learning atmosphere.	☐1	☐2	☐3	☐4
c)	I lose quite a lot of time because of students interrupting the lesson.	☐1	☐2	☐3	☐4
d)	There is much disruptive noise in this classroom.	☐1	☐2	☐3	☐4

44. How often does each of the following happen in the target class throughout the school year?

Please mark one choice in each row.

		Never or almost never	Occasionally	Frequently	In all or nearly all lessons
a)	I present a summary of recently learned content.	☐ 1	☐ 2	☐ 3	☐ 4
b)	Students work in small groups to come up with a joint solution to a problem or task.	☐ 1	☐ 2	☐ 3	☐ 4
c)	I give different work to the students who have difficulties learning and/or to those who can advance faster.	☐ 1	☐ 2	☐ 3	☐ 4
d)	I refer to a problem from everyday life or work to demonstrate why new knowledge is useful.	☐ 1	☐ 2	☐ 3	☐ 4
e)	I let students practice similar tasks until I know that every student understands the subject matter.	☐ 1	☐ 2	☐ 3	☐ 4
f)	I check my students' exercise books or homework.	☐ 1	☐ 2	☐ 3	☐ 4
g)	Students work on projects that require at least one week to complete.	☐ 1	☐ 2	☐ 3	☐ 4
h)	Students use ICT (information and communication technology) for projects or class work.	☐ 1	☐ 2	☐ 3	☐ 4

45. How often do you use the following methods to assess student learning in the target class?

Please mark one choice in each row.

		Never or almost never	Occasionally	Frequently	In all or nearly all lessons
a)	I develop and administer my own assessment.	☐ 1	☐ 2	☐ 3	☐ 4
b)	I administer a standardized test.	☐ 1	☐ 2	☐ 3	☐ 4
c)	I have individual students answer questions in front of the class.	☐ 1	☐ 2	☐ 3	☐ 4
d)	I provide written feedback on student work in addition to a letter grade or numeric score.	☐ 1	☐ 2	☐ 3	☐ 4
e)	I let students evaluate their own progress.	☐ 1	☐ 2	☐ 3	☐ 4
f)	I observe students when working on particular tasks and provide immediate feedback.	☐ 1	☐ 2	☐ 3	☐ 4

School Climate and Job Satisfaction

46. How strongly do you agree or disagree with these statements as applied to this school?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	This school provides staff with opportunities to actively participate in school decisions.	☐ 1	☐ 2	☐ 3	☐ 4
b)	This school provides parents or guardians with opportunities to actively participate in school decisions.	☐ 1	☐ 2	☐ 3	☐ 4
c)	This school provides students with opportunities to actively participate in school decisions.	☐ 1	☐ 2	☐ 3	☐ 4
d)	This school has a culture of shared responsibility for school issues.	☐ 1	☐ 2	☐ 3	☐ 4
e)	There is a collaborative school culture which is characterized by mutual support.	☐ 1	☐ 2	☐ 3	☐ 4
f)	Teachers get along well with the school leadership.	☐ 1	☐ 2	☐ 3	☐ 4

47. How strongly do you agree or disagree with the following statements about what happens in this school?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	In this school, teachers and students usually get along well with each other.	☐ 1	☐ 2	☐ 3	☐ 4
b)	Most teachers in this school believe that the students' well-being is important.	☐ 1	☐ 2	☐ 3	☐ 4
c)	Most teachers in this school are interested in what students have to say.	☐ 1	☐ 2	☐ 3	☐ 4
d)	If a student from this school needs extra assistance, the school provides it.	☐ 1	☐ 2	☐ 3	☐ 4

48. We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?

Please mark one choice in each row.

		Strongly disagree	Disagree	Agree	Strongly agree
a)	The advantages of being a teacher clearly outweigh the disadvantages.	☐ 1	☐ 2	☐ 3	☐ 4
b)	If I could decide again, I would still choose to work as a teacher.	☐ 1	☐ 2	☐ 3	☐ 4
c)	I would like to change to another school if that were possible.	☐ 1	☐ 2	☐ 3	☐ 4
d)	I regret that I decided to become a teacher.	☐ 1	☐ 2	☐ 3	☐ 4
e)	I enjoy working at this school.	☐ 1	☐ 2	☐ 3	☐ 4
f)	I wonder whether it would have been better to choose another profession.	☐ 1	☐ 2	☐ 3	☐ 4
g)	I would recommend my school as a good place to work. .	☐ 1	☐ 2	☐ 3	☐ 4
h)	I think that the teaching profession is valued in society. ..	☐ 1	☐ 2	☐ 3	☐ 4
i)	I am satisfied with my performance in this school.	☐ 1	☐ 2	☐ 3	☐ 4
j)	All in all, I am satisfied with my job.	☐ 1	☐ 2	☐ 3	☐ 4

49. Finally, how strongly do you agree or disagree with the following statements concerning your personal attitudes?

Please mark one choice in each row.

		Totally disagree	…	…	Neutral	…	…	Totally agree
a)	I always listen carefully to students.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
b)	I am confident about my judgments about students.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
c)	I have doubts about my ability to succeed as a teacher.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
d)	I have always been honest with myself about my teaching qualities.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
e)	I feel threatened by teachers who are very successful.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
f)	I have said things that hurt colleagues' or students' feelings.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
g)	I feel angry when colleagues express ideas different from my own.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
h)	I help students and colleagues in trouble.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
i)	I admit when I do not know something if a student asks a question in class.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
j)	I am irritated by students who ask for favors.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7

This is the end of the questionnaire.

Thank you very much for your participation!

Please put the questionnaire in the pre-paid, pre-addressed business reply envelope and mail to Strategic Research Group.

Appendix D. TALIS 2013 Questionnaire Adaptations

Any type of adaptations that were made to the U.S. versions of the questionnaires is included in this appendix. These include adaptations to spelling, punctuation, hyphenation, wording, answer categories, new USA-only questions, question numbering, and skip instructions that were added to accommodate new USA-only questions.

Exhibit Page

Exhibit D-1. Principal Questionnaire: Questions that require national adaptations

2013 International question number	2013 International Version	2013 International variable name	2013 USA question number	2013 USA Adaptation	2013 USA variable name	Recoding instructions
Q03	**What is the highest level of formal education you have completed?** *Please mark one choice.* 1 = <Below ISCED Level 5> 2 = <ISCED Level 5B> 3 = <ISCED Level 5A> 4 = <ISCED Level 6>	TC2G03	Q03	**What is the highest level of formal education you have completed?** *Please mark one choice.* 1= High school and/or some college courses 2= Associate's degree 3= Bachelor's degree 4= Master's degree 5= Doctoral degree or equivalent (Ph.D., Ed.D., J.D., M.D.)	TC2G03_USA2	USA --> International 1 --> 1 2 --> 2 3 --> 3 4 --> 3 5 --> 4
Q06	**Did the formal education you completed include the following and, if yes, was this before or after you took up a position as principal?** *Please mark one choice in each row.* 1 = Before 2 = After 3 = Before and After 4 = Never	†	Q06	**Did the formal education you completed include the following and, if yes, was this before, after, or before and after you took up a position as principal?** *Please mark one choice in each row.* 1 = Before 2 = After 3 = Before and After 4 = Never	†	†
Q06A	School administration or principal training programme or course	TC2G06A	Q06A	School administration or principal training program or course	TC2G06A	†
Q06B	Teacher training/education programme or course	TC2G06B	Q06B	Teacher training/education program or course	TC2G06B	†
Q07	**During the last <u>12 months</u>, did you participate in any of the following professional development activities aimed at you as a principal, and if yes, for how many days?** *Professional development is defined as activities that aim to develop an individual's professional skills and knowledge. Please indicate 'Yes' or 'No' in part (A) for each of the activities listed below. If 'Yes' in part (A), please specify the number of days spent on the activity in part (B). Please sum up activities in full days (a full day is 6-8 hours). Please include activities taking place during weekends, evenings or other off work hours.* (A) Participation 1 = Yes 2 = No (B) Duration in days _____	†	Q07	**During the last <u>12 months</u>, did you participate in any of the following professional development activities aimed at you as a principal, and if yes, for how many days?** *Professional development is defined as activities that aim to develop an individual's professional skills and knowledge. Please indicate 'Yes' or 'No' in part (A) for each of the activities listed below. If 'Yes' in part (A), please specify the number of days spent on the activity in part (B). Please sum up activities in full days (a full day is 6-8 hours). Please include activities taking place during weekends, evenings or other off-work hours.* (A) Participation 1 = Yes 2 = No (B) Duration in days _____	†	†

2013 International question number	**2013 International Version**	**2013 International variable name**	**2013 USA question number**	**2013 USA Adaptation**	**2013 USA variable name**	**Recoding instructions**
Q08A	I do not have the pre-requisites (e.g. qualifications, experience, seniority).	TC2G08A	Q08A	I do not have the prerequisites (e.g. qualifications, experience, seniority).	TC2G08A	†
†	***New USA-only question	†	Q08H	The professional development offered is of poor quality.	TC2G08H_USAX2	†
†	***New USA-only question	†	Q08I	Professional development is not readily accessible to me.	TC2G08I_USAX2	†
Q09	**Which best describes this school's location?** *Please mark one choice.* 1 = [Hamlet or rural area] (1,000 people or fewer) 2 = [Village] (1,001 to 3,000 people) 3 = [Small town] (3,001 to 15,000 people) 4 = [Town] (15,001 to 100,000 people) 5 = [City] (100,001 to 1,000,000 people) 6 = [Large city] (more than 1,000,000 people)	TC2G09	Q09	**Which best describes the community in which your school is located?** *Please mark one choice.* 1 = Rural area (1,000 people or fewer) 2 = Village (1,001 to 3,000 people) 3 = Small town (3,001 to 15,000 people) 4 = Town (15,001 to 100,000 people) 5 = City (100,001 to 1,000,000 people) 6 = Large city (more than 1,000,000 people)	TC2G09	†
Q10	**Is this school publicly- or privately-managed?** *Please mark one choice.* 1 = Publicly-managed *This is a school managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise.* 2 = Privately-managed *This is a school managed by a non-government organisation; e.g. a {church,} trade union, business or other private institution.*	TC2G10	Q10	**Is this school publicly- or privately-managed?** *Please mark one choice.* 1 = Publicly-managed *This is a school managed by a public education authority, government agency, or governing board appointed by government or elected by public franchise.* 2 = Privately-managed *This is a school managed by a non-government organization; e.g. a religious institution, trade union, business or other private institution*.	TC2G10	†
Q11A	50% or more of the school's funding comes from the <government>. *Includes departments, municipal, local, regional, state and national*	TC2G11A	Q11A	50% or more of the school's funding comes from the government. *Includes local, state and national*	TC2G11A	†
Q11B	Teaching personnel are funded by the <government>. *Includes departments, municipal, local, regional, state and national*	TC2G11B	Q11B	Teaching personnel are funded by the government. *Includes local, state and national*	TC2G11B	†

2013 International question number	2013 International Version	2013 International variable name	2013 USA question number	2013 USA Adaptation	2013 USA variable name	Recoding instructions
Q12B	Personnel for pedagogical support, irrespective of the grades/ages they support *Including all teacher aides or other non-teaching professionals who provide instruction or support teachers in providing instruction, professional curriculum/instructional specialists, educational media specialists, psychologists {and nurses}*	TC2G12B	Q12B	Personnel for pedagogical support, irrespective of the grades/ages they support *Including all teacher aides or other non-teaching professionals who provide instruction or support teachers in providing instruction, professional curriculum/instructional specialists, educational media specialists, and school psychologists*	TC2G12B	†
Q12C	School administrative personnel *Including receptionists, secretaries, and administration assistants*	TC2G12C	Q12C	School administrative personnel *Including receptionists, secretaries, and administrative assistants*	TC2G12C	†
Q13	**Are the following <ISCED levels> and/or programmes taught in this school and, if yes, are there other schools in your location that compete for students at that level and/or programme?** *Please indicate 'Yes' or 'No' in part (A) for each of the levels and/or programmes listed below. If 'Yes' in part (A), please indicate in part (B) the number of other schools in this location that compete for your students.* (A) Level/programme taught 1 = Yes 2 = No (B) Competition 1 = Two or more other schools 2 = One other school 3 = No other schools	†	Q13	**Are the following education levels and/or programs taught in this school and, if yes, are there other schools in your area that compete for students at that education level and/or program?** *Please indicate 'Yes' or 'No' in part (A) for each of the levels and/or programs listed below. If 'Yes' in part (A), please indicate in part (B) the number of other schools in this area that compete for your students.* (A) Level/program taught 1 = Yes 2 = No (B) Competition 1 = Two or more other schools 2 = One other school 3 = No other schools	†	†
Q13A	<ISCED Level 0>	TC2G13A1-A2	Q13A	Pre-primary education (pre-kindergarten, preschool, or kindergarten)	TC2G13A1-A2	†
Q13B	<ISCED Level 1>	TC2G13B1-B2	Q13B	Primary education (any of grades 1-6)	TC2G13B1-B2	†
Q13C	<ISCED Level 2>	TC2G13C1-C2	Q13C	Lower secondary education (any of grades 7-9)	TC2G13C1-C2	†
Q13D	<ISCED Level 3> general education programmes	TC2G13D1-D2	Q13D	Upper secondary (any of grades 10-12) general education programs	TC2G13D1-D2	†
Q13E	<ISCED Level 3> vocational or technical education programmes	TC2G13E1-E2	Q13E	Upper secondary (any of grades 10-12) vocational or technical education programs	TC2G13E1-E2	†

2013 International question number	**2013 International Version**	**2013 International variable name**	**2013 USA question number**	**2013 USA Adaptation**	**2013 USA variable name**	**Recoding instructions**
Q14	**What is the <u>current</u> school enrolment, i.e. the number of students of all grades/ages in this school?** *Please write a number.* _____ Students	TC2G14	Q14	**What is the <u>current</u> school enrollment (i.e., the number of students of all grades/ages in this school)?** *Please write a number.* _____ Students	TC2G14	†
Q15	**Please <u>estimate</u> the broad percentage of [<ISCED level x> or 15-year-old] students in this school who have the following characteristics.** *<Special need students cover those for whom a special learning need has been <u>formally identified</u> because they are mentally, physically, or emotionally disadvantaged. [Often they will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education.]>* *< 'Socioeconomically disadvantaged homes' refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.>* *Students may fall into multiple categories.* *Please mark one choice in each row.* 1 = None 2 = 1% to 10% 3 = 11% to 30% 4 = 31% to 60% 5 = More than 60%	†	Q15	**Please <u>estimate</u> the broad percentage of 7th, 8th, and/or 9th grade students in this school who have the following characteristics.** *Students with special needs are those for whom a special learning need has been <u>formally identified</u> due to specific mental, physical, or emotional characteristics. Often they will be those for whom additional public or private resources (personnel, material, or financial) have been provided to support their education.* *'Socioeconomically disadvantaged homes' refers to homes lacking the basic necessities or advantages of life, such as adequate income, housing, nutrition or medical care. Students may fall into multiple categories.* *Please mark one choice in each row.* 1 = None 2 = 1% to 10% 3 = 11% to 30% 4 = 31% to 60% 5 = More than 60%	†	†
†	***New USA-only question	†	Q17I	Representatives of businesses, religious institutions, or other private institutions	TC2G17I_USA2	USA --> International 17I --> 17I 17J-->17I
Q17I	Other	TC2G17I	Q17J	†	TC2G17J_USA2	USA --> International 17I --> 17I 17J-->17I

2013 International question number	**2013 International Version**	**2013 International variable name**	**2013 USA question number**	**2013 USA Adaptation**	**2013 USA variable name**	**Recoding instructions**
Q18	**Regarding this school, who has a significant responsibility for the following tasks?** *A 'significant responsibility' is one where an active role is played in decision making.* *Please mark as many choices as appropriate in each row.* A(1)-K(1) = You, as principal A(2)-K(2) = Other members of the school management team A(3)-K(3) = Teachers (not as a part of the school management team) A(4)-K(4) = School <governing board> A(5)-K(5) = <Local, municipality/regional, state, or national/federal> authority	†	Q18	**Regarding this school, who has a significant responsibility for the following tasks?** *A 'significant responsibility' is one where an active role is played in decision making.* *Please mark as many choices as appropriate in each row.* A(1)-K(1) = You, as principal A(2)-K(2) = Other members of the school management team A(3)-K(3) = Teachers (not as a part of the school management team) A(4)-K(4) = School governing board A(5)-K(5) = Local school district or state education authority	†	†
Q18G	Establishing student assessment policies, including <national/regional> assessments	TC2G18G1-G5	Q18G	Establishing student assessment policies, including state and district assessments	TC2G18G1-G5	†
Q18J	Determining course content, including <national/regional> curricula	TC2G18J1-J5	Q18J	Determining course content, including state and district curricula	TC2G18J1-J5	†
Q19A	_____% Administrative and leadership tasks and meetings *Including human resource/personnel issues, regulations, reports, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state, or national education officials*	TC2G19A	Q19A	_____% Administrative and leadership tasks and meetings *Including human resource/personnel issues; regulations; reports; school budget; preparing timetables and class composition; strategic planning; leadership and management activities; responding to requests from district, regional, state, or national education officials*	TC2G19A	†
Q19C	_____% Student interactions *Including counselling and conversations outside structured learning activities, discipline*	TC2G19C	Q19C	_____% Student interactions *Including counseling and conversations outside structured learning activities, discipline*	TC2G19C	†
Q19E	_____% Interactions with local and regional community, business and industry	TC2G19E	Q19E	_____% Interactions with local and regional community, businesses and industries	TC2G19E	†
†	***New USA-only question	†	Q19F	_____% Extra-curricular planning and supervision	TC2G19F_USA2	USA --> International 19F --> 19F 19G-->19F
Q19F	_____% Other	TC2G19F	Q19G	†	TC2G19G_USA2	USA --> International 19F --> 19F 19G-->19F

2013 International question number	2013 International Version	2013 International variable name	2013 USA question number	2013 USA Adaptation	2013 USA variable name	Recoding instructions
Q20A	I used student performance and student evaluation results (including national/international assessments) to develop the school's educational goals and programmes.	TC2G20A	Q20A	I used student performance and student evaluation results (including national/international assessments) to develop the school's educational goals and programs.	TC2G20A	†
Q21C	I took actions to support co-operation among teachers to develop new teaching practices.	TC2G21C	Q21C	I took actions to support cooperation among teachers to develop new teaching practices.	TC2G21C	†
Q22E	There is a collaborative school culture which is characterised by mutual support.	TC2G22E	Q22E	There is a collaborative school culture which is characterized by mutual support.	TC2G22E	†
Q24A	Representatives of a <local, municipality/regional, state, or national/federal> authority	TC2G24A	Q24A	Representatives of a local school district or state education authority	TC2G24A	†
Q24H	Representatives of business, {labour market institutions, a church,} or other private institutions	TC2G24H	Q24H	Representatives of businesses, religious institutions, or other private institutions	TC2G24H	†
Q27E	External individuals or bodies (e.g. inspectors, municipality representatives, districts/jurisdictions office personnel, or other persons from outside the school)	TC2G27E	Q27E	External individuals or bodies (e.g. inspectors, local or state education authorities, or other persons from outside the school)	TC2G27E	†
Q28F	Discussion about feedback received from parents or guardians	TC2G28F1-F6	Q28F	Discussion about feedback received by parents or guardians	TC2G28F1-F6	†
Q29A	Measures to remedy any weaknesses in teaching are discussed with the teacher.	TC2G29A	Q29A	Measures to remedy any weaknesses in teaching are discussed with the teacher	TC2G29A	†
Q29B	A development or training plan is developed for each teacher.	TC2G29B	Q29B	A development or training plan is developed for each teacher	TC2G29B	†
Q29C	If a teacher is found to be a poor performer, material sanctions such as reduced annual increases in pay are imposed on the teacher.	TC2G29C	Q29C	If a teacher is found to be a poor performer, material sanctions such as reduced annual increases in pay are imposed on the teacher	TC2G29C	†
Q29D	A mentor is appointed to help the teacher improve his/her teaching.	TC2G29D	Q29D	A mentor is appointed to help the teacher improve his/her teaching	TC2G29D	†
Q30B	There is a high level of co-operation between the school and the local community.	TC2G30B	Q30B	There is a high level of cooperation between the school and the local community.	TC2G30B	†
Q31A	Shortage of qualified and/or [well performing] teachers	TC2G31A	Q31A	Shortage of qualified and/or high-performing teachers	TC2G31A	†
Q31F	Insufficient Internet access	TC2G31F	Q31F	Insufficient internet access	TC2G31F	†

2013 International question number	**2013 International Version**	**2013 International variable name**	**2013 USA question number**	**2013 USA Adaptation**	**2013 USA variable name**	**Recoding instructions**
Teacher Induction and Mentoring Section Introduction	*The following section includes questions on induction and mentoring.* *An 'induction programme' is defined as a structured range of activities at school to support new teachers' introduction into the teaching profession/school. Student teachers still within the teacher education programme are not included. An induction programme could include peer work with other new teachers, mentoring by experienced teachers, etc. The formal arrangement could be defined by your school, or in relation to other schools, or by educational authorities/external agencies.* *'Mentoring' is defined as a support structure at schools where more experienced teachers support less experienced teachers. This structure might involve all teachers in the school or only new teachers.*	†	Teacher Induction and Mentoring Section Introduction	*The following section includes questions on induction and mentoring.* *An 'induction program' is defined as a structured range of activities at school to support new teachers' introduction into the teaching profession/school. Student teachers still within the teacher education program are not included. An induction program may include peer work with other new teachers, mentoring by experienced teachers, etc. The formal arrangement may be defined by your school, in relation to other schools, or by educational authorities/external agencies.* *'Mentoring' is defined as a support structure at schools where more experienced teachers support less experienced teachers. This structure may involve all teachers in the school or only new teachers.*	†	†
Q33	**Do new teachers at this school have access to an induction programme?** *Please mark one choice in each row.* 1 = Yes 2 = No	†	Q33	**Do new teachers at this school have access to an induction program?** *Please mark one choice in each row.* 1 = Yes 2 = No	†	†
Q33A	There is an induction programme for new teachers.	TC2G33A	Q33A	There is an induction program for new teachers.	TC2G33A	†
Q33B	There are informal induction activities for new teachers not part of an induction programme.	TC2G33B	Q33B	There are informal induction activities for new teachers not part of an induction program.	TC2G33B	†
Q34	**Which teachers at this school are offered an induction programme?** *Please mark one choice.* 1 = All teachers who are new to this school 2 = Only teachers new to teaching	TC2G34	Q34	**Which teachers at this school are offered an induction program?** *Please mark one choice.* 1 = All teachers who are new to this school 2 = Only teachers new to teaching	TC2G34	†
Q35	**What structures and activities are included in this induction programme?** *Please mark as many choices as appropriate.*	†	Q35	**What structures and activities are included in this induction program?** *Please mark as many choices as appropriate.*	†	†

2013 International question number	**2013 International Version**	**2013 International variable name**	**2013 USA question number**	**2013 USA Adaptation**	**2013 USA variable name**	**Recoding instructions**
Q36	**Do teachers at your school have access to a mentoring system?** *Please mark one choice.* 1 = Yes, but only teachers who are new to teaching, i.e. in their first job as teachers, have access. 2 = Yes, all teachers who are new to this school have access. 3 = Yes, all teachers at this school have access. 4 = No, at present there is no access to a mentoring system for teachers in this school. **-> Please go to Question [38].**	TC2G36	Q36	**Do teachers at your school have access to a mentoring system?** *Please mark one choice.* 1 = Yes, but only teachers who are new to teaching (i.e. in their first job as teachers) have access 2 = Yes, all teachers who are new to this school have access 3 = Yes, all teachers at this school have access 4 = No, at present there is no access to a mentoring system for teachers in this school **-> If No, please go to Question 38.**	TC2G36	†

† Not applicable.

Exhibit D-2. Teacher Questionnaire: Questions that require national adaptations

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q04	**Why do you work part-time?** *Please mark one choice.* 1 = I chose to work part-time. 2 = There was no possibility to work full-time.	TT2G04	Q04	**Why do you work part-time?** *Please mark one choice.* 1 = I chose to work part-time 2 = There was no possibility to work full-time	TT2G04	†
Q06	**What is your employment status as a teacher <u>at this school</u>?** *Please mark one choice.* 1 = Permanent employment (an on-going contract with no fixed end-point before the age of retirement) 2 = Fixed-term contract for a period of more than 1 school year 3 = Fixed-term contract for a period of 1 school year or less	TT2G06	Q06	**What is your employment status as a teacher <u>at this school</u>?** *Please mark one choice.* 1 = Permanent employment (an ongoing contract with no fixed end-point before the age of retirement) 2 = Fixed-term contract for a period of more than 1 school year 3 = Fixed-term contract for a period of 1 school year or less	TT2G06	†
Q07	**Do you currently work as a teacher of [<ISCED level x>/15-year-olds] <u>at another school?</u>** *Please mark one choice.* 1 = Yes 2 = No -> Please go to Question [9].	TT2G07	Q07	**Do you currently work as a teacher of 7th, 8th, and/or 9th grade students <u>at another school</u>?** *Please mark one choice.* 1 = Yes 2 = No -> Please go to Question 9.	TT2G07	†
Q08	**If 'Yes' in the previous question, please indicate in how many <u>other</u> schools you currently [work as a <ISCED level x> teacher/teach to 15-year-old students].** *Please write a number.* _____ School(s)	TT2G08	Q08	**If 'Yes' in the previous question, please indicate in how many <u>other</u> schools you currently teach 7th, 8th, and/or 9th grade students.** *Please write a number.* _____ School(s)	TT2G08	†

2013 International Question Number	**2013 International Version**	**2013 International Variable Name**	**2013 USA Question Number**	**2013 USA Adaptation**	**2013 USA Variable Name**	**Recoding Instructions**
Q09	**Across all your [<ISCED level x> classes/classes where most students are 15 years old] at this school, how many are special needs students?** *<Special needs students cover those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged. [Often they will be those for whom additional public or private resources (personnel, material or financial) have been provided to support their education.]>* *Please mark one choice.* 1 = None 2 = Some 3 = Most 4 = All	TT2G09	Q09	**Across all your 7th, 8th, and/or 9th grade classes at this school, how many of your students are students with special needs?** *Students with special needs are those for whom a special learning need has been formally identified due to mental, physical, or emotional characteristics. Often they will be those for whom additional public or private resources (personnel, material, or financial) have been provided to support their education.* *Please mark one choice.* 1 = None 2 = Some 3 = Most 4 = All	TT2G09	†
Q10	**What is the highest level of formal education you have completed?** *Please mark one choice.* 1 = <Below ISCED Level 5> 2 = <ISCED Level 5B> 3 = <ISCED Level 5A> 4 = <ISCED Level 6>	TT2G10	Q10	**What is the highest level of formal education you have completed?** *Please mark one choice*. 1= High school and/or some college courses 2= Associate's degree 3= Bachelor's degree 4= Master's degree 5= Doctoral degree or equivalent (Ph.D., Ed.D., J.D., M.D.)	TT2G10_USA2	USA --> International 1 --> 1 2 --> 2 3 --> 3 4 --> 3 5 --> 4
Q11	**Did you complete a <teacher training programme>?** *Please mark one choice.* 1 = Yes 2 = No	TT2G11	Q11	**Did you complete a teacher education or training program?** *Please mark one choice.* 1 = Yes 2 = No	TT2G11	†
Q12C	Classroom practice (practicum, internship or student teaching) in the subject(s) I teach	TT2G12C	Q12C	Classroom practice (practicum, internship or student teaching) in the subject(s) I teach **If your formal education or training did not include classroom practice -> Go to Question 14.**	TT2G12C	†
†	***New USA-only question added	†	Q13	**How long did your classroom practicum, internship or student teaching last?** *Please mark one choice*. 1 = 4 weeks or less 2 = 5-7 weeks 3 = 8-11 weeks 4 = 12 weeks or more	TT2G13_USAX2	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q13	**In your teaching, to what extent do you feel prepared for the elements below?** *Please mark one choice in each row.* 1 = Not at all 2 = Somewhat 3 = Well 4 = Very well	†	Q14	†	†	†
Q13A	Content of the subject(s) I teach	TT2G13A	Q14A	†	TT2G13A	†
Q13B	Pedagogy of the subject(s) I teach	TT2G13B	Q14B	†	TT2G13B	†
Q13C	Classroom practice in the subject(s) I teach	TT2G13C	Q14C	†	TT2G13C	†
Q14	**Were any of the subject categories listed below included in your formal education or training?** *Please mark as many choices as appropriate in each row.* A(1)-M(1) = In <ISCED Level 4 or 5B> A(2)-M(2) = In <ISCED Level 5A or above> A(3)-M(3) = In <Subject specialisation> as part of the teacher training A(4)-M(4) = At the in-service or professional development stage	†	Q15	**Were any of the subject categories listed below included in your formal education or training?** *Please mark as many choices as appropriate in each row.* A(1)-P(1) = Included in high school, vocational certificate, or Associate's degree A(2)-P(2) = Included in Bachelor's degree or above A(3)-P(3) = Included in subject specialization as part of teacher education A(4)-P(4) = Included at the in-service or professional development stage	†	†
Q14	*Because this is an international survey, we had to categorise many of the actual subjects taught in schools into broad categories. Please refer to the subject examples below. If the exact name of one of your subjects is not listed, please mark the category you think best fits the subject.*	†	Q15	*Because this is an international survey, we had to categorize many of the actual subjects taught in schools into broad categories. Please refer to the subject examples below. If the exact name of one of your subjects is not listed, please mark the category you think best fits the subject.*	†	†
Q14	*<u>Reading, writing and literature</u>: reading and writing (and literature) in the mother tongue, in the language of instruction, or in the tongue of the country (region) as a second language (for non-natives); language studies, public speaking, literature*	†	Q15	*<u>Reading, writing and literature</u>: reading and writing (and literature) in English, language arts, public speaking, literature, composition, communications, journalism*	†	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q14	***New USA-only question added	†	Q15	*English as a Second Language (ESL): ESL or bilingual education in support of students' subject matter learning*	†	†
Q14	*Mathematics: mathematics, mathematics with statistics, geometry, algebra etc.*	†	Q15	*Mathematics: basic and general mathematics, geometry, pre-algebra, algebra, business and applied mathematics, statistics and probability, trigonometry, calculus, and pre-calculus*	†	†
Q14	*Science: science, physics, physical science, chemistry, biology, human biology, environmental science, agriculture/horticulture/forestry*	†	Q15	*Science: general or integrated science, physics, physical science, chemistry, biology or life science, human biology, environmental science, Earth science*	†	†
Q14	*Social studies: social studies, community studies, contemporary studies, economics, environmental studies, geography, history, humanities, legal studies, studies of the own country, social sciences, ethical thinking, philosophy*	†	Q15	*Social studies/Social science: general social studies, anthropology, economics, geography, government or civics, history, humanities, philosophy, psychology, sociology*	†	†
Q14	*Modern foreign languages: languages different from the language of instruction*	†	Q15	*Modern foreign languages: languages other than English (e.g., French, German, Spanish, ASL)*	†	†
Q14	*Ancient Greek and/or Latin*	†	Q15	*Classical Greek and/or Latin*	†	†
Q14	*Technology: orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology*	†	Q15	†	†	†
Q14	*Arts: arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework*	†	Q15	†	†	†
Q14	*Physical education: physical education, gymnastics, dance, health*	†	Q15	*Physical and health education: physical education, gymnastics, dance, health*	†	†
Q14	*Religion and/or ethics: religion, history of religions, religion culture, ethics*	†	Q15		†	†
Q14	***New USA-only question added	†	Q15	*Business studies: accounting, business management, business principles and ethics, marketing and distribution*	†	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q14	*Practical and vocational skills: vocational skills (preparation for a specific occupation), technics, domestic science, accountancy, business studies, career education, clothing and textiles, driving, home economics, polytechnic courses, secretarial studies, tourism and hospitality, handicraft*	†	Q15	*Practical and vocational skills: vocational skills (preparation for a specific occupation), agriculture and natural resources, domestic science, career education, clothing and textiles, construction trades, cosmetology, culinary arts, driving, health occupations, home economics, mechanics and repair, polytechnic courses, secretarial studies, tourism and hospitality, handicraft*	†	†
Q14	*Interdisciplinary subject: integration of content and perspective of several traditional school subjects*	†	Q15	†	†	†
Q14	***New USA-only question added	†	Q15	*Special education: education of students with special needs*	†	†
Q14A	Reading, writing and literature	TT2G14A1-A4	Q15A	†	TT2G14A1-A4_USA2A	†
†	***New USA-only question added	†	Q15B	English as a Second Language	TT2G14A1-A4_USA2B	USA --> International Q15A --> Q14A Q15B --> Q14A
Q14B	Mathematics	TT2G14B1-B4	Q15C	†	TT2G14B1-B4	†
Q14C	Science	TT2G14C1-C4	Q15D	†	TT2G14C1-C4	†
Q14D	Social studies	TT2G14D1-D4	Q15E	Social studies/Social science	TT2G14D1-D4	†
Q14E	Modern foreign languages	TT2G14E1-E4	Q15F	†	TT2G14E1-E4	†
Q14F	Ancient Greek and/or Latin	TT2G14F1-F4	Q15G	Classical Greek and/or Latin	TT2G14F1-F4	†
Q14G	Technology	TT2G14G1-G4	Q15H	†	TT2G14G1-G4	†
Q14H	Arts	TT2G14H1-H4	Q15I	†	TT2G14H1-H4	†
Q14I	Physical education	TT2G14I1-I4	Q15J	Physical and health education	TT2G14I1-I4	†
Q14J	Religion and/or ethics	TT2G14J1-J4	Q15K	†	TT2G14J1-J4	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
†	***New USA-only question added	†	Q15L	Business studies	TT2G14K1-K4_USA2	USA --> International Q15L --> Q14k Q15M --> Q14k
Q14K	Practical and vocational skills	TT2G14K1-K4	Q15M	†	TT2G15M1-M4_USA2	USA --> International Q15L --> Q14K Q15M --> Q14K
Q14L	Interdisciplinary subject	TT2G14L1-L4	Q15N	†	TT2G14L1-L4	†
†	***New USA-only question added	†	Q15O	Special education	TT2G14M1-M4_USA2	USA --> International Q15O --> Q14M Q15P --> Q14M
Q14M	Other (please specify below)	TT2G14M1-M4, TT2G14MT	Q15P	†	TT2G15P1-P4_USA2	USA --> International Q15O --> Q14M Q15P --> Q14M
Q15	**During this current school year, do you teach the subjects below to any [<ISCED LEVEL x>/15 year-old] students in this school?** *Please mark one choice in each row.* 1 = Yes 2 = No	†	Q16	**During this current school year, do you teach the subjects below to any 7th, 8th, and/or 9th grade students in this school?** *Please mark one choice in each row.* 1 = Yes 2 = No	†	†
Q15A	Reading, writing and literature	TT2G15A	Q16A	†	TT2G15A_USA2A	†
†	***New USA-only question added	†	Q16B	English as a Second Language	TT2G15A_USA2B	USA --> International Q16A --> Q15A Q16B --> Q15A
Q15B	Mathematics	TT2G15B	Q16C	†	TT2G15B	†
Q15C	Science	TT2G15C	Q16D	†	TT2G15C	†
Q15D	Social studies	TT2G15D	Q16E	Social studies/Social science	TT2G15D	†
Q15E	Modern foreign languages	TT2G15E	Q16F	†	TT2G15E	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q15F	Ancient Greek and/or Latin	TT2G15F	Q16G	Classical Greek and/or Latin	TT2G15F	†
Q15G	Technology	TT2G15G	Q16H	†	TT2G15G	†
Q15H	Arts	TT2G15H	Q16I	†	TT2G15H	†
Q15I	Physical education	TT2G15I	Q16J	Physical and health education	TT2G15I	†
Q15J	Religion and/or ethics	TT2G15J	Q16K	†	TT2G15J	†
†	***New USA-only question added	†	Q16L	Business studies	TT2G15K_ USA2	USA --> International Q16L --> Q15K Q16M --> Q15K
Q15K	Practical and vocational skills	TT2G15K	Q16M	†	TT2G16M_ USA2	†
†	***New USA-only question added	†	Q16N	Special education	TT2G15L_ USA2	USA --> International Q16N --> Q15L Q16O --> Q15L
Q15L	Other	TT2G15L	Q16O	†	TT2G16O_ USA2	†
Q16	**During your <u>most recent complete calendar week</u>, approximately how many 60-minute hours did you spend <u>in total</u> on teaching, planning lessons, marking, collaborating with other teachers, participating in staff meetings and on other tasks related to your job at this school?** *A 'complete' calendar week is one that <u>was not shortened by breaks, public holidays, sick leave etc.</u>* *Also include tasks that took place during weekends, evenings or other off classroom hours.* *Round to the nearest whole hour.* _____ Hours	TT2G16	Q17	**During your <u>most recent complete calendar week</u>, approximately how many 60-minute hours did you spend <u>in total</u> on teaching, planning lessons, grading, collaborating with other teachers, participating in staff meetings and on other tasks related to your job at this school?** *A 'complete' calendar week is one that <u>was not shortened by breaks, public holidays, sick leave etc.</u>* *Also include tasks that took place during weekends, evenings or other off-classroom hours.* *Round to the nearest whole hour.* _____ Hours	TT2G16	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q17	**Of this total, how many 60-minute hours did you spend on teaching during your <u>most recent complete calendar week</u>?** *Please only count actual teaching time.* *Time spent on preparation, marking, etc. will be recorded in Question [18].* _____ Hours	TT2G17	Q18	**Of this total, how many 60-minute hours did you spend on teaching during your <u>most recent complete calendar week</u>?** *Please only count actual teaching time.* *Time spent on preparation, grading, etc. will be recorded in Question 19.* _____ Hours	TT2G17	†
Q18	**As a teacher of this school, during your <u>most recent complete calendar week</u>, how many 60-minute hours did you spend on the following tasks?** *Also include tasks that took place during weekends, evenings or other off classroom hours. Please exclude all time spent teaching as this was recorded in the previous question.* *Rough estimates are sufficient.* *If you did not perform the task during the most recent complete calendar week, write 0 (zero).*	†	Q19	**As a teacher of this school, during your <u>most recent complete calendar week</u>, how many 60-minute hours did you spend on the following tasks?** *Also include tasks that took place during weekends, evenings or other off-classroom hours. Please exclude all time spent teaching as this was recorded in the previous question.* *Rough estimates are sufficient.* *If you did not perform the task during the most recent complete calendar week, write 0 (zero).*	†	†
Q18A	Individual planning or preparation of lessons either at school or out of school	TT2G18A	Q19A	†	TT2G18A	†
Q18B	Team work and dialogue with colleagues within this school	TT2G18B	Q19B	Teamwork and dialogue with colleagues within this school	TT2G18B	†
Q18C	Marking/correcting of student work	TT2G18C	Q19C	Grading/correcting of student work	TT2G18C	†
Q18D	Students counselling (including student supervision, virtual counselling, career guidance and delinquency guidance)	TT2G18D	Q19D	Student counseling (including student supervision, virtual counseling, career guidance and delinquency guidance)	TT2G18D	†
Q18E	Participation in school management	TT2G18E	Q19E	†	TT2G18E	†
Q18F	General administrative work (including communication, paperwork and other clerical duties you undertake in your job as a teacher)	TT2G18F	Q19F	†	TT2G18F	†
Q18G	Communication and co-operation with parents or guardians	TT2G18G	Q19G	Communication and cooperation with parents or guardians	TT2G18G	†
Q18H	Engaging in extracurricular activities (e.g. sports and cultural activities after school)	TT2G18H	Q19H	†	TT2G18H	†
†	***New USA-only question added	†	Q19I	Developing students' test-taking skills to improve performance on mandated assessments	TT2G19I_USA2	Q19I --> Q18I

2013 International Question Number	**2013 International Version**	**2013 International Variable Name**	**2013 USA Question Number**	**2013 USA Adaptation**	**2013 USA Variable Name**	**Recoding Instructions**
†	***New USA-only question added	†	Q19J	Administering, proctoring, and scoring mandated assessments	TT2G19J_USA2	Q19J --> Q18I
†	***New USA-only question added	†	Q19K	Reviewing and analyzing results of mandated assessments to improve instruction	TT2G19K_USA2	Q19K --> Q18I
Q18I	Other tasks	TT2G18I	Q19L	†	TT2G18I_USA2	Q19L --> Q18I
Q19	**In your first regular employment as a teacher, did/do you take part in any induction programme?** *An 'induction programme' is defined as a range of structured activities to support your introduction into the teaching profession, for example peer work with other new teachers, mentoring by experienced teachers, etc.* *Please mark one choice in each row.* 1 = Yes 2 = No	†	Q20	**In your first regular employment as a teacher, did/do you take part in any induction program?** *An 'induction program' is defined as a range of structured activities to support your introduction into the teaching profession, for example peer work with other new teachers, mentoring by experienced teachers, etc.* *Please mark one choice in each row.* 1 = Yes 2 = No	†	†
Q19A	I took/take part in an induction programme.	TT2G19A	Q20A	I took/take part in an induction program.	TT2G19A	†
Q19B	I took/take part in informal induction activities not part of an induction programme.	TT2G19B	Q20B	I took/take part in informal induction activities not part of an induction program.	TT2G19B	†
Q19C	I took/take part in a general and/or administrative introduction to the school.	TT2G19C	Q20C	I took/take part in a general and/or administrative introduction to the school. **If you do/did not take part in an induction program or in informal induction activities -> Please go to Question 22.**	TT2G19C	†
†	***New USA-only question added	†	Q21	**In your first, regular employment as a teacher, how often did/do you take part in the induction program or informal induction activities?** *Please mark one choice.* 1 = A few occasions 2 = Multiple occasions across several months of my first year of teaching 3 = Consistently throughout my first year of teaching	TT2G21_USAX2	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q20	**Are you currently involved in any mentoring activities?** *This question refers to mentoring by or for teachers at your school. It does not refer to students within the teacher education who are practising as teachers at school.* *Please mark one choice in each row.* 1 = Yes 2 = No	†	Q22	**Are you currently involved in any mentoring activities?** *This question refers to mentoring by or for teachers at your school. It does not refer to students in teacher education programs who are student teachers practicing at your school.* *Please mark one choice in each row.* 1 = Yes 2 = No	†	†
Q20A	I presently have an assigned mentor to support me.	TT2G20A	Q22A	†	TT2G20A	†
Q20B	I serve as an assigned mentor for one or more teachers.	TT2G20B	Q22B	†	TT2G20B	†
Q21	**I. During the last <u>12 months</u>, did you participate in any of the following professional development activities, and if yes, for how many days did they last?** *Please indicate 'Yes' or 'No' in part (A) for each of the activities listed below. If 'Yes' in part (A), please specify the number of days spent on the activity in part (B). Please sum up the activities in full days (a full day is 6-8 hours). Please include activities taking place during weekends, evenings or other off work hours.* (A) Participation 1 = Yes 2 = No (B) Duration in days _____	†	Q23	**I. During the last <u>12 months</u>, did you participate in any of the following professional development activities, and if yes, for how many days did they last?** *Please indicate 'Yes' or 'No' in part (A) for each of the activities listed below. If 'Yes' in part (A), please specify the number of days spent on the activity in part (B). Please sum up the activities in full days (a full day is 6-8 hours). Please include activities taking place during weekends, evenings or other off-work hours.* (A) Participation 1 = Yes 2 = No (B) Duration in days _____	†	†
Q21A	Courses/workshops (e.g. on subject matter or methods and/or other education-related topics)	TT2G21A1-A2	Q23A	†	TT2G21A1-A2	†
Q21B	Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational issues)	TT2G21B1-B2	Q23B	†	TT2G21B1-B2	†
Q21C	Observation visits to other schools	TT2G21C1-C2	Q23C	†	TT2G21C1-C2	†
Q21D	Observation visits to business premises, public organisations, non-governmental organisations	TT2G21D1-D2	Q23D	Observation visits to business premises, public organizations, non-government organizations	TT2G21D1-D2	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q21E	In-service training courses in business premises, public organisations, non-governmental organisations	TT2G21E1-E2	Q23E	In-service training courses taking place in business premises, public organizations, non-government organizations	TT2G21E1-E2	†
Q21F	Qualification programme (e.g. a degree programme)	TT2G21F	Q23F	Degree program	TT2G21F	†
Q21G	Participation in a network of teachers formed specifically for the professional development of teachers	TT2G21G	Q23G	†	TT2G21G	†
Q21H	Individual or collaborative research on a topic of interest to you professionally	TT2G21H	Q23H	†	TT2G21H	†
Q21I	Mentoring and/or peer observation and coaching, as part of a formal school arrangement	TT2G21I	Q23I	†	TT2G21I	†
†	**If you did not participate in any professional development activities during the last 12 months -> Please go to Question [26].**	†	†	**If you did not participate in any professional development activities during the last 12 months -> Please go to Question 28.**	†	†
Q22	**Did the professional development activities you participated in during the last <u>12 months</u> cover the following topics? If so, what <u>positive impact</u> did these have on your teaching?** *For each specified alternative please indicate 'Yes' or 'No' in part (A). If 'Yes' in part (A), please estimate the impact in part (B).* (A) Topic 1 = Yes 2 = No (B) Positive impact 1 = No 2 = Small 3 = Moderate 4 = Large	†	Q24	**Did the professional development activities you participated in during the last <u>12 months</u> cover the following topics? If so, what <u>positive impact</u> did these have on your teaching?** *For each specified alternative please indicate 'Yes' or 'No' in part (A). If 'Yes' in part (A), please estimate the positive impact in part (B).* (A) Topic 1 = Yes 2 = No (B) Positive impact 1 = No 2 = Small 3 = Moderate 4 = Large	†	†
Q22A	Knowledge and understanding of my subject field(s)	TT2G22A1-A2	Q24A	†	TT2G22A1-A2	†
Q22B	Pedagogical competencies in teaching my subject field(s)	TT2G22B1-B2	Q24B	†	TT2G22B1-B2	†
Q22C	Knowledge of the curriculum	TT2G22C1-C2	Q24C	†	TT2G22C1-C2	†
Q22D	Student evaluation and assessment practices	TT2G22D1-D2	Q24D	†	TT2G22D1-D2	†
Q22E	ICT (information and communication technology) skills for teaching	TT2G22E1-E2	Q24E	†	TT2G22E1-E2	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q22F	Student behaviour and classroom management	TT2G22F1-F2	Q24F	Student behavior and classroom management	TT2G22F1-F2	†
Q22G	School management and administration	TT2G22G1-G2	Q24G	†	TT2G22G1-G2	†
Q22H	Approaches to individualised learning	TT2G22H1-H2	Q24H	Approaches to individualized learning	TT2G22H1-H2	†
Q22I	Teaching students with special needs (see Question [9] for the definition)	TT2G22I1-I2	Q24I	†	TT2G22I1-I2	†
Q22J	Teaching in a multicultural or multilingual setting	TT2G22J1-J2	Q24J	†	TT2G22J1-J2	†
Q22K	Teaching cross-curricular skills (e.g. problem solving, learning-to-learn)	TT2G22K1-K2	Q24K	†	TT2G22K1-K2	†
Q22L	Approaches to developing cross-occupational competencies for future work or future studies	TT2G22L1-L2	Q24L	†	TT2G22L1-L2	†
Q22M	New technologies in the workplace	TT2G22M1-M2	Q24M	†	TT2G22M1-M2	†
Q22N	Student career guidance and counselling	TT2G22N1-N2	Q24N	Student career guidance and counseling	TT2G22N1-N2	†
†	***New USA-only question added	†	Q24O	Implementation of national/state curriculum standards or Common Core standards	TT2G24O1-O2_USAX2	†
Q23	**For the professional development in which you participated in the last 12 months, how much did you personally have to pay for?** *Please mark one choice.* 1 = None 2 = Some 3 = All	TT2G23	Q25	†	TT2G23	†
Q24	**For the professional development in which you participated in the last 12 months, did you receive any of the following support?** *Please mark one choice in each row.* 1 = Yes 2 = No	†	Q26	†	†	†
Q24A	I received scheduled time for activities that took place during regular working hours at this school.	TT2G24A	Q26A	I received scheduled time off for activities that took place during regular working hours at this school.	TT2G24A	†
Q24B	I received a salary supplement for activities outside working hours.	TT2G24B	Q26B	†	TT2G24B	†

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Q24C	I received non-monetary support for activities outside working hours (reduced teaching, days off, study leave, etc.).	TT2G24C	Q26C	†	TT2G24C	†
Q25	**Considering the professional development activities you took part in during the last 12 months, to what extent have they included the following?** *Please mark one choice in each row.* 1 = Not in any activities 2 = Yes, in some activities 3 = Yes, in most activities 4 = Yes, in all activities	†	Q27	†	†	†
Q25A	A group of colleagues from my school or subject group	TT2G25A	Q27A	†	TT2G25A	†
Q25B	Opportunities for active learning methods (not only listening to a lecturer)	TT2G25B	Q27B	Opportunities for active learning methods (not only listening to a lecture)	TT2G25B	†
Q25C	Collaborative learning activities or research with other teachers	TT2G25C	Q27C	†	TT2G25C	†
Q25D	An extended time-period (several occasions spread out over several weeks or months)	TT2G25D	Q27D	†	TT2G25D	†
Q26	**For each of the areas listed below, please indicate the degree to which you currently need professional development.** *Please mark one choice in each row.* 1 = No need at present 2 = Low level of need 3 = Moderate level of need 4 = High level of need	†	Q28	†	†	†
Q26A	Knowledge and understanding of my subject field(s)	TT2G26A	Q28A	†	TT2G26A	†
Q26B	Pedagogical competencies in teaching my subject field(s)	TT2G26B	Q28B	†	TT2G26B	†
Q26C	Knowledge of the curriculum	TT2G26C	Q28C	†	TT2G26C	†
Q26D	Student evaluation and assessment practice	TT2G26D	Q28D	†	TT2G26D	†
Q26E	ICT (information and communication technology) skills for teaching	TT2G26E	Q28E	†	TT2G26E	†
Q26F	Student behaviour and classroom management	TT2G26F	Q28F	Student behavior and classroom management	TT2G26F	†
Q26G	School management and administration	TT2G26G	Q28G	†	TT2G26G	†
Q26H	Approaches to individualised learning	TT2G26H	Q28H	Approaches to individualized learning	TT2G26H	†

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Q26I	Teaching students with special needs (see Question [9] for the definition)	TT2G26I	Q28I	†	TT2G26I	†
Q26J	Teaching in a multicultural or multilingual setting	TT2G26J	Q28J	†	TT2G26J	†
Q26K	Teaching cross-curricular skills (e.g. problem solving, learning-to-learn)	TT2G26K	Q28K	†	TT2G26K	†
Q26L	Approaches to developing cross-occupational competencies for future work or future studies	TT2G26L	Q28L	†	TT2G26L	†
Q26M	New technologies in the workplace	TT2G26M	Q28M	†	TT2G26M	†
Q26N	Student career guidance and counselling	TT2G26N	Q28N	Student career guidance and counseling	TT2G26N	†
†	***New USA-only question added	†	Q28O	Implementation of national/state curriculum standards or Common Core standards	TT2G28O_ USAX2	†
Q27	**How strongly do you agree or disagree that the following present barriers to your participation in professional development?** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	Q29	†	†	†
Q27A	I do not have the pre-requisites (e.g. qualifications, experience, seniority).	TT2G27A	Q29A	I do not have the prerequisites (e.g. qualifications, experience, seniority).	TT2G27A	†
Q27B	Professional development is too expensive/unaffordable.	TT2G27B	Q29B	†	TT2G27B	†
Q27C	There is a lack of employer support.	TT2G27C	Q29C	†	TT2G27C	†
Q27D	Professional development conflicts with my work schedule.	TT2G27D	Q29D	†	TT2G27D	†
Q27E	I do not have time because of family responsibilities.	TT2G27E	Q29E	†	TT2G27E	†
Q27F	There is no relevant professional development offered.	TT2G27F	Q29F	†	TT2G27F	†
Q27G	There are no incentives for participating in such activities.	TT2G27G	Q29G	†	TT2G27G	†
†	***New USA-only question added	†	Q29H	The professional development offered is of poor quality.	TT2G29H_ USAX2	†
†	***New USA-only question added	†	Q29I	Professional development is not readily accessible to me.	TT2G29I_U SAX2	†

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Teacher Feedback Section Introduction	*We would like to ask you about the feedback you receive about your work in this school.* *'Feedback' is defined broadly as including any communication you receive about your teaching, based on some form of interaction with your work (e.g. observing you teach students, discussing your curriculum or students' results).* *Feedback can be provided through informal discussions with you or as part of a more formal and structured arrangement.*	†	Teacher Feedback Section Introduction	*We would like to ask you about the feedback you receive about your work in this school.* *'Feedback' is defined broadly as including any communication you receive about your teaching, based on some form of interaction with your work (e.g. observing you teach students, discussing your curriculum or students' performance).* *Feedback can be provided through informal discussions with you or as part of a more formal and structured arrangement.*	†	†
Q28	**In this school, who uses the following methods to provide feedback to you?** *'External individuals or bodies' as used below refer to, for example, inspectors, municipality representatives, or other persons from outside the school.* *Please mark as many choices as appropriate in each row.* A(1)-F(1) = External individuals or bodies A(2)-F(2) = School principal A(3)-F(3) = Member(s) of school management team A(4)-F(4) = Assigned mentors A(5)-F(5) = Other teachers (not a part of the management team) A(6)-F(6) = I have never received this feedback in this school.	†	Q30	**In this school, who uses the following methods to provide feedback to you?** *'External individuals or bodies' as used below refer to, for example, inspectors, local or state education authorities, or other persons from outside the school.* Please mark as many choices as appropriate in each row. A(1)-F(1) = External individuals or bodies A(2)-F(2) = School principal A(3)-F(3) = Member(s) of school management team A(4)-F(4) = Assigned mentors A(5)-F(5) = Other teachers (not a part of the management team) A(6)-F(6) = I have never received this type of feedback in this school	†	†
Q28A	Feedback following direct observation of your classroom teaching	TT2G28A1-A6	Q30A	†	TT2G28A1-A6	†
Q28B	Feedback from student surveys about your teaching	TT2G28B1-B6	Q30B	†	TT2G28B1-B6	†
Q28C	Feedback following an assessment of your content knowledge	TT2G28C1-C6	Q30C	†	TT2G28C1-C6	†
Q28D	Feedback following an analysis of your students' test scores	TT2G28D1-D6	Q30D	†	TT2G28D1-D6	†
Q28E	Feedback following your self-assessment of your work (e.g. presentation of a portfolio assessment)	TT2G28E1-E6	Q30E	†	TT2G28E1-E6	†

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Q28F	Feedback following surveys or discussions with parents or guardians	TT2G28F1-F6	Q30F	†	TT2G28F1-F6	†
†	**If you answered 'I have never received this feedback in this school' to each of the above -> Please go to Question [31].**	†	†	**If you answered 'I have never received this type of feedback in this school' to each of the above -> Please go to Question 33.**	†	†
Q29	**In your opinion, when you receive this feedback, what is the emphasis placed on the following areas?** *Please mark one choice in each row.* 1 = Not considered at all 2 = Considered with low importance 3 = Considered with moderate importance 4 = Considered with high importance	†	Q31	†	†	†
Q29A	Student performance	TT2G29A	Q31A	†	TT2G29A	†
Q29B	Knowledge and understanding of my subject field(s)	TT2G29B	Q31B	†	TT2G29B	†
Q29C	Pedagogical competencies in teaching my subject field(s)	TT2G29C	Q31C	†	TT2G29C	†
Q29D	Student assessment practices	TT2G29D	Q31D	†	TT2G29D	†
Q29E	Student behaviour and classroom management	TT2G29E	Q31E	Student behavior and classroom management	TT2G29E	†
Q29F	Teaching of students with special needs	TT2G29F	Q31F	Teaching of students with special needs (see Question 9 for the definition)	TT2G29F	†
Q29G	Teaching in a multicultural or multilingual setting	TT2G29G	Q31G	†	TT2G29G	†
Q29H	The feedback I provide to other teachers to improve their teaching	TT2G29H	Q31H	†	TT2G29H	†
Q29I	Feedback from parents or guardians	TT2G29I	Q31I	†	TT2G29I	†
Q29J	Student feedback	TT2G29J	Q31J	†	TT2G29J	†
Q29K	Collaboration or working with other teachers	TT2G29K	Q31K	†	TT2G29K	†

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Q30	**Concerning the feedback you have received at this school, to what extent has it directly led to a positive change in any of the following?** *Please mark one choice in each row.* 1 = No positive change 2 = A small change 3 = A moderate change 4 = A large change	†	Q32	†	†	†
Q30A	Your public recognition from the principal and/or your colleagues	TT2G30A	Q32A	†	TT2G30A	†
Q30B	Your role in school development initiatives (e.g. curriculum development group, development of school objectives)	TT2G30B	Q32B	†	TT2G30B	†
Q30C	The likelihood of your career advancement (e.g. promotion)	TT2G30C	Q32C	†	TT2G30C	†
Q30D	The amount of professional development you undertake	TT2G30D	Q32D	†	TT2G30D	†
Q30E	Your job responsibilities at this school	TT2G30E	Q32E	†	TT2G30E	†
Q30F	Your confidence as a teacher	TT2G30F	Q32F	†	TT2G30F	†
Q30G	Your salary and/or financial bonus	TT2G30G	Q32G	†	TT2G30G	†
Q30H	Your classroom management practices	TT2G30H	Q32H	†	TT2G30H	†
Q30I	Your knowledge and understanding of your main subject field(s)	TT2G30I	Q32I	†	TT2G30I	†
Q30J	Your teaching practices	TT2G30J	Q32J	†	TT2G30J	†
Q30K	Your methods for teaching of students with special needs	TT2G30K	Q32K	Your methods for teaching students with special needs (see Question 9 for the definition)	TT2G30K	†
Q30L	Your use of student assessments to improve student learning	TT2G30L	Q32L	†	TT2G30L	†
Q30M	Your job satisfaction	TT2G30M	Q32M	†	TT2G30M	†
Q30N	Your motivation	TT2G30N	Q32N	†	TT2G30N	†

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Q31	**We would now like to ask you about teacher appraisal and feedback in this school more generally. How strongly do you agree or disagree with the following statements about this school?** *Here, 'appraisal' is defined as review of teachers' work. This appraisal can be conducted in a range of ways from a more formal approach (e.g. as part of a formal performance management system, involving set procedures and criteria) to a more informal approach (e.g. through informal discussions).* *When a statement does not apply in your context, please omit the item.* *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	Q33	**We would now like to ask you about teacher appraisal and feedback in this school more generally. How strongly do you agree or disagree with the following statements about this school?** *Here, 'appraisal' is defined as review of teachers' work. This appraisal can be conducted in a range of ways from a more formal approach (e.g. as part of a formal performance management system, involving set procedures and criteria) to a more informal approach (e.g. through informal discussions).* *When a statement does not apply in your context, please skip the item.* *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	†
Q31A	The best performing teachers in this school receive the greatest recognition (e.g. rewards, additional training or responsibilities).	TT2G31A	Q33A	†	TT2G31A	†
Q31B	Teacher appraisal and feedback have little impact upon the way teachers teach in the classroom.	TT2G31B	Q33B	†	TT2G31B	†
Q31C	Teacher appraisal and feedback are largely done to fulfil administrative requirements.	TT2G31C	Q33C	Teacher appraisal and feedback are largely done to fulfill administrative requirements.	TT2G31C	†
Q31D	A development or training plan is established for teachers to improve their work as a teacher.	TT2G31D	Q33D	†	TT2G31D	†
Q31E	Feedback is provided to teachers based on a thorough assessment of their teaching.	TT2G31E	Q33E	†	TT2G31E	†
Q31F	If a teacher is consistently under-performing, he/she would be dismissed.	TT2G31F	Q33F	†	TT2G31F	†
Q31G	Measures to remedy any weaknesses in teaching are discussed with the teacher.	TT2G31G	Q33G	†	TT2G31G	†
Q31H	A mentor is appointed to help the teacher improve his/her teaching.	TT2G31H	Q33H	†	TT2G31H	†

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†	***New USA-only question added	†	Q33I	High-performing teachers are promoted to positions of greater influence and authority.	TT2G33I_USAX2	†
†	***New USA-only question added	†	Q33J	Struggling teachers are provided with additional support to improve their performance.	TT2G33J_USAX2	†
Q32	**We would like to ask about your personal beliefs on teaching and learning. Please indicate how strongly you agree or disagree with each of the following statements.** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	Q34	†	†	†
Q32A	My role as a teacher is to facilitate students' own inquiry.	TT2G32A	Q34A	†	TT2G32A	†
Q32B	Students learn best by finding solutions to problems on their own.	TT2G32B	Q34B	†	TT2G32B	†
Q32C	Students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved.	TT2G32C	Q34C	†	TT2G32C	†
Q32D	Thinking and reasoning processes are more important than specific curriculum content.	TT2G32D	Q34D	†	TT2G32D	†
Q33	**On average, how often do you do the following in this school?** *Please mark one choice in each row.* 1 = Never 2 = Once a year or less 3 = 2-4 times a year 4 = 5-10 times a year 5 = 1-3 times a month 6 = Once a week or more	†	Q35	†	†	†
Q33A	Teach jointly as a team in the same class	TT2G33A	Q35A	†	TT2G33A	†
Q33B	Observe other teachers' classes and provide feedback	TT2G33B	Q35B	†	TT2G33B	†
Q33C	Engage in joint activities across different classes and age groups (e.g. projects)	TT2G33C	Q35C	†	TT2G33C	†
Q33D	Exchange teaching materials with colleagues	TT2G33D	Q35D	†	TT2G33D	†

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Q33E	Engage in discussions about the learning development of specific students	TT2G33E	Q35E	†	TT2G33E	†
Q33F	Work with other teachers in my school to ensure common standards in evaluations for assessing student progress	TT2G33F	Q35F	Work with other teachers in my school to ensure the use of common standards in evaluations assessing student progress	TT2G33F	†
Q33G	Attend team conferences	TT2G33G	Q35G	†	TT2G33G	†
Q33H	Take part in collaborative professional learning	TT2G33H	Q35H	†	TT2G33H	†
Q34	**In your teaching, to what extent can you do the following?** *Please mark one choice in each row.* 1 = Not at all 2 = To some extent 3 = Quite a bit 4 = A lot	†	Q36	†	†	†
Q34A	Get students to believe they can do well in school work	TT2G34A	Q36A	†	TT2G34A	†
Q34B	Help my students value learning	TT2G34B	Q36B	†	TT2G34B	†
Q34C	Craft good questions for my students	TT2G34C	Q36C	†	TT2G34C	†
Q34D	Control disruptive behaviour in the classroom	TT2G34D	Q36D	Control disruptive behavior in the classroom	TT2G34D	†
Q34E	Motivate students who show low interest in school work	TT2G34E	Q36E	†	TT2G34E	†
Q34F	Make my expectations about student behaviour clear	TT2G34F	Q36F	Make my expectations about student behavior clear	TT2G34F	†
Q34G	Help students think critically	TT2G34G	Q36G	†	TT2G34G	†
Q34H	Get students to follow classroom rules	TT2G34H	Q36H	†	TT2G34H	†
Q34I	Calm a student who is disruptive or noisy	TT2G34I	Q36I	†	TT2G34I	†
Q34J	Use a variety of assessment strategies	TT2G34J	Q36J	†	TT2G34J	†
Q34K	Provide an alternative explanation for example when students are confused	TT2G34K	Q36K	Provide an alternative explanation (e.g., when students are confused)	TT2G34K	†
Q34L	Implement alternative instructional strategies in my classroom	TT2G34L	Q36L	†	TT2G34L	†

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Your Teaching in the <Target Class> Section Introduction	*In the following, we want to get into more detail about your teaching practices. Within this questionnaire, we cannot cover the whole scope of your teaching. Therefore, we use an exemplary approach and focus on the teaching of one <class>.* *The following questions ask you about a particular <class> that you teach. The <class> that we would like you to respond to is the first [<ISCED Level x>] <class> [attended by 15-year-old students] that you taught in this school after 11 a.m. last Tuesday. Please note that if you do not teach a <class> [at <ISCED Level x>] / [attended by 15-year-old students] on Tuesday, this can be a class taught on a day following the last Tuesday.* *In the questions below, this <class> will be referred to as the <target class>.*	†	Your Teaching in the Target Class Section Introduction	*In the following, we want to get into more detail about your teaching practices. Within this questionnaire, we cannot cover the whole scope of your teaching. Therefore, we use an exemplary approach and focus on the teaching of one specific class.* *The following questions ask you about a particular class that you teach. The class that we would like you to answer questions about is the first 7th, 8th, or 9th grade class that you taught in this school after 11 a.m. last Tuesday. Please note that if you do not teach a 7th, 8th, or 9th grade class on Tuesday, you can answer the following questions about a class taught on a day following the Tuesday of last week.* *In the questions below, this class will be referred to as the target class.*	†	†
Q35	**We would like to understand the composition of the <target class>. Please estimate the broad percentage of students who have the following characteristics.** *<'Socioeconomically disadvantaged homes' refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.>* *This question asks about your personal perception of student background. It is acceptable to base your replies on rough estimates.* *Students may fall into multiple categories.* *Please mark one choice in each row.* 1 = None 2 = 1% to 10% 3 = 11% to 30% 4 = 31% to 60% 5 = More than 60%	†	Q37	**We would like to understand the composition of the target class. Please estimate the broad percentage of students who have the following characteristics.** *'Socioeconomically disadvantaged homes' refers to homes lacking the basic necessities or advantages of life, such as adequate income, housing, nutrition or medical care.* *This question asks about your personal perception of student background. It is acceptable to base your replies on rough estimates.* *Students may fall into multiple categories.* *Please mark one choice in each row.* 1 = None 2 = 1% to 10% 3 = 11% to 30% 4 = 31% to 60% 5 = More than 60%	†	†

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Q35A	Students whose [first language] is different from the language(s) of instruction or from a dialect of this/these language(s)	TT2G35A	Q37A	Students whose first language is not English.	TT2G35A	†
Q35B	Low academic achievers	TT2G35B	Q37B	†	TT2G35B	†
Q35C	Students with special needs	TT2G35C	Q37C	Students with special needs (see Question 9 for the definition)	TT2G35C	†
Q35D	Students with behavioural problems	TT2G35D	Q37D	Students with behavioral problems	TT2G35D	†
Q35E	Students from socioeconomically disadvantaged homes	TT2G35E	Q37E	†	TT2G35E	†
Q35F	Academically gifted students	TT2G35F	Q37F	†	TT2G35F	†
Q36	**Is your teaching in the <target class> directed entirely or mainly to <special needs> students?** *Please mark one choice.* 1 = Yes **-> Please go to Question [44].** 2 = No	TT2G36	Q38	**Is your teaching in the target class directed entirely or mainly to students with special needs?** *See Question 9 for the definition of students with special needs.* *Please mark one choice.* 1 = Yes **-> Please go to Question 46**. 2 = No	TT2G36	†

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Q37	**Into which subject category does this <target class> fall?** *Please mark one choice.* 1 = Reading, writing and literature *Includes reading and writing (and literature) in the mother tongue, in the language of instruction, or in the tongue of the country (region) as a second language (for non-natives); language studies, public speaking, literature* 2 = Mathematics *Includes mathematics, mathematics with statistics, geometry, algebra, etc.* 3 = Science *Includes science, physics, physical science, chemistry, biology, human biology, environmental science, agriculture/horticulture/forestry* 4 = Social studies *Includes social studies, community studies, contemporary studies, economics, environmental studies, geography, history, humanities, legal studies, studies of the own country, social sciences, ethical thinking, philosophy* 5 = Modern foreign languages *Includes languages different from the language of instruction* 6 = Ancient Greek and/or Latin 7 = Technology *Includes orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology*	TT2G37	Q39	**Into which subject category does this target class fall?** *Please mark one choice.* 1 = Reading, writing and literature *Includes reading and writing (and literature) in English, language arts, public speaking, literature, composition, communications, journalism* 2 = English as a Second Language (ESL) *Includes ESL or bilingual education in support of students' subject matter learning* 3 = Mathematics *Includes basic and general mathematics, geometry, pre-algebra, algebra, business and applied mathematics, statistics and probability, trigonometry, calculus, and pre-calculus* 4 = Science *Includes general or integrated science, physics, physical science, chemistry, biology or life science, human biology, environmental science, Earth Science* 5 = Social studies/Social science *Includes general social studies, anthropology, economics, geography, government or civics, history, philosophy, psychology, sociology* 6 = Modern foreign languages *Includes languages other than English (e.g., French, German, Spanish, ASL)* 7 = Classical Greek and/or Latin 8 = Technology Includes orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology	TT2G37_USA2	USA --> International 1 --> 1 2 --> 1 3 --> 2 4 --> 3 5 --> 4 6 --> 5 7 --> 6 8 --> 7 9 --> 8 10 --> 9 11 --> 10 12 --> 11 13 --> 11 14 --> 12 15 --> 12

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Q37 continued	8 = Arts *Includes arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework* 9 = Physical education *Includes physical education, gymnastics, dance, health* 10 = Religion and/or ethics *Includes religion, history of religions, religion culture, ethics* 11 = Practical and vocational skills *Includes vocational skills (preparation for a specific occupation), technics, domestic science, accountancy, business studies, career education, clothing and textiles, driving, home economics, polytechnic courses, secretarial studies, tourism and hospitality, handicraft* 12 = Other	TT2G37	Q39 continued	9 = Arts *Includes arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework* 10 = Physical and health education *Includes physical education, gymnastics, dance, health* 11 = Religion and/or ethics *Includes religion, history of religions, religion culture, ethics* 12 = Business studies *Includes accounting, business management, business principles and ethics, marketing and distribution* 13 = Practical and vocational skills *Includes vocational skills (preparation for a specific occupation), agriculture and natural resources, domestic science, career education, clothing and textiles, construction trades, cosmetology, culinary arts, driving, health occupations, home economics, mechanics and repair, polytechnic courses, secretarial studies, tourism and hospitality, handicraft* 14= Special Education *Includes education of students with special needs* 15 = Other	TT2G37_USA2	USA --> International 1 --> 1 2 --> 1 3 --> 2 4 --> 3 5 --> 4 6 --> 5 7 --> 6 8 --> 7 9 --> 8 10 --> 9 11 --> 10 12 --> 11 13 --> 11 14 --> 12 15 --> 12
Q38	**How many students are currently enrolled in this <target class>?** *Please write a number.* _____ Students	TT2G38	Q40	**How many students are currently enrolled in this target class?** *Please write a number.* _____ Students	TT2G38	†
Q39	**For this <target class>, what percentage of <class> time is typically spent on each of the following activities?** *Write a percentage for each activity. Write 0 (zero) if none. Please ensure that responses add up to 100%.*	†	Q41	**For this target class, what percentage of class time is typically spent on each of the following activities?** *Write a percentage for each activity. Write 0 (zero) if none. Please ensure that responses add up to 100%.*	†	†
Q39A	_____ % Administrative tasks (e.g. recording attendance, handing out school information/forms)	TT2G39A	Q41A	†	TT2G39A	†

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Q39B	_____ % Keeping order in the classroom (maintaining discipline)	TT2G39B	Q41B	†	TT2G39B	†
Q39C	_____ % Actual teaching and learning	TT2G39C	Q41C	†	TT2G39C	†
†	100 % Total	†	†	†	†	†
Q40	**Please indicate how representative you feel the <target class> is of all the classes you teach.** *Please mark one choice.* 1 = Very representative 2 = Representative 3 = Not representative	TT2G40	Q42	**Please indicate how representative you feel the target class is of all the classes you teach.** *Please mark one choice.* 1 = Very representative 2 = Representative 3 = Not representative	TT2G40	†
Q41	**How strongly do you agree or disagree with the following statements about this <target class>?** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	Q43	**How strongly do you agree or disagree with the following statements about this target class?** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	†
Q41A	When the lesson begins, I have to wait quite a long time for students to quiet down.	TT2G41A	Q43A	†	TT2G41A	†
Q41B	Students in this class take care to create a pleasant learning atmosphere.	TT2G41B	Q43B	†	TT2G41B	†
Q41C	I lose quite a lot of time because of students interrupting the lesson.	TT2G41C	Q43C	†	TT2G41C	†
Q41D	There is much disruptive noise in this classroom.	TT2G41D	Q43D	†	TT2G41D	†
Q42	**How often does each of the following happen in the <target class> throughout the school year?** *Please mark one choice in each row.* 1 = Never or almost never 2 = Occasionally 3 = Frequently 4 = In all or nearly all lessons	†	Q44	**How often does each of the following happen in the target class throughout the school year?** *Please mark one choice in each row.* 1 = Never or almost never 2 = Occasionally 3 = Frequently 4 = In all or nearly all lessons	†	†
Q42A	I present a summary of recently learned content.	TT2G42A	Q44A	†	TT2G42A	†
Q42B	Students work in small groups to come up with a joint solution to a problem or task.	TT2G42B	Q44B	†	TT2G42B	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q42C	I give different work to the students who have difficulties learning and/or to those who can advance faster.	TT2G42C	Q44C	†	TT2G42C	†
Q42D	I refer to a problem from everyday life or work to demonstrate why new knowledge is useful.	TT2G42D	Q44D	†	TT2G42D	†
Q42E	I let students practice similar tasks until I know that every student has understood the subject matter.	TT2G42E	Q44E	I let students practice similar tasks until I know that every student understands the subject matter.	TT2G42E	†
Q42F	I check my students' exercise books or homework.	TT2G42F	Q44F	†	TT2G42F	†
Q42G	Students work on projects that require at least one week to complete.	TT2G42G	Q44G	†	TT2G42G	†
Q42H	Students use ICT (information and communication technology) for projects or class work.	TT2G42H	Q44H	†	TT2G42H	†
Q43	**How often do you use the following methods of assessing student learning in the <target class>?** *Please mark one choice in each row.* 1 = Never or almost never 2 = Occasionally 3 = Frequently 4 = In all or nearly all lessons	†	Q45	**How often do you use the following methods to assess student learning in the target class?** *Please mark one choice in each row.* 1 = Never or almost never 2 = Occasionally 3 = Frequently 4 = In all or nearly all lessons	†	†
Q43A	I develop and administer my own assessment.	TT2G43A	Q45A	†	TT2G43A	†
Q43B	I administer a standardised test.	TT2G43B	Q45B	I administer a standardized test.	TT2G43B	†
Q43C	I have individual students answer questions in front of the class.	TT2G43C	Q45C	†	TT2G43C	†
Q43D	I provide written feedback on student work in addition to a <mark, i.e. numeric score or letter grade>.	TT2G43D	Q45D	I provide written feedback on student work in addition to a letter grade or numeric score.	TT2G43D	†
Q43E	I let students evaluate their own progress.	TT2G43E	Q45E	†	TT2G43E	†
Q43F	I observe students when working on particular tasks and provide immediate feedback.	TT2G43F	Q45F	†	TT2G43F	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q44	**How strongly do you agree or disagree with these statements as applied to this school?** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree		Q46	†	†	†
Q44A	This school provides staff with opportunities to actively participate in school decisions.	TT2G44A	Q46A	†	TT2G44A	†
Q44B	This school provides parents or guardians with opportunities to actively participate in school decisions.	TT2G44B	Q46B	†	TT2G44B	†
Q44C	This school provides students with opportunities to actively participate in school decisions.	TT2G44C	Q46C	†	TT2G44C	†
Q44D	This school has a culture of shared responsibility for school issues.	TT2G44D	Q46D	†	TT2G44D	†
Q44E	There is a collaborative school culture which is characterised by mutual support.	TT2G44E	Q46E	†	TT2G44E	†
†	***New USA-only question added	†	Q46F	Teachers get along well with the school leadership.	TT2G46F_USAX2	†
Q45	**How strongly do you agree or disagree with the following statements about what happens in this school?** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	Q47	†	†	†
Q45A	In this school, teachers and students usually get on well with each other.	TT2G45A	Q47A	In this school, teachers and students usually get along well with each other.	TT2G45A	†
Q45B	Most teachers in this school believe that the students' well-being is important.	TT2G45B	Q47B	†	TT2G45B	†
Q45C	Most teachers in this school are interested in what students have to say.	TT2G45C	Q47C	†	TT2G45C	†
Q45D	If a student from this school needs extra assistance, the school provides it.	TT2G45D	Q47D	†	TT2G45D	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q46	**{Finally, }we would like to know how you generally feel about your job. How strongly do you agree or disagree** with the following statements? *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	Q48	**We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?** *Please mark one choice in each row.* 1 = Strongly disagree 2 = Disagree 3 = Agree 4 = Strongly agree	†	†
Q46A	The advantages of being a teacher clearly outweigh the disadvantages.	TT2G46A	Q48A	†	TT2G46A	†
Q46B	If I could decide again, I would still choose to work as a teacher.	TT2G46B	Q48B	†	TT2G46B	†
Q46C	I would like to change to another school if that were possible.	TT2G46C	Q48C	†	TT2G46C	†
Q46D	I regret that I decided to become a teacher.	TT2G46D	Q48D	†	TT2G46D	†
Q46E	I enjoy working at this school.	TT2G46E	Q48E	†	TT2G46E	†
Q46F	I wonder whether it would have been better to choose another profession.	TT2G46F	Q48F	†	TT2G46F	†
Q46G	I would recommend my school as a good place to work.	TT2G46G	Q48G	†	TT2G46G	†
Q46H	I think that the teaching profession is valued in society.	TT2G46H	Q48H	†	TT2G46H	†
Q46I	I am satisfied with my performance in this school.	TT2G46I	Q48I	†	TT2G46I	†
Q46J	All in all, I am satisfied with my job.	TT2G46J	Q48J	†	TT2G46J	†
Q47	**How strongly do you agree or disagree with the following statements concerning your personal attitudes?** *Please mark one choice in each row.* 1 = Totally disagree 2 = … 3 = … 4 = Neutral 5 = … 6 = … 7 = Totally agree	†	Q49	**Finally, how strongly do you agree or disagree with the following statements concerning your personal attitudes?** *Please mark one choice in each row.* 1 = Totally disagree 2 = … 3 = … 4 = Neutral 5 = … 6 = … 7 = Totally agree	†	†
Q47A	I always listen carefully to students.	TT2G47A	Q49A	†	TT2G47A	†
Q47B	I am confident about my judgements about students.	TT2G47B	Q49B	I am confident about my judgments about students.	TT2G47B	†
Q47C	I have doubts about my ability to succeed as a teacher.	TT2G47C	Q49C	†	TT2G47C	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
Q47D	I have always been honest with myself about my teaching qualities.	TT2G47D	Q49D	†	TT2G47D	†
Q47E	I feel threatened by teachers who are very successful.	TT2G47E	Q49E	†	TT2G47E	†
Q47F	I have said things that hurt colleagues' or students' feelings.	TT2G47F	Q49F	†	TT2G47F	†
Q47G	I feel angry when colleagues express ideas different from my own.	TT2G47G	Q49G	†	TT2G47G	†
Q47H	I help students and colleagues in trouble.	TT2G47H	Q49H	†	TT2G47H	†
Q47I	I admit when I do not know something if a student asks a question in class.	TT2G47I	Q49I	†	TT2G47I	†
Q47J	I am irritated by students who ask for favours.	TT2G47J	Q49J	I am irritated by students who ask for favors.	TT2G47J	†
Teacher Mobility Section Introduction	*We would like to know if you travelled abroad for professional purposes.* *Please consider only travel for a week or more at educational institutions or schools. Do not consider conferences or workshops.*	†	†	Not Administered	†	†
Q48	**Have you ever been abroad for professional purposes in your career as a teacher or during your teacher education/training?** *Please mark as many choices as appropriate.*	†	†	Not Administered	†	†
†	No **-> Please go to the end of the questionnaire.**	TT2G48A	†	Not Administered	†	†
†	Yes, as a student as part of my teacher education	TT2G48B	†	Not Administered	†	†
†	Yes, as a teacher in an EU programme (e.g. Comenius)	TT2G48C	†	Not Administered	†	†
†	Yes, as a teacher in a regional or national programme	TT2G48D	†	Not Administered	†	†
†	Yes, as a teacher as arranged by my school or school district	TT2G48E	†	Not Administered	†	†
†	Yes, by my own initiative	TT2G48F		Not Administered	†	†
Q49	**If yes in the previous question, what were the purpose(s) of your visit(s) abroad?** *Please mark as many choices as appropriate.*	†	†	Not Administered	†	†

2013 International Question Number	2013 International Version	2013 International Variable Name	2013 USA Question Number	2013 USA Adaptation	2013 USA Variable Name	Recoding Instructions
†	Studying, as part of your teacher education	TT2G49A	†	Not Administered	†	†
†	Language learning	TT2G49B	†	Not Administered	†	†
†	Learning of other subject areas	TT2G49C	†	Not Administered	†	†
†	Accompanying visiting students	TT2G49D	†	Not Administered	†	†
†	Establishing contact with schools abroad	TT2G49E	†	Not Administered	†	†
†	Teaching	TT2G49F	†	Not Administered	†	†
†	Other	TT2G49G	†	Not Administered	†	†

† Not applicable.

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Appendix E. Nonresponse Bias Analysis

This appendix contains two documents:

- U.S. Participation in the Teaching and Learning International Survey (TALIS) 2013: Nonresponse Bias Analysis, Preliminary Results
- TALIS Item-level Response Rates and Nonresponse Bias Analysis

E.1 U.S. Participation in the Teaching and Learning International Survey (TALIS) 2013: Nonresponse Bias Analysis, Preliminary Results

Introduction

The technical standards for the OECD's Teaching and Learning International Survey (TALIS) 2013 data adjudication require convincing evidence of no or low nonresponse bias where data collection has yielded less than the minimally required 75 percent weighted participation rate for schools after substitution (assuming a participation rate of at least 50 percent from the original sample of schools). The National Center for Education Statistics (NCES) standards for surveys stipulate that a nonresponse bias analysis is required at any stage of data collection with a weighted unit response rate less than 85 percent (before substitution). TALIS is based on a two-stage sampling design: first, a selection of schools in which teachers of grades 7-9 work, and second, a selection of eligible teachers within each sampled school. Thus, there are two levels at which unit response rates must be explored: schools and teachers.

The participation rate of U.S. schools in TALIS did not reach either the TALIS or NCES standard. For TALIS 2013, the United States achieved a weighted response rate of 36.9 percent for original sampled schools and a weighted response rate of 60.8 percent for all participating schools (original and substitute).[1] The response rate for teachers—the unit of primary interest in TALIS—did not meet NCES standards. The unweighted response rate for teachers was 83.3 percent and the weighted response rate was 82.8 percent.[2]

The primary objective of this nonresponse bias analysis is to shed light on any biases at either the school or teacher level that might be present in the data because of nonresponse. To accomplish this, responding and nonresponding schools and teachers are compared using information from the sampling frame to determine whether responding schools and teachers are representative of the original sample or whether there are significant differences between the responding and nonresponding schools and teachers. The analyses that follow are divided into two sections:

- section 1 focuses on nonresponse bias at the school level; and
- section 2 focuses on nonresponse bias at the teacher level.

TALIS data are from file version 2.0 provided by Statistics Canada (file date of November 2013).

Brief Description of the U.S. TALIS Sample

The U.S. sample included 201 schools that included any of grades 7, 8, or 9. Of these 201 schools, 3 were found to be ineligible, yielding an original school sample of 198. For each school selected in the sample, two neighboring schools in the sampling frame (within the same strata) were designated as substitute schools. Of the 198 original schools in the U.S. TALIS 2013 sample, 89 participated. In addition to these original schools, 51 substitute schools participated, for a total of 140 participating schools. Of these schools, 122 schools had a teacher participation

[1] The TALIS technical standards method of calculating response rates includes only those schools with at least 50 percent of sampled teachers responding.
[2] Based on the final weighting report produced by the OECD.

rate of greater than 50 percent, the threshold for school and teacher inclusion in the OECD TALIS report and inclusion in the international data file release. These 122 schools include 78 original schools and 44 substitute schools.

Methodology

To measure the potential nonresponse bias at the school level, the characteristics of participating schools and teachers were compared to those of the total eligible sample of schools and teachers. The alternative of comparing participants to nonparticipants, while resulting in the same tests of significance, makes it more difficult to judge the potential for bias.

The analysis for school-level nonresponse bias was conducted in three parts as follows:

- Analysis of participating original school sample: The distribution of the participating original school sample (n = 78) was compared with that of the total eligible original school sample (n = 198). The original sample is the sample before substitution. In each sample, schools were weighted by their school base weights that did not include a nonresponse adjustment factor. The base weight for each original school was the reciprocal of its selection probability.
- Analysis of all participating schools, original and substitute: The distribution of all participating schools (n = 122) was compared to the total eligible original school sample (n = 198). Again, school base weights were used for both the eligible sample and the participating schools. A logistic regression predicting school participation based on participation status is included.
- Analysis of all participating schools with nonresponse adjusted weights applied: As done in the second series of analyses, all participating schools were compared, but with school nonresponse adjusted weights applied to the sample of participating schools. The international weighting procedures created a nonresponse adjustment class[3] for each explicit stratum.

The first analysis indicates the potential for nonresponse bias that was introduced through school nonresponse. The second analysis suggests the remaining potential for nonresponse bias after the mitigating effects of substitution have been accounted for. The third analysis indicates the potential for bias after accounting for the mitigating effects of both substitution and nonresponse weight adjustments. Both the second and third analyses, however, may provide an overly optimistic scenario because even though substitution and nonresponse adjustments may correct somewhat for deficiencies in the few characteristics examined here, there is no guarantee that they are equally as effective for other characteristics.

To compare participants and the total eligible sample, the sample of schools was matched to the sample frame to compare as many characteristics as possible that might provide information about the presence of nonresponse bias. Since the analyses involve both participating and nonparticipating schools, they are based, out of necessity, on data from the sampling frame as TALIS data are not available for nonparticipating schools. Comparing frame characteristics for

[3] In general, nonresponse adjustment classes are formed based on characteristics related to response rates or to values of survey estimates where respondents and nonrespondents are similar within each class. The nonresponse adjustment is applied within each of these classes.

participants and the total eligible sample is not an ideal measure of nonresponse bias if the characteristics are unrelated or weakly related to more substantive items in the survey; however, this is often the only approach available.

The data for public schools were taken from the 2010-11 Common Core of Data (CCD), and the data for private schools were taken from the 2009-10 Private School Universe Survey (PSS).

The specific variables on which schools were compared came from the sampling frame and were used as stratification variables when selecting the sample. School control and school grade structure were explicit stratification variables, while urbanicity, Census region, and percent minority students in school were implicit stratification variables. The variables used to compare groups included the following:

- School control: This variable indicates whether the schools is under public control (operated by publicly elected or appointed officials) or private control (operated by privately elected or appointed officials and derives its major source of funds from private sources).
- Grade structure: This variable indicates how the school is organized in terms of grade structure, with schools grouped into one of three categories. Middle school or junior high included grade ranges of 6-8, 7-9, or 7-8; high school included a grade range of 9-12, and "other" schools included all other grade range combinations (e.g., K-8).
- Urbanicity: The location of a school relative to populous areas was condensed into four categories (city, suburb, town, and rural).
- Census region: Four Census regions were used: Northeast, Midwest, South, and West.
- Percent minority students in school.

The first four variables are categorical; percent minority students in school is continuous. For the bivariate analyses presented here, percent minority students in school was treated as a categorical variable (by quartiles). A more complete description of these variables is included in the technical notes section.

The relationship between these characteristics and participation was tested using the Pearson Chi-Square statistic corrected for the survey design using the second-order correction of Rao and Scott (1984) and is converted into an *F*-statistic. The bias and relative bias are also given in each table. The bias is the difference between the respective estimates for the participants and the eligible sample. The relative bias is calculated as the bias divided by the estimate from the eligible sample. The relative bias is a measure of the size of the bias compared to the eligible sample estimate. The relationship between participation and nonparticipation within a row is also shown using the results of a *t*-test expressed as the *t*-statistic divided by the critical value, in this case 1.96. Results that are significant at the $p < .05$ level are bolded.

In addition to these tests, logistic regression models were used to provide a multivariate analysis in which the conditional independence of these school characteristics as predictors of participation was examined. This is done because, while it may be that only one or two variables are actually related to participation status, if these variables are also related to the other variables examined in the analyses, then other variables, which are not related to participation status, will appear as significant in simple bivariate tables. Dummy variables were created for each

component of the categorical variables so that each component was included separately. The last component of each categorical variable is always the reference category and is not included in the model explicitly. The *p* value of a dummy variable indicates whether there is a significant difference at the 5 percent level from the effect of the (omitted) reference category. The replication-based variance estimation method used in the regression model is a direct result of the methods described in Deville (1999), Demnati and Rao (2004), and Shah (2004).

Statistical comparisons are considered significant at the $p < .05$ level. Standard errors for the estimates shown in tables are provided in the attachment that starts on page E-30.

A Brief Note on the Definition of "Participating" Used in the Analyses

Based on TALIS technical standards, a school is considered "participating" when at least 50 percent of sampled teachers complete at least one question from the teacher survey. NCES considers a school participating when any sampled respondent completes any part of the survey. The difference in the definition of a participating school is not inconsequential, as under the TALIS definition, the final U.S. sample includes 78 participating original schools and 122 original and substitute schools while under the NCES definition it includes 89 original schools and 140 original and substitute schools (table E-1). The analyses conducted here reflect the schools and teachers considered "participating" under the TALIS technical standards, as this is the data that will be included in the TALIS international database and report.

Table E-1. Number of participating schools in U.S. TALIS 2013 sample

Sampling status	Participating: Any sampled teacher responded	Participating: At least 50 percent of sampled teachers responded
Original sample schools	89	78
Original and substitute schools	140	122

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Section 1: Evaluating the Potential for Nonresponse Bias among Schools

This section presents the results of the nonresponse bias analysis at the school level using the TALIS technical standards definition of a "participating" school. In table E-2, the distribution of the responding original school sample was compared with that of the total eligible original school sample using base weights in each case. All original schools in the sample that declined to participate in the survey were treated as nonparticipants regardless of whether they were replaced by a substitute school. The unweighted response rate was 39.4 percent and the weighted response rate was 36.9 percent, with 78 out of 198 eligible schools participating.

Based on a comparison of the potential for bias among eligible and original participating schools among the frame stratification variables, grade structure of the school is the only variable for which the original participating schools in the U.S. TALIS sample (n = 78) show a statistically significant difference in participation status compared to eligible schools when using base weights (chi square *p*-value = .0203). This suggests that schools organized as middle or junior high schools—that is, schools that traditionally house primarily ISCED Level 2 students and teachers in the United States—were more likely to participate than schools with other grade structures where ISCED Level 2 students and teachers were less prevalent within the schools.

Indeed, based on the results of row-level *t*-tests, middle or junior high schools were overrepresented among participating original schools (37.9 vs. 24.9 percent, respectively) while schools organized around other grade combinations (e.g., K-8) were underrepresented among participating original schools (36.9 vs. 48.5, respectively). Although chi-square results for the other frame characteristics did not show any measurable difference, row-level *t*-tests nonetheless indicate public schools were also overrepresented among participating original schools (91.3 vs. 82.5 percent, respectively) while private schools were underrepresented (8.7 vs. 17.5 percent, respectively). The remaining frame characteristics examined for the participating original schools (i.e., urbanicity, Census region, and percent minority students in school) were not found to be measurably different from eligible schools for either the chi-square or *t*-test results.

In terms of bias, table E-2 shows that point estimates based on the original participating schools (only) differ from the eligible school sample by as little as .5 percentage points (50-74.9 percent minority students) to 13 percentage points (middle-junior high school). In terms of relative bias, the distribution of original participating schools compared to the eligible sample show a wide range of potential bias in the sample, with estimates based on the original participating schools being off from the eligible sample by less than 1 percent (Northeast region) to 52 percent (middle-junior high schools), with most estimates showing a potential relative bias of 10 percent or more, including cases where no statistically significant differences were detected.

Table E-2. Comparison of the distribution of eligible and participating original schools, by stratification variables (explicit and implicit), base-weighted: 2013

Characteristics	Sample schools: Percent of eligible (n = 198)	Sample schools: Percent of participating, original (n = 78)[1]	Bias	Relative bias	Row-level *t*-test (ratio of *t*/cv)	Chi-square *p*-value
School control						.1232
Public	82.5	91.3	8.8	10.7	**-1.372**	
Private	17.5	8.7	-8.8	- 50.3	**1.372**	
Grade structure						**.0203**
Middle-Junior school	24.9	37.9	13.0	52.2	**-1.820**	
High school	26.6	25.1	-1.5	-5.6	0.208	
Other	48.5	36.9	-11.6	-23.9	**1.287**	
Urbanicity						.5386
City	29.0	25.5	-3.5	-12.1	0.264	
Suburb	26.6	22.5	-4.1	-15.4	0.360	
Town	8.2	11.0	2.8	34.1	-0.304	
Rural	36.2	40.9	4.7	13.0	-0.305	
Region						.3828
Northeast	18.5	18.4	-0.1	-0.5	0.008	
Midwest	31.0	25.4	-5.6	-18.1	0.361	
South	30.9	39.8	8.9	28.8	-0.600	
West	19.5	16.4	-3.1	-15.9	0.267	
Percent minority students[2]						.4803
Less than 25 percent	51.7	48.3	-3.4	-6.6	0.216	
25-49.9 percent	16.8	23.1	6.3	37.5	-0.510	
50-74.9 percent	11.3	10.8	-0.5	-4.4	0.055	
75 percent or more	20.1	17.8	-2.3	-11.4	0.207	

[1] The schools shown here are based on the TALIS definition of "participating," which includes only schools with at least 50 percent participation among sampled teachers.

[2] There was one school missing data for this variable (n = 197). This was an implicit stratification variable.

NOTE: Eligible schools had at least one teacher of grade 7, 8, or 9 students. Participating schools are eligible schools that agreed to implement the survey. Grade structure was defined as follows: middle school or junior high included grade ranges of 6-8, 7-9, or 7-8; high school included a grade range of 9-12, and "other" schools included all other grade range combinations. The bias is the difference between the respective estimates for the eligible and participating schools. The relative bias is calculated as the bias divided by the estimate of the eligible sample multiplied by 100. Schools were weighted by the base weight. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Table E-3 presents the distribution of the final sample of all participating schools (n = 122), both original and substitute, compared to the total eligible school sample (n = 198) using base weights. The unweighted response rate when including both original and substitute schools was 61.6 percent[4] and the weighted response rate was 60.8 percent.

Based on a comparison of the potential for bias among eligible and all participating schools among the frame stratification variables, there were no measurable differences detected, either in the chi-square or row-level *t*-tests. Once substitute schools were added to the sample, the differences shown in table E-2 appear to have been largely mitigated, including point estimates for grade structure of the school and school control, which were found to be significant when examining participating original schools only.

In terms of bias, table E-3 shows that the inclusion of substitute schools in the sample substantially reduced differences in the point estimates. The calculation of bias in the point estimates based on the final sample of participating schools differs from the eligible school sample by as little as .1 percentage point (25-49.9 percent minority students) to 3.6 percentage points (suburb). Expressed in terms of relative bias, the distribution of all participating schools compared to the eligible sample shows a narrower range of potential bias in the sample compared to that shown in table E-2, with estimates based on the all participating schools being off from the eligible sample by less than 1 percent (25-49.9 percent minority students) to 22 percent (town), with most estimates showing a potential relative bias of less than 10 percent. Nonetheless, 5 of the 17 categories examined show a potential bias of more than 10 percent, including cases where no statistically significant differences were found.

[4] The unweighted and weighted response rates shown here are calculated by dividing the total number of participating schools (n = 122), original and substitute, by the total number of eligible original schools (n = 198) and reflect the TALIS technical standards method for calculating response rates. Substitute schools are matched pairs and can have a probability of selection that differs from the original school that it replaces. NCES standards (Standard 1-3-8) indicate that, in these circumstances, response rates should be calculated without including substitute schools (NCES 2012). TALIS response rates described as "before substitution" conform to this standard. TALIS response rates denoted as "after substitution" are not consistent with NCES standards since, in the calculation of these rates, substitute schools are treated as the equivalent of original sample schools.

Table E-3. Comparison of the distribution of eligible and all participating schools (original and substitute), by stratification variables (explicit and implicit), base-weighted: 2013

	Sample schools					
Characteristics	Percent of eligible (n = 198)	Percent of participating, original and substitute (n = 122)[1]	Bias	Relative bias	Row-level *t*-tests (ratio of *t*/cv)	Chi-square *p*-value
School control						.5359
Public	82. 5	84.4	1.9	2.3	-0.409	
Private	17.5	15.6	-1.9	-10.9	0.409	
Grade structure						.4786
Middle-Junior school	24.9	27.6	2.7	10.8	-0.529	
High school	26.6	27.3	0.7	2.6	-0.124	
Other	48.5	45.2	-3.3	-6.8	0.488	
Urbanicity						.4651
City	29.0	30.2	1.2	4.1	-0.094	
Suburb	26.6	23.0	-3.6	-13.5	0.332	
Town	8.2	10.0	1.8	22.0	-0.240	
Rural	36.2	36.8	0.6	1.7	-0.047	
Region						.8729
Northeast	18.5	17.6	-0.9	-4.9	0.083	
Midwest	31.0	29.3	-1.7	-5.5	0.127	
South	30.9	32.1	1.2	3.9	-0.098	
West	19.5	21.0	1.5	7.7	-0.132	
Percent minority students[2]						.8622
Less than 25 percent	51.7	53.7	2.0	3.9	-0.148	
25-49.9 percent	16.8	16.9	0.1	0.6	-0.011	
50-74.9 percent	11.3	9.9	-1.4	-12.4	0.177	
75 percent or more	20.1	19.6	-0.5	-2.5	0.049	

† Not applicable.

[1] The schools shown here are based on the TALIS definition of "participating," which includes only schools with at least 50 percent participation among sampled teachers.

[2] There was one school missing data for this variable (n = 197). This was an implicit stratification variable.

NOTE: Eligible schools had at least one teacher of grade 7, 8, or 9 students. Participating schools are eligible schools that agreed to implement the survey. Grade structure was defined as follows: middle school or junior high included grade ranges of 6-8, 7-9, or 7-8; high school included a grade range of 9-12, and "other" schools included all other grade range combinations. The bias is the difference between the respective estimates for the eligible and participating schools. The relative bias is calculated as the bias divided by the estimate of the eligible sample multiplied by 100. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant. Schools were weighted by the base weight. The base weight for each substitute school was set to the probability of selection of the substitute school, which could differ from the selected school.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

To examine the joint relationship of various characteristics to school nonresponse, the analysis utilized a logistic regression model with participation status as the binary dependent variable and frame characteristics as predictor variables. Public and private school were modeled together using the variables available for all schools. Standard errors and tests of hypotheses for the full model parameter estimates are shown in table E-4.

The results of the regression are similar to the bivariate analyses for all participating schools presented in table E-3: none of the variables reached statistical significance at the $p < .05$ level nor was the measure of overall fit for the model statistically significant.

Table E-4. Logistic regression model parameter estimates in the U.S. TALIS sample predicting participation (original and substitute schools): 2013

Parameter	Parameter estimate	Standard error	*t*-test for H_o: parameter = 0	*p*-value
Intercept	0.848	.8222	1.03	.304
Private school	-0.087	.6831	-0.13	.899
Suburb	-0.689	.5660	-1.22	.225
Town	0.419	.7825	0.54	.593
Rural	-0.294	.6237	-0.47	.638
Middle-Junior school	0.562	.4525	1.24	.216
High school	0.233	.4553	0.51	.610
Midwest	-0.121	.6085	-0.20	.843
South	0.243	.5966	0.41	.684
West	0.478	.6281	0.76	.448
Percent minority students	-0.007	.0076	-0.93	.356

NOTE: The schools shown here are based on the TALIS definition of "participating," which includes only those schools with at least 50 percent participation among sampled teachers. Analysis performed using Stata svylogit procedure, with initial base-weight; Number of obs = 198; number of strata = 5; population size = 44,821; $F(10, 184) = 0.51$, prob > $F = .8844$. Dependent variable was at least 50 percent participation among sampled teachers; 122 of 198 schools participated. The base weight for each substitute school was set to the probability of selection of the substitute school which could be different from the original school that it replaced.
SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

For the next part of the analyses, the same analyses as shown in table E-3 comparing all participating schools and all eligible sampled schools was repeated using the TALIS nonresponse adjusted weights. These weights were calculated by Statistics Canada based on response rates within sampling strata, and were not based on a post-weighting nonresponse bias analyses or poststratification.

Table E-5 compares all participating sampled schools, including substitutes, with all eligible originally sampled schools. The comparison of estimates using the adjusted weights provides insight into how the nonresponse adjustments mitigate any nonresponse bias. Based on these comparisons, there were no measurable differences detected when adjusted weights were used, either in the chi-square or row-level *t*-tests. This mirrors the results found when substitute schools were added to the analyses using base weights (table E-3). The application of the adjusted weights to the full sample of participating schools (n = 122) appears to have further reduced differences in the point estimates between the eligible and final participating samples. The calculation of bias in the point estimates based on the final sample of participating schools differs from the eligible school sample by as little as .1 percentage point (rural) to 3.1 percentage points (less than 25 percent minority students). Expressed in terms of relative bias, the distribution of all participating schools compared to the eligible sample shows a narrower range of potential bias in the sample compared to that shown in table E-2 and only slightly narrower than that shown in table E-3, with weighted estimates based on the all participating schools being off from the eligible sample by 1 percent (south) to 19.5 percent (town), with most estimates showing a potential relative bias of less than 10 percent. Nonetheless, 3 of the 17 categories examined show a potential bias of more than 10 percent, including cases where no statistically significant differences were found.

Table E-5. Comparison of the distribution of eligible and participating schools (original and substitute), by stratification variables (explicit and implicit), adjusted weights: 2013

Characteristics	Sample schools: Percent of eligible (n = 198), base weights	Sample schools: Percent of participating, original and substitute (n = 122)[1], adjusted weights	Bias	Relative bias	Row-level *t*-test (ratio of *t*/cv)	Chi-square *p*-value[2]
School control						.7872
Public	82. 5	81.5	-1.0	-1.2	0.202	
Private	17.5	18.5	1.0	5.7	-0.202	
Grade structure						.8215
Middle-Junior school	24.9	23.2	-1.7	-6.8	0.357	
High school	26.6	27.2	0.6	2.3	-0.106	
Other	48.5	49.6	1.1	2.3	-0.163	
Urbanicity						.5340
City	29.0	30.3	1.3	4.5	-0.098	
Suburb	26.6	23.8	-2.8	-10.5	0.248	
Town	8.2	9.8	1.6	19.5	-0.214	
Rural	36.2	36.1	-0.1	-0.3	0.008	
Region						.8916
Northeast	18.5	17.7	-0.8	-4.3	0.071	
Midwest	31.0	29.7	-1.3	-4.2	0.094	
South	30.9	31.2	0.3	1.0	-0.024	
West	19.5	21.3	1.8	9.2	-0.153	
Percent minority students[3]						.8289
Less than 25 percent	51.7	54.8	3.1	6.0	-0.224	
25-49.9 percent	16.8	16.6	-0.2	-1.2	0.021	
50-74.9 percent	11.3	9.8	-1.5	-13.3	0.181	
75 percent or more	20.1	18.7	-1.4	-7.0	0.138	

† Not applicable.

[1] The schools shown here are based on the TALIS definition of "participating," which includes only those schools with at least 50 percent participation among sampled teachers.

[2] The chi-square test was run using the nonresponse adjusted weight for participating schools and the base weight for nonparticipating schools.

[3] There was one school missing data for this variable (N = 197). This was an implicit stratification variable.

NOTE: Eligible schools had at least one teacher of grade 7, 8, or 9 students. Participating schools are eligible schools that agreed to implement the survey. Grade structure was defined as follows: middle school or junior high included grade ranges of 6-8, 7-9, or 7-8; high school included a grade range of 9-12, and "other" schools included all other grade range combinations. The bias is the difference between the respective estimates for the eligible and participating schools. The relative bias is calculated as the bias divided by the estimate from the eligible sample multiplied by 100. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant. Eligible school percentages were estimated using base weights. The participating school percentages were calculated using the nonresponse adjusted weights.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Section 2: Evaluating the Potential for Nonresponse Bias among Teachers

The preceding analysis compared estimates on key school-level characteristics from the original sample of schools to the participating originally sampled schools and participating original and substitute schools. The estimates of school characteristics were produced using school-level data and school weights. The primary unit of interest in TALIS, however, is the teacher. This section evaluates the same key school characteristics using the teacher file and teacher weights to compare the distribution of these characteristics based upon teacher participation. This teacher analysis, while insightful, is not as complete as the school-level analysis because it includes only

teacher information from the 122 schools that achieved a 50 percent teacher response rate or the 140 schools that provided teacher listing forms and had any teachers responding to the TALIS survey. The school-level analysis compared the school characteristics of the 198 sampled schools to the characteristics of the relevant participating schools. That is, the data on nonparticipating teachers are more limited than that for participating teachers because teacher-level data are not available for teachers from nonparticipating schools.

The comparisons in this section are made between all eligible teachers at the participating schools and participating teachers from these schools. Where the earlier section showed that the participating schools were comparable to the full sample on most characteristics, this section will examine the same question comparing participating to nonparticipating teachers.

As mentioned previously, the unweighted response rate for teachers was 83.3 percent and the weighted response rate was 82.8 percent. As shown in table E-6, the number of teachers included in the analyses that follow differ depending on which definition of participating is used. There were 2,628 teachers sampled from the 140 schools that provided teacher listing forms. This was the form completed by each participating school to provide a complete list of eligible ISCED Level 2 teachers. From this list, teachers were sampled within each school. There were 1,680 teachers selected from 89 originally sampled schools and 948 teachers selected from substitute schools. When considering teachers from schools that were included based on the TALIS technical standards definition of "participating," there were 1,507 teachers selected from 78 originally sampled schools that had greater than 50 percent teacher participation and 1,250 of these teachers responded to the survey. There were 820 sampled teachers at the 44 substitute schools that had greater than 50 percent teacher participation and 676 of these teachers responded. Combining these two groups, there were 2,327 teachers sampled at original and substitute schools that had greater than 50 percent teacher participation, of which 1,926 teachers participated and are included on the international teacher file. There were 44 respondents from the 11 originally sampled schools that did not meet the 50 percent participation rate criterion that are excluded from the file and 37 teachers from the 7 substitute schools that did not meet the participation criterion that were also excluded from the file. While these teachers responded individually, fewer than 50 percent of the teachers at their respective schools completed the survey which, based on the TALIS standards, resulted in the exclusion of these respondents from the final teacher file.

Table E-6. Number of schools and teachers in U.S. TALIS 2013 sample

	When participating means any sampled teacher responded			When participating means at least 50 percent of sampled teachers responded		
Sampling status	Number of participating schools	Number of eligible teachers	Number of participating teachers	Number of participating schools	Number of eligible teachers	Number of participating teachers
Original schools	89	1,680	1,261	78	1,507	1,250
Original and substitute schools	140	2,628	1,974	122	2,327	1,926

NOTE: The total original eligible sample of schools was 198.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

The U.S. TALIS teacher sample was analyzed in two phases:

- Analysis of participating teacher sample, in original schools: The distribution of the participating original teacher sample (n = 1,507) was compared with the total eligible teacher sample (n = 2,327) based on school frame characteristics. The participating original teacher sample is the sample before substitution. In each sample, teachers were weighted by their teacher base weights that did not include a nonresponse adjustment factor. The base weight for each teacher was the reciprocal of its selection probability, taking into account the selection probability of the school in addition to the in-school selection probability of the teacher.
- Analysis of participating teacher sample, in original and substitute schools: The distribution of all participating teachers in original and substitute schools (n = 1,926) was compared with the total eligible teacher sample based (n = 2,327) on school frame characteristics. Again, base weights were used for both the eligible sample and the participating teachers. A logistic regression predicting teacher participation based on participation status is included.

Table E-7 compares eligible teachers in original participating schools (n = 1,507) to eligible teachers in all participating schools (i.e., original and substitute schools; n = 2,327). Based on a comparison of the potential for bias among eligible teachers distributed according to the frame stratification variables associated with the schools in which they work, there are no measurable differences at the $p < .05$ level based on the chi-square tests. However, for two frame characteristics—school control and grade structure—the chi-square *p*-values approach significance (*p*-value = .0562 and .0590, respectively). Indeed, examination of row-level *t*-tests shows that the percentage of eligible teachers in participating original public schools is significantly greater than that in the total eligible sample of teachers in all participating public schools (95.3 vs. 89.9 percent, respectively). Conversely, the percentage of eligible teachers in participating original private schools is significantly smaller than that in the total eligible sample of teachers in all participating private schools (4.7 vs. 10.1 percent, respectively). This suggests that teachers in public schools were more likely to participate than teachers in private schools. Also, the row-level *t*-tests show that the percentage of eligible teachers in participating original middle-junior high schools is greater than that in the total eligible sample of teachers in these types of schools (35.1 vs. 29.2 percent, respectively) while the percentage of eligible teachers in participating original schools with "other" types of grade structures (e.g., K-8) is lower than that in the total eligible sample of teachers (28.9 vs. 38.5 percent, respectively). This suggests that teachers in original middle-junior high schools were more likely to participate and teachers in original schools with other types of grade structures were less likely to participate in TALIS. The remaining frame characteristics examined for the eligible teachers in original schools—urbanicity, Census region, and percent minority students in school—were not found to be measurably different from eligible teachers in all participating schools for either the chi-square or row-level *t*-test results.

Examination of the potential for bias in the point estimate distributions displayed in table E-7 also show that eligible teachers in original participating schools differ from eligible teachers in all participating schools by as little as .2 percentage point (75 percent or higher minority students) to 9.6 percentage points ("Other" school grade structure) depending on the characteristic examined. In terms of relative bias, the distribution of eligible teachers in

participating original schools compared to the eligible teachers in all participating schools shows a range of potential bias in the original sample, with estimates being off from the eligible sample by nearly 1 percent (75 percent or higher minority students) to 53.5 percent (private schools), with more than half of the estimates showing a potential relative bias of 10 percent or more, including cases where no statistically significant differences were found.

Table E-7. Comparison of the distribution of eligible teachers in participating original schools and all schools, by stratification variables (explicit and implicit), base-weighted: 2013

Characteristics	Percent of all eligible teachers, all participating schools (n = 2,327)[1]	Percent of eligible teachers, participating original schools (n = 1,507)[2]	Bias	Relative bias	Row-level *t*-test (ratio of *t*/cv)	Chi-square *p*-value
School control						.0562
Public	89.9	95.3	5.4	6.0	**-1.708**	
Private	10.1	4.7	-5.4	-53.5	**1.708**	
Grade structure						.0590
Middle-Junior school	29.2	35.1	5.9	20.2	**-1.117**	
High school	32.2	36.0	3.8	11.8	-0.455	
Other	38.5	28.9	-9.6	-24.9	**1.489**	
Urbanicity						.8440
City	26.4	24.4	-2.0	-7.6	0.158	
Suburb	26.2	25.3	-0.9	-3.4	0.066	
Town	9.4	11.2	1.8	19.1	-0.191	
Rural	38.0	39.2	1.2	3.2	-0.072	
Region						.2509
Northeast	22.6	24.2	1.6	7.1	-0.102	
Midwest	24.4	18.4	-6.0	-24.6	0.434	
South	34.7	41.6	6.9	19.9	-0.446	
West	18.3	15.8	-2.5	-13.7	0.216	
Percent minority students[3]						.1739
Less than 25 percent	49.4	42.1	-7.3	-14.8	0.434	
25-49.9 percent	21.9	28.6	6.7	30.6	-0.461	
50-74.9 percent	9.5	10.3	0.8	8.4	-0.103	
75 percent or more	19.2	19.0	-0.2	-1.0	0.018	

[1] The number of teachers are from original and substitute schools (n = 122) that meet the TALIS definition of "participating," which includes schools with at least 50 percent participation among sampled teachers. Teachers for whom a design weight was not included on the file were assigned a weight of 1.

[2] The teachers included in this analysis are from original schools (n = 78) that meet the TALIS definition of "participating," which includes schools with at least 50 percent participation among sampled teachers.

[3] There was one school missing data for this variable (n = 197). This was an implicit stratification variable.

NOTE: Eligible schools had at least one teacher of grade 7, 8, or 9 students. Participating schools are eligible schools that agreed to implement the survey. Grade structure was defined as follows: middle school or junior high included grade ranges of 6-8, 7-9, or 7-8; high school included a grade range of 9-12, and "other" schools included all other grade range combinations. The bias is the difference between the respective school estimates based upon the eligible and participating teachers. The relative bias is calculated as the bias divided by the estimate of the eligible sample multiplied by 100. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant. Teachers were weighted by their base weight, which was a product of the school base weight, a school nonresponse adjustment, and the teacher's probability of selection.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Whereas table E-7 examined the distribution of eligible teachers in participating original schools to eligible teachers in all participating schools, table E-8 widens the scope to include all participating teachers in both original and substitute schools (n = 1,926). Based on a comparison of the potential for bias among eligible and participating teachers distributed according to the frame stratification variables associated with the schools in which they work, there are no measurable differences at the $p < .05$ level based on the chi-square tests. While teacher estimates based solely on participating teachers from original schools showed some areas of potential bias, the inclusion of participating teachers from both original and substitute schools does not (at least for the characteristics examined here). Examination of the row-level *t*-tests also shows that the

teacher estimates derived from the full sample of participating teachers are not measurably different from the estimates derived from all eligible teachers.

In contrast to the bias estimates shown in table E-7, when participating teachers from both original and substitute schools are compared to the total eligible teacher sample, the potential for bias in the point estimate distributions in table E-8 narrowed. That is, the point estimates between participating teachers and eligible teachers in all participating schools differ by less than one percentage point in all cases examined. Translated into a measure of relative bias, the distribution of all participating teachers compared to the eligible teachers shows a range of potential bias in the final teacher sample, all of which are less than 10 percent.

Table E-8. Comparison of the distribution of eligible and participating teachers in all participating schools, by stratification variables (explicit and implicit), adjusted weights: 2013

Characteristics	Percent of eligible teachers, all participating schools (n = 2,327)[1]	Percent of participating teachers, all participating schools (n = 1,926)[2]	Bias	Relative bias	Row-level *t*-test (ratio of *t*/cv)	Chi-square *p*-value
School control						.8744
Public	89.9	89.2	-0.7	-0.8	0.155	
Private	10.1	10.8	0.7	6.9	-0.155	
Grade structure						.8272
Middle-Junior school	29.2	28.8	-0.4	-1.4	0.091	
High school	32.2	32.3	0.1	0.3	-0.014	
Other	38.5	38.8	0.3	0.8	-0.045	
Urbanicity						.4362
City	26.4	26.4	0.0	0.0	0.000	
Suburb	26.2	27.0	0.8	3.1	-0.064	
Town	9.4	9.3	-0.1	-1.1	0.013	
Rural	38.0	37.2	-0.8	-2.1	0.056	
Region						.1727
Northeast	22.6	23.2	0.6	2.7	-0.043	
Midwest	24.4	23.7	-0.7	-2.9	0.055	
South	34.7	34.4	-0.3	-0.9	0.023	
West	18.3	18.7	0.4	2.2	-0.036	
Percent minority students[3]						.1314
Less than 25 percent	49.4	48.7	-0.7	-1.4	0.048	
25-49.9 percent	21.9	22.2	0.3	1.4	-0.025	
50-74.9 percent	9.5	9.9	0.4	4.2	-0.058	
75 percent or more	19.2	19.1	-0.1	-0.5	0.010	

† Not applicable.

[1] The number of teachers are from original and substitute schools (n = 122) that meet the TALIS definition of "participating," which includes schools with at least 50 percent participation among sampled teachers. Teachers for whom a design weight was not included on the file were assigned a weight of 1.

[2] The teachers included in this analysis are from schools that meet the TALIS definition of "participating," which includes schools with at least 50 percent participation among sampled teachers.

[3] There was one school missing data for this variable (n = 197). This was an implicit stratification variable.

NOTE: Eligible schools had at least one teacher of grade 7, 8, or 9 students. Participating schools are eligible schools that agreed to implement the survey. Grade structure was defined as follows: middle school or junior high included grade ranges of 6-8, 7-9, or 7-8; high school included a grade range of 9-12, and "other" schools included all other grade range combinations. The bias is the difference between the respective school estimates based upon the eligible and participating teachers. The relative bias is calculated as the bias divided by the estimate of the eligible sample multiplied by 100. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant. Teachers were weighted by their base weight, which was a product of the school base weight, a school nonresponse adjustment, the teacher's probability of selection, and an adjustment for teacher nonresponse.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

To examine the joint relationship of various characteristics to teacher nonresponse, the analysis used a logistic regression model with participation status as the binary dependent variable and frame characteristics as predictor variables. Teachers in public and private schools were modeled together using the available variables. Standard errors and tests of hypotheses for the full model parameter estimates are shown in table E-9.

The results of the regression indicate a significant relationship between percent minority students in the schools of participating and nonparticipating teachers. These results suggest that teachers in schools with fewer minority students are overrepresented in the respondents when compared to teachers from schools with more minority students. The overall model results, however, find that the measure of overall fit for the model was not statistically significant. In the multivariate setting, when controlling on the explicit stratification variables, only one implicit stratification variable showed any evidence of potential bias.

Table E-9. Logistic regression model parameter estimates in the U.S. TALIS sample predicting teacher participation (teachers at original and substitute schools): 2013

Parameter	Parameter estimate	Standard error	*t*-test for H_o: parameter = 0	*p*-value
Intercept	2.418	.4638	5.21	.000
Private school	-0.151	.4232	-0.36	.722
Suburb	-0.284	.3123	-0.91	.364
Town	-0.438	.4552	-0.96	.338
Rural	-0.046	.3188	-0.14	.887
Middle-Junior school	-0.056	.2782	-0.20	.841
High school	-0.219	.3005	-0.73	.467
Midwest	0.513	.4360	1.18	.242
South	0.212	.3366	0.63	.529
West	-0.143	.3928	-0.36	.717
Percent minority students	-0.008	.0034	-2.35	**.020**

NOTE: The teachers included in this analysis defined as participating include all responding teachers from schools that met the TALIS definition of "participating"' (n = 1,926), which includes only those schools with at least 50 percent participation among sampled teachers. Analysis performed using Stata svylogit procedure, with initial base-weight; Number of obs = 2,327; number of strata = 5; population size = 1,009,970 *F* (10, 108) =1.45, prob > *F* = .1702. Dependent variable was teacher participation at schools with at least 50 percent participation among sampled teachers; 122 of 198 schools are included in the analysis.
SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

In addition to an examination of the characteristics of respondents based on frame characteristics, the teacher distributions in the U.S. TALIS sample can be compared to a national survey that shares some variables in common. For this exercise, the distribution of TALIS responding teachers is compared to the distribution of similar (but not strictly identical) teachers from the Schools and Staffing Survey (SASS) by several demographic characteristics. SASS is a system of national surveys that provide descriptive data on the context of elementary and secondary education that covers a wide range of topics from teacher demand, teacher and principal characteristics, general conditions in schools, principals' and teachers' perceptions of school climate and problems in their schools, teacher compensation, district hiring and retention practices, to basic characteristics of the student population by several demographic characteristics. The 2007-08 SASS data are the most recent available for comparative purposes. The SASS data can be subset to examine a similar but not strictly identical population of teachers at ISCED Level 2 (the target population in TALIS). In making these comparisons, it is important to keep in mind that there are definitional and operational differences between TALIS and SASS

that cannot be accounted for in a direct comparison. The SASS teacher sample, however, does contain a sufficient number of teachers teaching at the ISCED Level 2 grade range to provide a reasonable benchmark for the distribution of key teacher characteristics of the TALIS teacher sample. The specific variables on which TALIS and SASS teachers were compared are demographic characteristics that had the greatest correspondence between the two datasets:

- sex;
- contract status;
- age; and
- years of experience.

To identify a comparable population of teachers in SASS, the following steps were taken. SASS teachers were selected based upon their responses to variables asking for a report if the teachers teach any students in grade 7 (T0058), grade 8 (T0059), or grade 9 (T0060). Age was analyzed using the variable AGE, created from year of birth (T0360). Contract status was obtained from an item asking teachers to report their contract status (T0035). Years of experience combined years as a full-time or part-time teacher at a public or private school (T0038, T0039, T0041, and T0042). There were 24,312 public and private school teachers included in this analysis. The categories of age and years of experience presented here were used in SASS 2007-08 teacher reports.

Table E-10 compares teachers in the U.S. TALIS 2013 sample and teachers in SASS on key demographic variables. Both the SASS and TALIS estimates are calculated using adjusted weights. Among the key demographic variables examined, there are significant differences in the teacher estimates between SASS and TALIS in terms of contract status and years of experience. TALIS estimates are higher than the SASS estimates of the percentage of teachers who report a full-time contract status (96.3 vs. 91.0 percent, respectively), 10-14 years of teaching experience (19.6 vs. 15.7 percent, respectively) and 15 years or more of teaching experience (39.1 vs. 33.7 percent, respectively). Conversely, TALIS estimates are lower than SASS estimates for teachers who report a part-time contract status (3.7 vs. 9.0 percent, respectively). In other terms, the U.S. TALIS sample of teachers includes more full-time contract status and experienced teachers than SASS.

In terms of potential bias, the TALIS teacher estimates differ from the SASS teacher estimates by less than one percentage point (sex) to eight percentage points (less than 4 years teaching experience). This translates into a potential relative bias of anywhere between nearly 1 percent (female) to upwards of 58.9 percent (part-time contract status), with 6 of the 13 categories showing a potential bias of 10 percent or more, including cases where no statistically significant differences were found.

Table E-10. Comparison of the distribution of ISCED Level 2 teachers in TALIS and SASS, by key demographic characteristics

Characteristic	SASS percent (S.E.)	TALIS percent (S.E.)	Bias	Relative bias	*t*-test (ratio of *t*/cv)
Sex					
Male	36.2 (0.59)	35.6 (1.37)	-0.6	-1.7	0.205
Female	63.8 (0.59)	64.4 (1.37)	0.6	0.9	-0.205
Contract status					
Full-time	91.0 (0.38)	96.3 (0.81)	5.3	5.8	**-3.022**
Part-time	9.0 (0.38)	3.7 (0.81)	-5.3	- 58.9	**3.022**
Age					
Under 30	17.6 (0.55)	15.7 (1.25)	-1.9	-10.8	0.710
30-39	26.0 (0.55)	28.6 (1.33)	2.6	10.0	-0.922
40-49	23.6 (0.47)	25.4 (1.08)	1.8	7.6	-0.780
50-54	13.2 (0.41)	12.5 (1.01)	-0.7	-5.3	0.328
55 and over	19.7 (0.51)	17.8 (1.24)	-1.9	-9.6	0.723
Years of experience					
Less than 4	21.9 (0.54)	13.9 (1.12)	-8.0	-36.5	**3.283**
4-9	28.8 (0.54)	27.4 (1.51)	-1.4	-4.9	0.445
10-14	15.7 (0.43)	19.6 (1.02)	3.9	24.8	**-1.798**
15 or more	33.7 (0.63)	39.1 (1.73)	5.4	16.0	**-1.496**

NOTE: S.E. means standard error. ISCED stands for the International Standard Classification of Education (UNESCO 1997). In the United States, ISCED Level 2 teachers are those that instruct any students in grades 7, 8, or 9 (or lower secondary). The bias is the difference between the respective estimates for SASS and TALIS. The relative bias is calculated as the bias divided by the estimate from SASS multiplied by 100. SASS estimates use the SASS final weights. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant. TALIS estimates use the final teacher weights from version 2.0 of the International file.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2007-08, and Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Summary Discussion

In examining school-level nonresponse, the chi-square analysis results showed that one of the variables examined (grade structure) had a statistically significant relationship with school participation. Based on the results of row-level *t*-tests, middle or junior high schools were found to be overrepresented among participating original schools while schools organized around other grade combinations were underrepresented among participating original schools. In addition, row-level *t*-tests indicated public schools were also overrepresented among participating original schools while private schools were underrepresented. These results held for schools in the original sample but not when all participating schools (original and substitute) were considered. In the logistic regression analysis, none of the stratification variables were found to be significantly related to participation status, nor were the overall measures of fit of the model. Thus, the overall regression equation did not provide statistically significant evidence of differences between school-level respondents and nonrespondents when all participating schools were taken into consideration.

Indeed, when the TALIS school estimates were computed using adjusted weights, the results were similar: neither the chi-square tests of independence nor row-level *t*-tests showed evidence of significant differences between all participating schools and sampled eligible schools by school control, grade structure, urbanicity, Census region, or percent minority students in school at the $p < .05$ percent level.

The investigation into nonresponse bias at the school level for the U.S. TALIS 2013 school sample showed that there was no statistically significant relationship detected between participation status and the school characteristics that were available for analysis. It also suggested that there was evidence that the use of substitute schools reduced the potential for bias, based on an examination of the relative bias between estimates across the variables examined here. The application of nonresponse adjusted weights appears to have reduced, but certainly not eliminated, the potential for bias as evidenced by the smaller measures of bias in most categories.

The investigation into nonresponse bias at the teacher level, which is the unit level of analytic interest in TALIS, revealed that two of the variables examined (school control and grade structure) showed statistically significant relationships with teacher participation when examining base-weighted distributions. Based on the results of row-level *t*-tests, public school teachers were overrepresented among participating teachers in original schools while private school teachers were underrepresented among participating teachers. When taking into consideration all participating teachers at both original and substitute schools, and accounting for the nonresponse adjustments, these results did not hold. The multivariate results were consistent with the bivariate findings in most respects. Neither school control nor grade structure was significant in the multivariate setting, but the percent of minority students was significantly related to nonresponse in the regression model in spite of the nonsignificant results for the model.

Further evidence of potential bias in the U.S. TALIS teacher sample came from a comparison to a similar sample of teachers in SASS. Based on comparisons of a limited number of key demographic characteristics shared between the two studies, the U.S. TALIS teacher sample appears to overrepresent teachers who report a full-time contract status and those that have the most number of years of teaching experience (i.e., 10+ years) while it underrepresents teachers who report a part-time contract status and those with the fewest years of teaching experience (i.e., less than 4 years).

Taken all together, the investigation of unit level nonresponse in the U.S. TALIS sample reveals there is potential for nonresponse bias in some estimates at the school and teacher level, although the amount of bias varies greatly depending on the unit level (school or teacher) and the variable being examined.

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Technical Notes

Description of Variables

The data for public schools were taken from the 2010-11 Common Core of Data (CCD), and the data for private schools were taken from the 2009-10 Private School Universe Survey (PSS).

School Control: School control indicates whether the school is under public control (operated by publicly elected or appointed officials) or private control (operated by privately elected or appointed officials and derives its major source of funds from private sources).

Urbanicity: Urbanicity was derived from the locale variable based on how the school is situated in a particular location relative to populous areas, based on the school's address. Urbanicity includes four categories, below.

- City consists of territory inside an urbanized area and inside a principal city with population of 250,000 or more, territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000, and territory inside an urbanized area and inside a principal city with population less than 100,000.
- Suburb consists of territory outside a principal city and inside an urbanized area with population of 250,000 or more, territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000, and territory outside a principal city and inside an urbanized area with population less than 100,000.
- Town consists of territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area, territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area, and territory inside an urban cluster that is more than 35 miles of an urbanized area.
- Rural consists of Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster, Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster, and Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster.

Region: Region is the Census region of the country. Northeast consists of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Midwest consists of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South consists of Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West consists of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Percent minority students: The measure of minority students is based on the reported number of minority students divided by the total number of reported enrolled students on the CCD and PSS frame file.

Statistical Procedures

Weighting

Before the data are analyzed, responses from the schools and teachers are assigned sampling weights to ensure that their representation in TALIS 2013 results matches their actual percentage of the school and teacher populations eligible for TALIS.

Responses from the schools and teachers were assigned sampling weights to adjust for over- or under-representation during the sampling of a particular group. The use of sampling weights is necessary for the computation of sound, nationally representative estimates. The weight assigned to a school or teacher's responses is the inverse of the probability that the school or teacher would be selected for the sample. Substitute schools were selected based upon explicit stratification variables, but were assigned the substitute school's probability of selection which could differ from the originally selected school. Weighting also adjusts for various situations (such as school and teacher nonresponse) because data cannot be assumed to be randomly missing. The internationally defined weighting specifications require that each assessed school sampling weight should be the product of (1) the inverse of the school's probability of selection and (2) an adjustment for school-level nonresponse. The internationally defined weighting specifications require that each assessed teacher sampling weight should be the product of (1) the inverse of the school's probability of selection, (2) an adjustment for school-level nonresponse, (3) the inverse of the teacher's probability of selection, and (4) an adjustment for student-level nonresponse. The teacher weight also included factors that adjusted for incidental exclusions and a teacher multiplicity adjustment.

In the analyses in this report, sometimes the appropriate weight (base weight) includes only the components of the reciprocals of the respective selection probabilities. This is the case when estimates are made based on the entire sample. In other cases nonresponse adjustments, as computed by the International Study Center, are also applied. In each case the text and tables make clear which of these weighting procedures has been applied. Whereas for substantive analyses using the TALIS data, one would normally apply the nonresponse adjustments when analyzing the data from the respondents in the sample, this is not always when the case when carrying out analyses of potential nonresponse bias analyses.

Sampling errors

Sampling errors occur when the discrepancy between a population characteristic and the sample estimate arises because not all members of the reference population are sampled for the survey. The size of the sample relative to the population and the variability of the population characteristics both influence the magnitude of sampling error. The particular sample of schools and teachers from the 2012-13 school year was just one of many possible samples that could have been selected. Therefore, estimates produced from the TALIS sample may differ from estimates that would have been produced had another school or teacher sample been drawn. This type of variability is called sampling error because it arises from using a sample of schools and teachers, rather than all relevant schools and teachers in that year.

The standard error is a measure of the variability due to sampling when estimating a statistic, and is often included in reports containing estimates from survey data. The approach used for calculating sampling variances was the jackknife repeated replication (JRR). This report does not show estimates of standard errors for each estimate. Rather the effects of sampling error are

reflected in the test statistics (for *t*-tests and chi-square tests, and the *t*-test used in logistic regression analyses) that are presented for each analysis. These are described below.

The first step to compute the variance with replication is to calculate the estimate of interest from the full sample as well as each subsample or replicate. The variation between the replicate estimates and the full-sample estimate is then used to estimate the variance for the full sample. Suppose that $\hat{\theta}$ is the full-sample estimate of some population parameter θ. The variance estimator, $v\left(\hat{\theta}\right)$, takes the form

$$v\left(\hat{\theta}\right) = \sum_{g=1}^{G}\left(\hat{\theta}_{(g)} - \hat{\theta}\right)^2$$

where

$\hat{\theta}_{(g)}$ is the estimate of θ based on the observations included in the *g*-th replicate, and

G is the total number of replicates formed (G = 100 for U.S. TALIS).

The standard error is then

$$se\left(\hat{\theta}\right) = \sqrt{v\left(\hat{\theta}\right)}.$$

The JRR algorithm used in 2011 assumes that there are *G* replicates, each containing two sampled schools selected independently. The element $\hat{\theta}_{(g)}$ denotes the estimate using the *g*-th jackknife replicate. This is computed using all cases except those in the *g*-th replicate of the sample. For those in the *g*-th replicate, the replicate weights for all cases associated with one of the randomly selected units of the pair are multiplied by zero, and the replicate weights for the elements associated with the other unit in the replicate are doubled. The computation of the JRR variance for any estimate requires the computation of the statistic 76 times for any given country: once to obtain the estimate for the full sample, and 75 times to obtain the estimate for each of the jackknife replicates ($\hat{\theta}_{(g)}$).

Tests of Significance

Comparisons made in the text of this report have been tested for statistical significance. For example, when comparing results obtained from the full sample, with those obtained only from the responding sample units, tests of statistical significance were used to establish whether or not the observed differences are statistically significant. The estimation of the standard errors that are required in order to undertake the tests of significance is complicated by the complex sample and assessment designs which both generate error variance. Together they mandate a set of statistically complex procedures in order to estimate the correct standard errors. As a consequence, the estimated standard errors contain a sampling variance component estimated by

replicate weights. Details on the procedures used can be found in the Stata User's Guide: Release 13 (StataCorp 2013).

Two kinds of statistical tests are included in the report: *t*-tests and chi-square tests. In addition, logistic regression analyses were conducted.

Use of t-tests

The *t*-test was used for testing for the hypothesis that no difference exists between the means of continuous variables for two groups (namely, the full sample and the responding sample). Suppose that $\bar{x}_A$ and $\bar{x}_B$ are the means for two groups that are being compared and $se(\bar{x}_A - \bar{x}_B)$ is the standard error of the difference between the means, which accounts for the complex survey design. Then the *t*-test is defined as

$$t = \frac{|\bar{x}_A - \bar{x}_B|}{se(\bar{x}_A - \bar{x}_B)}.$$

This statistic is then compared to the critical values of the appropriate student *t*-distribution to determine whether the difference is statistically significant. The appropriate number of degrees of freedom for the distribution is given by the number of primary sampling units in the design (in this case the number of schools) minus the number of sampling strata.

Note that this procedure took account of the fact that the two samples in question were not independent samples, but in fact the responding sample was a subsample of the full sample. This effect was accounted for in calculating the standard error of the difference. Note also that, in those cases where both samples were weighted just using base weights, the test is exactly equivalent to testing that the mean of the respondents was equal to the mean of the nonrespondents.

The *t*-test was also used in the logistic regression for testing for the hypothesis for whether each estimated parameter estimate is significantly different from 0. Then the *t*-test is defined as

$$t = \frac{b_k}{\sqrt{v(b_k)}}$$

where b_k is a parameter estimate and $v(b_k)$ is the replication variance estimate for that parameter. This statistic is then compared to the critical values of the appropriate student *t*-distribution, as described above, to determine whether the difference is statistically significant. The appropriate number of degrees of freedom for the distribution is again given by the number of primary sampling units in the design (in this case the number of schools) minus the number of sampling strata.

Chi-square Tests

Chi-square tests are used for testing whether two distributions of a given categorical variable are different, conducted in a way that reflects the impact of the complex sample design on sampling variance. In this instance one distribution is for the full sample and one for the responding

sample. Suppose that the categorical variable in question has *c* levels, cross-tabulated producing weighted proportions *p*. The usual Pearson chi-square statistic is calculated as

$$X^2 = n\sum_{i=1}^{2}\sum_{j=1}^{c}\left(p_{ij} - p_{i\cdot}p_{\cdot j}\right)^2 \Big/ p_{i\cdot}p_{\cdot j}$$

where *j* denotes the categories of the categorical variable, *i* indexes the samples (full sample and respondents), and *n* indicates the overall sample size. This statistic is not suitable for use directly in a statistical test with these data, for two reasons. First, the fact that the respondents are a subset of the full sample violates the standard assumptions for a chi-square test of this kind. Second, this statistic does not account for the complex sample design used to collect the data.

Thus the Pearson chi-square statistic is modified appropriately to account for the impact of these two features. The resulting test statistic is referred to as the Rao-Scott Adjusted chi-square statistic. It is sometimes also referred to as the Satterthwaite-adjusted chi-square statistic. The number of degrees of freedom for the chi-square test, normally given as (*c* - 1), where *c* is the number of categories of the categorical variable for each distribution, is also modified on account of the complex design. The modified test statistic is then compared to the chi-square distribution with the appropriate number of degrees of freedom to determine whether the difference in the two distributions is statistically significant. For a detailed description of the technique, see Rao and Scott (1984) or Rao and Thomas (2003).

The first step in the calculation of the Satterthwaite-adjusted chi-square statistic is to form the following vector:

$$\mathrm{Y} = \sqrt{n}\begin{pmatrix} p_{11} - p_{1\cdot}p_{\cdot 1} \\ p_{12} - p_{1\cdot}p_{\cdot 2} \\ \\ p_{rc} - p_{r\cdot}p_{\cdot c} \end{pmatrix} = \begin{pmatrix} y_1 \\ y_2 \\ \\ y_{rc} \end{pmatrix}.$$

An *rc* x 1 vector made up of the products of the marginal proportions is defined as

$$\mathrm{p} = \begin{pmatrix} p_{1\cdot}p_{\cdot 1} \\ p_{1\cdot}p_{\cdot 2} \\ \\ p_{r\cdot}p_{\cdot c} \end{pmatrix} = \begin{pmatrix} p_1 \\ p_2 \\ \\ p_{rc} \end{pmatrix}.$$

For each replicate, an *rc* x *rc* matrix is calculated whose *ij*-th element is made up of

$$(y_{ig} - y_i)(y_{jg} - y_j),$$

where y_{ig} and y_{jg} are the *i*-th and *j*-th elements of **Y** calculated for the *g*-th replicate and y_i and y_j are the corresponding full-sample values. The *ij*-th element of the estimated covariance matrix for Y, B = cov(Y), is calculated using the following formula:

$$B_{ij} = \sum_{g=1}^{G} \left(y_{ig} - y_i \right)\left(y_{jg} - y_j \right),$$

where *c* is the constant appropriate to the replication. The Satterthwaite's approximation to degrees of freedom for the chi-square statistic to be calculated is

$$v = \frac{\left(\sum_{i=1}^{rc} \frac{B_{ii}}{p_i} \right)^2}{\sum_{i=1}^{rc} \sum_{j=1}^{rc} \frac{B_{ij}^2}{p_i p_j}}.$$

Since v will generally not be an integer, interpolation in standard chi-square tables is required.

Finally, the adjusted chi-square statistic is defined as

$$RS3 = \frac{X^2}{\sum_{i=1}^{rc} \frac{B_{ii}}{p_i}}.$$

Logistic Regression Models
Let *pi* denote the probability that the *i*-th sampled school will participate. Under the logistic regression model, the log odds of response propensity (expressed in terms of the logarithm of *pi*/(1 - *pi*)), is assumed to have the following linear form:

$$\log\left(\frac{p_i}{1 - p_i} \right) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \ldots + \beta_p X_{pi}$$

where X_{1i}, X_{2i} ..., X_{pi} are *p* auxiliary variables associated with the *i*-th sampled school, and β_0, β_1, ..., β_p are coefficients to be estimated. Asymptotic assumptions are used to develop statistical tests to determine which, if any, of the coefficients are significantly different from zero. In the analyses in this report the standard procedures for carrying out logistic regression analyses have been modified both to incorporate the sampling weights in the estimation of the coefficients and to reflect the effect of the complex sample design on the variance-covariance matrix of the coefficients.

The Newton-Raphson algorithm is used to iteratively solve for parameter solutions in the logistic regression. Let $q(\beta) = \partial L_n(\beta)/\partial\beta$ be the vector of first partial derivatives of the sample log-likelihood with respect to β. Let $H(\beta)$ be the matrix of second partial derivatives (or Hessian) of the sample log-likelihood having entries $\partial^2 L/\partial\beta_a \partial\beta_b$, where β_a and β_b are two separate components of β. Denote by q^t and H^t the values of $q(\beta)$ and $H(\beta)$ evaluated at b^t, the value of the estimate b at step *t*.

The general approach is to approximate the sample log-likelihood at the desired estimate, $L_n(\beta)$, at step t in the iterative process near the point β^t by a second-order Taylor series expansion:

$$L_n^t(\beta) \cong L_n(\beta^t) + q^{t\prime}(\beta - \beta^t) + \frac{1}{2}(\beta - \beta^t)' H^t (\beta - \beta^t).$$

Solving $\partial L^t / \partial \beta = q^t + H^t(\beta - \beta^t) = 0$ for β yields the iteration equations

$$\beta^{t+1} = \beta^t - \left[H^t \right]^{-1} q^t,$$

assuming H^t has an inverse. Given an initial value for $t = 0$, the set of iteration equations is solved for β^1, β^1 is used to solve for β^2, and so on, until the convergence criterion is satisfied. The $se(\hat{\beta})$ is calculated using JRR and repeating the procedure for each replicate.

Attachment. Standard Error Tables for Unit Nonresponse Bias Analysis

Table E-11. Standard errors for table E-2

Characteristics	Eligible sample schools (n = 198)	Participating sample schools, original (n = 78)
School control		
Public	1.79	2.74
Private	1.79	2.74
Grade structure		
Middle-Junior school	1.63	3.26
High school	1.89	3.15
Other	2.27	4.00
Urbanicity		
City	4.02	5.44
Suburb	3.63	4.53
Town	2.21	4.14
Rural	4.13	6.69
Region		
Northeast	3.45	5.71
Midwest	4.23	6.69
South	3.96	6.45
West	3.47	4.80
Percent minority students		
Less than 25 percent	4.29	6.77
25-49.9 percent	2.98	5.55
50-74.9 percent	2.54	3.84
75 percent or more	3.37	4.55

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Table E-12. Standard errors for table E-3

Characteristics	Eligible sample schools (n = 198)	Participating sample schools, original and substitute (n = 122)
School control		
Public	1.79	1.55
Private	1.79	1.55
Grade structure		
Middle-Junior school	1.63	2.03
High school	1.89	2.18
Other	2.27	2.60
Urbanicity		
City	4.02	5.15
Suburb	3.63	4.17
Town	2.21	3.12
Rural	4.13	4.95
Region		
Northeast	3.45	4.35
Midwest	4.23	5.35
South	3.96	4.86
West	3.47	4.62
Percent minority students		
Less than 25 percent	4.29	5.41
25-49.9 percent	2.98	3.70
50-74.9 percent	2.54	3.14
75 percent or more	3.37	3.98

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Table E-13. Standard errors for table E-5

Characteristics	Eligible sample schools (n = 198)	Participating sample schools, original and substitute (n = 122)
School control		
Public	1.79	1.79
Private	1.79	1.79
Grade structure		
Middle-Junior school	1.63	1.80
High school	1.89	2.17
Other	2.27	2.60
Urbanicity		
City	4.02	5.45
Suburb	3.63	4.47
Town	2.21	3.11
Rural	4.13	4.95
Region		
Northeast	3.45	4.61
Midwest	4.23	5.62
South	3.96	5.03
West	3.47	4.88
Percent minority students		
Less than 25 percent	4.29	5.61
25-49.9 percent	2.98	3.79
50-74.9 percent	2.54	3.39
75 percent or more	3.37	3.95

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Table E-14. Standard errors for table E-7

Characteristics	All eligible teachers, all participating schools (n = 2,327)	Eligible teachers, participating original schools (n = 1,507)
School control		
Public	1.53	0.51
Private	1.53	0.51
Grade structure		
Middle-Junior school	1.57	2.19
High school	2.57	3.40
Other	2.37	2.28
Urbanicity		
City	4.23	4.88
Suburb	4.43	5.36
Town	2.74	3.96
Rural	5.13	6.71
Region		
Northeast	4.96	6.26
Midwest	4.67	5.29
South	4.73	6.32
West	3.94	4.40
Percent minority students		
Less than 25 percent	5.26	6.78
25-49.9 percent	4.25	6.07
50-74.9 percent	2.40	3.13
75 percent or more	3.66	4.50

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Table E-15. Standard errors for table E-8

Characteristics	All eligible teachers, all participating schools (n = 2,327)	Participating teachers, all participating schools s (n = 1,926)
School control		
Public	1.53	1.73
Private	1.53	1.73
Grade structure		
Middle-Junior school	1.57	1.60
High school	2.57	2.64
Other	2.37	2.45
Urbanicity		
City	4.23	4.27
Suburb	4.43	4.57
Town	2.74	2.76
Rural	5.13	5.13
Region		
Northeast	4.96	5.13
Midwest	4.67	4.58
South	4.73	4.74
West	3.94	4.06
Percent minority students		
Less than 25 percent	5.26	5.33
25-49.9 percent	4.25	4.34
50-74.9 percent	2.40	2.54
75 percent or more	3.66	3.70

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

E.2 TALIS Item-Level Response Rates and Nonresponse Bias Analysis

Summary

This memo documents the item-level response rates for the TALIS 2013 surveys and discusses the potential for item-level nonresponse bias analysis. Despite the low unit-level response rates of the teacher and principal surveys, the response to the survey by participants produced very good item-level response rates. In fact, when accounting for skip patterns and unit nonresponse, there was one item on each survey that fell below 85 percent at the item level. The couple of issues related to item-level nonresponse are discussed in greater detail in the body of the memo. We conducted an analysis for item-level nonresponse analysis for each of the items with low response.

Teacher File

The teacher file included 351 survey items. Of these 351 survey items, 350 had a response rate of at least 85 percent. A total of 262 of the survey items, or 75 percent, had an item response rate of greater than 95 percent. An additional 29 items, or 8 percent, had item-level response rates of greater than 90 percent.

The single item that fell below the 85 percent threshold had a response rate of 77.5 percent. This item was a U.S. country-specific adaptation, the final item in a panel of similar items (see question 24 in addendum A). The specific question asked about the substantive areas in which teachers received professional development training in the prior 12 months, and asked about the positive impact of this training on teachers' professional practice.

When reviewing the univariate frequencies, 48 additional items appeared to have response rates lower than 85 percent. However, these items were all part of the same question. The question, item 15 in addendum A, asked teachers to report on whether, "…any of the subject categories below (were) included in your formal education or training?" The response categories cover four distinct categories, and respondents were asked to, "…mark as many choices as appropriate in each row." As such, the frequencies do not represent the item response rate, but the percentage of respondents who received education or training in that subject at the marked level.

Principal File

The principal file included 267 survey items. Of these 267 items, 266 had a response rate of at least 85 percent. A total of 253 of the 267 items had a response rate of greater than 95 percent. There was one item that had a response rate below 85 percent, and it was 84.3 percent.

The single item that had an item response rate below 85 percent was a sub-item on a question asking principals to provide an estimate of the percentage of their time they spent across a variety of tasks (see addendum B). There were six substantive areas covered and a seventh category labeled "other." The single item that fell below 85 percent was the "other" category. Respondents were asked to write a 0 (zero) in the row if the appropriate answer was none, but it would be reasonable to assume that those not responding to this residual category were conveying a zero response. In fact, additional analysis confirmed that the prior items summed to 100 percent for a majority of nonrespondents to this item. This was not converted to an implied 0

response by the IEA-DPC because the "other" category was a U.S. addition and not included on the international file. After treating the respondents with prior items summing to 100 percent, the adjusted item response rate was 94.1 percent.

Initial examination of the principal file suggested a pattern of "block nonresponse," whereby a group of principals included as respondents appeared to fail to answer more than a couple of questions. The preliminary plan was to identify this group of block nonrespondents and examine their characteristics. Upon further examination, it was determined that the IEA processing center deviated from our expectations and the stated procedures by adding a principal observation for each school from which more than 50 percent of the teachers responded, whether or not the principal actually responded to the principal survey. Of the 122 observations on the principal file, 20 observations were blank observations that included no item responses and were, in fact, unit nonresponse. The results above treat these observations as unit nonresponse. While there were problems with unit-nonresponse, participants who responded completed nearly all items in the survey.

Item-Level Nonresponse Analysis Plan

The analysis plan for the single teacher item included a comparison of respondents to nonrespondents across response categories on the teacher-level characteristics included in the unit-level nonresponse bias analysis: sex, contract status, age, and years of experience. The analysis identifies any potential bias in nonresponse on this item based on these key teacher characteristics.

Item-Level Nonresponse Bias Analysis

The item with a response rate below 85 percent was analyzed, comparing the distribution of those teachers responding to the item to those teachers not responding to the item. Analysis was completed for sex, contract status, age, and years of experience. The results of the analysis are included below in table E-16.

Table E-16. Comparison of the distribution of ISCED Level 2 teachers responding to item 24O2 (variable TT2G24O2_USAX2) to those not responding to item 24O2 in TALIS, by key demographic characteristics: 2013

Characteristic	Respondents percent (S.E.)	Nonrespondents percent (S.E.)	Bias	Relative bias	*t*-test (ratio of *t*/cv)
Sex					
Male	35.5 (1.42)	37.3 (4.56)	1.8	5.1	0.192
Female	64.5 (1.42)	62.7 (4.56)	-1.8	-2.8	-0.192
Contract status					
Full-time	96.6 (0.60)	93.6 (2.43)	-3.0	-3.1	-.612
Part-time	3.4 (0.60)	6.4 (2.43)	3.0	88.2	.612
Age					
Under 30	16.1 (1.09)	11.6 (2.36)	-4.5	-28.0	0.883
30-39	28.4 (1.31)	31.1 (4.27)	2.7	9.5	0.308
40-49	26.0 (1.31)	19.8 (3.51)	-6.2	-23.8	-0.844
50-54	11.8 (0.98)	19.1 (4.25)	7.3	61.9	0.854
55 and over	17.8 (1.10)	18.4 (3.66)	0.6	3.4	0.080
Years of experience					
Less than 4	13.9 (1.03)	13.4 (2.90)	-0.5	-3.6	-0.083
4-9	27.8 (1.36)	23.7 (3.91)	-4.1	-14.7	-0.505
10-14	19.7 (1.17)	18.9 (3.27)	-0.8	-4.1	-0.118
15 or more	38.5 (1.42)	44.0 (4.25)	5.5	14.3	0.626

NOTE: S.E. means standard error. ISCED stands for the International Standard Classification of Education (UNESCO 1997). In the United States, ISCED Level 2 teachers are those that instruct any students in grades 7, 8, or 9 (or lower secondary). The bias is the difference between the respective estimates for responding and nonresponding teachers for item 2402. The relative bias is calculated as the bias divided by the estimate from SASS multiplied by 100. SASS estimates use the SASS final weights. Row-level *t*-tests are shown as the ratio of the *t*-statistic to the critical value (cv), in this case 1.96. Ratios at or greater than 1/-1 are significant. All estimates use the final teacher weights from version 2.0 of the International file.

SOURCE: Organization for Economic Cooperation and Development, Teaching and Learning International Survey (TALIS) file version 2.0, 2013.

Addendum A. Teacher Items

Item 24O2 was the only item below 85 percent:

24. Did the professional development activities you participated in during the last 12 months cover the following topics? If so, what positive impact did these have on your teaching?

For each specified alternative please indicate 'Yes' or 'No' in part (A). If 'Yes' in part (A), please estimate the positive impact in part (B).

	(A) Topic		(B) Positive impact			
	Yes	No	No	Small	Moderate	Large
a) Knowledge and understanding of my subject field(s)	☐1	☐2	☐1	☐2	☐3	☐4
b) Pedagogical competencies in teaching my subject field(s)	☐1	☐2	☐1	☐2	☐3	☐4
c) Knowledge of the curriculum	☐1	☐2	☐1	☐2	☐3	☐4
d) Student evaluation and assessment practices	☐1	☐2	☐1	☐2	☐3	☐4
e) ICT (information and communication technology) skills for teaching	☐1	☐2	☐1	☐2	☐3	☐4
f) Student behavior and classroom management	☐1	☐2	☐1	☐2	☐3	☐4
g) School management and administration	☐1	☐2	☐1	☐2	☐3	☐4
h) Approaches to individualized learning	☐1	☐2	☐1	☐2	☐3	☐4
i) Teaching students with special needs (see Question 9 for the definition)	☐1	☐2	☐1	☐2	☐3	☐4
j) Teaching in a multicultural or multilingual setting	☐1	☐2	☐1	☐2	☐3	☐4
k) Teaching cross-curricular skills (e.g. problem solving, learning-to-learn)	☐1	☐2	☐1	☐2	☐3	☐4
l) Approaches to developing cross-occupational competencies for future work or future studies	☐1	☐2	☐1	☐2	☐3	☐4
m) New technologies in the workplace	☐1	☐2	☐1	☐2	☐3	☐4
n) Student career guidance and counseling ...	☐1	☐2	☐1	☐2	☐3	☐4
o) Implementation of national/state curriculum standards or Common Core standards	☐1	☐2	☐1	☐2	☐3	☐4

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ITEMS TT2G14* - are all collected on

Item 15 appeared to have low item response rates, but the univariate frequencies represent the prevalence of each item category in a, "mark as many choices as appropriate…" format that has no explicit "no/not included" category.

15. Were any of the subject categories listed below included in your formal education or training?

Please mark as many choices as appropriate in each row.

Because this is an international survey, we had to categorize many of the actual subjects taught in schools into broad categories. Please refer to the subject examples below. If the exact name of one of your subjects is not listed, please mark the category you think best fits the subject.

Reading, writing and literature: reading and writing (and literature) in English, language arts, public speaking, literature, composition, communications, journalism

English as a Second Language (ESL): ESL or bilingual education in support of students' subject matter learning

Mathematics: basic and general mathematics, geometry, pre-algebra, algebra, business and applied mathematics, statistics and probability, trigonometry, calculus, and pre-calculus.

Science: general or integrated science, physics, physical science, chemistry, biology or life science, human biology, environmental science, Earth science

Social studies/Social science: general social studies, anthropology, economics, geography, government or civics, history, humanities, philosophy, psychology, sociology

Modern foreign languages: languages other than English (e.g., French, German, Spanish, ASL)

Classical Greek and/or Latin

Technology: orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology/design technology

Arts: arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework

Physical and health education: physical education, gymnastics, dance, health

Religion and/or ethics: religion, history of religions, religion culture, ethics

Business studies: accounting, business management, business principles and ethics, marketing and distribution

Practical and vocational skills: vocational skills (preparation for a specific occupation), agriculture and natural resources, domestic science, career education, clothing and textiles, construction trades, cosmetology, culinary arts, driving, health occupations, home economics, mechanics and repair, polytechnic courses, secretarial studies, tourism and hospitality, handicraft

Interdisciplinary subject: integration of content and perspective of several traditional school subjects

Special education: education of students with special needs

		Included in high school, vocational certificate, or Associate's degree	Included in Bachelor's degree or above	Included in subject specialization as part of teacher education	Included at the in-service or professional development stage
a)	Reading, writing and literature	☐1	☐1	☐1	☐1
b)	English as a Second Language	☐1	☐1	☐1	☐1
c)	Mathematics	☐1	☐1	☐1	☐1
d)	Science	☐1	☐1	☐1	☐1
e)	Social studies/Social science	☐1	☐1	☐1	☐1
f)	Modern foreign languages	☐1	☐1	☐1	☐1
g)	Classical Greek and/or Latin	☐1	☐1	☐1	☐1
h)	Technology	☐1	☐1	☐1	☐1
i)	Arts	☐1	☐1	☐1	☐1
j)	Physical and health education	☐1	☐1	☐1	☐1
k)	Religion and/or ethics	☐1	☐1	☐1	☐1
l)	Business studies	☐1	☐1	☐1	☐1
m)	Practical and vocational skills	☐1	☐1	☐1	☐1
m)	Interdisciplinary subject	☐1	☐1	☐1	☐1
o)	Special education	☐1	☐1	☐1	☐1
p)	Other (please specify below)	☐1	☐1	☐1	☐1

Addendum B. Principal Items

Item 19g had an item-level response rate of 84.3 percent.

19. On average throughout the school year, what percentage of time in your role as a principal do you spend on the following tasks in this school?

Rough estimates are sufficient. Please write a number in each row. Write 0 (zero) if none.

Please ensure that responses add up to 100%.

a) ⌊_⌊_⌊_ % Administrative and leadership tasks and meetings

Including human resource/personnel issues, regulations, reports, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state, or national education officials

b) ⌊_⌊_⌊_ % Curriculum and teaching-related tasks and meetings

Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development

c) ⌊_⌊_⌊_ % Student interactions

Including counseling and conversations outside structured learning activities, discipline

d) ⌊_⌊_⌊_ % Parent or guardian interactions

Including formal and informal interactions

e) ⌊_⌊_⌊_ % Interactions with local and regional community, businesses and industries

f) ⌊_⌊_⌊_ % Extra-curricular planning and supervision

g) ⌊_⌊_⌊_ % Other **ITEM TC2G19G_USA**

100 % Total