

New Insights from TALIS 2013

TEACHING AND LEARNING IN PRIMARY AND UPPER SECONDARY EDUCATION





New Insights from TALIS 2013

TEACHING AND LEARNING IN PRIMARY AND UPPER SECONDARY EDUCATION



This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Please cite this publication as:

OECD (2014), New Insights from TALIS 2013: Teaching and Learning in Primary and Upper Secondary Education, OECD Publishing. http://dx.doi.org/10.1787/9789264226319-en

ISBN 978-92-64-22617-3 (print) ISBN 978-92-64-22631-9 (PDF)

TALIS ISSN 2312-9646 ISSN 2312-9662

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

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

Photo credits:

- © Andersen Ross/Inmagine LTD
- © Digital Vision/Getty Images
- © Feng Yu/Stocklib
- © Hero Images/Corbis
- © Michael Brown/Stocklib
- © Monkey Busines/Fotolia
- © Pressmaster/Shutterstock
- © Vetta Collection/iStock
- © Tyler Olson/Shutterstock

 $\label{thm:corrigenda} \mbox{Corrigenda to OECD publications may be found on line at: $www.oecd.org/publishing/corrigenda.} \\$

© OECD 2014

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgement of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.



Foreword

The OECD Teaching and Learning International Study (TALIS) has added the voice of teachers to the data and evidence the OECD regularly collects from students, schools and education systems. TALIS is the largest international survey on teaching and learning, and it helps shed light on which practices and policies can spur more effective teaching and learning environments.

The focus of the TALIS report so far has been on lower secondary education. This report now extends the picture to both primary and upper secondary teachers and reveals that the challenges and work of teachers can vary significantly across levels of education.

By examining the teaching profession from primary through upper secondary, we get a true picture of the people working in our schools today and the level of responsibility they have. Similarities and differences in some areas are revealed, such as the need for support for training, personnel and material resources at all levels of the school system. Primary education seems to be lacking qualified teachers and Information and Communications Technology (ICT) resources the most. The issue of gender imbalance to school leadership positions is also most marked in primary education. At the same time, teachers in primary education tend to co-operate more and more readily teach classes jointly. In upper secondary education, the main challenge is the administrative burden which falls on the principals, leaving them little time to work on actual learning-related tasks. Mentoring and induction activities are more widely available at the higher levels, but teachers are not always engaged in those.

The analysis will enable countries to see more clearly where imbalances might lie and can also help teachers, schools and policy makers learn from these practices at their own level and at other educational levels as well.

Preparing students to become successful life-long learners and providing them with the skills necessary to become active and engaged members of society is a process that begins well before and continues beyond lower secondary school. The work of teachers in primary and upper secondary education is key to achieving this goal.

Andrean Solieicler

Andreas Schleicher

Director, Directorate for Education and Skills



Acknowledgements

The OECD Teaching and Learning International Survey (TALIS) is the outcome of a collaboration among the participating countries, the OECD Secretariat, the European Commission and an international consortium led by the International Association for the Evaluation of Educational Achievement (IEA). This report was prepared by Julie Bélanger, Katarzyna Kubacka, Simon Normandeau, Mathilde Overduin and Kristen Weatherby, with help from Marie-Amélie Doring Serre, Tadakazu Miki, Gabriella Moriconi and Andreas Schleicher.

Communications assistance was provided by Cassandra Davis and Sophie Limoges. Administrative assistance was provided by Elisa Larrakoetxea with help from Brigitte Beyeler and Delphine Versini.

The development of the report was steered by the TALIS Board of Participating Countries, chaired by Anne-Berit Kavli (Norway). Annex C of this report lists the members of various TALIS bodies as well as the individual experts and consultants who have contributed to TALIS in general.

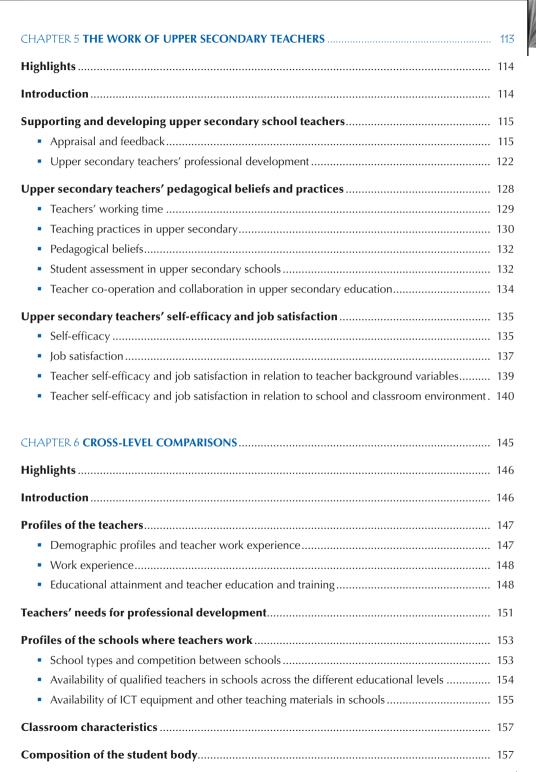


Table of contents

EXECUTIVE SUMMARY	21
READER'S GUIDE	23
CHAPTER 1 OVERVIEW OF TALIS IN PRIMARY AND UPPER SECONDARY EDUCATION	25
What is TALIS?	26
Learning about teachers across an education system	27
The population surveyed	28
 Interpretation of the results	29
Organisation of the report	29
CHAPTER 2 PRIMARY TEACHERS AND THEIR SCHOOLS	31
Highlights	32
Introduction	32
A profile of primary education teachers	33
Demographic profile of teachers	33
Educational attainment and work experience	34
Employment status	37
A profile of schools where teachers work	38
School type and school composition	38
School resources	40
Characteristics of primary teachers' classrooms	42
Profile of principals and school leadership in primary schools	45
Demographic characteristics of primary school principals	46
Educational attainment and work experience of primary school principals	46
The work of primary school principals	50



CHAPTER 3 THE WORK OF PRIMARY EDUCATION TEACHERS	57
Highlights	58
Introduction	58
Supporting and developing primary school teachers	59
Appraisal and feedback	59
Primary teachers' professional development	64
Primary teachers' pedagogical beliefs and practices	69
Teachers' working time	69
Teaching practices in primary schools	71
Pedagogical beliefs of teachers	73
Student assessment in primary schools	74
Teacher co-operation and collaboration in primary education	75
Primary teachers' self-efficacy and job satisfaction	77
Self-efficacy	77
Job satisfaction	79
 Teacher self-efficacy and job satisfaction in relation to teacher background variables 	80
 Teacher self-efficacy and job satisfaction in relation to school and classroom environment. 	80
CHAPTER 4 UPPER SECONDARY TEACHERS AND THEIR SCHOOLS	85
Highlights	86
Introduction	86
A profile of upper secondary education teachers	87
Demographic profile of upper secondary teachers	87
Educational attainment and work experience of upper secondary teachers	88
Employment status	92
A profile of schools where teachers work	93
School type	94
School composition	
School resources	96
Characteristics of upper secondary teachers' classrooms	100
Profile of principals and school leadership in upper secondary schools	102
Demographic characteristics of upper secondary principals	103
Educational attainment and work experience of upper secondary principals	104
The work of upper secondary school principals	106







Teachers' access and participation in mentoring and induction	159
Participation in mentoring	159
Access to formal and informal induction programmes	159
Teacher feedback and appraisal	161
Teacher feedback by source	161
Methods of feedback	163
Outcomes of teacher feedback	165
Teachers' work	166
Distribution of tasks in teachers working hours	166
Time spent in the classroom	168
Teaching practices	168
Teachers' feelings and perception on their profession	169
Teachers' self-efficacy	170
Teachers' job satisfaction and perceptions of being valued by the society	171
CHAPTER 7 KEY FINDINGS AND POLICY IMPLICATIONS	173
Introduction	174
Policy implications	174
Ensure an equitable distribution of human and material resources	
across the school system	. 174
 Review the process by which teachers can be promoted to leadership positions and 	
endeavour to reduce administrative burden for principals	. 175
 Provide access to formal induction and mentoring programmes at all levels of the education 	า
system, and encourage teachers to participate	. 176
 Develop systems of teacher appraisal and feedback that touch on all aspects 	
of teachers' work and career	. 177
 Monitor and find ways to increase teachers' levels of self-efficacy 	
and job satisfaction	. 178
ANNEX A TECHNICAL NOTES ON INDICES AND ANALYSIS USED IN TALIS 2013	179
ANNEX B DATA TABLES	191
ANNEX CLIST OF CONTRIBUTORS	321



BOXES

Box 1.1	The TALIS design in primary and upper secondary education	28
Box 2.1	Reform of teacher education in Denmark	35
Box 2.2	Language minorities in Denmark, Norway and Flanders (Belgium)	43
Box 2.3	Special-needs students in Finnish primary schools	45
Box 2.4	Collaboration among schools in Flanders (Belgium)	51
Box 3.1	Programme for ICT in Norway and Poland	72
Box 3.2	Change of educational structure and curriculum in Poland	73
Box 3.3	Finland's system of student assessment	74
Box 3.4	Finland's most respected profession	79
Box 4.1	Teacher recruitment and development in Singapore	89
Box 4.2	Recent upper secondary reform in Mexico	90
Box 4.3	Policies for supporting students from disadvantaged background in Australia	99
Box 4.4	Mexico's Programme for the Strengthening of Special Education and Educational Integration	102
Box 4.5	School leadership culture and classroom observation in Norway	108
Box 5.1	The use of teacher and student feedback in Denmark and Norway	117
Box 5.2	Career progression in Australia and Singapore	121
Box 5.3	Mandatory induction programmes in Italy	124
Box 5.4	Immigration in Italy and meeting teachers' professional development needs for teaching in multicultural and multilingual contexts	128
Box 5.5	Iceland's focus on knowledge, skills and competence	132

FIGURES

Figure 1.1	Countries and economies participating in TALIS 2013	26
Figure 1.2	Countries and economies surveying primary and upper secondary schools	27

TABLE OF CONTENTS



Figure 2.1	Gender and age distribution of primary teachers	34
Figure 2.2	Completion and content of teacher education or training programme for primary education teachers	36
Figure 2.3	Work experience of primary teachers	37
Figure 2.4	Employment status of primary teachers, full time or part time	38
Figure 2.5	Primary schools composition by first language, special needs and disadvantaged homes	39
Figure 2.6	School resources in primary education	41
Figure 2.7	School resources in primary education, by socio-economic level	42
Figure 2.8	Classroom composition in primary education	44
Figure 2.9	Gender and age distribution of primary education principals	47
Figure 2.10	Primary education principals' formal education	48
Figure 2.11	Work experience of primary education principals	49
Figure 2.12	Gender of primary education teachers and principals	50
Figure 2.13	Principals' working time in primary education	51
Figure 2.14	Principals' leadership in primary education	52
Figure 2.15	Primary education principals' participation in a school development plan	53
Figure 3.1	Teachers' feedback by source of feedback in primary education	59
Figure 3.2	Methods for providing feedback to primary education teachers	60
Figure 3.3	Emphasis of teacher feedback in primary education	62
Figure 3.4	Outcomes of teacher feedback in primary education	63
Figure 3.5	Access to and participation in induction programmes in primary education	65
Figure 3.6	Mentoring programmes in primary education	66
Figure 3.7	Participation in mentoring programmes and teacher co-operation in primary education	67
Figure 3.8	Primary teachers' participation in professional development activities in the previous 12 months and personal financial cost of professional development activities	68
Figure 3.9	Teachers' needs for professional development in primary education	69
Figure 3.10	Teachers' working hours in primary education	70
Figure 3.11	Distribution of class time during an average lesson in primary education	71



Figure 3.12	Teaching practices in primary education	72
Figure 3.13	Assessment of student learning in primary education	75
Figure 3.14	Teacher co-operation in primary education	76
Figure 3.15	Teachers' self-efficacy in primary education	77
Figure 3.16	Primary teachers' view of the way society value the teaching profession	78
Figure 3.17	Primary teachers' job satisfaction and class composition	81
Figure 4.1	Gender and age distribution of upper secondary teachers	88
Figure 4.2	Completion and content of teacher education or training programme for upper secondary education teachers	91
Figure 4.3	Work experience of upper secondary teachers	92
Figure 4.4	Employment status of upper secondary teachers, full time or part time	93
Figure 4.5	Upper secondary schools composition by first language, special needs and disadvantaged homes	95
Figure 4.6	School resources in upper secondary education	97
Figure 4.7	School resources in upper secondary education, by socio-economic level	98
Figure 4.8	School resources in upper secondary education, by school location	99
Figure 4.9	Classroom composition in upper secondary education	101
Figure 4.10	Gender and age distribution of upper secondary principals	103
Figure 4.11	Upper secondary education principals' formal education	104
Figure 4.12	Work experience of upper secondary education principals	105
Figure 4.13	Principals' working time in upper secondary education	106
Figure 4.14	Principals' leadership in upper secondary education	107
Figure 4.15	Upper secondary principals' participation in a school development plan	109
Figure 5.1	Teachers' feedback by source of feedback in upper secondary education	116
Figure 5.2	Methods for providing feedback to upper secondary education teachers	117
Figure 5.3	Emphasis of teacher feedback in upper secondary education	119
Figure 5.4	Outcomes of teacher feedback in upper secondary education	120
Figure 5.5	Access to induction programmes in upper secondary education	123
Figure 5.6	Access to and participation in mentoring programmes in upper secondary education	125



Figure 5.7	Professional development recently undertaken by upper secondary education teachers, by type and intensity	126
Figure 5.8	Teachers' needs for professional development in upper secondary education	
_	Teachers' working hours in upper secondary education	
	Distribution of class time during an average lesson in upper secondary education	
_	Teaching practices in upper secondary education	
	Assessment of student learning in upper secondary education	
_	Teacher co-operation in upper secondary education	
Ü	Teachers' self-efficacy in upper secondary education	
_	Upper secondary teachers' job satisfaction	
Ü	Upper secondary teachers' view of the way society value the teaching profession	
Ü	Upper secondary teachers' job satisfaction and class composition	
rigule 3.17	——————————————————————————————————————	141
Figure 6.1	Gender and age of teachers, across ISCED levels	148
Figure 6.2	Work experience of teachers, across ISCED levels	149
Figure 6.3	Completion and content of teacher education or training programme,	
	across ISCED levels	150
Figure 6.4	Teachers' needs for professional development, across ISCED levels	152
Figure 6.5	School type and school competition, across ISCED levels	153
Figure 6.6	School resources, across ISCED levels	156
Figure 6.7	Class size, across ISCED levels	157
Figure 6.8	Classroom composition, across ISCED levels	158
Figure 6.9	Participation in mentoring programmes, across ISCED levels	160
Figure 6.10	Access to induction programmes for new teachers, across ISCED levels	161
Figure 6.11	Teachers' feedback by source, across ISCED levels	162
Figure 6.12	Teachers' feedback by method, across ISCED levels	164
Figure 6.13	Outcomes of teacher feedback, across ISCED levels	165
Figure 6.14	Teachers' working hours, across ISCED levels	167
Figure 6.15	Distribution of class time during an average lesson, across ISCED levels	168
Figure 6.16	Teacher self-efficacy, across ISCED levels	170
Figure 6.17	Teacher job satisfaction, across ISCED levels	172



TABLES

Table A.1	List of variables in the Chapter 3 regression analyses	185
Table A.2	The percentage of missing cases for each country for each variable included in the Chapter 3 regression analyses	186
Table A.3	List of variables in the Chapter 5 regression analyses	187
Table A.4	The percentage of missing cases for each country for each variable included in the Chapter 5 regression analyses	188
Table 2.1	Gender and age distribution of primary teachers	192
Table 2.2	Primary teachers' educational attainment	192
Table 2.3	Completion and content of teacher education or training programme in primary education	193
Table 2.4	Work experience of primary teachers	193
Table 2.5	Employment contract status of primary teachers	194
Table 2.6	Employment status of primary teachers, full time or part time	194
Table 2.7	Primary school type and school competition	195
Table 2.8	Primary school composition by first language, special needs and disadvantaged homes	196
Table 2.9	School resources in primary education	197
Table 2.10	School resources in primary education, by socio-economic level	198
Table 2.11	School resources in primary education, by school location	200
Table 2.12	Class size and classroom composition in primary education	202
Table 2.13	Gender and age distribution of primary education principals	204
Table 2.14	Primary education principals' educational attainment	204
Table 2.15	Primary education principals' formal education	205
Table 2.16	Work experience of primary education principals	206
Table 2.17	Principals' working time in primary education	207
Table 2.18	Principals' leadership in primary education	208
Table 2.19	Primary education principals' participation in a school development plan	208
Table 3.1	Teachers' feedback by source of feedback in primary education	209
Table 3.2	Methods for providing feedback to teachers in primary education	209

TABLE OF CONTENTS



Emphasis of teacher feedback in primary education	210	
Outcomes of teacher feedback in primary education		
Access to and participation in induction programmes in primary education		
Mentoring programmes in primary education	213	
Primary teachers' participation in professional development and personal financial cost involved	214	
Teachers' needs for professional development in primary education	215	
Teachers' working hours in primary education	216	
Distribution of class time during an average lesson in primary education	217	
Teaching practices in primary education	217	
Teachers' beliefs about teaching and learning in primary education	218	
Teachers' use of student assessment practices in primary education	219	
Teacher co-operation in primary education	220	
Teachers' self-efficacy in primary education	221	
Teachers' job satisfaction in primary education	222	
Relationship between teacher and school characteristics and societal value of teaching in primary education	223	
Relationship between teachers' characteristics and their self-efficacy in primary education	223	
Relationship between teachers' characteristics and their job satisfaction in primary education	224	
ble 3.20 Relationship between classroom and school environment and teachers' self-efficacy in primary education		
Relationship between classroom and school environment and teachers' job satisfaction in primary education	226	
Gender and age distribution of upper secondary teachers	227	
Upper secondary teachers' educational attainment	227	
Completion and content of teacher education or training programme for upper secondary teachers		
Work experience of upper secondary teachers	228	
	Outcomes of teacher feedback in primary education	



Table 4.5	Employment contract status of upper secondary teachers		
Table 4.6	Employment status of upper secondary teachers, full time or part time		
Table 4.7	Upper secondary school type and school competition		
Table 4.8	Upper secondary education school composition by first language, special needs and disadvantaged homes		
Table 4.9	School resources in upper secondary education		
Table 4.10	School resources in upper secondary education, by socio-economic level		
Table 4.11	School resources in upper secondary education, by school location		
Table 4.12	Class size and classroom composition in upper secondary education		
Table 4.13	Gender and age distribution of upper secondary principals		
Table 4.14	Upper secondary education principals' educational attainment		
Table 4.15	Upper secondary education principals' formal education		
Table 4.16	Work experience of upper secondary education principals		
Table 4.17	Principals' working time in upper secondary education		
Table 4.18	Principals' leadership in upper secondary education		
1able 4.16	Threspans reductions in apper secondary education		
Table 4.19	Upper secondary principals' participation in a school development plan		
Table 4.19	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3 Table 5.4	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3 Table 5.4 Table 5.5	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3 Table 5.4 Table 5.5 Table 5.6	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3 Table 5.4 Table 5.5 Table 5.6 Table 5.7	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3 Table 5.4 Table 5.5 Table 5.6 Table 5.7 Table 5.8	Upper secondary principals' participation in a school development plan		
Table 4.19 Table 5.1 Table 5.2 Table 5.3 Table 5.4 Table 5.5 Table 5.6 Table 5.7 Table 5.8 Table 5.9	Upper secondary principals' participation in a school development plan		



Distribution of class time during an average lesson in upper secondary education	259
Teaching practices in upper secondary education	260
Teachers' beliefs about teaching and learning in upper secondary education	260
Teachers' use of student assessment practices in upper secondary education	261
Teacher co-operation in upper secondary education	262
Teachers' self-efficacy in upper secondary education	263
Teachers' job satisfaction in upper secondary education	264
Relationship between teacher and school characteristics and societal value of teaching in upper secondary education	265
Relationship between teachers' characteristics and their self-efficacy in upper secondary education	266
Relationship between teachers' characteristics and their job satisfaction in upper secondary education	267
Relationship between classroom and school environment and teachers' self-efficacy in upper secondary education	268
Relationship between classroom and school environment and teachers' job satisfaction in upper secondary education	269
Gender and age of teachers, across ISCED levels	270
Work experience of teachers, across ISCED levels	271
Teachers' educational attainment, across ISCED levels	272
Completion and content of teacher education or training programme, across ISCED levels	273
Teachers' needs for professional development, across ISCED levels	275
School type and school competition, across ISCED levels	282
School resources, across ISCED levels	283
Class sizes, across ISCED levels	285
Classroom composition – Students with special needs, across ISCED levels	286
Classroom composition – Students with behavioural problems, across ISCED levels	288
Classroom composition – Low academic achievers, across ISCED levels	290
Classroom composition – Students from socio-economically disadvantaged homes, across ISCED levels	292
	Teachers' beliefs about teaching and learning in upper secondary education



Participation in mentoring programmes, across ISCED levels	294
Access to formal induction programmes, across ISCED levels	295
Teachers' access to informal induction activities or introduction to the schools, across ISCED levels	296
Teachers' feedback by source, across ISCED levels	297
Teachers' feedback by method, across ISCED levels	300
Outcomes of teacher feedback, across ISCED levels	302
Teachers' working hours, across ISCED levels	305
Distribution of time spent in the classroom during an average lesson,	
across ISCED levels	309
Teaching practices, across ISCED levels	310
Teacher self-efficacy, across ISCED levels	313
Teacher job satisfaction, across ISCED levels	317
	Access to formal induction programmes, across ISCED levels

This book has...



Look for the *StatLinks* at the bottom left-hand corner of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the *http://dx.doi.org* prefix.

If you're reading the PDF e-book edition, and your PC is connected to the Internet, simply click on the link. You'll find *StatLinks* appearing in more OECD books.



Executive summary

Who are our teachers, and what do they think about the job they do and the support they receive from their colleagues and from society as a whole? The OECD Teaching and Learning International Survey (TALIS) asked teachers and school leaders in lower secondary schools in 34 countries and economies about the conditions that affect the learning environment in their schools. The results of the 2013 survey, published in TALIS 2013 Results: An International Perspective on Teaching and Learning (OECD, 2014), show that, among many other findings, lower secondary teachers still work in isolation, rarely or never teach jointly with colleagues, and do not always receive meaningful feedback. They also show that teachers' satisfaction with their job is much more affected by students' behaviour than by the size of their classes.

This report broadens the results from TALIS to include responses from primary and upper secondary teachers.

TALIS IN PRIMARY SCHOOL

Six countries chose to conduct the TALIS survey in their primary schools in addition to their lower secondary schools: Denmark, Finland, Mexico, Norway, Poland and Flanders (Belgium). The results show that there are more female teachers at the primary level than at any other level of education, while there is near gender equality among primary school leaders. This implies a worrying gender imbalance in promotion among primary school teachers. Primary school principals report that shortages of human and material resources, including support personnel, teachers with advanced qualifications, and information and communication technologies (ICT) equipment, undermine the quality of teaching, especially in schools with larger proportions of students from socio-economically disadvantaged homes. Primary school teachers collaborate with their colleagues in joint teaching and learning activities or simply by exchanging teaching materials and attending team conferences. Like their colleagues in lower secondary schools, primary teachers seem fairly confident about their abilities in the classroom and satisfied with their jobs. However, more than one in four have second thoughts about their choice of work, and only one in three think that society values the teaching profession.

TALIS IN UPPER SECONDARY SCHOOL

Ten countries and economies opted to conduct the survey in their upper secondary schools: Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi (United Arab Emirates). At this level of education, at least 30% of teachers are men. Secondary school principals report that the quality of education can be affected by shortages of teachers and support personnel, and particularly by a lack of qualified teachers. These conditions are more likely to affect



schools with large proportions of disadvantaged students or schools located in rural areas. Upper secondary teachers often face the challenge of instructing classes of students who have a wide range of abilities and attitudes, including many low achievers and students with behavioural problems. Most upper secondary teachers consider that their role is to facilitate students' own inquiry, that learning how to think and reason is more important than learning specific curriculum content. Like their colleagues in lower secondary schools, they are less likely to collaborate with fellow teachers, other than in simple forms of co-operation, like exchanging teaching materials. Upper secondary teachers are generally satisfied with their jobs and work environment. Fewer than half think that the profession is valued in society, but if they had to make the decision again, they would still choose to work as a teacher. At this level of education, teachers' self-confidence and job satisfaction are related to their classroom environment: teachers who teach classes with larger proportions of low achievers or students with behavioural problems tend to report less self-confidence and less job satisfaction, while those who teach a large proportion of gifted students report greater self-confidence and greater job satisfaction.

TALIS FROM PRIMARY THROUGH UPPER SECONDARY SCHOOL

Most teachers, across all three levels of education, are women. In general, they are experienced as teachers and well-educated, with their own level of educational attainment rising as the level of education they teach rises. Most have participated in some form of teacher education or training.

The proportion of disadvantaged students in schools is similar across all three levels of education. However, primary and lower secondary teachers are more likely to report that more than 10% of their students have behavioural problems or special needs, while upper secondary teachers are more likely to report that more than 10% of their students are low achievers.

Across all three levels of education, but particularly at the primary and lower secondary levels, teachers report a need for professional development in working with students with special needs, in using ICT for teaching, and in using new technologies, themselves, in the workplace. Teachers and principals also report shortages in teachers qualified to use ICT and in ICT hardware. Primary school teachers and principals are most likely to report shortages in ICT hardware and software.

Teachers at all levels surveyed report that the feedback they receive on their work mainly comes from the school principal or other teachers, and largely through classroom observation. The use of other monitoring methods varies, depending on the education level. Primary school teachers report the most positive impact from feedback, affecting their self-confidence, motivation and job satisfaction.

Overall, TALIS shows that most teachers feel that their profession is not valued by society. But upper secondary teachers are less likely to share this view, and differences in this perception vary widely among countries and economies.

Teachers need support to build a strong education system. That means that governments, at all levels, should:

- Ensure an equitable distribution of human and material resources across the school system
- Provide access to formal induction and mentoring programmes at all levels of the education system, and encourage teachers to participate
- Develop systems of teacher appraisal and feedback that touch on all aspects of teachers' work and career.



Reader's guide

Statistics and analysis

This report presents statistics and analysis derived from the survey responses of teachers in primary, lower secondary and upper secondary education (levels 1, 2 and 3 of the International Standard Classification of Education [ISCED 97]) and the principals of their schools.

Classification of levels of education

The classification of the levels of education is based on the revised International Standard Classification of Education (ISCED 97). ISCED is an instrument for compiling statistics on education internationally and identifies six levels of education:

- Pre-primary education (ISCED level 0)
- Primary education (ISCED level 1)
- Lower secondary education (ISCED level 2)
- Upper secondary education (ISCED level 3)
- Post-secondary non-tertiary education (ISCED level 4)
- Tertiary-type A education (ISCED level 5A)
- Tertiary-type B education (ISCED level 5B)
- Advanced research qualifications (ISCED level 6)

While ISCED 2011 is now available, the first data collection based on the new classification will begin in 2014, as a result it was not available at the time of the TALIS 2013 data collection.

Data underlying the figures

The data referred to in this volume are presented in Annex B and in greater detail, including some additional tables on the web. These additional tables either contain more detail than similar tables that are published in the report or refer to domains referred to but not examined in the report.

A *StatLink* URL is provided under each figure and table. Readers using the PDF version of the report can simply click on the relevant *StatLink* URL to either open or download a Microsoft Excel® workbook containing the corresponding figures and tables. Readers of the print version of this report can access the Excel® workbook by typing the *Statlink* URL into their Internet browser.

Calculation of international average

Averages were calculated for most indicators presented throughout this report. Averages are calculated as the mean of the data values of the TALIS countries and economies included in the table. Averages therefore refer to an average of data values at the level of the national systems for the population presented in the tables.



Symbol for missing data

The following symbol is employed in the tables and charts to denote missing data:

a The category does not apply in the country concerned. Data are therefore missing.

Abbreviations used in this report

The following abbreviations are used in this report:

BRR	Balanced Repeated Replication	
ISCED	International Standard Classification of Education	
(S.E.)	Standard error	
TALIS	Teaching and Learning International Survey	

Rounding of figures

Because of rounding, some figures in tables may not exactly add up to the totals. Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation.

All standard errors in this publication have been rounded to one decimal place. Where the value 0.00 is shown, this does not imply that the standard error is zero, but that it is smaller than 0.005.

Country coverage

The TALIS 2013 publications feature data on 34 countries and economies, including 24 OECD countries and 10 partner countries and economies. A subset of these countries opted to implement TALIS 2013 at the ISCED level 1 and/or the ISCED level 3 (international options). The complete list of countries that participated in TALIS 2013 and the international options is listed in Chapter 1.

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

There are two subnational entities participating in international options for TALIS 2013. They are referred to throughout the report in the following manner, consistent with other OECD publications:

- The Flemish Community of Belgium is referred to as Flanders (Belgium).
- The emirate of Abu Dhabi is referred to as Abu Dhabi (United Arab Emirates).

Further documentation

For further information on TALIS documentation, the instruments and methodology see the *TALIS 2013 Technical Report* and the TALIS website (www.oecd.org/edu/school/talis.htm).



Overview of TALIS in primary and upper secondary education

This chapter introduces the OECD Teaching and Learning International Survey (TALIS) and provides information about the participating countries and economies and the teachers and schools surveyed. It describes the objectives of TALIS as well as the main themes covered by the survey and this report, and provides information to explain why these themes were chosen as a policy focus for this study. This chapter also provides an outline of the report to follow.



WHAT IS TALIS?

The OECD Teaching and Learning International Survey (TALIS) is an international, large-scale survey that focuses on the working conditions of teachers and the learning environment in schools. TALIS aims to provide valid, timely and comparable information to help countries review and define policies for developing a high-quality teaching profession. It is an opportunity for teachers and principals to provide input into educational policy analysis and development in key areas and is a collaborative effort between participating countries, the OECD, an international research consortium, social partners and the European Commission.

Understanding that recruiting, retaining and developing teachers is a priority in school systems worldwide, TALIS examines the ways in which teachers' work is recognised, appraised and rewarded, and assesses the degree to which teachers' professional-development needs are being met. The study provides insights into the beliefs and attitudes about teaching that teachers bring to the classroom and the pedagogical practices that they adopt. Recognising the important role that school leadership plays in fostering an effective teaching and learning environment, TALIS describes the role of principals and examines the support that they give their teachers. Finally, TALIS examines the extent to which certain factors may relate to teachers' feelings of job satisfaction and self-efficacy.

TALIS 2013 includes the countries and economies listed in Figure 1.1. While maintaining a focus on lower secondary education (ISCED level 2, as classified by the International Standard Classification of Education [ISCED 1997], which identifies comparable levels of education across countries), some countries also conducted the survey in their primary (ISCED level 1) and/or upper secondary (ISCED level 3) schools. Figure 1.2 lists the countries and economies that participated in each of these options.

■ Figure 1.1 ■

Countries and economies participating in TALIS 2013

OECD Countries and Economies			Partner Countries and Economies
Alberta (Canada)	Flanders (Belgium)1	Netherlands	Abu Dhabi (United Arab Emirates)
Australia	France	Norway	Brazil
Chile	Iceland	Poland	Bulgaria
Czech Republic	Israel ¹	Portugal	Croatia
Denmark	Italy	Slovak Republic	Cyprus ^{2, 3}
England (United Kingdom)	Japan ¹	Spain	Latvia
Estonia	Korea ¹	Sweden	Malaysia ¹
Finland	Mexico	United States ⁴	Romania
			Serbia ¹
			Singapore ¹

Note: Cells shaded in light blue indicate countries and economies that also participated in TALIS 2008.

- 1. See Annex A for notes about interpreting the data from these countries.
- 2. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
- 3. Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.
- 4. The data from the United States are located below the line in selected tables in *TALIS 2013 Results: An International Perspective on Teaching and Learning* and is not included in the calculations for the international average. This is because the United States did not meet the international standards for participation rates. See Annex A of *TALIS 2013 Results* for more information.



■ Figure 1.2 ■ Countries and economies surveying primary and upper secondary schools

ISCED 1	ISCED 3
Denmark	Abu Dhabi (United Arab Emirates)
Finland	Australia
Flanders (Belgium)	Denmark
Mexico	Finland
Norway	Iceland
Poland	Italy
	Mexico ¹
	Norway
	Poland
	Singapore ¹

^{1.} See Annex A for notes about interpreting the data from these countries.

Learning about teachers across an education system

TALIS provides insights into the backgrounds, beliefs and practices of teachers through data collected from teachers and their school principals. The report TALIS 2013 Results: An International Perspective on Teaching and Learning presented many interesting findings about teachers in lower secondary schools in the participating countries. This information alone is both thought-provoking and useful for policy makers, principals and teachers themselves, and many implications for policy and practice can be extrapolated from the findings presented in this report. In addition, some countries wanted a broader view of their education systems across levels. These countries chose to offer the TALIS survey to their primary schools (ISCED level 1), their upper secondary schools (ISCED level 3) or, in the case of five countries, to both.

Broadening the reach of TALIS provides an interesting opportunity for policy makers, researchers, principals and teachers alike to learn from different areas of the education system. For example, in primary schools, teachers are responsible for building basic skills – such as reading, writing and math – and helping students develop behaviours that they will use throughout their formal schooling and beyond. Children may be less independent at these younger ages, and thus the role of teachers and the relationship they have with students and parents or caregivers might be different. In many countries, primary school teachers are often subject-generalists who teach all subjects to students and thus might be required to be knowledgeable about the content and pedagogy for subjects as diverse as literacy, the sciences and the arts. The kind of teaching that is required in primary schools is different, and as such the teaching and assessment practices employed might be different or might be employed at different frequency from other school levels.

At the other end of the spectrum are upper secondary schools. This level of schooling can be dedicated to preparing students for university, it can be a vocational programme preparing students for work in a trade, or it can be the last stage of formal education for some students. Teachers at this level might be less focused on generalist knowledge than they would be in primary and lower secondary schools, and in turn they might have a deeper knowledge of the content of their subject area. In vocational education, teachers might come directly from work in trades themselves, and as such they might have



different levels of education or different work-experience background from other teachers at this level or in other levels of schooling. The teaching practices used in upper secondary education are especially interesting to explore, as teachers might be preparing students for large-scale, national exams that come at the end of schooling, or they might be doing more hands-on work with students as they prepare them for immediate entry into the workforce.

The population surveyed

Sampling requirements for the countries surveying their primary and upper secondary schools were identical to those for the main TALIS survey of lower secondary school teachers. The participating countries and economies were first asked to adhere to specific sampling guidelines in order to select the schools and teachers to participate in the study. For both education-level survey options, 200 schools per country were surveyed, with a sample of 20 teachers in each school. The target response rates for all TALIS survey options were the same as those for the core ISCED 2 sample. Further details on the sample for all target populations can be found in the *TALIS 2013 Technical Report* (OECD, 2014). The international sampling guidelines and other operational parameters applied in TALIS for the ISCED level 1 and 3 options are shown in Box 1.1.

Box 1.1 The TALIS design in primary and upper secondary education

International target population: Primary or upper secondary education teachers and leaders of mainstream schools.

Target sample size: 200 schools per country; 20 teachers and 1 school leader in each school.

School samples: Representative samples of schools and teachers within schools.

Target response rates: 75% of the sampled schools, together with a 75% response rate from all sampled teachers in the country. A school is considered to have responded if 50% of sampled teachers respond.

Questionnaires: Separate questionnaires for teachers and principals, each requiring between 45 and 60 minutes to complete.

Mode of data collection: Questionnaires filled in on paper or on line.

Survey windows: September-December 2012 for Southern Hemisphere countries and February-June 2013 for Northern Hemisphere countries.

TALIS defines a teacher as one whose primary or major activity in the school is student instruction, involving the delivery of lessons to students. Teachers may work with students as a whole class, in small groups or one-to-one inside or outside regular classrooms. They might also share their teaching time among more than one school.

Teachers and school principals were given the TALIS teacher and principal and teacher questionnaires, which require between 45 and 60 minutes to complete. (For more information on the TALIS questionnaires, see the *TALIS 2013 Technical Report.*)



Interpretation of the results

TALIS results are based on self-reports from teachers and principals and therefore represent their opinions, perceptions, beliefs and accounts of their activities. This is powerful information because it provides insight into how teachers perceive the learning environments in which they work, what motivates teachers and how policies that are put in place are carried out in practice. But, as with any self-reported data, this information is subjective and therefore differs from objectively collected data. The same is true of principals' reports about school characteristics, which may differ from descriptions provided by administrative data at a national- or local-government level.

In addition, as a cross-sectional survey, TALIS cannot measure causality. For instance, in examining the relationship between school climate and teacher co-operation, it is not possible to establish whether a positive school climate depends on good teacher co-operation or whether good teacher co-operation depends on a positive school climate. The perspective taken in the analysis - i.e. the choice of predicted and predictor variables - is based purely on theoretical considerations, as laid out in the analytical framework. When a reference is made to "effects", the reference should be understood in a statistical sense – i.e. an effect is a statistical parameter that describes the linear relationship between a predicted variable (e.g. job satisfaction) and a predictor variable (e.g. participation in professional development activities) -, taking effects of individual and school background as well as other independent variables into account. Thus, the effects reported are statistical net effects even if they do not imply causality.

Additionally, the cross-cultural validity of the results is an important feature of the analysis, particularly with regard to the international scales and indices (see Annex A). The analysis indicates the extent to which the scales can be compared among countries; where there appear to be limitations on the comparability of the scales, this is noted in the text. Full details of the cross-cultural validity analysis are provided in the TALIS 2013 Technical Report.

Finally, the intention of TALIS is not to measure the effects of teaching on student outcomes. Because TALIS cannot measure teaching effectiveness directly, it looks at themes that are not only policy priorities for participating countries but have also been shown in the research literature to be associated with high-quality teaching.

Organisation of the report

Chapter 2 examines the profiles of teachers in primary education, looking as well at their background characteristics and experiences. It continues with a profile of the schools in which they work, discussing the student composition and the resources to which they have access. Chapter 4 does the same for upper secondary teachers.

Chapter 3 continues looking into the data on primary teachers in terms of the work that they do and the support they receive to do that work. It discusses their professional development, appraisal and feedback and their teaching practices. It also looks at teachers' levels of self-efficacy and job satisfaction and possible influences on each. Chapter 5 examines these same issues for upper secondary teachers.

Chapter 6 provides an examination of key issues across all levels of the education system for the five countries that have data for primary, lower secondary and upper secondary schools. It also compares the data between two levels of the education system for the remaining countries.

OVERVIEW OF TALIS IN PRIMARY AND UPPER SECONDARY EDUCATION



Chapter 7 summarises the key findings from previous chapters of this report and provides recommendations for policy makers, principals and teachers.

Reference

OECD (2014), TALIS 2013 Technical Report, www.oecd.org/edu/school/TALIS-technical-report-2013.pdf.



Primary teachers and their schools

This chapter focuses on primary school teachers in the six countries that surveyed this population. It describes the background characteristics and education of these teachers and provides information about the schools in which they work, including the composition of students at the school and human and material resources. The chapter also examines classroom characteristics, including class size and the composition of students, and concludes by taking a look at the profile of primary school principals and their school leadership.



Highlights

- Only ten of four teachers are younger than 40 years of age across the six countries. Mexico and Flanders (Belgium) tend to have more primary education teachers below 30 years of age than the other countries, while there are larger proportions of teachers aged 60 or more in Denmark and Norway.
- Reports by principals of school composition in terms of the students' first language, special needs and socio-economic backgrounds vary widely across countries. Principals in Denmark, Finland, Norway and Flanders (Belgium) report more students whose first language is different from the language of instruction. Teachers in Poland work in schools where the principals report a student population that includes a higher percentage of special-needs students, and principals in Mexico report higher numbers of students from disadvantaged homes than principals in the other five countries.
- More than half of the primary teachers across countries work in schools where principals report that shortages of support personnel and computers for instruction are a hindrance to quality of instruction. Whereas material resources are a particular worry for Mexican principals, the shortages of qualified and/or well-performing teachers and support personnel seem to be particularly pressing for principals in Flanders (Belgium). Shortages of teachers with competency in teaching students with special needs represent a particular hindrance according to principals in Denmark.
- Eighty percent of primary school principals across the six countries had more than 10 years of teaching experience before becoming a principal. Eight of ten primary teachers are female, but only half of primary principals across the six countries are female. The proportion of female teachers is thus not in line with the proportion of female principals across the six TALIS countries. This means that male primary teachers are disproportionately more often promoted to a principal role than are female teachers.

INTRODUCTION

This chapter focuses on primary school teachers in the six countries and economies that participated in the ISCED 1 (primary education) international option offered in the OECD Teaching and Learning International Survey (TALIS). Hence, this chapter attempts to answer the questions of "Who are the primary school teachers in Denmark, Finland, Mexico, Norway, Poland and Flanders (Belgium)" and "What is their work environment like?"

This chapter is divided into four main sections. The first section focuses on teacher characteristics and provides a profile of primary school teachers in the six participating countries and economies. Analyses in this section focus on demographic characteristics such as the age and gender of teachers, their formal education, their previous work experience and their employment status. The second section of this chapter provides a profile of the primary schools in which teachers work, with particular emphasis on school background information, the composition of students at the school and human and material resources. The third section examines classroom characteristics including class size and the composition of students. The last section examines the profile of principals and school leadership.

Because TALIS focuses on teachers and teachers' working conditions, it is important to note that, as in the report TALIS 2013 Results: An International Perspective on Teaching and Learning (OECD, 2014a),



most of the tables and charts in this chapter, and in the rest of the report, are presented from a teacher's perspective. This focus becomes particularly apparent in the second section of this chapter, where the analyses are performed on data taken from the principal questionnaire. The data presented here represent the proportion of primary teachers who work in schools with certain characteristics rather than the proportion of primary schools with certain characteristics.

A PROFILE OF PRIMARY EDUCATION TEACHERS

Primary schooling is the beginning of formal education for children in many countries. While in some countries children have access to universal pre-primary schooling, in many others early childhood education is not compulsory or supported by the government and thus is accessed only by a portion of the pre-school age population. Primary schools differ from schools at lower secondary and upper secondary levels in terms of what is taught and how subjects are taught. Primary curricula in many countries include ample time for play, for example, as well as exposing students to arts, music and many hands-on activities. Students in primary school are learning fundamental skills (reading, writing, basic mathematics) that they will build on throughout their education. They are also learning interpersonal skills that will help them develop as people and as citizens.

Teaching at a primary level must also accommodate the needs of these young children and their learning. In contrast to teachers in secondary education, primary school teachers are often generalists, meaning that they do not specialise in teaching one subject but rather have a general knowledge of several core subject areas for teaching one class of students that is assigned to them for the school year.

This section provides a view of the teaching workforce in primary education across the six participating countries and economies. Primary school teachers were asked to provide background information on themselves, their education and work experience and their current employment.

DEMOGRAPHIC PROFILE OF TEACHERS

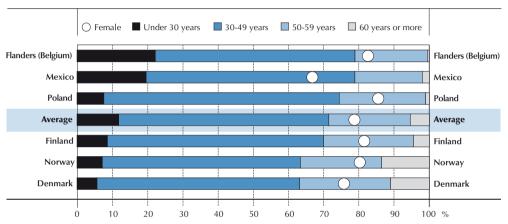
Demographic characteristics of teachers such as their age and gender can represent specific challenges in primary education. For example, the almost universal gender imbalance in primary and secondary education that sees fewer males working as teachers is largest in primary education (OECD, 2013a; UNESCO Institute for Statistics, 2006, 2009; Drudy, 2008; OECD, 2005, 2009). While research seems to indicate that a teacher's gender has little impact on student performance in primary education (Antecol, Eren and Ozbeklik, 2012), there is some evidence that teachers' attitudes and anxieties about particular subjects can impact their students' achievement (Beilock et al., 2009; Hopf and Hatzichristou, 2010). Gaining information about the age distribution of the teaching workforce is also valuable to policy makers. Some countries face important challenges related to their aging teacher workforce, with a high proportion of teachers reaching retirement age (OECD, 2009, 2013a). Moreover, there seems to be a relation between age and teacher attrition in schools: attrition rates tend to be higher in the first few years of teaching and decline the longer that teachers are in the profession (OECD, 2005; Ingersoll, 2001).

Table 2.1 and Figure 2.1 show the gender and age distribution across the six countries that surveyed their primary school teachers. In line with the literature, nearly 8 of 10 teachers are female in these countries, on average, ranging from 67% in Mexico to 85% in Poland. With respect to age, only four of ten teachers are younger than 40 years across the six countries. In Mexico, more than half of the teachers are younger than 40, while in Denmark, Finland and Norway only about a third of the teachers are.



For these Nordic countries, only between 6% and 9% of primary school teachers are below 30 years of age, while in Mexico and Flanders (Belgium) the percentages for this age group are 20% and 22%, respectively. Denmark and Norway also have high proportions of primary school teachers who are aged 60 years and above (11% and 14%, respectively). Finally, the average age of teachers across the six countries is around 43 years, with teachers in Mexico and Flanders (Belgium) at least three years younger.

■ Figure 2.1 ■ Gender and age distribution of primary teachers Percentage of primary education female teachers and age of teachers



Countries are ranked in descending order, based on the percentage of teachers aged 49 or younger.

Source: OECD, TALIS 2013 Database. StatLink as http://dx.doi.org/10.1787/888933165453

Educational attainment and work experience

Initial teacher education is viewed as the first phase of the professional life cycle of a teacher; part of a professional continuum of learning and expertise, rather than a distinct preparatory phase (Ward et al., 2013). In general, there is no consensus in the research literature regarding the impact of teacher education and experience on student achievement (Buddin and Zamarro, 2009; Croninger et al., 2007; Harris and Sass, 2011; Clotfelter, Ladd and Vigdor, 2007; Darling-Hammond et al., 2005; Ronfeldt and Reininger, 2012). When it comes to the effect of teachers' education on primary students' achievement specifically, there is little consensus on the relationship between teachers' education level and students' learning outcomes (see also Ferguson and Ladd, 1996; Kiesling, 1984; Rowan, Correnti and Miller, 2002). In comparison with teachers at higher education levels, primary teachers are generalists; they teach a wide range of subjects, from languages, arts and crafts, music and social sciences to mathematics, natural sciences and physical education. As a result, primary teachers' responsibilities might need a more holistic professional education, rather than a specialisation in a narrow subset of subjects. Such degrees might be suitable to a Bachelor's or Master's degree depending on the system in a particular country.

In addition to teachers' educational attainment, teachers' work experience further develops their skills and competencies. How teachers' experience relates to student achievement is a widely researched topic (Clotfelter, Ladd and Vigdor, 2007; Croninger et al., 2007; Leigh, 2010). In Hanushek and Rivkin's



review (2004), studies show positive relationships between years of teacher experience and student achievement. Years of experience may be particularly important during the early stages of a teacher's career. Some evidence shows that each additional year of a teacher's experience is related to higher student achievement, especially during a teacher's first five years in the profession (Rockoff, 2004; Rivkin, Hanushek and Kain, 2005; Harris and Sass, 2011).

TALIS explores primary teachers' initial education, training and work experience. Table 2.2 shows the highest educational levels obtained by primary teachers. This table presents the percentages of teachers per level of education, as defined by the International Standard Classification of Education (ISCED 1997), which identifies comparable levels of education across countries. ISCED 5 represents the first stages of tertiary education and is split between ISCED levels 5A and 5B. ISCED level 5B programmes are generally more practically oriented and shorter than programmes at ISCED level 5A. ISCED level 5A typically includes a Bachelor's degree and Master's degree from universities or equivalent institutions. ISCED level 6 represents further education at the tertiary level that leads to an advanced research qualification such as a Doctorate degree.

As shown in Table 2.2, in most countries the great majority of primary teachers report having obtained formal education at the level of ISCED 5A. On average across the six countries, 79% of teachers report having an ISCED level 5A degree. The only countries where this percentage is less than 95% are Mexico (80%) and Flanders (Belgium) (6%). In Flanders (Belgium), 94% of the primary teachers have completed ISCED level 5B, since this is required to become a teacher in Flanders (Belgium). Mexico is the only country where a significant minority of the teachers report having an educational level that is below ISCED 5 (19%). In none of the six countries does the number of teachers who obtained an educational level of ISCED level 6 exceed 1%.

Besides formal education, whether teachers completed a teacher education or training programme also provides interesting information. On average across countries, 91% of teachers report having completed such a programme (Table 2.3 and Figure 2.2). This is higher in Poland (99%) and Flanders (Belgium) (99%), but it is lower in Mexico (82%). Box 2.1 presents an example of a recent reform of teacher education in Denmark.

Box 2.1 Reform of teacher education in Denmark

In 2013, Denmark initiated a comprehensive educational reform, which includes teacher education and qualifications. Some of the main guiding principles of the reform include deregulation, internationalisation and a strong connection between teacher training and the needs of the Danish public school system. In addition, the introduction of minimum grade point average requirements and entrance exams has raised the bar for entering the teacher-training programmes. Since 2013, the Bachelor of Education programme is guided by competency objectives for each teaching practice, teacher education is constructed around modules and the University Colleges (Professionshojskoler) are granted more autonomy in setting programme structures and in determining the content of modules for development of different teacher profiles.

Sources: Education Policy Outlook: Denmark (OECD, 2014b; OECD, 2014c).

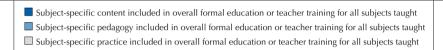


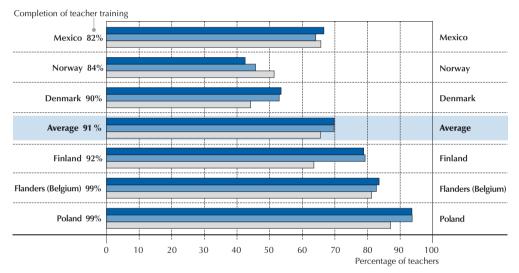
TALIS also looks at the elements included in teachers' formal education, differentiating content, pedagogy and classroom practice elements for the subjects the teacher currently teaches. Across countries, about two-thirds of teachers report that all three of these elements were included in their formal education for all the subjects they currently teach. This proportion ranges from between 87% and 93% in Poland to 42% and 51% in Norway.

■ Figure 2.2 ■

Completion and content of teacher education or training programme for primary education teachers

Percentage of teachers in primary education who completed teacher education or a training programme and for whom the following elements were included in their formal education and training





Countries are ranked in ascending order, based on the percentage of teachers who completed a teacher education or training programme.

Source: OECD, TALIS 2013 Database.

StatLink

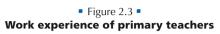
http://dx.doi.org/10.1787/888933165469

Figure 2.3 shows the average number of years of working experience for primary teachers in the six participating countries, in their current school, in total, in other educational roles and in other jobs (see also Table 2.4). Teachers across the six countries show similarities. On average, teachers have worked for 11 years in their current school, ranging from 8 years in Mexico to 14 years in Poland and Flanders (Belgium). For work experience as a teacher, most countries are close to the average of 16 years; only in Poland is this number somewhat higher (19 years). The average number of years teachers have worked in other educational roles is low for most teachers, and ranges from one year (Flanders) to three years (Mexico and Norway). Finally, the average number of years teachers have held other professions is slightly more varied across the countries. While teachers in Flanders (Belgium) report having worked on average one year in other jobs, in Denmark and Mexico this number is four years or more.

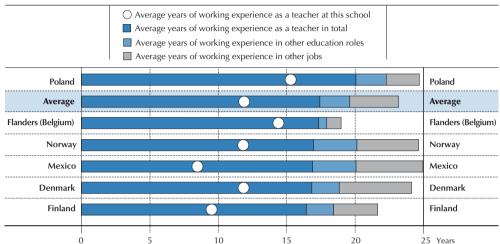
All in all, primary teachers tend to be experienced teachers. This is quite different from the situation in the higher ISCED levels, where teachers also tend to report other professional experience. For example,



teachers in vocational education programmes often come to teaching with previous professional experience in their trade.



Average years of working experience among primary education teachers in various roles



Countries are ranked in descending order, based on the average years of working experience as a teacher in total.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165471

Employment status

Employment status relates both to job security (through long-term or permanent contracts) and to job flexibility (through the possibility of choosing to work part time). Under what kind of contract teachers are employed is therefore an important factor in recruiting and retaining teacher talents (OECD, 2005). Primary education teachers reported whether they are permanently employed or employed on a fixedterm contract basis, in addition to whether they work full time or part time across all their teaching jobs.

Across the six countries, 84% of teachers work on a permanent contract (Table 2.5). Among these countries, this proportion ranges from 96% in Denmark to 74% in Mexico. Fixed-term contracts for one year or less are most common in Finland and apply to more than one in five teachers (22%), but are much less frequent in Denmark, Mexico, Norway and Poland, where fewer than one in ten teachers report working under this type of short-term contract. This indicates that primary teachers stay in their job for a long time and the majority have permanent contracts.

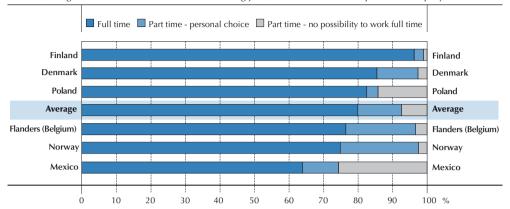
Figure 2.4 displays the distribution of teachers who work full time or part time across the six countries that surveyed their primary school teachers (see also Table 2.6). On average across countries, 80% of teachers work full time. This ranges from a high of 96% in Finland to a low of 64% in Mexico. Whether teachers choose a part-time contract or were forced into it because of the absence of other options differs greatly across countries. On average across countries, 63% of teachers who work part time state they chose to work part time. Although a majority of these teachers in Denmark (82%), Finland (73%), Norway (90%) and Flanders (Belgium) (86%) report choosing to work part time, the percentage of teachers who report working part time by choice is much less in Mexico (29%) and Poland (19%).



■ Figure 2.4 ■

Employment status of primary teachers, full time or part time

Percentage of primary education teachers who are employed full time and part time (taking into account all their current teaching jobs) and the reasons for part-time employment



Countries are ranked in descending order, based on the percentage of full-time teachers.

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165489

A PROFILE OF SCHOOLS WHERE TEACHERS WORK

This section examines the school-level background information provided by principals in the six participating countries and economies. This kind of information can be used to contextualise teachers' work and the working conditions that teachers perceive enable them to function effectively in their roles. This section looks at the school type, composition of the student population and the school resources to which they have access.

School type and school composition

Schools vary greatly in terms of their sector (public or private), their size and the characteristics of their student population, and all of these factors shape teachers' work environment. The ideal primary school size has been a long-contested topic in research literature. A recent review of empirical studies that researched the effects of primary school size on various student and organisational outcomes concluded that smaller schools are favourable. Low-academic achievers and students from disadvantaged social and economic backgrounds are the major benefactors of smaller schools (Leithwood and Jantzi, 2009).

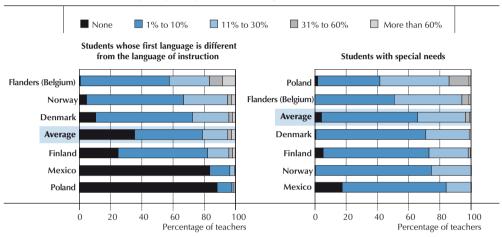
On average, 83% of the primary teachers surveyed work in public schools and two-thirds work in schools (public or private) that compete with two or more schools for students (Table 2.7). However, some large differences among the countries are observed. In Flanders (Belgium), only 39% of primary school teachers work in public schools, while this is nearly universal for Denmark, Finland, Mexico and Poland. On average across the six countries, 18% of primary school principals report that their school does not compete with other schools for their students. In Finland, 80% of schools tend to compete with two or more schools for some of their students, but this is the case for just over half of the schools in Norway. Indeed, in Norway almost a third of schools report not competing with other schools for their students. In Flanders (Belgium), only 6% of schools do not compete with other schools for their students.

Figure 2.5 shows the composition of students in terms of their first language, special needs and socioeconomic background (see also Table 2.8). Primary teachers in Denmark, Norway and

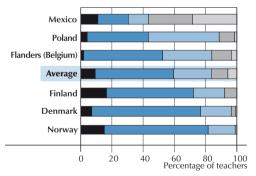


Flanders (Belgium) appear to work in schools with high linguistic diversity. In these countries, more than one in four teachers works in a school where the principal reports that more than 10% of students speak a different mother tongue. In contrast, in Mexico and Poland, linguistic diversity in the school population seems relatively uncommon; between 84% and 88% of teachers work in schools where principals report there to be no students with a different native language in their school.

■ Figure 2.5 ■ Primary schools composition by first language, special needs and disadvantaged homes Percentage of primary education teachers who work in schools where principals report the following school characteristics^{1, 2, 3}



Students from socio-economically disadvantaged homes



1. These data are broad estimates reported by principals.

Countries are ranked in ascending order, based on the percentage of teachers working in schools whose principal reports that 10% or fewer of their students have a first language that is different from the language of instruction, have special needs or are from socioeconomically disadvantaged homes. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165493

^{2.} 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

^{3. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



As to the proportion of students with special needs, Poland is the only country where more than one-tenth of teachers work in schools where the principal reports that more than 30% of students have special needs. It is important to keep in mind, however, that countries differ in when and how special needs are diagnosed in their students.

Similarly, for students from disadvantaged homes, half of teachers work in schools where the principal reports that these students make up as much as one-tenth of the student population, and one-quarter of teachers work in schools where the principal reports that these students represent 11% to 30% of the student population across countries, though this proportion reaches 45% in Poland. In Mexico, more than one-quarter of primary teachers (28% to 29%) work in schools where the principal reports that between 31% and 60% or more than 60% of the student population comes from disadvantaged homes, respectively. These diverging ratios are perhaps not surprising given the socio-economic makeup of each country.

School resources

School resources, as defined by TALIS, include both human (especially teachers specialised in specific student or subject needs) and material resources, such as instructional materials, computers or computer software. Policies that focus on resource allocation only are unlikely to be effective (Hanushek, 2006; OECD, 2010). Instead, resource policies should have links to specific goals – for example, targeting those schools with many socio-economically disadvantaged or special-needs students. Research shows that across different countries, principals generally have great concerns over teacher shortages and quality as well as teacher turnover. The validity of these concerns have been supported empirically by research (Clotfelter et al., 2007; Darling-Hammond, 2004).

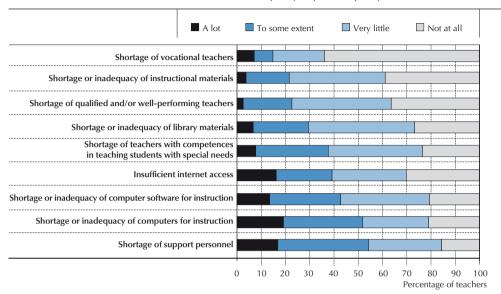
Principals' reports about whether school resources hinder the provision of quality instruction in the six countries that surveyed primary teachers are summarised in Figure 2.6 (see also Table 2.9). More than half of the teachers work in schools where principals report that shortages of support personnel and computers for instruction are a hindrance, followed by shortages or inadequacy of computer software for instruction (43%), insufficient Internet access (39%) and shortages of teachers with competency in teaching students with special needs (38%). Shortages and inadequcies in material resources especially are a frequently reported issue for primary teachers in Mexican schools. Shortages of qualified and/or well-performing teachers (34%) and support personnel (71%) seem to be most pressing for primary schools in Flanders (Belgium). Shortages of teachers with competency in teaching students with special needs also seem a prominent hindrance for primary schools in Denmark; more than half of teachers work in schools where this is an issue. Teachers with this specialisation, in addition to other support personnel, can be extremely valuable for ensuring an inclusive schooling system at the national level (see Box 2.3 for a discussion of special-needs students in Finnish primary schools). Shortages in these areas can therefore compromise national or school goals for providing extra support or assistance to students with special needs to prevent them from falling behind in mainstream primary schools.

Findings from PISA suggest that high-performing systems tend to allocate resources more equitably across socio-economically advantaged and disadvantaged schools (OECD, 2013b). TALIS further shows that an equitable distribution of resources is not always achieved. Figure 2.7 shows that primary teachers who work in schools with higher proportions of students from socio-economically disadvantaged homes tend to be more likely to have principals reporting a number of key human and materiel resource shortages, which they believe limit their effectiveness (see also Table 2.10). In particular, on average, larger proportions of teachers working in lower SES schools¹ have principals who report shortages of qualified and/or well-performing teachers and of teachers with competences in teaching students with special needs.



■ Figure 2.6 ■ School resources in primary education

Percentage of primary education teachers whose school principal reports that the shortage in the following resources hinder "not at all", "very little", "to some extent" or "a lot" the school's capacity to provide quality instruction



Items are ranked in ascending order, based on the percentage of teachers whose school principal reports that the shortage of resources is hindering "a lot" or "to some extent" their school's capacity to provide quality instruction.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165502

In Mexico in particular, where many teachers work in schools with a higher proportion of students from socio-economically disadvantaged homes, principals are more likely to report shortages of teachers but also shortages or inadequacies in instructional materials, computers and software, Internet access and support personnel (with a difference of 12% of teachers or more). Large differences between schools with low (below 30%) and high (30% or above) proportions of students from socio-economically disadvantaged homes are also found in Finland in terms of shortages in teachers: a) who are qualified or well-performing (16% versus 42%), b) who have competencies in teaching students with special needs (37% versus 71%); and c) who are vocational teachers (4% versus 8% of teachers in schools with low and high proportions of such students, respectively, work in schools with such a shortage). However, it should be noted that the scale of the issue is quite different in the two countries, as many fewer teachers overall work in lower SES schools in Finland (8%) as compared to Mexico (57%) (see also Table 2.10).

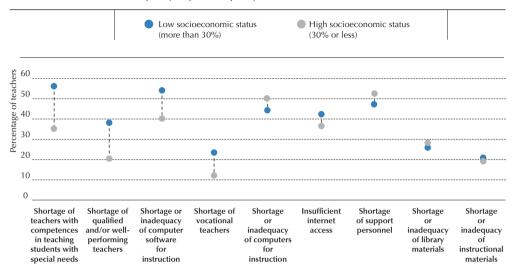
Interestingly, as shown in Table 2.11, human and material resources shortages do not appear, on average, to be greater or lesser in more rural or more urban areas. But different patterns emerge for specific countries. In Mexico, shortages of qualified or well-performing teachers appear to be particularly noted in urban areas, while shortages of teachers with competency in teaching specialneeds students and support personnel are more important in rural areas. Teachers working in rural areas are also more likely to work in schools where the principal reports shortages or inadequacies in computers and Internet access. In Finland, teachers working in urban areas are more likely to work in schools with reported shortages of teachers for students with special needs and of support personnel.



Figure 2.7

School resources in primary education, by socio-economic level

Percentage of primary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide quality instruction in their school



Items are ranked in descending order, based on the difference in the percentage of teachers whose school principal reports that the shortage of resources hinder "a lot" or "to some extent" their school's capacity to provide quality instruction.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165511

Characteristics of primary teachers' classrooms

The previous section examined the student composition in the school. This section turns to the classroom. Certain classroom characteristics can make a teacher's work more challenging in primary education. Teaching classes in which a high proportion of students speak a language different from the language of instruction, have different achievement levels, have special needs, or come from socio-economically disadvantaged homes can affect a teacher's confidence or motivation, especially if the teacher is not properly prepared or supported (Pepe and Addimando, 2013; Pang, 2012; Kokkinos and Davazoglou, 2009; Major, 2012). As for class size in primary education, there is empirical evidence that reducing class size increases student-teacher interactions and thereby individual attention for students. At the same time, there is less consensus about whether reducing class size improves student learning in primary education (Cho, Glewwe and Whitler, 2012; Galton and Pell, 2012; Mascall and Leung, 2012; Folmer-Annevelink et al., 2010).

The average class size is 20 across the six countries (Table 2.12), varying from 18 students in Finland and Flanders (Belgium) to 26 in Mexico. TALIS asks primary school teachers what proportions of their class include students who speak a language different from the language of instruction, students who are low academic achievers, students with special needs, students with behavioural problems, students who come from socio-economically disadvantaged homes or students who are academically gifted (Table 2.12 and Figure 2.8). Teaching in classrooms with higher language diversity appears to be common in Denmark, Norway and Flanders (Belgium), where more than one in five teachers reports that more than 10% of their students speak a different language from the language of instruction



(21%, 24% and 34% respectively). Box 2.2 reports on policies and practices for language minorities in Denmark, Norway and Flanders (Belgium).

Box 2.2 Language minorities in Denmark, Norway and Flanders (Belgium)

In Danish primary schools, instruction in a second language is provided where needed for students with a different mother tongue who require support with the Danish language (Danish Ministry of Education, 2009). Moreover, the Danish Ministry of Education recently developed a plan where schools with high proportions of bilingual and non-ethnic Danish children will receive extra funding to help improve students' language skills. The initiative will deliver one million kroner per year over three years to each of the 14 national schools whose student makeup includes at least 40% non-ethnic Danes.

Source: Sirius network (2013).

Today, approximately 13% of the population in Norway has immigrated or has two parents who did. The Norwegian government wants to increase participation in kindergarten for the youngest children, ensure inclusive teaching and good learning outcomes for all students in compulsory and post-compulsory education and training, prevent students from dropping out of upper secondary education and ensure that adults have access to education appropriate to their needs. Several official Norwegian reports and white papers have addressed specific issues of migrant education. Particularly important are the following Official Norwegian Reports: NOU 2011:14 Better Integration – Goals, Strategies, Initiatives; NOU 2011:7 Welfare and Migration – The Future of the Norwegian Model; NOU 2010:7 Diversity and Mastery – Multilingual Children, Young People and Adults in the Education and Training System. A large-scale programme has been launched to increase competence among all education staff in kindergarten and schools in second-language tuition and multicultural understanding. Syllabi for second-language teaching, mother-tongue teaching and various support materials have been developed. Initiatives have also been taken to ensure a better understanding and implementation of the legislation affecting minority students.

Source: Norwegian Ministry of Education (2007).

It is essential for students in the Flemish educational system to have a good knowledge of standard Dutch. In Flanders (Belgium), still many children grow up learning a different, regional form of standard Dutch. Moreover, 15% of primary education students in Flanders speak a different native language at home than Dutch. The Flemish Ministry of Education has designed a plan where language coordinators facilitate the stimulation of language competencies in schools. Schools are responsible for designing a development plan in collaboration with governmental and non-governmental agencies that work on integration and family issues in Flanders (Belgium). The educational sector, together with the Ministry of Welfare, Public Health and Family, will develop projects that stimulate the learning of Dutch and communicate best practices throughout the whole educational sector.

Source: Vlaams Ministerie van Onderwijs (2011).

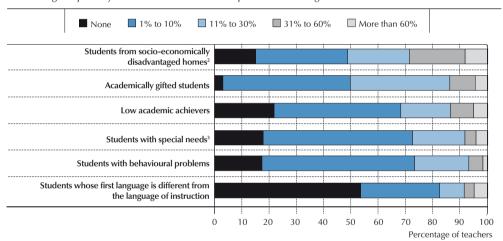


The proportion of the class that is classified by the teacher as being low academic achievers is more evenly distributed across countries. Very few teachers report having no low academic achievers in their class (3% of teachers on average), but also few teachers report that more than 60% of the students in their class are low academic achievers (5% of teachers on average). Only in Finland, does a slightly higher proportion of teachers (10%) report this. Most teachers across countries say that between 1% and 30% are low academic achievers (83% of all teachers on average).

Similarly, primary teachers in Finland are slightly more likely than teachers in the other five countries to report that more than 60% of their students have special needs (Table 2.12). In contrast, primary teachers in Mexico report particularly frequently that they have no special-needs students in their class (36%), while in Norway this is significantly less common (10%). Again, these between-country differences might be due to different methods and timing of diagnosing these needs. Box 2.3 provides more information on Finnish policies regarding the diagnosis and treatment of special-needs students in primary school.

• Figure 2.8 • Classroom composition in primary education

Percentage of primary education teachers who report the following students' characteristics in their class!



- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 3. 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

Items are ranked in ascending order, based on the percentage of teachers reporting that 10% or less of their students have the specific characteristic.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165523

Students with behavioural problems do not appear to make up a large part of primary teachers' classes. Most teachers across the six countries report that 10% or less of their class has behavioural problems (73% of all teachers on average). In particular, more than one in five teachers in Norway and Flanders (Belgium) reports that none of their students in the class have behavioural problems. On average, only 7% of all teachers report that more than 30% of the students in their class have behavioural problems (Table 2.12).



Box 2.3 Special-needs students in Finnish primary schools

The high reported rates of special-needs students in Finnish primary classrooms can be explained by the focus on inclusion in this educational system. In 2011, changes to the Basic Education Act came into force that demanded earlier support for special-needs students and prevention of aggravation and escalation of problems related to learning, social interaction or development. Every Finnish student has the right to get instruction and guidance counselling in accordance with the curriculum and sufficient support in learning and school attendance.

Consequently, while 8% of all Finnish children are considered to have special needs, only half of them are placed in special schools, while the other half attends regular schools (OECD, 2010). Finnish educators believe that if schools focus on early diagnosis and intervention of special needs, most students can be helped to achieve success in regular classrooms. The main tool for supporting students who have difficulties learning is the "special teacher" who is assigned to each school. These special teachers work closely with the class teachers to identify students who require extra support so that they can work individually or in small groups with them to help them keep up with their classmates. In line with this, TALIS data show that for every three Finnish primary teachers, there is a pedagogical support employee. On average, primary teachers in the other five countries share such pedagogical support with almost three times as many colleagues.

Source: European Agency for Special Needs and Inclusive Education (2012).

Table 2.12 and Figure 2.8 also show teachers' estimations of the proportions of students from socioeconomically disadvantaged homes in their classroom. In Mexico, teachers report high percentages for this type of student in their classrooms. More than one in five teachers in Mexico reports that more than 60% of their students come from disadvantaged homes, while nearly half (46%) report that more than 30% of their students come from disadvantaged homes. For the other five countries, these percentages are much smaller. On average across countries, teachers most frequently report that one-tenth or less of their students come from disadvantaged homes (68%).

Finally, the reported proportion of students in the class who are academically gifted shows great variations across countries. This is probably a reflection of countries using different methods and/or timing for diagnosing academic giftedness. On average across countries, 15% of teachers report that none of their students are gifted, though this varies from 1% in Poland to 46% in Flanders (Belgium). On the other end of the spectrum, 8% of teachers on average report that more than 60% of the students in their class are gifted, varying from less than 1% in Flanders (Belgium) to nearly one-quarter in Denmark (24%) (Table 2.12). Having more academically gifted students in the classroom can be a challenge for primary teachers because they need to tailor their teaching to a wider range of academic levels. One solution is to divide the classroom into groups, where students with higher academic levels can work on different tasks that challenge them further. Another is for schools to offer extra classes or subjects that are not part of the compulsory curriculum but available for students who are eager for an extra academic challenge.

PROFILE OF PRINCIPALS AND SCHOOL LEADERSHIP IN PRIMARY SCHOOLS

Over the past two decades, the influence that the gender of primary school leaders can have on the school's culture has received more attention in the literature. Though the majority of teachers in primary



education are female, research still reports a significant underrepresentation of female school leaders (Brinia, 2012). The structural position of the principal and the feminisation or masculinisation of school leadership are central topics in this research. Chan (2011) has revealed the complex and, at times, gendered discourses that some male principals employ. In general, it appears that the gender of school leaders may affect teachers' workplace and school leadership (Chan, 2011).

But leadership style has an even bigger impact on teachers' working conditions. Specifically, using TALIS 2008 data, Gumus, Bulut and Bellibas (2013) found that there is an important link in Turkish primary schools between various components of principal leadership and teacher collaboration. In general, the implementation of an instructional leadership approach by principals is associated positively with teacher collaboration, while administrative leadership attitudes negatively correlated with teacher collaboration (Gumus, Bulut and Bellibas, 2013).

The first part of this section provides a profile of principals in primary schools in participating countries and economies and includes information on gender and age distribution, formal education, leadership training and practical experience. It also includes data about the proportion of principals who combine their responsibilities in that role with teaching responsibilities. The second part of this section discusses the work of principals, including how they spend their working hours and their development of school goals and programmes and professional development plans.

Demographic characteristics of primary school principals

Figure 2.9 depicts the gender and age distribution of principals across the six countries (see also Table 2.13). The demographics of principals for the six countries show similarities to teacher background characteristics, and again, wide variations are observed for school leaders between the countries. However, although the majority of teachers in primary education are women (eight of ten on average), only half of the principals across the six countries are women. In other words, there seems to be a significant underrepresentation of female school leaders. In Denmark, this situation is even more pronounced, as only 37% of school leaders are female, though three-quarters of teachers are female (Table 2.1). In Poland, the ratio among teachers and principals is more congruent, as almost three-quarters of principals are women (72%).

The average age of principals across countries is around 50 years. Almost half of the principals across countries are between 50 and 59 years of age, though in Mexico this age group represents only 34% of primary school principals. Having a younger principal in primary schools is more common in Mexico than in any of the other five countries. In five out of the six countries surveyed, there are no primary principals under the age of 30. In contrast, 14% of principals in Mexico are younger than 30. At the other end of the spectrum, 20% of principals in Denmark and 23% of principals in Norway are 60 years of age or older (Table 2.13).

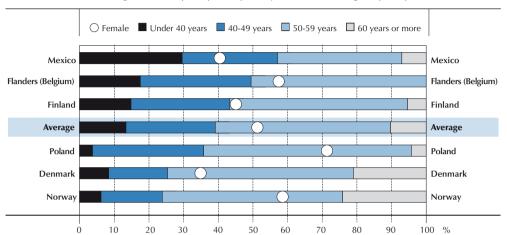
Educational attainment and work experience of primary school principals

Several differences exist in the educational attainment of principals in the six participating countries (Table 2.14). Although almost all principals in Denmark, Finland, Norway and Poland have completed ISCED level 5A education or higher (which typically covers Bachelor's and Master's degrees), only 84% have reached this educational attainment in Mexico and even fewer (10%) in Flanders (Belgium). While 14% of principals in Mexico have a degree lower than ISCED level 5, 2% also report having an ISCED level 6 degree. In Flanders (Belgium), 90% of principals have completed an ISCED level 5B degree.



This is in line with the Flemish regulations, as most principals have worked as a teacher before taking up the role of principal.

■ Figure 2.9 ■ Gender and age distribution of primary education principals Percentage of female principals in primary education and age of principals



Countries are ranked in descending order, based on the percentage of principals who are aged 49 or younger.

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165534

Figure 2.10 depicts the elements that primary education principals report were included in their formal education (see also Table 2.15). First, principals reported on whether and, if so, when they completed a school administration or principal training programme or course. On average across countries, principals report most frequently having completed such a programme or course only after taking up the position of principal (37%). In Finland and Poland, however, it is more common for primary school principals to complete such a programme or course before taking up their role: 58% and 57% of primary school principals reported this, respectively. In Finland, Poland and Flanders (Belgium), more than nine in ten principals report having completed a principal training programme or course at some point, while approximately one in four principals reports never having completed such a programme in Denmark (36%), Mexico (28%) and Norway (23%).

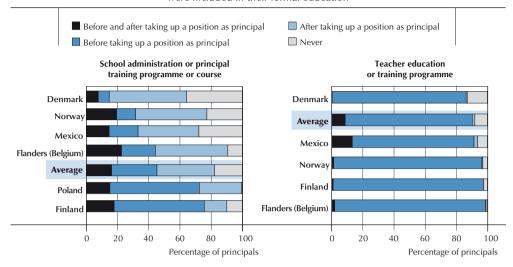
Figure 2.10 also shows principals' reports as to whether and when they completed a teacher education or training programme or course (see also Table 2.15). The great majority of principals across countries report having completed such a programme before taking up their position as primary school principal (91%), with Finland, Norway and Flanders (Belgium) showing percentages over 96%. This is perhaps not surprising given that the majority of school principals were teachers before taking up their duties as principals. Finally, Figure 2.10 also depicts whether and when principals have completed an instructional leadership training or course (see also Table 2.15). Principals' responses are more evenly distributed here. Across the six countries, primary education principals report most frequently having completed an instructional leadership training after taking up their function as principal (36%). However, more than one in three principals on average reports never having completed such training or course (34%). Especially in Poland (66%), it is relatively uncommon to follow such training. Essentially, this means that two-thirds of principals in primary education may not have been formally prepared to help teachers develop with respect to their teaching and learning.

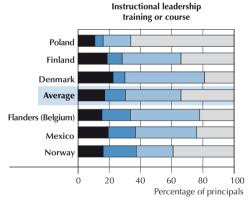


■ Figure 2.10 ■

Primary education principals' formal education

Percentage of principals in primary education for whom the following elements were included in their formal education





Countries are ranked in ascending order, based on the percentage of principals who report that the element was included "before and after", or "before" taking up a position as principal.

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165544

Figure 2.11 illustrates the work experience that primary school principals bring to their roles (see also Table 2.16). Across the six countries, principals report having worked 11 years as a principal on average. However, noticeable differences are observed among countries when looking at the distribution of years of experience. In some countries, relatively large proportions of principals are fairly new to their role: While only 4% of principals in Denmark and Poland have less than three years of work experience as a principal, this percentage is three times that or more for Finland, Mexico, Norway and Flanders (Belgium). Very few principals in Flanders (Belgium) (3%) and Norway (8%) report having more than 20 years of experience as a principal.

Figure 2.11 also shows that primary education principals across the six countries report on average three years of working experience in other managerial roles, with 67% of principals reporting less than three

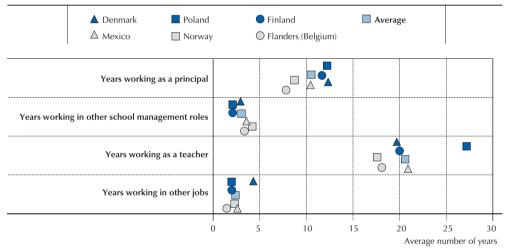


years of experience across the countries (see also Table 2.16). The exception is Norway, where more than a half of principals (52%) report between three and ten years of experience in other managerial roles.

Primary school principals tend to have spent a significant portion of their careers as teachers. The average number of years primary principals have worked as a teacher is 21, ranging from 18 years in Flanders (Belgium) to 27 years in Poland. Moreover, 89% of primary education principals in Poland report having worked as a teacher for 20 years or more. Finally, primary education principals seem to have relatively little working experience outside the educational sector. The average number of years principals report having worked in other jobs is two.

■ Figure 2.11 ■ Work experience of primary education principals

Percentage of principals in primary education with the following work experience and average years of experience in each role



^{1.} Categories presented in this graph are not mutually exclusive. For example, a principal can be working as a teacher in his school. Countries are ranked in descending order, based on the average number of years of experience working as a principal. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165551

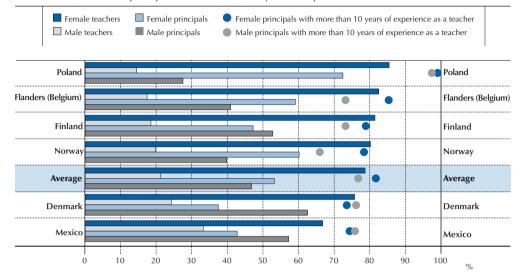
What is important to emphasise here is that most principals have been teachers for a long time. The data indicate that 80% of all principals across the six countries have more than 10 years of working experience as a teacher. Furthermore, it appears that the most common way to become a principal is to be promoted from a teacher. However, as Figure 2.12 demonstrates, the proportions of female teachers are not in line with the proportions of female principals across the six participating countries. While eight of ten primary teachers across the six countries are female, only half of the principals across the six countries are female. That is, while only one in five primary teachers is male, a staggering 50% of all primary principals are male. This means that there is a significant imbalance when it comes to female teachers being promoted to principals in the six countries that surveyed their primary school teachers and principals. Female primary principals also tend to have more teaching experience before becoming a principal in all countries except Denmark. Besides the imbalanced ratios, it also seems that it takes longer for female teachers to be promoted than male teachers. In other words, it appears that male teachers are disproportionately more often, and after less time as a teacher, promoted to principal than female teachers (Figure 2.12).



■ Figure 2.12 ■

Gender of primary education teachers and principals

Percentage of female and male primary education teachers and principals and the percentage of principals with more than 10 years of exprience as a teacher



Countries are ranked in descending order, based on the percentage of female teachers.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/1010.1787/888933165567

The work of primary school principals

The way in which primary principals spend their time also tells an interesting story for the six participating countries. Figure 2.13 illustrates the average proportion of time principals report spending on a number of key activities (see also Table 2.17). Principals report that most of their time goes to administrative and leadership tasks and meetings (42% across countries) followed by curriculum and teaching-related tasks and meetings (23% across countries). Principals across countries spend 13% of their time on average interacting with students and 11% interacting with parents or guardians. These figures might seem surprisingly low for primary school principals. Because children are less independent in primary school, one might have expected that interacting with students and/or their parents would take up a more substantial amount of the principals' time.

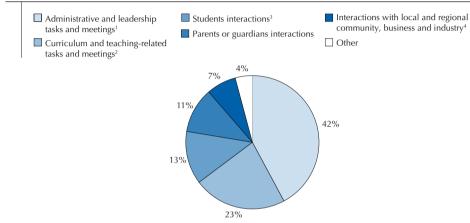
Figure 2.14 shows the extent to which the six countries vary in the leadership activities that primary education principals report engaging in (see also Table 2.18). On average across countries, observing instruction in the classroom is the least reported leadership activity (33%), while collaboration with principals in other schools is most frequently reported (68%). For all nine leadership activities reported in Table 2.18, however, countries show extremely large variations in their principals' responses. For example, only 7% of principals in Finland report engaging in observation in the classroom, as opposed to 72% in Poland. In Flanders (Belgium), 44% of principals report collaboration with teachers to solve classroom discipline problems, while 73% of principals report this in Mexico. In Denmark, 37% of principals report taking action to support co-operation among teachers to develop new teaching practices, but this percentage almost doubles for Poland (71%). Similar differences are observed for Denmark, Finland and Norway, on the one hand, and Mexico and Poland, on the other, for the



following activities: ensuring that teachers take responsibility for improving their teaching skills; ensuring that teachers feel responsible for their students' learning outcomes; providing parents or guardians with information on the school and student performance. Whereas principals in Mexico and Poland frequently report involvement in these activities, the percentages from the Nordic countries are much lower (Figure 2.13). Box 2.4 reports on policies and practices for collaboration among schools in Flanders (Belgium).

Figure 2.13 Principals' working time in primary education

Average proportion of time principals report spending on the following activities



- 1. Including human resource/personnel issues, regulations, report, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state or national education officials.
- 2. Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.
- 3. Including counseling and conversations outside structured learning activities.
- 4. Including formal and informal interactions.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165578

Box 2.4 Collaboration among schools in Flanders (Belgium)

In Flanders the promotion of "school communities" (scholengemeenschappen) has been a major effort to stimulate collaboration between schools. These communities are groups of schools offering education at the same level (school communities can be formed by either elementary schools or secondary schools) and are located within a certain geographical area. Schools can join a school community on a voluntary basis and irrespective of the educational network they belong to. The Ministry for Education and Training provides incentives for schools to join a school community by offering extra resources (e.g. the possibility to have extra staff in ICT). In the case of secondary schools, there are also some organisational advantages to joining a school community. These efforts have successfully stimulated further collaboration between schools, and today almost all Flemish schools offering mainstream elementary or secondary education belong to a school community.

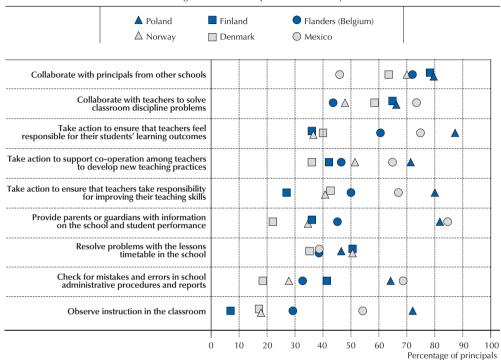
Source: OECD (2011).



Figure 2.14

Principals' leadership in primary education

Percentage of principals who engaged "often" or "very often" in the following leadership activities during the 12 months prior to the survey



Items are ranked in descending order, based on the average percentage of principals who engaged "often" or "very often" in the leadership activity during the 12 months prior to the survey.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165586

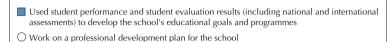
Finally, Figure 2.15 depicts primary education principals' reported engagement in the development of school development plans. On average, three-quarters of principals in the six countries say they work on a professional development plan for the school (see also Table 2.19). In Finland, however, this is much lower (32%), whereas in Poland almost all principals reported this (97%). On average across the six countries, 82% of principals reported that they used student performance and student evaluation results (including national/international assessments) to develop the school's educational goals and programmes. Again, in Finland, this was a mere 56%, while in Mexico, Norway and Poland this is nearly universal (94% and up).

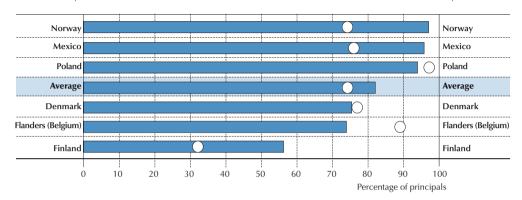


■ Figure 2.15 ■

Primary education principals' participation in a school development plan

Percentage of principals who engaged in the following activities related to a school development plan in the 12 months prior to the survey





Countries are ranked in descending order, based on the percentage of principals who used student performance and student evaluation results to develop the school's educational goals and programmes.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165592

Notes

1. Schools with more than 30% of pupils from socio-economically disadvantaged homes.

References

Antecol, H., O. Eren and S. Ozbeklik (2012), "The effect of teacher gender on student achievement in primary school: Evidence from a randomized experiment", IZA Discussion Paper, No. 6453, http://ftp.iza.org/dp6453.pdf.

Beilock, S.L. et al. (2009), "Female teachers' math anxiety affects girls' math achievement", Proceedings of the National Academy of Science of the United States of America-PNAS, Vol. 107/5, pp. 1860-1863.

Brinia, V. (2012), "Men vs women; Educational leadership in primary schools in Greece: An empirical study", International Journal of Educational Management, Vol. 26/2, pp. 175-191, http://dx.doi.org/10.1108/09513541211201988.

Buddin, R. and G. Zamarro (2009), "Teacher qualifications and student achievement in urban elementary schools", Journal of Urban Economic, Vol. 66, pp. 103-115.

Chan, K.W.A. (2011), "Feminising and masculinising primary teaching: A critical examination of the interpretive frameworks of male principals in Hong Kong", Gender and Education, Vol. 23/6, pp. 745-759.

Cho, H., P. Glewwe and M. Whitler (2012), "Do reductions in class size raise students' test scores? Evidence from population variation in Minnesota's elementary schools", Economics of Education Review, Vol. 31/3, pp. 77-95.



Clotfelter, C.T., H.F. Ladd and J.L. Vigdor (2007), "Teacher credentials and student achievement: Longitudinal analysis with student fixed effects", *Economics of Education Review*, Vol. 26/6, pp. 673-682.

Clotfelter, C.T. et al. (2007), "High poverty schools and the distribution of principals and teachers", CALDER Working Paper 1, CALDER Urban Institute, National Center for Analysis of Longitudinal Data in Education Research, Washington, DC.

Croninger, R.G. et al. (2007), "Teacher qualifications and early learning: Effects of certification, degree, and experience on first-grade student achievement", *Economics of Education Review*, Vol. 26, pp. 312-324.

Danish Ministry of Education (2009), Welcome to the Danish Folkeskole, http://www.eng.uvm.dk/~/media/Publikationer/2010/Folkeskolen_ENG_web.ashx.

Darling-Hammond, L. (2004), "Inequality and the right to learn: Access to qualified teachers in California's public schools", *Teachers College Record*, Vol. 106/10, pp. 1936-1966.

Darling-Hammond, L. et al. (2005), "Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness", *Education Policy Analysis Archives*, Vol. 13(42), http://dx.doi.org/10.14507/epaa.v13n42.2005.

Drudy, S. (2008), "Gender balance/gender bias: The teaching profession and the impact of feminisation", *Gender and Education*, Vol. 20/4, pp. 309-323.

European Agency for Special Needs and Inclusive Education (2012), "Special needs education within the education system – Finland", http://www.european-agency.org/country-information/finland/national-overview/special-needs-education-within-the-education-system.

Ferguson, R.F. and H.F. Ladd (1996), "How and why money matters: An analysis of Alabama schools", in H.F. Ladd (ed.), Holding Schools Accountable: Performance-based Reform in Education, pp. 265-298, Brookings, Washington, DC.

Folmer-Annevelink et al. (2010), "Class size effects on the number and types of student-teacher interactions in primary classrooms", *Journal of Classroom Interaction*, Vol. 45/2, pp. 30-38.

Galton, M. and T. Pell (2012), "Do class size reductions make a difference to classroom practice? The case of Hong Kong primary schools", *International Journal of Educational Research*, Vol. 53, pp. 22-31.

Gumus, S., O. Bulut and M.S. Bellibas (2013), "The relationship between principal leadership and teacher collaboration in Turkish primary schools: A multilevel analysis", Education Research and Perspectives, Vol. 40, pp. 1-29.

Hanushek, E.A. (2006), "School resources", in E.A. Hanushek and F. Welch (eds.), Handbook of Economics of Education, Vol. 2, pp. 866-908, Amsterdam.

Hanushek, E.A. and S.G. Rivkin (2004), "How to improve the supply of high-quality teachers", *Brookings Papers on Education Policy*, Vol. 7, pp. 7-25.

Harris, D.N. and T.R. Sass (2011), "Teacher training, teacher quality and student achievement", *Journal of Public Economics*, Vol. 95, pp. 798-812.

Hopf, D. and C. Hatzichristou (2010), "Teacher gender-related influences in Greek schools", *British Journal of Educational Psychology*, Vol. 69/1, pp. 1-18.

Ingersoll, R.M. (2001), "Teacher turnover and teacher shortages: An organizational analysis", *American Educational Research Journal*, Vol. 38/3, pp. 499-534.

Kiesling, H.J. (1984), "Assignment practices and the relationship of instructional time to the reading performance of elementary school children", *Economics of Education Review*, Vol. 3/4, pp. 341-350.

Kokkinos, C.M. and A.M. Davazoglou (2009), "Special education teachers under stress: Evidence from a Greek national study", *Educational Psychology*, Vol. 29/4, pp. 407-424, http://dx.doi.org/10.1080/01443410902971492.



Leigh, A. (2010), "Estimating teacher effectiveness from two-year changes in students' test scores", Economics of Education Review, Vol. 29, pp. 480-488.

Leithwood, K. and D. Jantzi (2009), "A review of empirical evidence of school size effects: A policy perspective", *Review of Educational Research*, Vol. 79, pp. 464-490.

Major, A.E. (2012), "Job design for special education teachers", Current Issues in Education, Vol 15/2, http://cie.asu.edu/ojs/index.php/cieatasu/article/viewFile/900/333.

Mascall, B. and J. Leung (2012), "District resource capacity and the effects of educational policy: The case of primary class size reduction in Ontario", *Leadership and Policy in Schools*, Vol. 11/3, pp. 311-324, http://dx.doi.org/10.1080/15700763.2012.692428.

Norwegian Ministry of Education and Research (2007). Education from Kindergarten to Adult Education, http://www.udir.no/Upload/Brosjyrer/5/Education_in_Norway.pdf?epslanguage=no.

OECD (2014a), TALIS 2013 Results: An International Perspective on Teaching and Learning, TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en.

OECD (2014b), Education Policy Outlook: Denmark, www.oecd.org/edu/policyoutlook.htm.

OECD (2014c), OECD Economic Surveys: Denmark 2013, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-dnk-2013-en.

OECD (2013a), Education at a Glance 2013: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2013-en.

OECD (2013b), *PISA 2012 Results: What Makes Schools Successful? (Volume IV) Resources, Policies and Practices,* PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en.

OECD (2011), *School Evaluation in the Flemish Community of Belgium*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264116726-en.

OECD (2010), PISA 2009 Results: What makes a school successful? Resources, Policies and Practices (Volume IV), PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091559-en.

OECD (2009), Creating Effective Teaching and Learning Environments: First Results from TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264068780-en.

OECD (2005), *Teachers Matter: Attracting, Developing and Retaining Effective Teachers,* Education and Training Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264018044-en.

Pang, I.W. (2012), "Teacher stress in working with challenging students in Hong Kong", Educational Research for Policy and Practice, Vol. 11/2, pp. 119-139, http://dx.doi.org/10.1007/s10671-011-9109-6.

Pepe, A. and L. Addimando (2013), "Comparison of occupational stress in response to challenging behaviours between general and special education primary teachers in Northern Italy", *International Journal of Special Education*, Vol. 28/1, pp. 14-26.

Rivkin, S., E. Hanushek and J. Kain (2005), "Teachers, schools, and academic achievement", *Econometrica*, Vol. 73/2, pp. 417-458.

Rockoff, J.E. (2004), "The impact of individual teachers on students' achievement: Evidence from panel data", *American Economic Review*, Vol. 94/2, pp. 247-252.

Ronfeldt, M. and M. Reininger (2012), "More of better student teaching?", Teaching and Teacher Education, Vol. 28, pp. 1091-1106.

PRIMARY TEACHERS AND THEIR SCHOOLS



Rowan, B., R. Correnti and R.J. Miller (2002), "What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools", *Teacher College Record*, Vol. 104/8, p. 1525-1567.

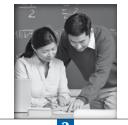
Sirius Network, Education and Migration News (2013), "Denmark: Funding boost for schools with high immigrant enrollment", http://www.sirius-migrationeducation.org/denmark-funding-boost-for-schools-with-high-immigrant-enrollment/ (accessed 17 April 2014).

UNESCO Institute for Statistics (2009), *Global Education Digest 2009: Comparing Education Statistics Across the World*, UNESCO Institute for Statistics, Montreal.

UNESCO Institute for Statistics (2006), Teachers and Educational Quality: Monitoring Global Needs for 2015, UNESCO Institute for Statistics, Montreal.

Vlaams Ministerie van Onderwijs (2011), Conceptnota: samen taalgrenzen verleggen, http://www.ond.vlaanderen.be/nieuws/2011/doc/talennota-2011.pdf.

Ward, L. et al., (2013), "Teacher preparation to proficiency and beyond: Exploring the landscape", Asia Pacific Journal of Education, Vol. 33/1, pp. 68-80.



3

The work of primary education teachers

This chapter examines the work of primary school teachers in the six participating countries. It describes the feedback that primary teachers receive and the induction activities, mentoring and professional development in which they participate. The chapter also focuses on primary teachers' pedagogical beliefs and practices, student evaluation, teacher co-operation and collaboration, and teachers' beliefs about teaching and learning. Finally, this chapter discusses primary teachers' feelings of self-efficacy and job satisfaction.



Highlights

- Primary teachers report that the greatest benefits from feedback occur in the personal and emotional sphere. Receiving feedback has a positive influence on teachers' confidence, motivation and job satisfaction, while it has little perceived impact on their career advancement, salary or a financial bonus.
- More than 50% of teachers across the six countries work in schools where principals say there is no formal induction programme for new teachers in their schools; in Mexico and Poland, this is even more prevalent. However, compared with the international average, twice as many primary teachers in Mexico participate in formal induction programmes if they have access to them.
- Almost half of the teachers across countries work in schools where principals report that there is no access to a mentoring system for teachers in their school. Even for the teachers who do have access, very few participate in mentoring. In most countries, primary teachers receive peer support from elsewhere. For example, 80% or more of primary teachers across the participating countries report engaging in joint teaching or joint activities across classes and taking part in collaborative learning.
- Overall, primary teachers seem fairly confident about their abilities in the classroom and are satisfied with their jobs. However, more than a quarter of primary teachers across countries wonder whether it would have been better to choose another profession, and only one-third of primary teachers think that the teaching profession is valued in society.
- Class size is not associated with significant changes in primary teachers' self-efficacy and job satisfaction. However, teachers whose classes have more students who are low academic achievers or students with behavioural problems report lower job satisfaction, and, in some countries, they also report lower levels of self-efficacy. The associations found for primary teachers in these areas are less consistent and weaker than for lower secondary teachers.
- Teacher collaboration is widespread among primary teachers in the six countries. Two-thirds or more of teachers report engaging in joint teaching and collaborative learning, and almost all teachers across the six countries report exchanging teaching materials with colleagues and attending team conferences.

INTRODUCTION

The previous chapter provided a descriptive foundation of primary school teachers in Denmark, Finland, Mexico, Norway, Poland and Flanders (Belgium), the classes they teach, their schools and school leaders. This chapter builds on that foundation by further analysing specific teacher- and teaching-related topics. The first part discusses the appraisal and feedback that primary teachers receive and the induction activities, mentoring and professional development in which they participate. Next, the chapter focuses on primary teachers' pedagogical beliefs and practices in these six countries. Specific topics in this area are classroom teaching, student evaluation, teacher co-operation and collaboration and teachers' beliefs about teaching and learning. The final section of this chapter examines teachers' feelings of self-efficacy and job satisfaction.



SUPPORTING AND DEVELOPING PRIMARY SCHOOL TEACHERS

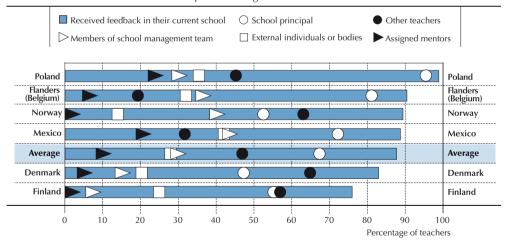
Appraisal and feedback

Teacher appraisal and feedback can refer to a number of activities that are used to evaluate the performance of teachers and provide them with the information they need to improve their practice. This section focuses on feedback to individual teachers. Feedback entails any communication teachers receive about their teaching, based on some form of interaction with their work (i.e. observing classrooms and the teaching of students). This feedback can be provided through informal discussions or as part of a more formal and structured arrangement. In the OECD Teaching and Learning International Survey (TALIS), teachers were asked specifically about the feedback they personally receive in their school. It is important to note that the six participating countries may differ in the extent to which formal systems of teacher appraisals are in place. As a result, this section will focus on the feedback teachers receive, based on formal or informal exchanges.

Giving teachers feedback is important for their careers and development. Teachers can significantly improve their understanding of their teaching methods, teaching practices and student learning (Santiago and Benavides, 2009; Jacob and Lefgren, 2008; OECD, 2013). Whether feedback really affects teaching practices and thereby improves student learning depends on the extent to which appraisal and feedback are formative and whether there are links between performance assessments and professional learning (OECD, 2005; 2013; Isoré, 2009).

 Figure 3.1 Teachers' feedback by source of feedback in primary education

Percentage of primary education teachers who report having received feedback in their school and teachers who report receiving feedback from various sources1



^{1.} 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.

Countries are ranked in descending order, based on the percentage of teachers who report having received feedback in their school. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165607

For primary teachers who receive feedback in their school, it is important to distinguish between multiple possible sources of this feedback. Figure 3.1 shows the extent to which teachers receive

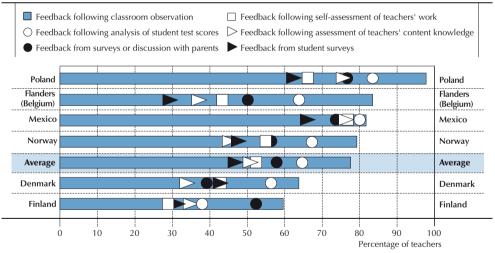


feedback from peers, teacher mentors, principals and external evaluators or agencies, or whether they do not receive feedback at all (see also Table 3.1). Of all teachers across the six countries, 12% report never having received feedback at all. In Finland, almost a quarter of teachers report this, while in Poland nearly all teachers receive feedback. The most common source of feedback for teachers who do receive feedback is the school principal. Two-thirds of teachers across the six countries report receiving feedback from their school principal, though this figure is much lower for Denmark (47%) and much higher for Poland (95%).

Teachers in Denmark report receiving feedback from colleagues more frequently (65%), while for teachers in Flanders (Belgium) and Mexico, this practice is less common (19% and 32%, respectively). There are also large differences among countries in the frequency with which teachers say they receive feedback from members of the school management team and assigned mentors. In Finland and Denmark, 7% and 15% of teachers, respectively, report receiving feedback from members of the school management team. One-third or more of teachers in Mexico, Norway and Flanders (Belgium) report this. Similarly, in Mexico and Poland, almost a quarter of teachers report receiving feedback from assigned mentors, but this source of feedback is almost non-existent for teachers in Denmark (5%), Finland (1%), Norway (2%) and Flanders (Belgium) (7%).

■ Figure 3.2 ■ Methods for providing feedback to primary education teachers Percentage of primary education teachers who report receiving feedback

Percentage of primary education teachers who report receiving feedback via the following methods^{1, 2}



^{1.} Percentage of teachers who report receiving feedback via the following methods by at least one body, including: "external individuals or bodies", "principal", "member(s) of school management team", "assigned mentors" or "other teachers".

Countries are ranked in descending order, based on the percentage of teachers who report having received feedback following classroom observation.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165616

Schools also use different methods to provide feedback to primary school teachers. TALIS asked teachers whether they received feedback following classroom observation or from student surveys,

^{2.} 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. Countries are ranked in descending order, based on the percentage of teachers who report having received feedback following classroom.

assessments of their content knowledge, analysis of student test scores, self-assessments of their work or feedback from parents. Classroom observations that provide constructive and immediate feedback for teachers to improve their teaching can have a significant impact on student learning (Zwart et al., 2007). Furthermore, by monitoring teaching practices, schools can ensure consistency in the quality of teaching (Goldstein, 2004; 2007). Providing feedback based on data such as students' results has also been shown to lead to school improvement and enhanced system performance (Barber and Mourshed, 2007).

TALIS looks at how these six methods for providing feedback to teachers in primary education were used across the six participating countries (Table 3.2). Figure 3.2 shows that feedback following classroom observation is the most common across countries on average (78%), followed by feedback following analysis of student test scores (65%), surveys or discussion with parents (58%), self-assessment of teachers' work (52%), assessment of teachers' content knowledge (51%) and feedback from student surveys (46%). Receiving feedback from all six methods is reported most frequently by teachers in Mexico and Poland. Feedback following classroom observation also seems highly common in Flanders (Belgium). Teachers in Finland show consistently low percentages for all feedback methods, with feedback following classroom observation being the most popular, followed by feedback from surveys or discussion with parents. Teachers in Denmark and Flanders (Belgium) report receiving little feedback following student surveys, assessment of teachers' content knowledge, self-assessment of teachers' work and surveys or discussion with parents.

The focus of teacher feedback is extremely important as well because it shows teachers what is most and least valued in their work. Figure 3.3 shows teachers' perception of the emphasis of the feedback they receive in the six countries that surveyed their primary school teachers (see also Table 3.3). More than eight of ten teachers across countries report the following issues to have moderate or high importance in their feedback: student performance, knowledge and understanding of the subject field(s), pedagogical competencies in teaching the subject field(s), student behaviour and classroom management and collaboration or working with other teachers. Teaching in a multicultural or multilingual setting was least emphasised in teachers' feedback across countries (33%).

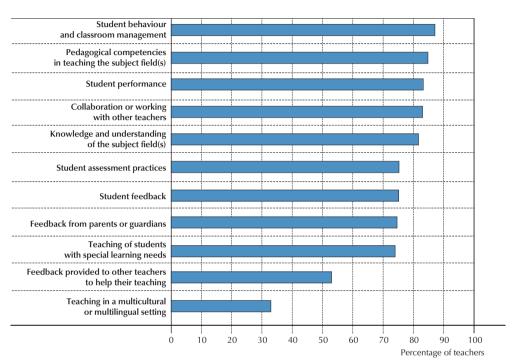
Perhaps the most crucial aspect of teacher feedback is whether it positively affects teachers and the way they teach. Feedback to teachers can have a number of positive impacts, ranging from a personal impact on teachers to an impact on their career, their development and their teaching (Hattie, 2009). Figure 3.4 looks at how teachers perceive the outcomes of teacher feedback in primary education (see also Table 3.4). On average across countries, 72% of primary teachers report that the largest positive influence is on their confidence. Especially in Mexico, feedback seems to have an important impact on teachers' confidence, as 93% of teachers there report a large positive influence. More than two-thirds of teachers on average indicate that their motivation (68%) and job satisfaction (67%) are also positively impacted after they receive feedback, with teachers in Mexico again showing even higher percentages (89% and 92%, respectively). Far fewer teachers across countries report feedback having an influence on the likelihood of career advancement (30%) or financial implications (18%). Hence, it seems that for primary education teachers the largest benefits from feedback are gained in the personal and emotional sphere: confidence, motivation and job satisfaction.



■ Figure 3.3 ■

Emphasis of teacher feedback in primary education

Percentage of primary education teachers who report the feedback they received emphasised the following issues with a "moderate" or "high" importance!



^{1.} 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.

Items are ranked in descending order, based on the percentage of teachers who report the feedback they received emphasised the issue with a "moderate" or "high" importance.

Source: OECD, TALIS 2013 Database.

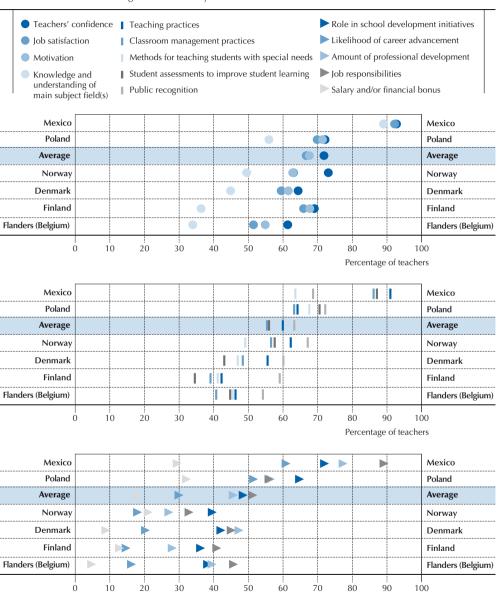
StatLink http://dx.doi.org/10.1787/888933165627

Thus, most primary teachers in the six participating countries report receiving feedback, and commonly this is provided by principals and other teachers. Two-thirds or more of primary teachers report having received feedback following classroom observation or following analysis of student test scores. Most often, the emphasis in this feedback seems to be student performance, knowledge and understanding of the subject field(s), pedagogical competencies in teaching the subject field(s), student behaviour and classroom management and collaboration or working with other teachers. This means that student learning and the learning environment are central issues when primary teachers are provided feedback. Finally, the largest benefits from feedback are gained in the personal and emotional sphere for primary teachers: receiving feedback relates more to confidence, motivation and job satisfaction. This is congruent with findings of the *TALIS 2013 Results: An International Perspective on Teaching and Learning* (OECD, 2014), which reported that when teachers perceive appraisal and feedback to have real effects on their teaching practices, they also report higher levels of self-efficacy and job satisfaction.



■ Figure 3.4 ■ Outcomes of teacher feedback in primary education

Percentage of primary education teachers who report a "moderate" or "large" positive change in the following issues after they received feedback on their work at their school



^{1.} 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.

Countries are ranked in descending order, based on the overall percentage of teachers who report a "moderate" or "large" positive change after

they received feedback on their work at their school. Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165637

Percentage of teachers



Primary teachers' professional development

Professional development is essential for primary school teachers to meet the demands of the education system. TALIS adopts a broad definition of professional development as activities that aim to develop an individual's skills, knowledge, expertise and other characteristics as a teacher. This definition recognises that development can be provided in many ways, ranging from formal approaches (such as courses or workshops) to informal approaches (such as collaboration with other teachers or participation in extracurricular activities). Professional development can be conducted outside of school in the form of courses, workshops or formal qualification programmes; through collaboration between schools or teachers (in the form of observational visits to other schools); or within schools where teachers work. Professional development within schools can be provided through coaching or mentoring, collaborative planning and teaching and sharing good practices. A high-quality professional development programme is aligned with classroom conditions, school contexts and teachers' daily experiences (Coulter and Woods, 2012). The literature remains inconclusive as to whether the duration of the professional development programme or the teacher's years of work experience affect any impact that professional development might have on primary education teachers' attitudes and students' achievement (Lumpe et al., 2012; Wayne et al., 2008; Rosenfeld and Rosenfeld, 2008).

Importantly, however, research shows that induction programmes can help retain teachers and improve their teaching and their students' achievement. But the kind, intensity and duration of support vary greatly, and the effects depend on how much induction one gets and for how long (Ingersoll, 2012). When it comes to mentoring for new teachers, it seems that time spent with a mentor, participation in mentor-facilitated professional development activities and the quality of mentors' interactions are significantly related to new teachers' confidence and their development of effective collaborative relationships (LoCasale-Crouch et al., 2012). Finally, how teachers perceive professional development in primary education seems to be independent of their gender, educational attainment and work experience (Tas, 2012). This section examines primary education teachers' participation in these different types and aspects of professional development.

Induction programmes and activities

Table 3.5 shows the access to induction programmes for primary teachers as well as their levels of participation, according to both the school principal and the teachers themselves. Over half of principals across all six countries report that there is no formal induction programme for new teachers in their schools. However, as shown in Figure 3.5, these percentages vary widely across countries. Three-quarters or more of principals in Mexico (86%) and Poland (74%) report that no formal induction is available in their school for new teachers, whereas less than a fifth report this in Flanders (Belgium) (19%). In Denmark, Finland and Flanders (Belgium), induction for all new teachers in the school (43-74% of principals report this) seems to be more common than in Mexico, Norway and Poland (where percentages range between 12% and 19%). In Norway, principals report that formal induction is more dedicated to teachers who are new to teaching (40%) than in the other five countries (1%-9%).

Informal induction activities seem to be more common across countries (Table 3.5 and Figure 3.5). Except for Mexico, where only 29% of principals report the existence of these activities, between 78% and 92% of principals report that informal induction happens in their school. A general or administrative introduction to the school for new teachers is also less common in Mexico (33%) and Norway (44%) than in Denmark (82%), Finland (93%), Poland (76%) and Flanders (Belgium) (83%).

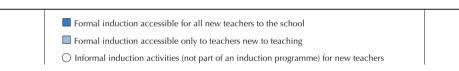


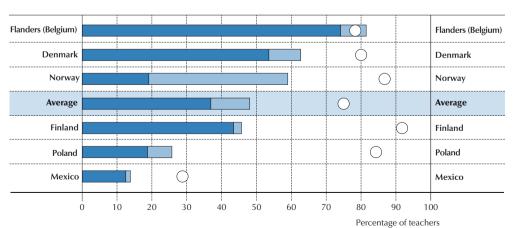
The lack of induction activities in Mexico could be particularly problematic since Mexican principals also report less frequent use of formal induction programmes.

The availability of induction activities in schools can be compared with the participation rates in induction activities as reported by teachers, which are also displayed in Table 3.5.¹ Overall, just under a third of teachers across countries report having participated in a formal induction programme. For Mexico (60%) and Poland (45%), this figure is much higher, while for Finland (16%), Norway (10%) and Flanders (Belgium) (19%), it is lower. Interestingly, principals in Mexico and Poland are less likely to report that their school has a formal induction programme, but primary teachers in those countries seem more likely than do teachers in other countries to report having participated in such programmes when they do have access to them. This means that primary teachers in Mexico and Poland may perceive such programmes to be very beneficial, and schools could benefit from developing more formal induction programmes.

Informal induction activities appear to be more popular among teachers across countries, as 42% of teachers on average report having taken part in these (Table 3.5). For Finland (51%) and Poland (59%), this represents at least half of the teachers, while for Flanders (Belgium) (23%), this constitutes a relatively small group of teachers. Taking part in a general and/or administrative introduction to the school is reported by 35% of teachers on average across countries. Teachers in Poland report this more often (51%), while relatively few teachers in Norway partake in this (16%).

Percentage of primary education teachers whose school principal reports the existence of induction processes for new teachers in the school





Countries are ranked in descending order, based on the cumulative percentage of teachers whose school principal reports access to formal induction programmes for all new teachers to the school and for only teachers new to teaching.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165644

65

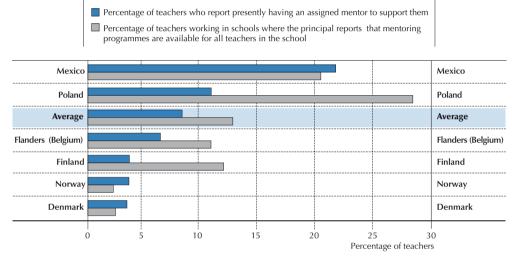


Mentoring programmes for teachers

Access to and participation in mentoring programmes in primary education, as reported by both principals and teachers themselves, are displayed in Table 3.6 (see also Figure 3.6). Almost half of teachers across the six countries work in schools where the principal reports there to be no access to a mentoring system for teachers in their school (47%). This is more than half of the principals in Finland (64%), Mexico (74%) and Flanders (Belgium) (54%). If teachers do have access to a mentoring system, its target group is most often all teachers who are new to the school (23%) across the six countries.

• Figure 3.6 • **Mentoring programmes in primary education**

Percentage of primary education teachers whose school principal reports the existence of a mentoring system in the school and the percentage of primary education teachers who report being involved in mentoring activities¹



1. Refers to mentoring by or for teachers at the school. Does not refer to students within the teacher education who are practising as teachers at the school

Countries are ranked in descending order, based on the percentage of teachers who report presently having an assigned mentor to support them. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165655

Table 3.6 shows that few teachers have a mentor (8%) or serve as a mentor (9%) in the TALIS survey. In Mexico, more teachers have mentors (22%), whereas in the participating Nordic countries (Denmark, Finland and Norway), particularly few teachers report having a mentor (3% to 4%). When there is a mentoring system that the teacher has access to and uses, it seems that teachers and their mentors often teach the same subject field (Table 3.6). This may be expected given that primary school teachers tend to teach a range of subjects to their class, and it makes sense that this would be the case for both mentees and mentors. However, 29% of teachers report that mentors and mentees teach the same subject only sometimes, and 4% report this rarely or never. In Denmark in particular, 10% of principals report this to be rarely or never the case. The overall low participation in mentoring programmes could stem from a number of factors – for instance, lack of support for mentoring programmes at the school level –, but it does not necessarily mean that teachers are not interested in seeking support from their colleagues. Indeed, as Figure 3.7 shows, primary teachers across the six countries show high participation rates in activities in which they can collaborate with their peers. While half of all

99

primary teachers report observing other teachers' classes and providing feedback, at least eight out of ten primary teachers across countries report engaging in joint teaching and joint activities across classes and taking part in collaborative learning.

Continuing professional development

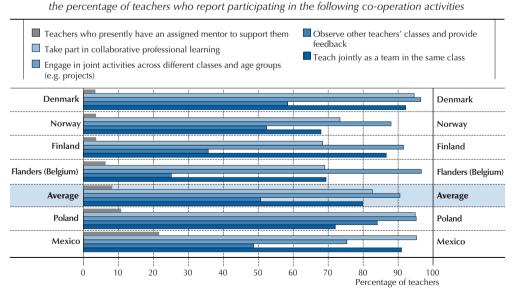
Table 3.7 displays primary teachers' participation in professional development activities in the previous 12 months and the personal financial cost of these professional development activities. On average, nine out of ten teachers across countries report undertaking some professional development activities in the past 12 months. Figure 3.8 shows that financial costs of the professional development activities appear to be entirely covered for more than three-quarters of teachers (77%), with only 5% of teachers reporting that they pay for all of it. Especially in Mexico and Poland, it is relatively more common that the teachers pays for some (24% and 29%, respectively) or all (9% and 11%, respectively) of the professional development costs.

Teachers' needs for professional development in primary education are outlined in Table 3.8. ICT skills for teaching and teaching students with special needs² are the most frequently reported needs on average across countries (20% and 22%, respectively). This is in line with studies that have shown that teachers of special-needs students are prone to low job satisfaction and self-efficacy and have a greater chance of leaving their schools than their colleagues teaching classes without such students. This is especially the case if they teach students with behavioural and emotional problems (Kokkinos and Davazoglou, 2009; Katsiyannis, Zhang and Conroy, 2003).

■ Figure 3.7 ■

Participation in mentoring programmes and teacher co-operation in primary education

Percentage of primary education teachers who have an assigned mentor to support them and



Countries are ranked in ascending order, based on the percentage of teachers who presently have an assigned mentor to support them. **Source:** OECD, TALIS 2013 Database.

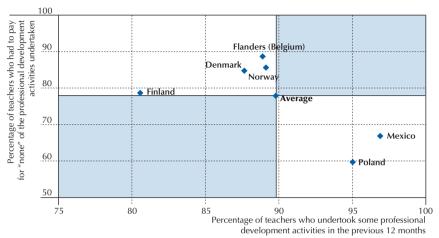
StatLink http://dx.doi.org/10.1787/888933165660



■ Figure 3.8 ■

Primary teachers' participation in professional development activities in the previous 12 months and personal financial cost of professional development activities

Participation rates and reported personal financial cost of professional development activities undertaken by primary education teachers in the 12 months prior to the survey



Source: OECD, TALIS 2013 Database.

StatLink @s http://dx.doi.org/10.1787/888933165674

As shown in Figure 3.9, teaching students with special needs seems especially challenging in Denmark, as one-third of teachers report a high need for professional development in this area. More teachers in Mexico than in the other five countries report high levels of needs for professional development in several areas: school management, teaching students with special needs, teaching in a multicultural setting, developing cross-occupational competencies, using new technologies in the workplace and student career guidance and counselling (Figure 3.9). Almost half of teachers in Mexico say that teaching in a multicultural or multilingual setting is emphasised in the feedback they receive (compared with only one-third of teachers internationally), so their reported high level of need for professional development in this area may not be surprising.

Barriers to further participation in professional development

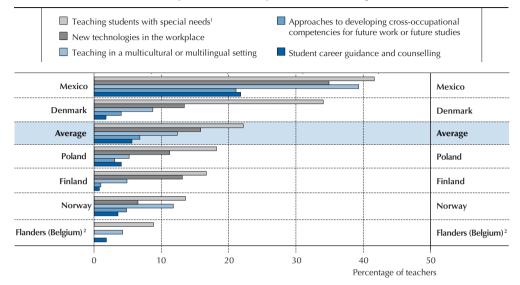
TALIS also provides insights into challenges that teachers report facing in their participation in further professional development. Across the six participating countries and economies, the reasons that teachers report most commonly as barriers to their engagement in professional development are: professional development being too expensive (44%), a conflict with the work schedule (53%) and a lack of incentives for participating in professional development (41%). More than half of teachers in Denmark, Mexico and Poland (55-60%) cite the expensive costs as a barrier. More than half of teachers in Mexico also report a lack of employer support and incentives for participating in such activities (65% for both), no relevant professional development being offered (56%) and conflicts with the work schedule (51%) as barriers for professional development (see also Table 3.9).

In contrast, the least-often-reported barrier to professional development is that of lack of pre-requisites such as qualification or experience, with only 12% of teachers reporting it across the six countries (Table 3.9). This indicates that most teachers in the six countries have the necessary qualifications for professional development activities but might lack the support and the resources to engage in them.

■ Figure 3.9 ■

Teachers' needs for professional development in primary education

Percentage of primary education teachers indicating they have a high level of need for professional development in the following areas



^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Categories not showing for Flanders (Belgium) because these questions were not part of the national questionnaire.Items are ranked in descending order, based on the percentage of teachers who report a high level of need for professional development.Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165682

PRIMARY TEACHERS' PEDAGOGICAL BELIEFS AND PRACTICES

The teaching practices that primary teachers use can play a role in how well their students learn and how motivated they are to learn (Seidel and Shavelson, 2007). What practices teachers decide to use in the classroom is dependent on many factors. Primary teachers' beliefs about the nature of teaching and learning play a big role in the practices that teachers deploy (Beyer and Davis, 2008; Pajares, 1992), but the extent to which primary teachers collaborate with colleagues is also highly important. Collaboration among teachers can facilitate resource sharing, including the exchange of ideas (Clement and Vandenberghe, 2000; Murawski and Swanson, 2001). How successful primary teachers are in their use of certain practices and collaborative activities may in turn influence their feelings of self-efficacy and job satisfaction. This section will therefore discuss classroom teaching and evaluation, teacher collaboration and teachers' feelings of self-efficacy and job satisfaction.

Teachers' working time

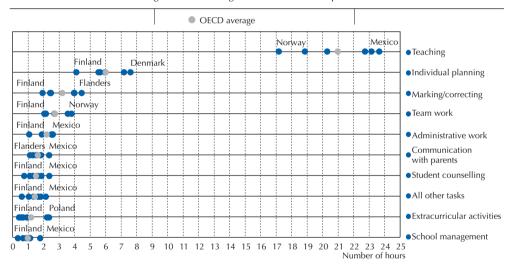
Primary teachers' work consists of a range of responsibilities that they often need to prioritise differently. This section looks at teachers' total reported working hours in addition to the time they report spending on various work-related tasks during a typical week. Figure 3.10 illustrates the variations among countries for these tasks. As also seen in Table 3.10, the number of total reported working hours across countries



is 37, ranging from 31 hours in Finland to 41 hours in Flanders (Belgium). Of this total, teachers across countries report spending on average 21 hours a week on teaching. Other than on teaching, teachers report spending most time on individual planning or on preparation of lessons either at school or out of school (6 hours on average), marking/correcting student work (3 hours on average) and team work and dialogue with colleagues within the school (3 hours on average). General administrative work (2 hours on average), communication and co-operation with parents or guardians (2 hours on average) and hours spent on student counselling (2 hours on average) also consistently take up some time for teachers across countries. Participation in school management and extracurricular activities (both 1 hour on average) seem to be the least time-consuming activities for teachers across countries (Figure 3.10), although there may be fewer extracurricular activities on offer for children of this age. It is noteworthy that these data show that neither principals (see Chapter 2) nor teachers report spending a substantial amount of time with parents or students. This is surprising as students are less independent in primary school, often requiring more frequent interactions between school staff and parents or guardians.

■ Figure 3.10 ■ Teachers' working hours in primary education

Average number of 60-minute hours primary education teachers report spending on the following activities during the most recent complete calendar week¹



1. 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.

Each dot represent a country value except the grey dot representing the average. For each category, the country with the lowest value is indicated on the left side, and the country with the highest value on the right side. Tasks are ranked in ascending order, based on the average number of hours teachers report spending on their tasks.

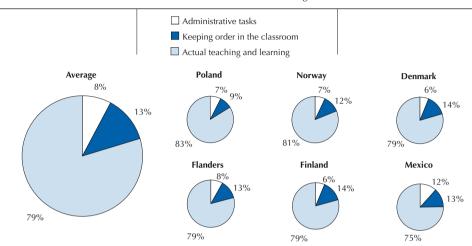
Source: OECD, TALIS 2013 Database. StatLink as http://dx.doi.org/10.1787/888933165692

TALIS also provides information on the distribution of time spent in the classroom during an average lesson in primary education. As seen in Figure 3.11, primary school teachers across countries have similar overall patterns of how they spend their class time (see also Table 3.11). On average across countries, 79% of teachers' time goes to actual teaching and learning, ranging from 75% in Mexico to 83% in Poland. After this, keeping order in the classroom takes up considerable time (13% on average, ranging from 9% in Poland to 14% in Denmark and Finland), and 8% of working time of primary education teachers goes to administrative tasks (ranging from 6% in Denmark and Finland to 12% in Mexico).

Figure 3.11

Distribution of class time during an average lesson in primary education

Average proportion of time primary education teachers report spending for each of these activities in an average lesson^{1, 2}



- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. The sum of time spent in an average lesson may not add up to 100% because some answers that did not add up to 100% were accepted. Countries are displayed in descending order, based on the proportion of time they spend on actual teaching and learning. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165704

Teaching practices in primary schools

The teaching practices that primary teachers report using frequently are displayed in Figure 3.12 (see also Table 3.12).3 Checking students' work is reported as the most frequently used practice across countries (84%), followed by letting students practice similar tasks (78%). There are, however, many differences among countries in the relative frequency reported for these activities, as shown in Figure 3.12. While it is common in Norway for a teacher to present a summary of recently learned content (93%), only two-thirds or fewer of the teachers in Mexico and Flanders (Belgium) report using this practice. Teachers also differ as to whether they frequently refer to a problem from everyday life or work when teaching. While 54% of teachers in Norway and 61% of teachers in Denmark report using this practice often, it is more often used by teachers in Mexico (88%) and Poland (81%). Similarly, while most teachers in Norway (82%) report that they frequently give different work to students with different abilities (Table 3.12), this is less common in the other five countries and particularly in Mexico (52%). Even larger differences occur among countries for the practice of having students work in small groups to come up with a joint solution to a problem or task. While less than half of the teachers in Finland and Poland report using this practice frequently, around two-thirds or more do in Norway and Mexico. Similarly, having students work on projects that require at least one week to complete is very common in Mexico (84%), but much less frequently used - by less than one-third of teachers - in the other five countries. Finally, only 39% of primary teachers across countries report frequently having students use ICT. In Finland (21%) and Poland (29%) this is even less frequent, while primary teachers in Norway use this practice more (57%). Although many of these differences stem from teachers' individual preferences, some differences can also be explained by national educational programmes. For example, ICT is more commonly used in Norway because the Ministry of Education made it a priority area throughout the educational sector (see Box 3.1).



Box 3.1 Programme for ICT in Norway and Poland

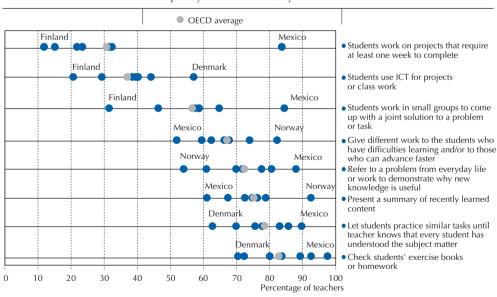
In 2006, an educational reform in Norway established digital competency as one of five basic skills, and ICT literacy was made part of the competence aims in all subject areas. In 2010, the Norwegian Ministry of Education and Research established The Norwegian Centre for ICT in Education. The centre's main objective is to enhance knowledge about the use of ICT to improve the quality of education and learning. Further, it shall provide schools and schools' owners with guidance on implementation of ICT in education in areas such as infrastructure and standards (e.g. cloud computing). Currently, there are fewer than 2.8 students per computer in Norwegian primary schools.

The "Digital School" in Poland is the government programme to develop the competence of students and teachers in the use of ICT. This programme is regarded as the pilot programme and was implemented from April 2012 to August 2013. This programme contained the following four major components: teacher training, e-learning resources (including e-textbook), providing schools with necessary ICT infrastructure and ICT lessons to students. About 380 public primary schools in Poland are expected to join this pilot programme. These results develop an optional model for the long-term ICT programme for students and teachers.

Source: Norwegian Ministry of Education and Research, 2007, EDU-Entuzjasci website http://eduentuzjasci.pl/en/en-wydarzenia/596-ibe-in-qdigital-schoolq-programme.html.

■ Figure 3.12 ■ Teaching practices in primary education

Percentage of primary education teachers who report using the following teaching practices "frequently" or "in all or nearly all lessons":



1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. For each category, the country with the lowest value is indicated on the left side, and the country with the highest value on the right side. Teaching practices are ranked in descending order, based on the average percentage of teachers report using them "frequently" or "in all or nearly all lessons". Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165715



Pedagogical beliefs of teachers

Teachers' beliefs about teaching and learning in primary education are delineated in Table 3.13. Across the six countries, teachers seem to strongly believe that their role as a teacher is to facilitate students' own inquiry (96%) and that students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved (95%). In contrast, while nine of ten teachers in Denmark, Finland, Mexico, Poland and Flanders (Belgium) seem to agree that students learn best by finding solutions to problems on their own, only around half of teachers in Norway share this view. The recent curriculum changes in Poland, described in Box 3.2 have aimed to shift the focus of teaching from a more narrow subject-based focus to general skills and hands-on experience.

On average across countries, 82% of teachers believe that thinking and reasoning processes are more important than specific curriculum content. This indicates that the focus of primary teachers is on building reasoning processes. This may be beneficial for the next levels of education because developing reasoning and thinking skills early on will help primary students capitalise and expand on the skills and competencies they acquire later.

Box 3.2 Change of educational structure and curriculum in Poland

Poland carried out an aggressive education reform in the past decades. During this period, Poland's PISA results showed significant improvement: the performance of Poland's 15-yearold students in PISA 2000 was below the OECD average, but their latest results in PISA 2012 are significantly above the OECD average. Generally, these education reforms occurred in two stages. One was conducted in the late 1990s. This phase reformed school structure, reduced the period of primary school from eight years to six years and introduced lower secondary schools, with the aims to provide all students with opportunities for longer general education and to avoid early differentiation. The other reform was conducted starting in 2009. It expanded the reform from the late 1990s and revised the national curriculum. Poland introduced crosscurricular themes such as health education, ecological education, reading and media education and education for society, and improved vocational training programs. While respecting the autonomy of schools and teachers, assessment and examination were revised in terms of improving accountability and quality assurance.

Poland's reforms have also been flexible, adjusting to the needs of a more diverse student population and increased demand to participate in secondary and tertiary education. In this context, in 2009, the Ministry of National Education expanded the reforms initiated in the late 1990s by modifying the national core curriculum for general education and school vocationaltraining programmes. The new curriculum shifted the focus from the narrow, subject-related requirements to more general, transversal skills and competencies. The new curriculum would focus on experiments, scientific inquiry, problem solving, reasoning and collaboration. National standardised assessments and examinations were adjusted accordingly, and the concept of a core curriculum was adopted. This gave schools extensive autonomy to create their own curricula within a predetermined general framework, balancing the three goals of education: imparting knowledge, developing skills and shaping attitudes.

Sources: OECD (2013); Pearson Foundation website, http://www.pearsonfoundation.org/oecd/poland.html.



Student assessment in primary schools

TALIS also asked about how primary teachers assess their students. The most frequently used methods of assessing student learning by teachers in primary education are displayed in Table 3.14. A lot of variability across countries can be seen (Figure 3.13). On average across countries, 54% of teachers report that they develop and administer their own assessment. Administering a standardised test seems less popular in Denmark (16%) and Norway (33%), but much more common in Flanders (Belgium) (75%). To have students answer questions in front of the class is very common in Mexico (84%) and Norway (62%), but used much less in Finland (13%). On average, about half of the teachers use this form of assessment internationally.

About half of the teachers across countries provide written feedback on student work in addition to grading (Table 3.14 and Figure 3.13). This is again more common in Mexico (83%) and Flanders (Belgium) (73%), but is less common in Denmark (29%) and Finland (26%). It is possible that these low numbers stem from a country's particular assessment systems. For instance, in Finland, students' assessment can be conducted verbally (see Box 3.3 for more information). As one would expect from primary school teaching, letting students evaluate their own progress is slightly less common across countries (40%), though in Mexico three-quarters of teachers use this form of assessment. Observing students when they work on particular tasks and providing immediate feedback is the most frequently used method of assessment across countries; 83% of teachers report using this approach frequently.

Box 3.3 Finland's system of student assessment

There are no national examinations in Finnish primary education; instead, students' assessment is in the hands of their teachers. Finnish core curriculum defines the guidelines for assessing students' progress, work skills and behaviour, and distinguishes between ongoing assessment and final assessment.

The final assessment takes place at the end of students' basic education and determines their future studies. Ongoing assessment, on the other hand, aims to offer feedback that will guide and support students' learning through the course of their studies in primary education. This feedback can be conducted through certificates or reports, for instance. Interestingly, in the first seven years of basic education, reports can be done either verbally or numerically or as a combination of the two. Thus, numerical reports are not obligatory until the eighth grade. Verbal reports are meant to offer teachers a chance to describe students' development in different areas of education.

Source: Europeaia, European encyclopedia on national education systems, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Assessment_in_Single_Structure_Education.

Assessing primary school students can be very different across countries. Because primary teachers diverge so much internationally on how they assess their students, it can be concluded only that the students' assessment in schools is very context-specific.

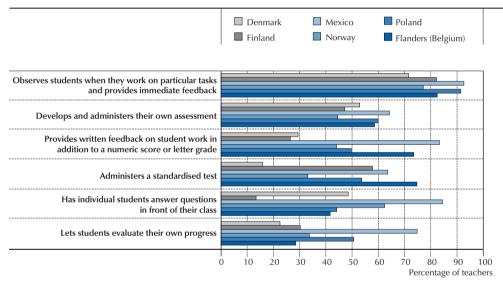


Teacher co-operation and collaboration in primary education

School-based teacher collaboration has been shown to be associated with an increase in school effectiveness and enhanced professional growth for teachers (Kougioumtzis and Patriksson, 2009). Primary school teachers can focus on different areas in their teaching and work environment when collaborating with other teachers in their school. The focus of collaboration appears to explain a considerable amount of between-school differences in teachers' reported learning activities and learning outcomes. In other words, the school context and the focus of collaboration are related and both influence collaborative teacher learning (Doppenberg, Den Brok and Bakx, 2012).

• Figure 3.13 • Assessment of student learning in primary education

Percentage of primary education teachers who report using the following methods "frequently" or "in all or nearly all lessons" to assess student learning!



1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Methods are ranked in descending order, based on the average percentage of teachers who use the method "frequently" or "in all or nearly all lessons" to assess student learning.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165724

The range of co-operative activities that teachers engage in across the six countries is illustrated in Table 3.15. Across the six countries, two-thirds or more of teachers report engaging in joint teaching and collaborative learning. Virtually all teachers across countries report exchanging teaching materials with colleagues and attending team conferences (96-97%). Figure 3.14 shows that for other collaborative activities, some large differences can be seen among countries. For example, the vast majority of primary teachers in Poland (84%) report observing other teachers' classes. This is much lower in the rest of the countries, especially in Finland (36%) and Flanders (Belgium) (25%). In Mexico, as compared with the other countries, primary teachers report less that they engage in joint activities across different classes and age groups and that they engage in discussions with colleagues about the learning development of specific students. However, the overall trend is that primary teachers across the six countries do participate in collaborative activities to a large extent. This is important, because

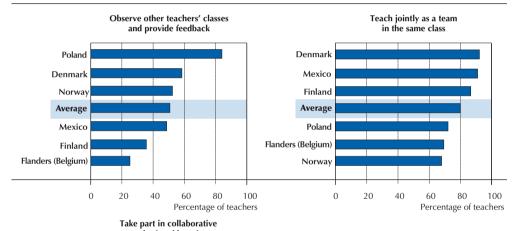


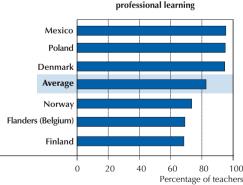
primary teachers seem to use mentors to a lesser extent, and they could be getting their collegial support from collaboration instead (Figure 3.7).

Peer support can be very important for improving the learning environment, as it forces primary teachers to think about other teachers' practices and reflect upon their own. In other words, it contributes to teachers' professional growth. Through this, another likely beneficial effect of collegial support is on teachers' feelings of self-efficacy and job satisfaction. When engaging in collaborative learning or joint teaching or when receiving feedback after a colleague has observed a class, a primary teacher is challenged or strengthened in their use of certain teaching practices, in a way that will likely reinforce their confidence and satisfaction with their work environment.

■ Figure 3.14 ■
Teacher co-operation in primary education

Percentage of primary education teachers who report doing the following activities¹





^{1.} Sum of all response categories for each question included question 33 of the teacher questionnaire, only excluding the "never" category. Meaning it is the sum of teachers who report doing the activity "once a year or less", "2-4 times a year", "5-10 times a year", "1-3 times a month" or "once a week or more".

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165731

Countries are ranked in descending order, based on the percentage of teachers who report doing the activity "once a year or less", "2-4 times a year", "5-10 times a years", "1-3 times a month" or "once a week or more".



PRIMARY TEACHERS' SELF-EFFICACY AND JOB SATISFACTION

This section focuses on teachers' feelings of self-efficacy and job satisfaction. Self-efficacy refers to the level of confidence teachers have in their abilities (Bandura, 1986), while job satisfaction is the sense of fulfilment and gratification that teachers get from working (Locke, 1969). Both have implications for teacher retention and commitment to the school, teachers' job performance and the academic achievement of their students (Klassen et al., 2009; Price and Collett, 2012).

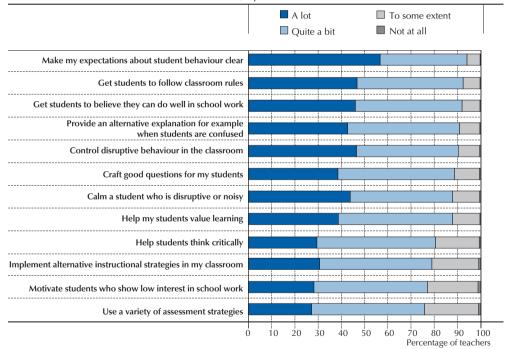
Self-efficacy

Self-efficacy for primary education teachers appears to be related to their job commitment, satisfaction and job-related stress (Skaalvik and Skaalvik, 2007; Klassen and Chiu, 2010). In line with findings for secondary school teachers, this means that higher levels of self-efficacy can lead to better instructional practices and higher student achievement and student motivation (Caprara et al., 2006; Holzberger, Philipp and Kunter, 2013; Tschannen-Moran and Barr, 2004).

■ Figure 3.15 ■

Teachers' self-efficacy in primary education

Percentage of primary education teachers who feel they can do the following "not at all", "to some extent", "quite a bit" or "a lot"



Items are ranked in descending order, based on the percentage of teachers reporting that they can do the following "quite a bit" or "a lot".

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165742

Lower levels of self-efficacy, on the other hand, have been associated with teachers experiencing more difficulties with student misbehaviour, being more pessimistic about student learning and experiencing

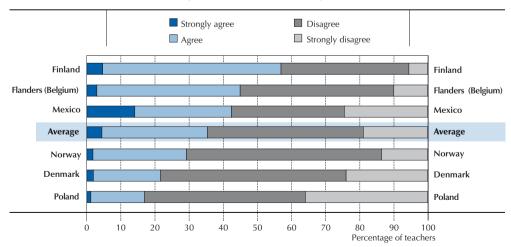


higher levels of job-related stress and lower levels of job satisfaction (Klassen and Chiu, 2010; Collie, Shapka and Perry, 2012; Caprara et al., 2003; Caprara et al., 2006). Furthermore, teachers' self-efficacy appears to be an important construct across countries differing in language and culture, and there is evidence that teachers' self-efficacy shows a similar positive relationship with teachers' job satisfaction across cultural settings (Klassen et al., 2009; OECD, 2009).

Figure 3.15 provides information on teachers' self-efficacy in primary education (see also Table 3.16). On average across countries, teachers seem fairly confident about their abilities in the classroom. Across countries, nine of ten teachers agree "quite a bit" or "a lot" that they can get students to believe they can do well in school work, control disruptive behaviour in the classroom, make expectations about student behaviour clear, get students to follow classroom rules and provide an alternative explanation for examples when students are confused. Slightly fewer teachers seem to think that they can successfully motivate students who show low interest in school work (77%), help students think critically (81%), use a variety of assessment strategies (76%) and implement alternative instructional strategies in their classroom (79%). Teachers in Norway have lower self-efficacy in several of these areas when compared with the other participating countries. For example, only 59% of teachers in Norway feel they can motivate students who show low interest in school work, only 60% believe they can help students think critically, and 61% report they use a variety of assessment strategies. Similarly, in Poland teachers seem less confident they can implement alternative instructional strategies in their classroom (71%), and in Mexico teachers report having slightly more trouble calming a student who is disruptive or noisy (77%), compared with the international average (88%).

■ Figure 3.16 ■
Primary teachers' view of the way society value the teaching profession

Percentage of primary education teachers who "strongly disagree", "disagree", "agree" or "strongly agree" with the following statement : I think that the teaching profession is valued in society



Countries are ranked in descending order, based on the percentage of teachers who "strongly agree" or "agree" that they think that the teaching profession is valued in society.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165756



Job satisfaction

The extent to which teachers feel satisfied with their jobs in primary education is shown in Table 3.17. Again, teachers seem fairly satisfied with their jobs. Across countries, 95% of teachers report that they are overall satisfied with their jobs, 97% feel satisfied with their performance in their current school, 94% say they enjoy working at their current school and only 6% regret becoming a teacher. More than eight in ten teachers also feel that the advantages of being a teacher clearly outweigh the disadvantages, say they would choose to be a teacher again and would recommend their school as a good place to work. However, 26% of teachers across countries report that they wonder whether it would have been better to choose another profession. More teachers in Denmark (35%) and Norway (36%) also report that they wonder whether it would have been better to choose another profession. Only in Mexico do teachers appear less certain specifically about their school; 32%, twice the international average, report they would like to change to another school if that were possible.

Just over one-third (35%) of primary teachers think that the teaching profession is valued in society (Figure 3.16). Far fewer teachers in Denmark (17%) and Poland (22%) feel that teaching is valued in their countries, whereas teachers in Finland (57%) seem to be more positive about the prestige of their profession (see Box 3.4).

In Mexico, Poland and Flanders (Belgium), men are more likely to say that teaching is valued in society, while in Norway, women are more likely to hold this belief (Table 3.18). Moreover, in Norway and Flanders (Belgium), primary teachers with more than five years of experience are less likely than their less-experienced peers to say that teaching is valued in society. This may indicate disillusionment in teachers who have been in the profession for a longer period of time. But providing teachers with more opportunities to actively participate in school decisions can have the opposite influence on these views. As shown in Table 3.18, in all participating countries (except Norway), the primary teachers who say that their school provides teachers with such opportunities are also more likely to believe that teaching is a valued profession in society.

Box 3.4 Finland's most respected profession

Policy researchers have described teaching in Finland as the "most respected" profession and primary school teaching as a highly sought after career. While sceptics dismiss the Finnish example as a cultural characteristic that is not replicable, the status of teachers in Finland is actually the result of specific policies and practices that are replicable. The answer seems to lie in the selection process and working conditions of Finnish teachers.

Finland has very high standards that must be met to enter teacher preparation programs, which are at the university level, so being admitted confers prestige to the applicant. From the start of their career, primary teachers have a high level of autonomy in how they teach the national core curriculum. This national core curriculum in turn is subject to constant further research and development. This means that teachers are always involved in the creative process of challenging what and how they teach their students. Finally, the educational authorities have a high level of trust for their teachers. For example, no tests are given to all Finnish students at any level of the system that would allow supervisors to make judgments about the comparative performance of individual teachers or schools.

Source: Center on International Education Benchmarking, 2014.



Teacher self-efficacy and job satisfaction in relation to teacher background variables

Teachers' self-efficacy and job satisfaction can, to a certain degree, be influenced by the demographic characteristics of individual primary teachers. Teachers' gender, years of teaching experience⁴ and any training they have received in the content, pedagogy and classroom practice of the subjects they teach can all be related to how confident they are in their abilities and how they feel about their job. The possible relationships of these demographic factors with primary teachers' self-efficacy and job satisfaction in the six participating countries are examined in this section. (See Annex A for more details about the analyses performed in this section.)

Table 3.19 shows the associations between these demographic characteristics and teacher self-efficacy, and Table 3.20 shows the same connections with job satisfaction. It appears that male primary teachers in almost all six countries report both lower self-efficacy and job satisfaction. For self-efficacy, this finding is particularly pronounced in Denmark and Poland (see Table 3.19.Web). Male primary teachers in Finland, Norway and Belgium (Flanders) reported especially low job satisfaction levels (see Table 3.19.Web). Primary teachers who have more experience also report high levels of self-efficacy in Denmark, Finland, Norway and Belgium (Flanders). In contrast, primary teachers with more experience report lower job satisfaction in Denmark, Norway and Belgium (Flanders).

The extent to which content, pedagogy and classroom practice elements are included in a teacher's formal training tends to have a smaller but significant effect on teacher self-efficacy and job satisfaction (Tables 3.19 and 3.20). For almost all countries the same pattern is observed: the less that primary teachers report the inclusion of these three elements in formal training, the lower their levels of self-efficacy and job satisfaction. These findings emphasise the importance of tailoring the content, pedagogy and classroom practice elements of a teachers' formal education to the range of subjects they teach in primary school.

Teacher self-efficacy and job satisfaction in relation to school and classroom environment

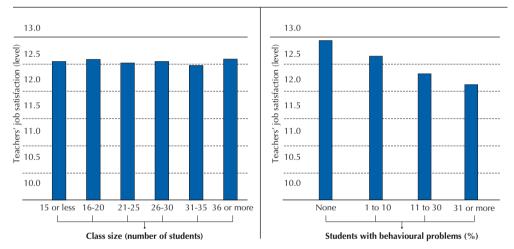
This section examines the associations between primary teachers' self-efficacy and job satisfaction and class size, challenging school environments and challenging classroom characteristics. Primary schools are classified as being more challenging if the principal indicated that the school consists of either more than 10% of students with a native language different from the language of instruction, more than 10% of students with special needs or more than 30% of students from socio-economically disadvantaged homes.⁵ Classrooms are considered to be challenging if more than 10% of students in the classroom are low academic achievers or more than 10% of students have behavioural problems.⁶ Classrooms in which 10% or more of the students are academically gifted are also included in this category, as teaching to a wide range of student abilities in one class can also be a challenge (Major, 2012).

The strength and significance of the associations of these variables with primary teacher self-efficacy and job satisfaction can be seen in Tables 3.21 and 3.22, respectively. In general, the student composition in the school does not seem to be related to teachers' self-efficacy and job satisfaction in a strong or consistent way across countries. In Finland, teachers who work in schools with high linguistic diversity tend to show higher levels of self-efficacy. In Denmark, teachers who work in such schools show lower job satisfaction than teachers who work in schools with less linguistic diversity. Working in a school with more special-needs students does not significantly relate to teachers' reports of

self-efficacy and job satisfaction in any of the six countries. When it comes to primary schools that have more students from disadvantaged backgrounds, no negative associations are observed with teachers' attitudes. In fact, teachers in Belgium (Flanders) who work in such schools report higher self-efficacy.

Classroom characteristics are much more closely related to teachers' feelings about self-efficacy and job satisfaction (Tables 3.21 and 3.22). Interestingly, class size seems to have only a minimal and inconsistent effect on teaching efficacy in Norway and Belgium (Flanders), while no significant relations with job satisfaction emerge for any of the countries. TALIS data therefore indicate that it is not the number of students but rather the types of students that are in a primary teacher's class that are realted to teachers' attitudes (Figure 3.17 for an illustration).

■ Figure 3.17 ■ Primary teachers' job satisfaction and class composition Primary education teachers' job satisfaction level according to the number of students in the classroom and to the percentage of students with behavioural problems¹



1. Data on class size and students with behavioural problems are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165769

Teaching classes with higher proportions of low academic achievers or students with behavioural problems relates to lower self-efficacy and job satisfaction for primary teachers in roughly half of the countries, and relates to lower job satisfaction in most of the countries. In Norway, primary school teachers show a pronounced drop in their self-efficacy when teaching more students with behavioural problems, and this is the case for job satisfaction levels in Finland, Norway and Belgium (Flanders). Finally, teaching classes where more than a tenth of students are academically gifted is linked to higher self-efficacy in Poland and to higher job satisfaction in Denmark and Poland.

What these data show is that school and class characteristics generally perceived as challenging do not necessarily relate to lower levels of self-efficacy and job satisfaction for primary teachers in the six countries. Challenging classroom characteristics have a weaker and less consistently negative effect on primary teachers' attitudes than what was found for lower secondary teachers (see OECD, 2014). This could indicate that teaching students from a wide range of academic levels or with more



behavioural problems is easier to manage for primary teachers than for lower secondary teachers, and thus does not affect their feelings of satisfaction in the same way. Teaching a more linguistically or socio-economically diverse primary class could actually benefit student learning, as it relates to higher confidence and satisfaction on the teacher's end in a number of countries.

Notes

- 1. Note that the first employment as a teacher may vary greatly among teachers, and thus their reports of participation or lack of participation in induction programmes may refer to periods up to decades prior to the survey. Policies on participation in induction programmes in these cases may have changed significantly.
- 2. Special-need 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 work. Some teachers believe that all students are unique learners and thus have some special learning needs. For the purpose of this survey, it is important to ensure a more objective judgment of who is a special-needs student and who is not. That is why a formal identification is stressed above.
- 3. Teachers were asked to refer to a randomly chosen class they currently teach from their weekly timetable.
- 4. For the purposes of these analyses, a teacher's work experience as a teacher is categorised as more than five years or five years or less.
- 5. To determine the cut-off points for the percentages of students needed to form these categories of more challenging schools, the overall distribution of teachers in schools with certain proportions of students with each type of characteristic was examined. These thresholds of more than 10% or more than 30% were chosen because in each one of these cases, less than one-fifth of the teachers' overall work in schools was characterised as being more challenging.
- 6. Similarly, the cut-off points were determined by reviewing the distribution of responses and selecting a point where both the representation of the responses and sufficient variability could be meaningfully maintained.

References

Bandura, A. (1986), Social Foundations of Thought and Action: A Social Cognitive Theory, Prentice Hall, Englewood Cliffs, NJ.

Barber, M. and M. Mourshed (2007), How the World's Best-Performing Schools Come Out on Top, McKinsey and Company.

Beyer, C.J. and E.A. Davis (2008), "Fostering second graders' scientific explanations: A beginning elementary teacher's knowledge, beliefs, and practice", *The Journal of the Learning Sciences*, Vol. 17/3, pp. 381-414.

Caprara, G.V. et al. (2003), "Efficacy beliefs as determinants of teachers' job satisfaction", Journal of Educational Psychology, Vol. 95/4, pp. 821-832.

Caprara, G.V. et al. (2006), "Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level", *Journal of School Psychology*, Vol. 44/6, pp. 473-490.

Center on International Education Benchmarking, "Finland: Teacher and Principal Quality", http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/finland-overview/finland-teacher-and-principal-quality/ (accessed 22 April 2014).



Clement, M. and R. Vandenberghe (2000), "Teachers' professional development: A solitary or collegial (ad) venture?", Teaching and Teacher Education, Vol. 16, pp. 81-101.

Collie, R.J., J.D. Shapka and N.E. Perry (2012), "School climate and socio-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy", *Journal of Educational Psychology*, Vol. 104/4, pp. 1189-1204.

Coulter, M. and C.B. Woods (2012), "Primary teachers' experience of a physical education professional development programme", *Irish Educational Studies*, Vol. 31/3, pp. 329-343.

Doppenberg, J.J., P.J. den Brok and A.W.E.A. Bakx (2012), "Collaborative teacher learning across foci of collaboration: Perceived activities and outcomes", *Teaching and Teacher Education: An International Journal of Research and Studies*, Vol. 28/6, pp. 899-910.

EDU-Entuzjasci website, http://eduentuzjasci.pl/en/en-wydarzenia/596-ibe-in-qdigital-schoolq-programme.html.

Eurypedia, European encyclopedia on national education systems, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Finland:Assessment_in_Single_Structure_Education.

Goldstein, J. (2007), "Easy to dance to: Solving the problems of teacher evaluation with peer assistance and review", *American Journal of Education*, Vol. 113/3, pp. 479-508.

Goldstein, J. (2004), "Making sense of distributed leadership: The case of peer assistance and review", *Educational Evaluation and Policy Analysis*, Vol. 26/2, pp. 173-197.

Hattie, J. (2009), Visible Learning. A Synthesis of Over 800 Meta-Analyses Relating to Achievement, Routledge, Milton Park, UK.

Holzberger, D., A. Philipp and M. Kunter (2013), "How teachers' self-efficacy is related to instructional quality: A longitudinal analysis", *Journal of Educational Psychology*, online-first publication, April 29.

Ingersoll, Richard M. (2012), "Beginning teacher induction: What the data tell us", *Phi Delta Kappan*, Vol. 93/8, pp. 47-51.

Isoré, **M.** (2009), "Teacher evaluation: Current practices in OECD countries and a literature review", OECD Education Working Papers, No. 23, OECD Publishing, Paris, http://dx.doi.org/10.1787/223283631428.

Jacob, B. and L. Lefgren (2008), "Can principals identify effective teachers? Evidence on subjective performance evaluation in education", *Journal of Labor Economics*, Vol. 26/1, pp. 101-136.

Katsiyannis, A., D. Zhang and M.A. Conroy (2003), "Availability of special education teachers: Trends and tests", *Remedial and Special Education*, Vol. 24/4, pp. 246-253.

Klassen, R.M. et al. (2009), "Exploring the validity of a teachers' self-efficacy scale in five countries", Contemporary Educational Psychology, Vol. 34/1, pp. 67-76.

Klassen, R.M. and M.M. Chiu (2010), "Effect on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress", *Journal of Educational Psychology*, Vol. 102/3, pp. 741-756.

Kokkinos, C.M. and A.M. Davazoglou (2009), "Special education teachers under stress: Evidence from a Greek national study", *Educational Psychology*, Vol. 29/4, pp. 407-424.

Kougioumtzis, K. and G. Patriksson (2009), "School-based teacher collaboration in Sweden and Greece: Formal cooperation, deprivatized practices and personalized interaction in primary and lower secondary schools", *Teachers and Teaching: Theory and Practice*, Vol. 15/1, pp. 131-154.

LoCasale-Crouch, J. et al. (2012), "The role of the mentor in supporting new teachers: Associations with self-efficacy, reflection, and quality", Mentoring and Tutoring: Partnership in Learning, Vol. 20/3, pp. 303-323.

THE WORK OF PRIMARY EDUCATION TEACHERS



Locke, E. (1969), "What is job satisfaction?", Organizational Behavior and Human Performance, Vol. 4, pp. 309-336.

Lumpe, A. et al. (2012), "Beliefs about teaching science: The relationship between elementary teachers' participation in professional development and student achievement", *International Journal of Science Education*, Vol. 34/2, pp. 153-166.

Major, A.E. (2012), "Job design for special education teachers", *Current Issues in Education*, Vol. 15/2, http://cie.asu.edu/ojs/index.php/cieatasu/article/view/900/333.

Murawski, W.W. and H.L. Swanson (2001), "A meta-analysis of co-teaching research", Remedial and Special Education, Vol. 22, pp. 258-267.

Norwegian Ministry of Education and Research (2007), Education from Kindergarten to Adult Education, http://www.udir.no/Upload/Brosjyrer/5/Education_in_Norway.pdf?epslanguage=no.

OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning,* TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en.

OECD (2013), PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices (Volume IV), PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en.

OECD (2009), Creating Effective Teaching and Learning Environments: First Results from TALIS, OECD Publishing: Paris, http://dx.doi.org/10.1787/9789264068780-en.

OECD (2005), *Teachers Matter: Attracting, Developing and Retaining Effective Teachers, Education and Training Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264018044-en.*

Pajares, M.F. (1992), "Teachers' beliefs and educational research: Cleaning up a messy construct", Review of Educational Research, Vol. 62/3, pp. 307-333.

Pearson Foundation, http://www.pearsonfoundation.org/oecd/poland.html.

Price, H. and J. Collett (2012), "The role of exchange and emotion on commitment: A study using teachers", *Social Science Research*, Vol. 41, pp. 1469-1479.

Rosenfeld, M. and S. Rosenfeld (2008), "Developing effective teacher beliefs about learners: The role of sensitizing teachers to individual learning differences", Educational Psychology, Vol. 28/3, pp. 245-272.

Santiago, P. and F. Benavides (2009), *Teacher Evaluation: A Conceptual Framework and Examples of Country Practices*, OECD Publishing, Paris, http://www.oecd.org/education/school/44568106.pdf.

Seidel, T. and R.J. Shavelson (2007), "Teaching effectiveness research in the past decade: The role of theory and research design in disentangling meta-analysis research", *Review of Educational Research*, Vol. 77, pp. 454-499.

Skaalvik, E.M. and S. Skaalvik (2007), "Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout", *Journal of Educational Psychology*, Vol. 99/3, pp. 611-625.

Tas, A.M. (2012), "Classroom teachers' views on professional development and cooperation: A Turkish profile", Educational Research and Reviews, Vol. 7/21, pp. 474-482.

Tschannen-Moran, M. and M. Barr (2004), "Fostering student achievement: The relationship between collective teacher efficacy and student achievement", *Leadership and Policy in Schools*, Vol. 3/3, 187-207.

Wayne, A.J. et al. (2008), "Experimenting with teacher professional development: Motives and methods", Educational Researcher, Vol. 37/8, pp. 469-479.

Zwart, R.C. et al. (2007), "Experienced teacher learning within the context of reciprocal peer coaching", *Teachers and Teaching: Theory and Practice*, Vol. 13/2, pp. 165-187, http://expertisecentrumlerenvandocenten.nl/files/TTTP collegiale coaching 0.pdf.



Upper secondary teachers and their schools

This chapter focuses on upper secondary school teachers in the ten countries and economies that surveyed this population. It provides a profile of upper secondary school teachers, focusing on demographic characteristics, and of the schools in which these teachers work, with particular emphasis on school background information, the composition of students at the school and human and material resources. The chapter also examines classroom characteristics, including class size and the composition of students, and concludes by taking a look at the profile of upper secondary school principals and of school leadership.



Highlights

- There are slightly more women (57%) than men (43%) teaching in upper secondary education, on average. It is of note, however, that in each of the participating countries and economies, at least 30% of the teachers are men. The average teacher is 45 years old.
- On average, more than eight in ten upper secondary teachers have completed teacher education
 or training and have 16 years of teaching experience. They also bring to their teaching 8 years
 of experience in other roles and jobs.
- Among countries internationally, there are large differences in the structure of upper secondary programmes in the extent to which they integrate or separate general or academic programmes and vocational programmes. Although the great majority of teachers work in schools that offer a general education programme, 16% of upper secondary teachers work in schools that offer vocational programmes exclusively.
- On average, at least one-third of upper secondary teachers work in schools where the principal reports that shortages of teachers and support personnel hinder the provision of quality education in the school at least to some extent. But teachers who work in schools with higher proportions of students from socio-economically disadvantaged homes or who work in rural areas are even more likely to have principals who report a number of shortages or inadequacies in human or material resources in the school.
- Teaching in classrooms with students who have behavioural problems is the norm for teachers in upper secondary schools: on average, 70% of these teachers report having at least some students with such problems in their classroom.
- On average, the gender distribution of upper secondary principals is quite balanced between men and women (46% of principals are women), though smaller proportions of principals are women compared with teachers. Upper secondary principals are 52 years old on average.
- Principals report spending nearly half of their time on administrative tasks (44% on average), and one-fifth (20%) of their time on curriculum and teaching-related activities. They report that interactions with students take up 15% of their time, while interactions with the local community, business and industry and with parents or guardians occupy between 8% and 9% each.

INTRODUCTION

The previous two chapters focused on teachers who work with pupils at the beginning of their formal education, in primary education. In this chapter and the next, the lens shifts to look at teachers who work with students at the end of their compulsory education and beyond – in upper secondary education. The role and importance of upper secondary institutions have expanded greatly over the past several decades. They are no longer reserved to prepare a small elite for university, as labour market indicators show that upper secondary education is now the minimal threshold for successful labour market entry and outcomes (OECD, 2013a; 2014a). Upper secondary education is therefore a pivotal educational stage between a basic educational foundation and preparation for more complex education or entrance into the labour market (OECD, 2004).



Because upper secondary education in many countries is entrusted with preparing students for a wide range of educational and occupational pathways, it must meet both diversification and specialisation objectives. The structure of upper secondary programmes and the extent to which they integrate or separate general or academic programmes and vocational programmes varies greatly among countries, and even in some cases within countries. The OECD Teaching and Leaving International Survey (TALIS) surveyed teachers in both general and vocational programmes. Because of the fundamental differences in how participating countries structure these programmes and because the sampling was not designed in such a way as to allow meaningful international comparisons among teachers in the general and vocational programmes, this report does not compare teachers who teach students in general or academic upper secondary programmes with those who teach students in vocational programmes. Rather, it takes a comprehensive approach and reports on the upper secondary teaching workforce as a whole.

This chapter therefore focuses on upper secondary school teachers in the ten countries and economies that participated in the upper secondary (ISCED 3) international option. It attempts to answer the questions of "who are the upper secondary school teachers in Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi (United Arab Emirates)?" and "what is their work environment like?"

This chapter is divided into four main sections. The first section provides a profile of upper secondary school teachers. Analyses focus on demographic characteristics such as the age and gender of teachers, their formal education, their previous work experience and their employment status. It also examines the extent to which upper secondary teachers feel prepared for their work. The second section of this chapter provides a profile of the schools in which these teachers work, with particular emphasis on school background information, the composition of students at the school and human and material resources. The third section examines classroom characteristics, including class size and the composition of students. The last section examines the profile of principals and school leadership.

A PROFILE OF UPPER SECONDARY EDUCATION TEACHERS

This section describes the teaching workforce in upper secondary education across the ten participating countries and economies. Upper secondary school teachers were asked to provide background information on themselves, their education and work experience, and their current employment.

Demographic profile of upper secondary teachers

Gaining information about the gender and age distribution of the teaching workforce is valuable to policy makers to provide them with a picture of their current teaching workforce. As seen in Chapter 2, gender imbalances in the teaching workforce are particularly prominent in primary education, with an underrepresentation of male teachers. As shown in TALIS 2013 Results: An International Perspective on Teaching and Learning and other data sources, these gender differences persist well into secondary education in many countries (OECD, 2013a; 2014b; UNESCO Institute for Statistics, 2006; 2009). Moreover, as shown in the TALIS 2013 Results report, in at least some countries, gender is related to a number of aspects of lower secondary teachers' work, such as their participation in professional development, the barriers they identify as preventing them from participating in more professional development, their use of certain teaching practices and their feelings of self-efficacy and job satisfaction (OECD, 2014b).

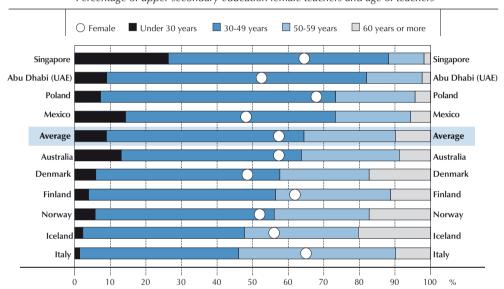


Figure 4.1 illustrates the gender and age distribution across the 10 countries and economies that surveyed their upper secondary school teachers (see also Table 4.1). On average, there are slightly more women (57%) than men (43%) teaching in upper secondary education. In Denmark, Mexico, Norway and Abu Dhabi (United Arab Emirates), the gender distribution of upper secondary teachers is more balanced (between 48% and 52% of teachers are women), whereas in Finland, Italy, Poland and Singapore the teaching profession in upper secondary education is dominated by women (more than six in ten teachers are women). It is of note, however, that in each of these countries and economies, at least 30% of the teachers are men.

■ Figure 4.1 ■

Gender and age distribution of upper secondary teachers

Percentage of upper secondary education female teachers and age of teachers



Countries are ranked in descending order, based on the percentage of teachers aged 49 or younger. **Source:** OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165777

On average across participating countries and economies, teachers are 45 years of age (Table 4.1). As can be seen in Figure 4.1, Iceland and Italy have the oldest upper secondary teaching workforces among these countries, where more than half of the teachers are 50 years or older (52% and 54%, respectively). The youngest upper secondary teacher population is in Singapore, where more than one-quarter of the teachers are younger than 30 years of age.

Educational attainment and work experience of upper secondary teachers

Although the research literature presents inconsistent findings regarding a direct impact from teacher education and experience on student achievement (Buddin and Zamarro, 2009; Clotfelter, Ladd and Vigdor, 2007; Darling-Hammond et al., 2005; Ronfeldt and Reininger, 2012), there is mounting evidence that teachers with more preparation for teaching have more confidence in their abilities and are more likely to stay in teaching (Andrew, 1990; Darling-Hammond, 2000a; 2000b; Lutz and Hutton, 1989). Moreover, the *TALIS 2013 Results* report suggests that lower secondary teachers who have taken part in teacher initial education or training show higher levels of engagement in continuing professional



development and tend to be more involved in mentoring other teachers (OECD, 2014b). These findings are consistent with the view that initial teacher education is but the first phase of the professional life cycle of a teacher, part of a professional continuum of learning and expertise (European Commission, 2012; OECD, 2005; Ward et al., 2013).

Teachers further develop their skills and competencies with more experience in the classroom. A teacher's early career appears to be particularly important in this regard: there is evidence that a teacher's years of experience are positively related to student outcomes and that additional years of experience are especially valuable during a teacher's first five years in the profession (Rockoff, 2004; Rivkin, Hanushek and Kain, 2005; Hanushek and Rivkin, 2004; Harris and Sass, 2011). Furthermore, the *TALIS 2013 Results* report shows that, with experience, lower secondary teachers gain in their self-efficacy – their confidence in their own abilities in the classroom. The relationship between teaching experience and job satisfaction appears to be more complex: higher levels of job satisfaction are seen early in teachers' careers and then again at the end of their careers (OECD, 2014b).

To provide a basis for examining some of these relationships for upper secondary teachers, this section looks at upper secondary teachers' initial education, training and work experience. As an example, Box 4.1 describes how teachers are recruited in Singapore.

Box 4.1 Teacher recruitment and development in Singapore

Singapore believes teachers are key for better education. The Ministry of Education (MOE) generally recruits teachers from the top one-third of each cohort. Each applicant is assessed based on his/her suitability for teaching, taking into consideration his/her content knowledge, personal qualities and experience. Applicants are interviewed by a panel that includes experienced principals. Prospective teachers then undergo paid pre-service training at the National Institute of Education (NIE). The strong partnership that NIE has with MOE ensures that NIE's pre-service programmes are aligned to the national curriculum and are relevant to the learning needs of students. After graduation, teachers receive support in the form of structured induction and mentoring in schools and access to beyond-school professional learning workshops.

Lifelong professional development in the teaching profession is also important in Singapore. Teachers have access to 100 hours of professional development per year, mostly at no cost to the teacher. Some of the professional learning in content and pedagogical knowledge is facilitated by the curricula specialists, master teachers and NIE staff. Much professional development is also school-based, where every school is a professional learning community with teachers involved in professional learning teams. These school-based professional learning opportunities are designed by school leaders and staff developers in each school. In addition, there are a number of networked learning communities driven by teacher academies. These communities provide the platforms for teachers to learn collaboratively and help to catalyse the spread of effective practices across the entire system.

Sources: OECD (2011); Ministry of Education, Singapore.

Table 4.2 shows the highest educational levels obtained by upper secondary school teachers. As seen in the table, in all participating countries and economies, only very small proportions of teachers report having attained education levels below ISCED level 5. In Australia, Finland, Poland, Singapore and Abu Dhabi (United Arab Emirates), this proportion is below 2%, while in Denmark, Iceland, Italy,



Mexico and Norway, the proportion is between 5% and 7% of upper secondary teachers. In all participating countries, at least eight in ten teachers reports having completed a Bachelor's degree or Master's degree from a university or equivalent institution (ISCED level 5).

Not only have most upper secondary teachers across participating countries and economies completed tertiary education, but they also report having completed specifically a teacher education or training programme. As shown in Figure 4.2 (left side), on average, more than eight in ten upper secondary teachers report having completed a teacher education or training programme. (See also Table 4.3). A clear exception to this is in Mexico, where only one in four upper secondary teachers reports having completed a teacher education or training programme. (See Box 4.2 for a description of a recent reform that may impact these data in the coming years.) In all other participating countries and economies, at least seven in ten teachers on average report having completed such training, and nearly all teachers report having done so in Australia (97%), Poland (98%) and Singapore (99%).

Box 4.2 Recent upper secondary reform in Mexico

Upper secondary education has recently been the focus of reforms in Mexico. Upper secondary graduation rates (49%), although increasing in recent years, are well below the OECD average (83%). Upper secondary education does not attract students as in other OECD countries: only 56% of 15-19 year-olds are enrolled in upper secondary education, compared with the OECD average of 84%. Moreover, the vocational education and training (VET) programme in Mexico is among the smallest across OECD countries: only 4% of students graduated from upper secondary VET in 2011, compared with an OECD average of 47%.

These challenges have led to recent reforms, including making upper secondary education compulsory in 2012 (with a goal of universal coverage by 2022). Prior to this, a National System of Upper Secondary Education (Sistema Nacional de Bachillerato) was introduced to provide a coherent framework of upper secondary education through better academic guidance, more educational offerings, a monitoring system for institutions and mechanisms to deliver education (e.g. teacher training, school leadership professionalisation, infrastructure, scholarships). Most recently, a new legislation (2013) to consolidate a professional teaching service brings together and updates different components of the teaching profession for both primary and upper secondary education. This law sets out the basis for selection, appointment, promotion and tenure possibilities for teachers. It builds upon the National Teaching Post Competition (2008-13), which aimed to improve transparency and quality of the teacher selection process.

Source: Education Policy Outlook: Mexico (OECD, 2014c).

Even though a minority of teachers in Mexico report having completed a teacher education or training programme, the great majority of them nevertheless report that the content (90%), pedagogy (88%) and practice (78%) of at least some of the subjects they currently teach were covered in their formal education, indicating that perhaps they have received this training through alternative channels. On average across all participating countries and economies, eight to nine teachers in ten report that the content, pedagogy and practice of at least some of the subjects they teach were included in their formal education. Teachers in Italy are much less likely (37%) than average (85%) to report that practical elements for at least some of the subjects they teach were included in their formal education. Figure 4.2 and Table 4.3 further display the proportions of teachers who report that these elements were included

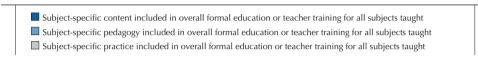


in their formal education for *all* the subjects they currently teach. As can be seen in the figure, among these ten countries and economies, teachers in Poland and Singapore are most likely to report this.

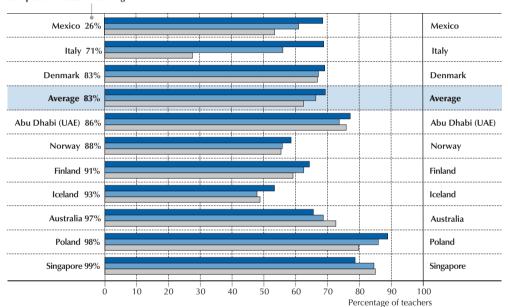
■ Figure 4.2 ■

Completion and content of teacher education or training programme for upper secondary education teachers

Percentage of upper secondary education teachers who completed teacher education or a training programme and for whom the following elements were included in their formal education and training



Completion of teacher training



Countries are ranked in ascending order, based on the percentage of teachers who completed a teacher education or training programme. **Source:** OFCD. TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165788

A teacher's experience further helps to shape his or her competences and abilities and can influence his or her feelings of self-efficacy in the classroom (OECD, 2014b). Figure 4.3 presents upper secondary teachers' average teaching experience in their current school, in total, and their work experience in other educational roles and in other jobs (see also Table 4.4). On average across all ten countries and economies, these teachers have 16 years of teaching experience. Upper secondary teachers in Italy report the most years of teaching experience on average, with 20 years. This is perhaps not surprising given that the Italian teaching workforce is among the oldest of the ten participating countries and economies (Table 4.1). This represents a valuable resource of experienced teachers in the system, but may also indicate a growing need for preparing for the next generation of teachers.

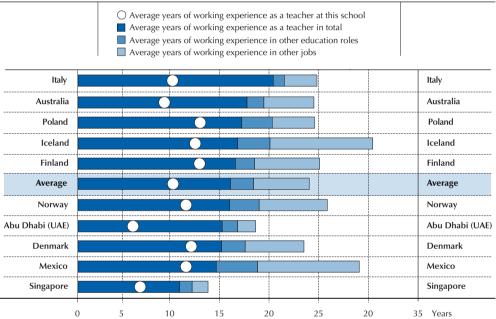
On average across participating countries and economies, upper secondary teachers report six years of experience in other jobs (not in teaching or other educational roles). It is noteworthy that upper



secondary teachers in Iceland and Mexico report 11 and 10 years respectively of work experience in other jobs. This may include a proportion of teachers in vocational education with working experience in a trade before or during their teaching experience. In contrast, in Singapore and Abu Dhabi (United Arab Emirates), upper secondary teachers report fewer than two years of experience in other jobs (Figure 4.3 and Table 4.4). These variations among countries and economies may be an indication of some of the fundamental differences and approaches in the upper secondary education systems.

• Figure 4.3 • Work experience of upper secondary teachers

Average years of working experience among upper secondary education teachers in various roles



Countries are ranked in descending order, based on the average years of working experience as a teacher in total. Source: OFCD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165799

All in all, these findings paint a picture of a well-educated (with at least a university education or equivalent) and well-prepared upper secondary teaching workforce with, in most countries and economies, significant teaching and other work experience.

Employment status

At all levels of education, including in upper secondary education, employment status relates both to job security (through long-term or permanent contracts) and to job flexibility (through the possibility of choosing to work part time). On average across all participating countries and economies, 79% of upper secondary teachers are employed on a permanent contract (Table 4.5). This average hides wide differences among the countries, however. As few as 44% of upper secondary teachers in Abu Dhabi (United Arab Emirates) and 60% in Mexico are employed permanently, while 90% or more are employed permanently in Australia, Denmark, Norway and Singapore. More than one in five teachers in Italy, Mexico and Abu Dhabi (United Arab Emirates) are employed on a fixed-term contract of one



year or less. The prospect of working under such short-term contracts might offer little incentive to attract the most qualified candidates to the teaching profession.

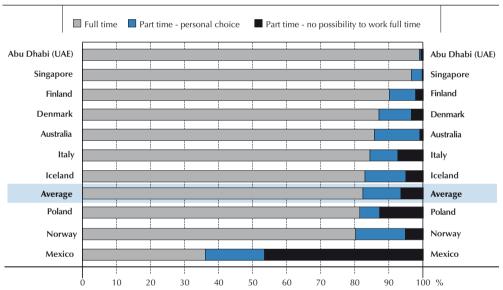
As can be seen in Figure 4.4, although more than 8 in 10 upper secondary teachers (82%) on average work full time (more than 90% of full-time hours), this proportion is as low as 36% in Mexico (see also Table 4.6). In Mexico, just over one in four teachers works part time (less than 50% of full-time hours), while the average across all participating countries and economies is 5%. Teachers who work part time were asked whether they did so by choice or whether there was no possibility of working full time. Nearly three-quarters (73%) of the teachers who work part time in Mexico report that they work part time because there was no possibility to work full time. The majority of teachers who work part time in Poland (69%) and Abu Dhabi (United Arab Emirates) (61%) also state that there were no full-time opportunities for them (Table 4.6).

■ Figure 4.4 ■

Employment status of upper secondary teachers, full time or part time

Percentage of upper secondary education teachers who are employed full time and part time

(taking into account all their current teaching jobs) and the reasons for part-time employment



Countries are ranked in descending order, based on the percentage of full-time teachers.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165803

In order to attract and retain the best upper secondary teachers in the profession, education systems must consider the employment conditions offered and whether these are competitive with those of other comparable professions. Flexible opportunities for working part time may be especially needed to recruit vocational teachers who might be working part time in industry (OECD, 2010).

A PROFILE OF SCHOOLS WHERE TEACHERS WORK

School charateristics can vary greatly between and within countries and can affect the conditions in which teaching and learning take place. For example, school size or school location (rural vs. urban) can affect the support needed to create effective teaching and learning conditions. This section



examines the school-level background information provided by principals that describes the schools in which upper secondary school teachers work in the ten participating countries and economies. In particular, this section looks at the school type, the composition of the student population and the school resources to which they have access.

School type

Overall, the majority (82%) of upper secondary school teachers in the ten participating countries and economies work in public schools (Table 4.7). This ranges from 43% in Abu Dhabi (United Arab Emirates) and 56% in Australia to 97% in Denmark and Poland and 100% in Singapore. On average, nearly three-quarters of upper secondary teachers (74%) work in schools that compete with at least two other schools for their students and nearly nine teachers in ten (87%) work in a school that competes with at least one other school for their students. Nevertheless, at least 20% of upper secondary teachers in Finland (30%), Italy (21%), Norway (25%) and Abu Dhabi (United Arab Emirates) (22%) work in schools that do not compete with other schools for their students.

On average, the majority (84%) of upper secondary teachers work in schools that offer general education programmes (Table 4.7). Just under half (47%) of the teachers work in schools that offer general programmes exclusively, while 37% work in schools that offer both general and vocational programmes. Another 16% of teachers work in schools that are dedicated to vocational programmes.

The large between-country differences that can be observed in Table 4.7 attest to the different approaches to the structure of upper secondary programmes internationally in the extent to which they integrate or separate general or academic programmes and vocational programmes. For example, although very few or none of the upper secondary teachers in Australia, Iceland, Singapore or Abu Dhabi (United Arab Emirates) work in schools dedicated exclusively to vocational programmes, half (50%) of the teachers in Finland do. This is explained by the fact that in Finland, there are two paths of study in upper secondary education: a general upper secondary education path and a vocational education path. In Singapore, although all upper secondary teachers work in schools that offer only general programmes, the great majority of teachers in Australia (85%), Iceland (69%) and Norway (82%) work in schools that offer both general and vocational programmes.

School composition

In order to get an overall picture of the student composition of the schools, principals were asked to estimate the proportions of students with certain characteristics, namely (1) students whose first language is different from the language of instruction, (2) students with special needs, and (3) students who come from socio-economically disadvantaged homes (Table 4.8). Figure 4.5 depicts the average proportion for each of these groups of students.

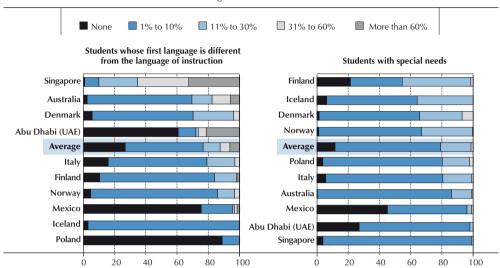
On average, more than three-quarters (77%) of upper secondary teachers work in schools where the principal reports low levels of language diversity, with 10% or fewer of the students having a first language that is different from the language of instruction (Table 4.8). This is particularly the case in Finland (84%), Iceland (100%), Mexico (96%), Norway (86%) and Poland (100%). In contrast, teachers in Singapore are much more likely to work in schools with more language diversity: 65% work in schools where principals report that more than 30% of the student population have a first language different from the language of instruction, and one-third (33%) work in schools where this reported proportion of students is more than 60%.



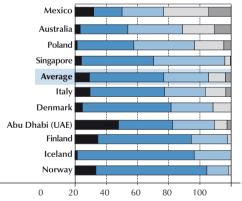
■ Figure 4.5 ■

Upper secondary schools composition by first language. special needs and disadvantaged homes

Percentage of upper secondary education teachers who work in schools where principals reports the following school characteristics1, 2, 3



Students from socio-economically disadvantaged homes



- 1. These data are broad estimates reported by principals.
- 2. 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.
- 3. "Socio-economically disadvan'iaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.

Countries are ranked in ascending order, based on the percentage of teachers working in schools whose principal reports that 10% or fewer of their students have a first language that is different from the language of instruction, have special needs or are from socio-economically disadvantaged homes

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165810



TALIS surveyed teachers and principals in regular schools – that is, schools that do not cater exclusively to students with special needs.² However, students with special needs are often integrated in mainstream schools. On average, only a small minority (12%) of upper secondary teachers work in schools where the principal reports that none of the students have special needs (however, this varies from less than 1% in Australia to 45% in Mexico). Just over one in five upper secondary teachers work in a school where the principal reports that more than 10% of the student population is composed of students with special needs. Larger proportions of teachers in the Nordic countries work in such schools: 34% in Denmark, 45% in Finland, 36% in Iceland and 33% in Norway. It becomes essential that teachers working in such schools are provided with the appropriate training and support to provide these students with effective learning environments. In contrast, fewer than 5% of teachers in Mexico, Singapore and Abu Dhabi (United Arab Emirates) work in schools with these proportions of students with special needs (Table 4.8 and Figure 4.5).

It is more common for teachers to work in schools where principals report higher proportions of students from socio-economically disadvantaged homes (Table 4.8). On average, just under half (43%) of upper secondary teachers work in schools where principals report that more than 10% of the students come from disadvantaged homes, though this varies among countries and economies, from only 16% in Norway to 62% in Poland, 66% in Australia and a high of 70% in Mexico. It is important to ensure that teachers in these schools are well equipped so that they can provide students with effective learning environments despite these potentially more challenging school environments that can be linked to having large numbers of students from socio-economically disadvantaged homes.

School resources

The creation of effective teaching and learning environments necessitates adequate allocation and use of school resources, including both human (especially teachers specialised in specific students or subject needs) and material resources, such as instructional materials, computers or computer software. Results from PISA show that, at the school level, teacher shortages appear to be related to poorer student performance in a number of countries and that the impact of socio-economic status (SES) on performance is mediated by the resources invested in schools (OECD, 2013b).

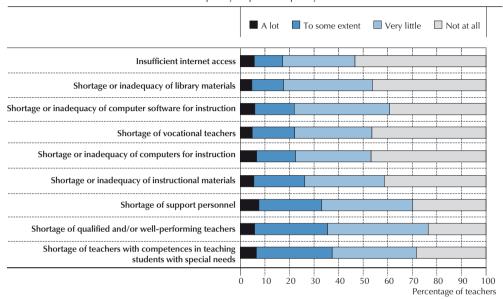
TALIS asked principals to identify resource issues that hinder the provision of quality education in the school. Figure 4.6 presents the percentages of teachers who work in schools where the principal reports such school resource problems (see also Table 4.9). On average, at least one-third of upper secondary teachers work in schools where the principal reports that shortages of teachers with competences in teaching students with special needs (37%), shortages of qualified and/or well-performing teachers (36%) or shortages of support personnel (33%) hinder the provision of quality education in the school at least to some extent.

As shown in Table 4.9, upper secondary teachers in Australia, Singapore and Abu Dhabi (United Arab Emirates) are the most likely among participating countries to work in schools where principals report that shortages of teachers with competencies for teaching students with special needs are problematic at least to some extent (at least 45% of teachers work in these schools). In Italy, Mexico and Abu Dhabi (United Arab Emirates), approximately half of the upper secondary teachers work in schools where principals say that shortages of support personnel hinder the provision of quality education at least to some extent.



■ Figure 4.6 ■ School resources in upper secondary education

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "not at all", "very little", "to some extent", or "a lot" the school's capacity to provide quality instruction



Items are ranked in ascending order, based on the percentage of teachers whose school principal reports that the shortage of resources is hindering "a lot" or "to some extent" their school's capacity to provide quality instruction.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165828

In upper secondary education, shortages of vocational teachers can potentially have significant consequences. More than one in five upper secondary teachers work in a school where the principal identifies this as a problem at least to some extent, and this proportion is at least 30% in Mexico and Abu Dhabi (United Arab Emirates). This may be an indication of challenges in recruiting teachers in vocational education in these countries.

Upper secondary teachers in Mexico and Abu Dhabi (United Arab Emirates) are most likely to work in schools where the principal identifies shortages in material resources as hindering significantly (i.e. a lot) the provision of quality education (Table 4.9.Web). Approximately 15% or more of upper secondary teachers work in schools where the principal says that a shortage or inadequacy of instructional material, computers, computer software, Internet access or library materials significantly hinders the provision of quality instruction (while the overall averages across all countries and economies are around 5% or 6% for these resources).

As mentioned in Chapter 2, findings from PISA suggest that high-performing systems tend to allocate resources more equitably across socio-economically advantaged and disadvantaged schools (OECD, 2013b). TALIS further shows that an equitable distribution of resources is not always achieved. As shown in Figure 4.7, upper secondary teachers who work in schools with higher proportions of students from socio-economically disadvantaged homes tend to be more likely to have principals report a number of key human and material resource shortages, which they believe limit their effectiveness. In particular, larger proportions of teachers working in lower SES schools have principals who report

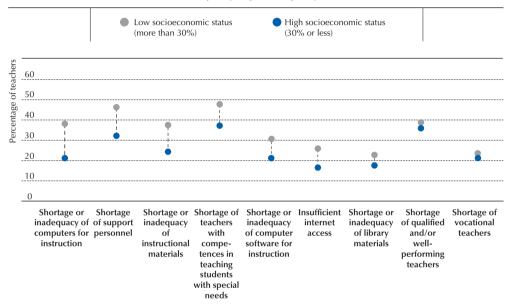


shortages of teachers with competences in teaching students with special needs, of support personnel, of shortages or inadequacies of instructional materials, computers, computer software or Internet access.

■ Figure 4.7 ■

School resources in upper secondary education, by socio-economic level

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide quality instruction



Items are ranked in descending order, based on the gap between low and high socioeconomic status in the percentage of teachers whose school principal reports that the shortage of resources hinder "a lot" or "to some extent" their school's capacity to provide quality instruction.

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165839

Table 4.10 shows the perceived shortage of resources for each country. In Mexico in particular, larger proportions of teachers working in lower SES schools have principals who report shortages across a large number of both human and material resources compared with teachers working in higher SES schools. In contrast, the resources distribution appears more equitable in Australia or Denmark, for example, where the proportion of teachers working in higher and lower SES schools with principals reporting shortages are more similar on many resources, or in some instances reversed (where shortages are more often reported in higher SES schools). See Box 4.3 for an example of a recent targeted policy for supporting students from disadvantaged backgrounds in Australia.

Similarly, as shown in Figure 4.8, teachers working in rural areas tend to be more likely to work in schools with reported shortages or inadequate resources than those working in large cities (see also Table 4.11). In particular, shortages of qualified or well-performing teachers appear to be particularly noted in rural areas in Australia, Denmark and Italy, where there are between 11 and 20 percentage-point differences between the proportions of teachers in small towns (15 000 people or fewer) and larger cities (100 000 people or more) who work in schools with such reported shortages. In contrast, teachers in rural areas in Finland are much less likely than their peers in more urban areas to work in schools where the principal reports such shortages (23% in small towns compared with 50% in large cities).



Box 4.3 Policies for supporting students from disadvantaged background in Australia

The Smarter Schools National Partnership for Low Socio-economic Status School Communities (2008/09 to 2014/15) is a comprehensive strategy that focuses on the learning and well-being of disadvantaged students to support their transitions to further education, work and community participation. This programme will distribute about AUD 1.5 billion to over 1 700 schools in socio-economically disadvantaged communities, with additional funding provided by the states and territories.

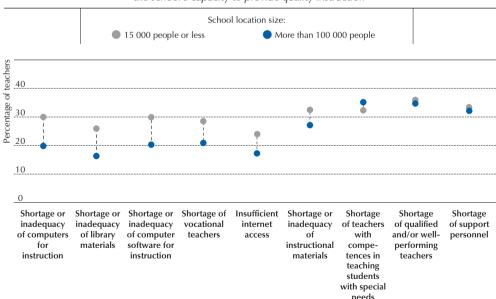
The programme engages all school systems (including the non-government sector) in partnerships to improve educational outcomes for all students, particularly disadvantaged students. The partnerships focus on raising literacy and numeracy outcomes (until 2012), improving teacher quality (until 2012), and addressing educational disadvantage associated with socio-economically disadvantaged school communities (until 2015). Over 2 500 Australian schools in both government and non-government sectors participate in these national partnerships.

Source: Education Policy Outlook 2014, Australia (OECD, 2014d).

Figure 4.8

School resources in upper secondary education, by school location

Percentage of upper secondary education teachers whose school principal reported that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide quality instruction



Items are ranked in descending order, based on the difference in the percentage of teachers whose school principal reports that the shortage of resources hinder "a lot" or "to some extent" their school's capacity to provide quality instruction.

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165847



Of particular relevance for upper secondary education, shortages of vocational education teachers appear more prevalent in more rural areas. On average, although 21% of teachers who work in large cities with more than 100 000 people work in schools where the principal reports shortages of vocational teachers, the proportion increases to 28% of teachers who work in small towns of 15 000 people or fewer. This may be an indication of the difficulty to attract vocational teachers to smaller rural communities, especially in Australia, Denmark, Iceland and Abu Dhabi (United Arab Emirates), where the discrepancy for shortages of vocational teachers between rural and urban areas are largest (Table 4.11).

The following section continues to examine upper secondary teachers' work environment, but focuses on teachers' more immediate environment, their classrooms.

CHARACTERISTICS OF UPPER SECONDARY TEACHERS' CLASSROOMS

The students in a teacher's classroom are certainly an important – if not the most important – aspect of the teachers' work environment. The *TALIS 2013 Results* report suggests that class size, while important for some aspects of secondary teachers' work, is perhaps less important than the characteristics of the specific students in the class (OECD, 2014b). In other words, it is not necessarily the number of students in the class, but the proportion of students with certain challenging characteristics that can impact teachers' work, their self-efficacy and their job satisfaction. This section examines the average class sizes as reported by upper secondary teachers, as well as the proportions of students in these classes who speak a language different from the language of instruction; have different achievement levels, behavioural problems, or special needs; or come from socio-economically disadvantaged homes.

As shown in Table 4.12, the average class size is 24 students.⁴ Upper secondary teachers report smaller class sizes on average in Australia and Norway (19) but larger class sizes in Mexico (34) and Singapore (33). In addition to providing the total number of students in their class, upper secondary teachers were asked to estimate the proportions of students with certain characteristics, namely (1) students whose first language is different from the language of instruction, (2) low academic achievers, (3) students with special needs, (4) students with behavioural problems, (5) students who come from socio-economically disadvantaged homes, and (6) academically gifted students.

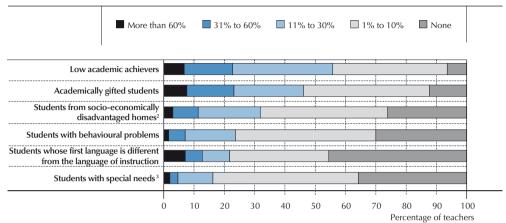
Figure 4.9 depicts the average proportion for each of these groups of students in upper secondary classrooms. The figure shows that overall, upper secondary teachers are most likely to report relatively higher proportions of low academic achievers and of academically gifted students in their classroom. More than one in five upper secondary teachers teach in classrooms where they report that more than 30% of the students are low academic achievers. In Poland and Singapore, more than 30% of the teachers report working in such classrooms. Moreover, many teachers (nearly nine in ten teachers on average) also report having academically gifted students in their classrooms (Table 4.12). These findings may be an indication that teachers are often faced with students with a wide range of academic abilities in their classroom, requiring them to adapt their teaching accordingly.

Table 4.12 further shows that on average, more than one in five teachers (22%) report that more than 10% of the students in their class have a first language that is different from the language of instruction. Teaching in a classroom with language diversity appears to be particularly prevalent in Singapore and Abu Dhabi (United Arab Emirates), where 48% and 36% of teachers, respectively, report teaching in classrooms where more than 30% of their students speak a language different from the language of instruction.



■ Figure 4.9 ■ Classroom composition in upper secondary education

Percentage of upper secondary education teachers reporting the following students' characteristics in their class1



- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 3. 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

Items are ranked in descending order, based on the percentage of teachers reporting that more than 10% of their students have the specific characteristic.

Source: OECD_TALIS 2013 Database

StatLink http://dx.doi.org/10.1787/888933165856

More than one in three teachers (36%) report that they have no students with special needs in their classroom, and more than eight in ten (84%) report that fewer than 10% of their students have special needs. But these data also show that the majority of teachers report having at least a small number of students with special needs in their class, and given the additional skills and resources that are potentially needed to teach these students, it is important to ensure that all teachers are well prepared and supported to face the challenges that come with having such students in a classroom. In Mexico, initiatives have been taken by the government to tackle this issue (see Box 4.4). Teaching in classrooms with students who have behavioural problems is the norm for teachers in upper secondary education: on average, 70% of these teachers report having at least some students with such problems in their classroom. In some countries, however, this appears to be less of an issue. In Mexico, 13% of teachers (almost twice the TALIS average) report that more than 30% of their students have behavioural problems. In Denmark and in Norway, 46% of teachers responded that none of the students in their class have behavioural problems. Given that disruptive students can have an impact on the learning environment of all the other students in the classroom, it is important to ensure that teachers are well prepared for dealing with these issues in their classroom. Moreover, the TALIS 2013 Results report suggested that teachers who report higher proportions of such students in their classrooms tend to report lower levels of job satisfaction and self-efficacy (OECD, 2014b).

Challenges can also come from teaching in a classroom in which many students come from socioeconomically disadvantaged homes. Once again, teachers in Mexico tend to report challenging



classrooms in this regard. Approximately one-third report that more than 30% of their students come from disadvantaged homes (compared with an average of 11% for all countries and economies).

Overall, these findings suggest that upper secondary teachers teach in heterogeneous classrooms with students with a wide range of characteristics and abilities. Such diversity appears to be the norm across most participating countries and economies, and it is imperative that teachers be well prepared and supported to ensure that they can provide each student with the learning environment needed to succeed.

Box 4.4 Mexico's Programme for the Strengthening of Special Education and Educational Integration

In Mexico, students with special needs (with disabilities and gifted students) attend mainstream basic schools or receive their education from Multi-Service Centres (Centros de Atención Múltiple, CAMs). CAMs exist from pre-primary to upper secondary education and cover training for the labour market of students up to 22 years of age. The Federal Secretariat of Public Education (SEP), through the Programme for the Strengthening of Special Education and Educational Integration (Programa de Fortalecimiento de la Educación Especial y de la Integración Educativa), manages special education programmes and supports the special education services provided by the 32 federal entities. Basic schools receive assistance for special-needs students from units created to support this kind of education in mainstream schools – the Unit for Support Services to Mainstream Schools (Unidad de Servicios de Apoyo a la Escuela Regular, USAER). These units promote the use of specific methods, techniques and materials to support the learning of special-needs students in mainstream schools, including the provision of necessary resources. Across the country, there are 1 519 CAMs and 3 858 USAERs.

There is also a structure to provide information and guidance to teachers and families on options and strategies for the education of students with special needs, typically in the form of Resource and Information Centres for Educational Integration (Centros de Recursos e Información para la Integración Educativa, CRIE) and Units for Public Guidance (Unidad de Orientación al Público, UOP).

Source: Santiago et al. (2012).

PROFILE OF PRINCIPALS AND SCHOOL LEADERSHIP IN UPPER SECONDARY SCHOOLS

The complexity and importance of the role of school principals is widely acknowledged and school leadership is increasingly a priority for many countries concerned about improving student and school outcomes (OECD, 2014a; 2014b; Pont, Nusche and Moorman, 2008; Robinson, Hohepa and Lloyd, 2009). A key concern for principals in upper secondary schools in several countries is preventing students from leaving school prematurely to ensure that all students can successfully complete upper secondary education (OECD, 2014a).

Principals tend to affect student learning indirectly through the influence they have on school climate and organisation and the conditions under which teachers work (Aydin, Sarier and Uysal, 2013; Lucas et al., 2012; Chin, 2007; Bell, Bolam and Cubillo, 2003; Hallinger, Bickman and Davis, 1996). The role of school principals includes managing human and material resources in the school, supporting teachers through instructional leadership and liaising between the school and stakeholders in the wider community. This last role is especially important in upper secondary education, where close



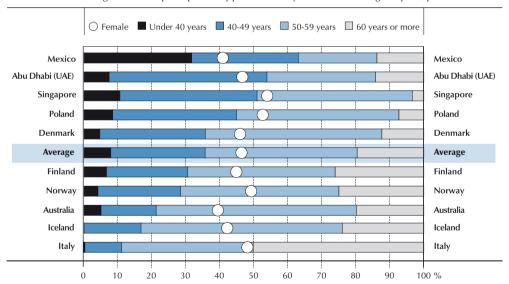
ties between schools and employers for the development and delivery of vocational programmes is essential (OECD, 2014a).

The first part of this section provides a profile of principals in upper secondary schools in participating countries and economies, and includes information on the gender and age distribution, formal education, leadership training and practical experience. The second part of this section discusses the work of principals, including how they spend their working hours and their development of school goals and programmes and professional development plans.

Demographic characteristics of upper secondary principals

This section provides a general picture of those who bear the complex tasks of leading upper secondary schools. Figure 4.10 shows the gender and age distribution of principals across the 10 participating countries and economies (see also Table 4.13). On average, the gender distribution is quite balanced between men and women (46% of principals are women), though this varies from 39% in Australia to 54% in Singapore. It is noteworthy that smaller proportions of principals are women compared with teachers. Since most principals have some work experience as a teacher (Table 4.16), this suggests that a larger proportion of male teachers continue on to school leadership roles than do female teachers, who are more likely to remain teachers or reach other forms of leadership roles in the school.

■ Figure 4.10 ■ Gender and age distribution of upper secondary principals Percentage of female principals in upper secondary education and age of principals



Countries are ranked in descending order, based on the percentage of principals who are aged 49 or younger. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165867

Not surprisingly, very few upper secondary principals are younger than 30 years of age (Table 4.13). On average, principals are 52 years old (compared with 45 years for teachers). The youngest principals among these ten countries and economies are in Mexico, where the average age of principals is 46 years old and 7% of principals are younger than 30 years old. The oldest principal population is in Italy, where they of age are 58 years old on average and where 50% are older than 60 years old.



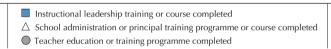
Educational attainment and work experience of upper secondary principals

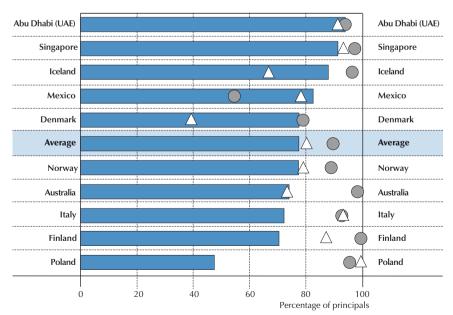
Nearly all principals in all participating countries report having completed a Bachelor's degree or Master's degree from a university or equivalent institution (ISCED level 5), and this characteristic has very little variation among countries and economies (Table 4.14). It is noteworthy that among these ten countries and economies, Finland has the highest proportion of principals (11%) who report having completed further education at the tertiary level that leads to an advanced research qualification such as a Doctorate degree (ISCED level 6).

On average, more than three-quarters of upper secondary principals report that their formal education included some school administration or principal training programme (79%) and instructional leadership training (77%). Instructional leadership focuses on tasks directly linked to the improvement of the quality of teaching and student learning in the school. Moreover, nearly nine in ten principals report having completed a teacher education or training programme (89%). Figure 4.11 illustrates the proportions of upper secondary principals in each participating country and economy who report that each of these elements was included in their formal education and training (either before or after taking up a position as a principal) (see also Table 4.15).

■ Figure 4.11 ■ Upper secondary education principals' formal education

Percentage of upper secondary education principals for whom the following elements were included in their formal education





Countries are ranked in descending order, based on the percentage of principals for whom instructional leadership training or course were included in their formal education.

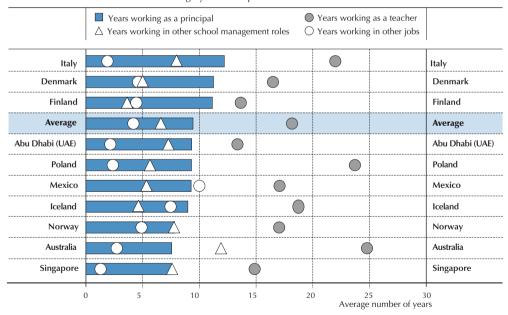
Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165870

As shown in the figure, although more than 90% of principals in Italy, Poland, Singapore and Abu Dhabi (United Arab Emirates) report having received some school administration or principal training, in Denmark, fewer than four in ten principals report the same. Moreover, although principals in Iceland, Singapore and Abu Dhabi (United Arab Emirates) commonly report that instructional leadership was a component of their formal education, fewer than half of the principals in Poland report this. Finally, more than three-quarters of principals in all participating countries or economies, except for Mexico, report having completed a teacher education or training programme. In Mexico, only about half of the principals report having done so (54%). This is not surprising given that only about one-quarter of upper secondary teachers in Mexico reported having completed a teacher education or training programme (Table 4.3).

On average, the upper secondary principal workforce is not only well educated but also experienced. Figure 4.12 shows that, on average, principals have nearly 10 years of work experience as a principal. In addition, they have nearly 7 years of experience working in other school management roles, 18 years working as a teacher and 4 years working in other jobs (see also Table 4.16). The greatest variation among countries is seen with the average years of experience as a teacher. This varies from 13 years in Abu Dhabi (United Arab Emirates) to 25 years in Australia. This suggests that principals in Australia have spent a great proportion of their career as teachers.

 Figure 4.12 Work experience of upper secondary education principals Percentage of upper secondary education principals with the following average years of experience in each role1



^{1.} Categories presented in this graph are not mutually exclusive. For example, a principal can be working as a teacher in his school. Countries are ranked in descending order, based on the average number of years of experience working as a principal. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165888

Education systems are increasingly recognising the importance of investing in the effective preparation and development of school leaders. The findings in this section suggest that there is significant



variability in the experience of principals and in the extent to which they have completed specific leadership training. Some countries are more developed than others in their standardisation of preparation of school leaders. Australia's Institute for Teaching and School Leadership (AITSL), for example, provides a school leadership framework, which includes leadership standards, a professional learning charter and incentives to promote quality school leadership.⁵

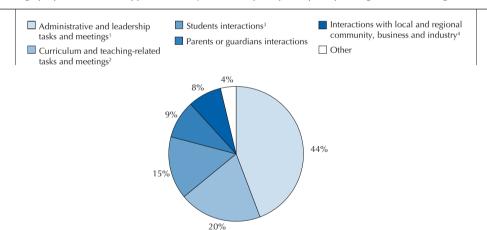
The work of upper secondary school principals

To gain some insight into what constitutes the work of upper secondary principals, this section examines the proportion of time they report spending on various tasks (Table 4.17). Figure 4.13 illustrates the overall average proportion of time principals report spending on administrative tasks and meetings; curriculum and teaching-related tasks and meetings; interactions with students; meetings with parents or guardians, local and regional community and business and industry; and in other tasks.

It is perhaps not surprising that principals report spending nearly half of their time on administrative tasks (44% on average), which leaves little time to attend to the other aspects of their work. One-fifth (20%) of upper secondary principals' time is dedicated to curriculum and teaching-related activities, which represent the second most time-consuming task, on average. This is followed by interactions with students (15%) and interactions with local community and business and industry and with parents or guardians (between 8% and 9% each).

• Figure 4.13 • Principals' working time in upper secondary education

Average proportion of time upper secondary education principals report spending on the following activities



- 1. Including human resource/personnel issues, regulations, report, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state or national education officials.
- 2. Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.
- 3. Including counseling and conversations outside structured learning activities.
- 4. Including formal and informal interactions.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165897

There is some variation among participating countries and economies in how upper secondary principals report distributing their work (Table 4.17). For example, principals in Denmark, Finland and Iceland report spending at least half of their time on administrative tasks but tend to spend relatively less time on interactions with parents or guardians (between 4% and 5% of their time) compared with



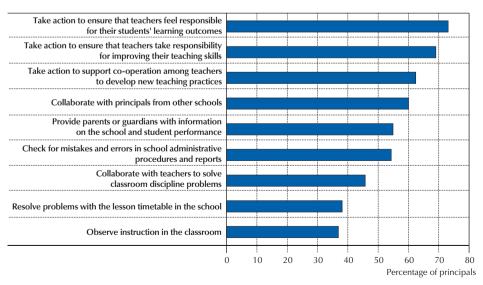
the overall average (9%). In Italy and Mexico, principals report spending less time on administrative and management tasks (35% to 37%) but tend to report spending slightly more time than average on interactions with students (between 16% and 20%) and with parents or guardians (12%). Principals in Italy report spending the largest proportion of time on curriculum and teaching-related activities (23%), while principals in Denmark and Finland report spending the highest proportion of time on interactions with local communities, business and industry (10%). This can be particularly important in upper secondary education as it helps ensure that the skills and competencies taught to students reflect the needs of the labour market (OECD, 2014a).

The leadership role of upper secondary principals entails aspects of administrative leadership and aspects of instructional leadership (OECD, 2009). For this cycle of TALIS, principals were asked about the frequency with which they engaged in specific types of leadership activities during the 12 months prior to the survey. The responses help provide insights as to where upper secondary principals are focusing their efforts in providing leadership in the school. These activities include collaborating with teachers to solve discipline problems, observing classroom instruction, supporting co-operation between teachers to develop new teaching practices, ensuring that teachers take responsibility for improving their teaching skills and for their students' outcomes, providing parents with information on school and student performance, checking for mistakes in school administrative procedures and reports, resolving problems with the timetable, and collaborating with principals from other schools (Table 4.18).

Figure 4.14 shows the proportion of upper secondary principals who report having engaged in these leadership activities often in the past 12 months.

■ Figure 4.14 ■ Principals' leadership in upper secondary education

Percentage of upper secondary education principals who report having engaged "often" or "very often" in the following leadership activities during the 12 months prior to the survey



Items are ranked in descending order, based on the percentage of principals who report having engaged "often" or "very often" in the leadership activity during the 12 months prior to the survey.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165902



On average, for this list of leadership activities, principals are least likely to report having often observed instruction in the classroom (37% on average). This is worrisome given the importance of providing feedback to teachers based on observing their teaching (OECD, 2013c; 2014b). There are, however, large variations in the frequency reported by principals for this activity (Table 4.18). Upper secondary principals in Finland and Norway are least likely to report engaging in classroom observation (4% and 6% respectively), while principals in Poland (66%), Singapore (58%) and Abu Dhabi (United Arab Emirates) (86%) are much more likely to report having observed classroom instruction frequently. Box 4.5 presents information about the school leadership culture in Norway and how it may relate to the lower levels of classroom observation reported by principals.

Box 4.5 School leadership culture and classroom observation in Norway

Norway has recently introduced (2009) a leadership training and development programme to improve the effectiveness of school leaders. This provides training to school leaders, with priority to those who have been in their position for less than two years. The training focuses on five key areas: pupils' learning outcomes and learning environment, management and administration, co-operation and organisational development, development and change, and the leadership role. Evaluation of this programme indicates positive reviews based on the content and relevance to school leadership.

In Norway, teacher appraisal practices tend to be the initiative of individual schools (in some cases in the context of municipality programmes or requirements) and largely depend on the leadership style of the school leader and the evaluation ethos of the school. The hierarchy in Norwegian schools has traditionally been very flat and democratic, with the school leader being perceived as first among equals. Within these highly democratic working traditions, having ambitions for strong pedagogical leadership including classroom observation may not always be well regarded by teachers and school leaders may be hesitant to exercise such leadership.

Sources: Education Policy Outlook: Norway (OECD, 2014e); Nuche et al. (2011); Norwegian Directorate for Education and Training, 2007.

At the other end of the spectrum, upper secondary principals are most likely to report having frequently taken action in the past 12 months to ensure that teachers take responsibility for improving their teaching skills and to ensure that teachers feel responsible for their students' learning outcomes (69% and 73% on average, respectively). Principals in Abu Dhabi (United Arab Emirates) are particularly engaged in these activities: more than nine in ten principals report having taken such actions often.

Fewer principals in the Nordic countries report taking action to support co-operation among teachers to develop new teaching practices and to take responsibility to improve their teaching skills: only between around 50% and 60% of principals in Denmark, Finland, Iceland and Norway report having engaged in these activities often or very often (Table 4.18).

Principals in Italy, Mexico and Abu Dhabi (United Arab Emirates) are most likely to report having provided parents with information about school and student performance (more than eight in ten principals report having done this often or very often), while this is not as frequently done by principals in Denmark, Finland and Norway, where fewer than two principals in ten report having done this often or very often.

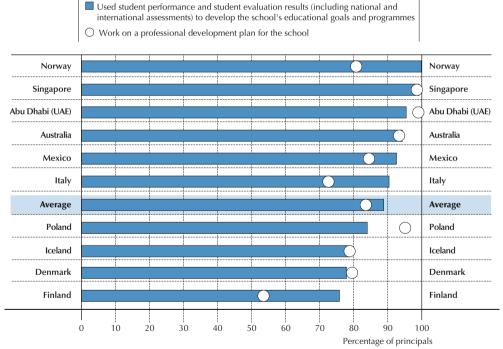


The more administrative tasks, such as checking for mistakes in procedures and reports and resolving problems with timetables, are most frequently reported by principals in Abu Dhabi (United Arab Emirates).

TALIS also asked upper secondary principals about their engagement in activities related to their school's development plan in the past 12 months. Table 4.19 presents the percentage of principals who report having used student performance and student evaluation to develop the school's educational goals and programmes, and who report having worked on a professional development plan for their school. The great majority of upper secondary principals (89% on average) report taking into account their students' outcomes in the development of the educational goals and programmes. As shown in Figure 4.15, this is a common occurrence across all participating countries and economies. Most upper secondary principals also report working on a common professional development plan for their school (84% on average), though there is more variation among countries, with a low of 54% reporting this in Finland and a high of 99% in Abu Dhabi (United Arab Emirates).

 Figure 4.15 Upper secondary principals' participation in a school development plan

Percentage of upper secondary education principals who report having engaged in the following activities related to a school development plan in the 12 months prior to the survey



Countries are ranked in descending order, based on the percentage of principals who report having used student performance and student evaluation results to develop the school's educational goals and programmes. Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933165912

In all participating countries and economies, more than three-quarters of upper secondary principals report considering their students' performance and evaluations in developing the school's educational goals and programmes (ranging from 76% of principals in Finland to 100% of principals in Norway).



Notes

- 1. As defined by the International Standard Classification of Education (ISCED 1997), which identifies comparable levels of education across countries. ISCED 5 represents the first stages of tertiary education and is split between ISCED levels 5A and 5B. ISCED level 5B programmes are generally more practically oriented and shorter than programmes at ISCED level 5A. ISCED level 5A typically includes Bachelor's degrees and Master's degrees from universities or equivalent institutions. ISCED level 6 represents further education at the tertiary level that leads to an advanced research qualification such as a Doctorate degree.
- 2. 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 work. Some teachers believe that all students are unique learners and thus have some special learning needs. For the purpose of this survey, it is important to ensure a more objective judgment of who is a special-needs student and who is not. That is why a formal identification is stressed above.
- 3. Schools with more than 30% of students from socio-economically disadvantaged homes.
- 4. As reported by upper secondary teachers and referring to a randomly chosen class they currently teach from their weekly timetable.
- 5. OECD, Education Policy Outlook: Australia (June 2013).

References

Andrew, M. (1990), "The differences between graduates of four-year and five-year teacher preparation programs", *Journal of Teacher Education*, Vol. 41, pp. 45-51.

Aydin, A., Y. Sarier and S. Uysal (2013), "The effect of school principals' leadership styles on teachers' organizational commitment and job satisfaction", Educational Sciences: Theory and Practice, Vol. 13/2, pp. 806-811.

Bell, L., R. Bolam and L. Cubillo (2003), "A systematic review of the impact of school leadership and management on student outcomes", in *Research Evidence in Education Library*, EPPI-Centre, Social Science Research Unit, Institute of Education, London.

Buddin, R. and **G. Zamarro** (2009), "Teacher qualifications and student achievement in urban elementary schools", *Journal of Urban Economic*, Vol. 66, pp. 103-115.

Chin, J.M. (2007), "Meta-analysis of transformational school leadership effects on school outcomes in Taiwan and the USA", *Asia Pacific Education Review*, Vol. 8/2, pp. 166-177.

Clotfelter, C.T., H.F. Ladd and J.L. Vigdor (2007), "Teacher credentials and student achievement: Longitudinal analysis with student fixed effects", *Economics of Education Review*, Vol. 26/6, pp. 673-682.

Darling-Hammond, L. (2000a), "Teacher quality and student achievement: A review of state policy evidence", Education Policy Analysis Archives, Vol. 8/1, http://epaa.asu.edu/ojs/article/viewFile/392/515.

Darling-Hammond, L. (2000b), "How teacher education matters", *Journal of Teacher Education*, Vol. 51/3, May/June 2000, pp. 166-173.



Darling-Hammond, L. et al. (2005), "Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness", *Education Policy Analysis Archives*, Vol. 13/42, http://epaa.asu.edu/ojs/article/view/147/273.

European Commission (2012), "Supporting the teaching professions for better learning outcomes", [SWD(2012) 374 final], European Commission, Strasbourg, November 2012, p. 58.

Hallinger, P., L. Bickman and K. Davis (1996), "School context, principal leadership, and student reading achievement", *The Elementary School Journal*, Vol. 96/5, pp. 527-549.

Hanushek, E.A. and S.G. Rivkin (2004), "How to improve the supply of high-quality teachers", *Brookings Papers on Education Policy*, Vol. 7, pp. 7-25.

Harris, D.N. and T.R. Sass (2011), "Teacher training, teacher quality and student achievement", *Journal of Public Economics*, Vol. 95, pp. 798-812.

Lucas, O. et al. (2012), "School principal's leadership style: A factor affecting staff absenteeism in secondary schools", Journal of Emerging Trends in Educational Research and Policy Studies, Vol. 3/4, pp. 444-446.

Lutz, F.W. and J.B. Hutton (1989), "Alternative teacher certification: Its policy implications for classroom and personnel practice", Educational Evaluation and Policy Analysis, Vol. 11/3, pp. 237-254.

Norwegian Directorate for Education and Training (2007), The Education Mirror 2006 – Analysis of Primary and Secondary Education and Training in Norway, Norwegian Directorate for Education and Training, Oslo.

Nusche, D. et al. (2011), OECD Reviews of Evaluation and Assessment in Education: Norway. OECD Publishing, Paris, http://www.oecd.org/norway/48632032.pdf.

OECD (2014a), Education Policy Outlook, www.oecd.org/edu/policyoutlook.htm.

OECD (2014b), *TALIS 2013 Results: An International Perspective on Teaching and Learning,* TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en.

OECD (2014c), Education Policy Outlook: Mexico, www.oecd.org/edu/policyoutlook.htm.

OECD (2014d), Education Policy Outlook: Australia, www.oecd.org/edu/policyoutlook.htm.

OECD (2014e), Education Policy Outlook: Norway, www.oecd.org/edu/policyoutlook.htm.

OECD (2013a), Education at a Glance 2013: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2013-en.

OECD (2013b), PISA 2012 Results: What Makes Schools Successful? (Volume IV) Resources, Policies and Practices, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en.

OECD (2013c), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264190658-en.

OECD (2011), Lessons from PISA for the United States, Strong Performers and Successful Reformers in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264096660-en.

OECD (2010), Learning for Jobs, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

OECD (2009), Creating Effective Teaching and Learning Environments: First Results from TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264068780-en.

OECD (2005), *Teachers Matter: Attracting, Developing and Retaining Effective Teachers,* Education and Training Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264018044-en.



OECD (2004), Completing the Foundation for Lifelong Learning: An OECD Survey of Upper Secondary Schools, OECD, Paris, http://dx.doi.org/10.1787/9789264103733-en.

Pont, B., D. Nusche and H. Moorman (2008), *Improving School Leadership, Volume 1: Policy and Practice*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264044715-en.

Rivkin, S., E. Hanushek and J. Kain (2005), "Teachers, schools, and academic achievement", *Econometrica*, Vol. 73/2, pp. 417-458.

Robinson, V., M. Hohepa and C. Lloyd (2009), School Leadership and Student Outcomes: Identifying What Works and Why: Best Evidence Synthesis Iteration, University of Auckland and the New Zealand Ministry of Education.

Rockoff, J.E. (2004), "The impact of individual teachers on students' achievement: Evidence from panel data", American Economic Review, Vol. 94/2, pp. 247-252.

Ronfeldt, M. and M. Reininger (2012), "More of better student teaching?", Teaching and Teacher Education, Vol. 28, pp. 1091-1106.

Santiago, P. et al. (2012), OECD Reviews of Evaluation and Assessment in Education: Mexico 2012, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264172647-en.

UNESCO Institute for Statistics (2009), *Global Education Digest 2009: Comparing Education Statistics Across the World*, UNESCO Institute for Statistics, Montreal.

UNESCO Institute for Statistics (2006), Teachers and Educational Quality: Monitoring Global Needs for 2015, UNESCO Institute for Statistics, Montreal.

Ward, L. et al. (2013), "Teacher preparation to proficiency and beyond: Exploring the landscape", Asia Pacific Journal of Education, Vol. 33/1, pp. 68-80.



The work of upper secondary teachers

This chapter examines how upper secondary teachers are supported in their work through the appraisal and feedback they receive and through the induction, mentoring and professional development in which they engage. It also examines upper secondary teachers' pedagogical beliefs and practices in more detail and concludes with a look at their feelings of self-efficacy and job satisfaction.



Highlights

- On average, more than eight in ten upper secondary teachers report having received feedback on their work in their current school. They are most likely to report that this feedback has led to positive impacts on personal factors such as their confidence, their motivation and their job satisfaction. The second general area in which teachers are most likely to report positive impacts is on their practices in the classroom, while comparatively fewer teachers report positive changes on their career and work responsibilities.
- Despite the reported availability of mentoring systems in schools (nearly three-quarters of teachers work in schools where the principal says there is a mentoring system available), few upper secondary teachers report engaging in mentoring, either as a mentor or as a mentee.
- Upper secondary teachers report being very engaged in their continued professional development. More than nine in ten teachers (91%) report having undertaken some professional development activities in the past 12 months. The three areas in which upper secondary teachers are most likely to report high needs for professional development are new technologies in the workplace, ICT skills for teaching and teaching students with special needs.
- On average across all countries, teachers report working 38 hours per week. This average varies from 31 hours in Finland to 48 hours in Singapore. Unsurprisingly, teachers report spending the most number of hours (18) on teaching. The second most time-consuming task on average is planning or preparing lessons (8 hours).
- Although less than half of upper secondary teachers (42%) on average think that the teaching profession is valued in society, about eight in ten teachers in all participating countries and economies state that if they could decide again they would still choose to work as a teacher (83% on average).
- Class size does not appear to be related to upper secondary teachers' levels of self-efficacy or job satisfaction, except in Finland, where teachers in larger classrooms tend to show very slightly higher levels of confidence in their abilities. The student composition in the classroom is more closely related to teachers' feelings of self-efficacy.

INTRODUCTION

The previous chapter provided a profile of the upper secondary teaching workforce in the ten participating countries and economies and described the environment in which these teachers work by examining the characteristics of their schools and of their classrooms. It also provided a profile of the principals in upper secondary schools and of some of the main aspects of their work. This chapter turns to how upper secondary teachers are supported in their work through the appraisal and feedback they receive and through the induction, mentoring and professional development in which they engage. It also examines upper secondary teachers' pedagogical beliefs and practices in more detail and concludes with a look at their feelings of self-efficacy and job satisfaction.



SUPPORTING AND DEVELOPING UPPER SECONDARY SCHOOL TEACHERS

There is no doubt that key elements to ensuring a quality teaching workforce include recruiting the best candidates into the profession and preparing them well for their entry into teaching (OECD, 2005; Schleicher, 2012). But also critical is ensuring that teachers receive meaningful feedback on their work and that they continue to engage in continued professional learning throughout their careers (OECD, 2014). This can be a particularly important aspect of school improvement efforts and wider system-level reforms. Lack of proper in-depth training and feedback systems can seriously impede reform implementation and outcomes, especially when the reform focuses on changing classroom practices (Watson and Katz, 2003). Moreover, research suggests that more fundamental changes in teaching require more extensive forms of professional training and teacher engagement to convince teachers of the value of the change, and that less qualified teachers need more training and guidance than more experienced and more qualified teachers (Desimone, 2002).

This section examines aspects of the appraisal and feedback received by upper secondary teachers and the induction, mentoring and continuing professional development in which they report engaging.

Appraisal and feedback

As in Chapter 3, this section focuses on teachers' reports about the feedback they personally receive, which includes any communication teachers receive about their teaching, based on some form of interaction with their work (i.e. observing classrooms and the teaching of students). This feedback can be provided through informal discussions or as part of a more formal and structured arrangement. More specifically, this section explores who provides feedback to upper secondary teachers, what is emphasised in this feedback, the methods used to provide this feedback, as well as the outcomes and impact teachers perceive from the appraisal and feedback. Countries differ in the extent to which formal systems of teacher appraisals are in place. Therefore, the focus of this section is on the feedback that teachers receive, whether this feedback stems from formal appraisal systems or informal exchanges.

On average, more than eight in ten upper secondary teachers report having received feedback on their work in their current school, although, as illustrated in Figure 5.1, this proportion varies from a high of more than nine in ten teachers in Poland, Singapore and Abu Dhabi (United Arab Emirates) to a low of just over half the teachers in Italy (see also Table 5.1).

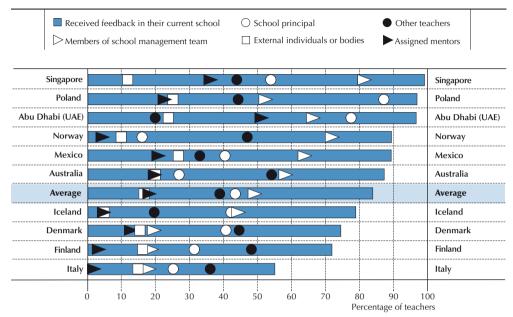
Figure 5.1 also shows the source of this feedback. On average, upper secondary teachers are most likely to report having received feedback from members of their school management team, their principal and other teachers. They are least likely to report having received feedback on their work from assigned mentors or from external individuals or bodies. There are, however, notable differences among countries in who teachers say provides feedback to them. For example, principals in Poland and Abu Dhabi (United Arab Emirates) appear to have a much more central role to play in providing their teachers with feedback - more than three-quarters of teachers there report receiving feedback from their principal (77% and 87%, respectively), compared with Australia or Norway, where fewer than 30% of teachers report the same. In Abu Dhabi (United Arab Emirates), other teachers are the least frequently cited source of feedback (by 20% of teachers), but in Denmark (45%), Italy (36%) and Finland (48%) it is the most frequent. Large proportions of teachers in Australia (54%), Norway (47%), Poland (44%) and Singapore (44%) also report receiving feedback from other teachers. This may be an indication of higher levels of collaboration among teachers in these countries.



■ Figure 5.1 ■

Teachers' feedback by source of feedback in upper secondary education

Percentage of upper secondary education teachers who report having received feedback in their school and teachers who report receiving feedback from various sources¹



^{1.} 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.

Countries are ranked in descending order, based on the percentage of teachers who report having received feedback in their school. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165925

The OECD Teaching and Learning International Survey (TALIS) also asked teachers about the methods by which they receive feedback in their school. Teachers were asked whether this feedback was provided to them following classroom observations, student surveys, assessments of their content knowledge, analysis of their students' test scores, a self-assessment of their own work, or surveys and discussions with parents or guardians. As illustrated in Figure 5.2, upper secondary teachers in general are more likely to report that their feedback was based on classroom observations (68% of teachers report this on average) than on any other method of providing feedback (see also Table 5.2). However, classroom observations appear to form the basis of feedback to teachers much more frequently in countries and economies such as Poland, Singapore and Abu Dhabi (United Arab Emirates) – where more than nine in ten teachers report this method of feedback –, than in Iceland and Italy – where fewer than four in ten teachers report the same. Instead, in Iceland (and also in Mexico and Norway), feedback based on student surveys is the most frequently reported method of feedback, as reported by more than seven in ten teachers in these countries. Box 5.1 provides examples of the growing importance of student surveys in Norway and the collaborative way in which teacher evaluations are organised in Denmark.

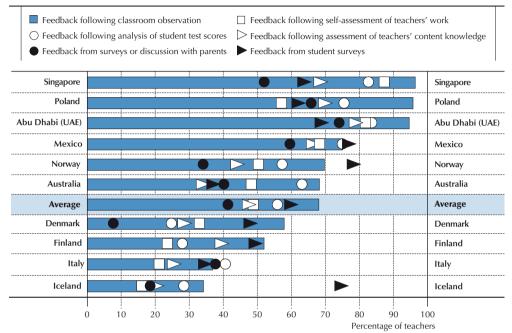
Also evident from Figure 5.2 is that feedback based on student test scores is also quite common for upper secondary teachers in most participating countries. More than half of teachers report this method of feedback in Australia, Mexico, Norway, Poland, Singapore and Abu Dhabi (United Arab Emirates). Receiving feedback following surveys or discussions with parents is much less frequent and is the least frequently cited method of feedback among teachers in Denmark, Finland, Mexico, Norway and Singapore (Figure 5.2 and Table 5.2).



■ Figure 5.2 ■

Methods for providing feedback to upper secondary education teachers

Percentage of upper secondary education teachers who report receiving feedback via the following methods^{1, 2}



^{1.} Percentage of teachers reporting receiving feedback via the following methods by at least one body, including: "external individuals or bodies", "principal", "member(s) of school management team", "assigned mentors" or "other teachers"

Countries are ranked in descending order, based on the percentage of teachers who report having received feedback following classroom

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165938

Box 5.1 The use of teacher and student feedback in Denmark and Norway

Collaborative evaluation in Denmark

In Denmark, teacher appraisal is not regulated by law and no national requirements exist to evaluate the performance of teachers. Actual teacher-appraisal practices are determined locally with the possible influence of municipal requirements or guidelines. According to the Folkeskole Act, the school principal is responsible for the quality of teaching at the school as well as the overall administrative and pedagogical management of the school, including the professional development of teachers. As a result, the main responsibility of designing, introducing and organising teacher-appraisal procedures within the school lies with the school principal. Actual teacher-appraisal practices in Danish schools seem to be based on a culture where school leaders show confidence in their teachers, appraisal is conducted as a school-teacher or teacher-teacher dialogue, and procedures are defined in collaboration with the teachers.

^{2.} 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.



Box 5.1 The use of teacher and student feedback in Denmark and Norway (continued)

Work in Danish schools is increasingly organised in a way that encourages teamwork. Schools are increasingly structuring work around teams of teachers (e.g. class team, form team, section team, subject team) that share responsibility for organising their work. This development has led to growing co-operation among teachers and a more formal dialogue between the school leaders and teams of teachers. This also provides a context in which some schools organise teacher appraisal mostly within teams. In this situation, teachers co-operate on promoting the quality of the teaching in the school. It is a widespread practice in the *Folkeskole* that planning, learning and knowledge sharing take place in teacher teams. Other typical activities among teachers include supervising each other within a team and discussing together the progress and development of an individual student. According to the *Folkeskole* Act, the school leader is responsible for the quality in his/her school within the limits imposed by the decisions of the city council and the school board.

Source: Shewbridge et al. (2011); OECD (2013a).

Student surveys in Norway

Following several years of collaboration, the Norwegian Student Organisation and the Union of Education Norway have developed a number of recommendations for teacher appraisal. The purpose of their collaboration was to develop a set of agreed principles that can form the basis for a student survey on teaching in particular classes, with the possibility of adapting it locally. Following their recommendations, the survey should:

- Focus on teaching practice rather than the teacher as an individual;
- Include the students' own self-assessment and assessment of peers to enable analysis of how student effort and motivation influence the learning environment;
- Feature questions on teaching approaches that are relevant for student learning, such as adapted education and feedback to students, as well as questions on the general framework for teaching, such as materials and physical conditions;
- Be carried out anonymously to ensure that students give honest answers;
- Be analysed by the teacher and students together with a view to improve the classroom environment and learning outcomes. This should be followed up with a joint report by the teacher and student group on their analysis of results and agreed future changes.

This report, together with relevant data, should be submitted to the teachers' closest supervisor. **Source:** Norwegian Directorate for Education and Training (2011), cited in Nusche et al. (2011).

To ensure that teacher appraisals are meaningful, it is important to identify key aspects that should be emphasised, based on a shared understanding of what constitutes effective teaching (OECD, 2013b). Teachers' reports on the emphasis of their feedback are represented in Figure 5.3. Consistent with the previous finding, on average, student performance and student feedback are most commonly cited as being aspects of feedback that are considered with moderate or high importance across participating countries. However, as shown in Table 5.3, in Denmark only just over half of teachers (54%) report that student performance is an important aspect of their feedback. Teachers' knowledge and understanding of their subject field, along with their pedagogical competencies, student assessment practices and student behaviour and management practices are also reported by more than three-quarters of teachers overall as being considered with moderate or high importance in their feedback. However, teachers

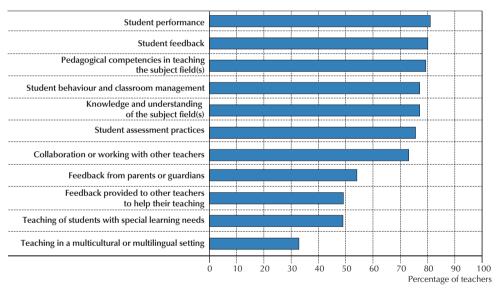


in Iceland are less likely to report that student assessment practices (49%) or student behaviour (45%) were considered with some importance. The importance of teacher co-operation and collaboration in upper secondary schools is evidenced by the fact that collaboration or working with other teachers is reported by 73% of teachers, on average, as being an important component of their feedback (although only 44% of teachers in Iceland report this).

As shown in Figure 5.3, overall, teaching students with special needs, teaching in a multicultural or multilingual setting and feedback provided to other teachers to help their teaching are the least likely to be reported by teachers as being considered with at least moderate importance in the feedback they receive (49%, 33% and 49% respectively).

■ Figure 5.3 ■ Emphasis of teacher feedback in upper secondary education

Percentage of upper secondary education teachers who report the feedback they received emphasised the following issues with a "moderate" or "high" importance1



1. 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.

Items are ranked in descending order, based on the percentage of teachers who report the feedback they received emphasised the issue with a "moderate" or "high" importance.

Source: OECD, TALIS 2013 Database.

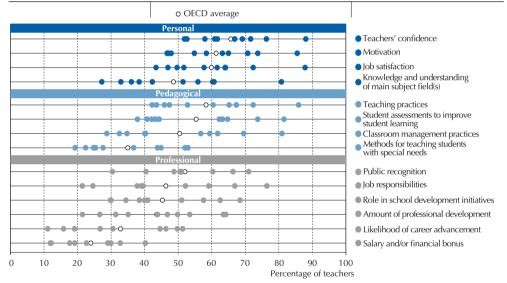
StatLink http://dx.doi.org/10.1787/888933165942

Research shows that feedback to teachers can have a positive impact on teachers in a number of ways, ranging from a personal impact to an impact on their career, their development and their teaching (Hattie, 2009). However, without a link to professional development opportunities, the impact of the evaluation process can be greatly reduced and may be perceived as a meaningless exercise and even lead to feelings of apathy on the part of teachers being evaluated (Danielson, 2001; Milanowski and Kimball, 2003; Margo et al., 2008; Santiago et al., 2011).

TALIS asked teachers the extent to which they felt that the feedback they received led to moderate or large positive changes on a number of elements of their work (Table 5.4). Figure 5.4 shows that teachers are most likely to report moderate or large positive impacts on personal factors such as their confidence, their motivation and their job satisfaction. Overall, at least two-thirds of teachers (66%) report at least a moderate positive impact on their self-confidence, while nearly half report such positive impact on their knowledge and understanding of their subject field (49%), and approximately six teachers in ten report such an impact on their motivation (61%) and on their job satisfaction (60%). This is important because teacher motivation and job satisfaction are related to teacher retention in the profession (Vandervoort, Amrein-Beardsley and Berliner, 2004; Lustick and Sykes, 2006).

■ Figure 5.4 ■ Outcomes of teacher feedback in upper secondary education

Percentage of upper secondary education teachers who report a "moderate" or "large" positive change in the following issues after they received feedback on their work at their school^{1, 2}



1. Each dot represents a country value except the white dots which represent the average.

2. 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.

Outcomes are ranked in descending order for each block based on the average percentage of teachers who report a "moderate" or "large" positive change in the following issues after they received feedback on their work at their school.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165959

As seen in Figure 5.4, many teachers also report a positive impact on their teaching practice following feedback. On average, just over half of teachers report that feedback has led to moderate or large positive changes in their teaching practices (58%) and on their student assessment practices (55%), while half of teachers on average report positive changes in their classroom management practices (50%), and just over one-third report positive changes on their methods for teaching students with special needs (35%).

Comparatively fewer teachers report moderate or large positive changes on their career and work responsibilities following feedback. Although just over half of teachers, on average, report a positive change in their public recognition (52%), fewer than half report a positive change regarding their job



responsibilities (46%), their role in school development initiatives (45%) and the amount of professional development they receive (44%). Just one-third say their feedback resulted in a change in their likelihood of career advancement (33%), while fewer than one-fourth report positive changes to their salary or bonuses (24%). The fact that fewer teachers see positive impact on their job responsibilities and careers can be problematic. Teacher appraisal and feedback can provide a mechanism to recognise and reward high-quality teaching and allow teachers to progress in their career and take on new roles and responsibilities based on solid appraisals of their performance (Mead, Rotherham and Brown, 2012). This can help address concerns about the attractiveness of teaching as a profession and prevent teachers from feeling that their work is undervalued (OECD, 2013a). Box 5.2 provides two examples of appraisal systems that can lead to career progression: one from Australia on a voluntary basis and one from Singapore with a specific structure.

Box 5.2 Career progression in Australia and Singapore

Advanced Skills Teaching positions in Australia

Teachers in Australia undergo appraisal, on a voluntary basis, to gain promotion positions in schools in recognition of quality teaching performance by applying for Advanced Skills Teaching positions (ASTs). These positions are linked to higher pay and are generally associated with further responsibilities and specific roles in schools. In most cases, teachers do not have to be at the top of the salary scale to apply for these positions, which entails a thorough assessment of their performance. Advanced Skills Teaching positions, which exist in almost all educational jurisdictions, accomplish two important functions for the most part: the recognition of advanced teaching skills with a formal position and additional pay, and a better match between teachers' skills and the roles and responsibilities needed in schools through competitions to gain the positions. These have the benefit of rewarding teachers who choose to remain in the classroom rather than to move into management positions.

AST positions embody two key concepts in the teaching profession in Australia. First, they recognise the need to introduce career diversification as a result of the greater variety of roles in schools – e.g. departmental head, team leader and manager of curriculum development and/or personnel development. Second, they reflect the need to reward teachers for their developing skills, performance and responsibilities in what constitutes a competency-based professional career ladder. Teachers, as they access AST positions, are expected to have deeper levels of knowledge, demonstrate more sophisticated and effective teaching, take on responsibility for co-curricular aspects of the school, assist colleagues and so on. Access to AST positions involves formal appraisal processes that are more summative in nature.

Source: Santiago et al. (2011).

Singapore: Linking teacher appraisal to career pathways

Singapore's Enhanced Performance Management System (EPMS) is a competency-based performance management tool to evaluate the performance of teachers and provide support for their development to achieve their aspiration in the education service.

•••



Box 5.2 Career progression in Australia and Singapore (continued)

EPMS was established through an extensive and comprehensive process of consultation with teachers from all levels. It is a structured process where work targets are set and reviewed holistically based on student outcomes, professional outcomes and organisational outcomes. EPMS also articulates the expected competencies of the teachers which help them identify areas of growth and development. Regular discussions between teachers and their supervisors using the EPMS are aimed to ensure rewards for teachers who have done well and mentorship for those who need to improve their performance.

Singapore's Education Service provides three different career tracks that cater to the different talents, interests and aspirations of teachers:

- The Teaching Track provides advancement opportunities for teachers who are keen to pursue a career in classroom teaching through progression to Senior Teacher, Lead Teacher, Master Teacher or Principal Master Teacher. These Senior Teachers will take on mentoring roles as they impart their expertise and share their experience with their colleagues and develop new pedagogies to meet learning needs.
- The Leadership Track presents teachers with opportunities to take on management and leadership positions in schools or at the Ministry of Education.
- The Senior Specialist Track is for teachers who are more inclined towards more specialised
 education fields. They work in the Ministry of Education and use their deep knowledge, skills
 and expertise to chart new grounds in educational developments.

The EPMS competency model is integrated across the three career tracks, with a core set of competencies developed to guide teachers' work, regardless of the career track they are on.

Source: OECD (2013a); Ministry of Education, Singapore.

Upper secondary teachers' professional development

Teachers' formal education, which may or may not include specific teacher education or training, can only go so far in preparing upper secondary teachers for their work. Induction and mentoring programmes, as well as other forms of continued professional development, can help retain teachers and improve their instruction and their students' achievement (Helms-Lorenz, Slof and van de Grif, 2013; Ingersoll, 2012; LoCasale-Crouch et al., 2012). This section examines upper secondary teachers' reports of their participation and engagement in induction, mentoring and professional development.

Induction

As can be seen in Figure 5.5, there appears to be great variation in the reported availability of induction activities and programmes across schools where upper secondary teachers work. Although most teachers work in schools where the principal reports some form of general and/or administrative introduction to the school for new teachers (88% on average, ranging from 72% in Italy to 100% in Denmark and Singapore), the availability of formal induction programmes is less prevalent (Table 5.5). Specifically, more than one in four upper secondary teachers (27%) work in a school where the principal reports no formal induction for teachers, although this proportion varies greatly among

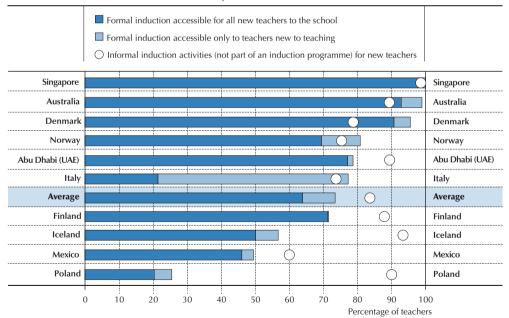


countries: three-quarters of teachers in Poland work in schools where the principal reports no formal induction programmes, whereas fewer than 5% of teachers work in such schools in Australia, Denmark, and none do in Singapore.

It is interesting to note that in some countries, the lack of availability of formal induction programmes for new teachers may be compensated for by the presence of informal induction activities (Table 5.5). In all participating countries and economies, most teachers work in schools where these more informal activities are taking place. Overall, 84% of upper secondary teachers work in schools where the principal reports the presence of informal induction activities (ranging from 60% in Mexico to 99% in Singapore). In Poland, where the reported availability of formal induction programmes is the lowest, the prevalence of informal induction activities is among the highest (90% of teachers work in schools where the principal reports informal activities), especially in those schools where principals report no access to formal induction. In these schools with no formal induction, 93% of teachers work in schools with reported access to informal induction activities. A similar situation is seen in Iceland, where more than two-fifths of teachers work in schools with no reported formal induction, but where all the teachers (100%) in these schools reportedly have access to informal induction activities.

■ Figure 5.5 ■ Access to induction programmes in upper secondary education

Percentage of upper secondary education teachers whose school principal reports the existence of induction processes for new teachers in the school



Data on access to induction are derived from principal questionnaires.

Countries are ranked in descending order, based on the cumulative percentage of teachers whose school principal reports access to formal induction programmes for all new teachers to the school and for only teachers new to teaching.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165962

TALIS also asked upper secondary teachers about their participation in induction activities during their first regular employment as a teacher (Table 5.6).1 On average, approximately half of upper secondary



teachers report having taken part in a general and/or administrative introduction to their school during their first regular employment as a teacher, though this proportion ranges from 25% of teachers in Norway to 80% in Singapore. Even fewer teachers report having taken part in a formal induction programme. On average, 45% of upper secondary teachers say they have done so. Among the ten participating countries and economies, teachers in Iceland and Norway are least likely to report having participated in such programmes (18% and 12% respectively), while such participation appears to be much more common for teachers in Singapore and Abu Dhabi (United Arab Emirates) (76% and 72%, respectively). Approximately half of teachers (51%) report having taken part in some informal induction activities, ranging from 31% in Italy to 60% in Singapore (Table 5.6).

Induction provides important support to new teachers and represents a key aspect of teachers continuing development. Moreover, findings from the main TALIS report (OECD, 2014) suggest that those teachers who engaged in induction are more likely to take part in further professional development. Unfortunately, not all teachers who do not take part in formal induction benefit from informal induction (Table 5.6). On the contrary, examining teachers' reports of participation in formal induction, a larger proportion of those who report having participated in formal induction also report having engaged in informal induction activities (57% compared to 45% for those who did not take part in formal induction). Since different participation patterns emerge in different countries, it seems important to study the country-specific profile of teachers who report undertaking induction to better understand those who do not participate in these programmes. Schools should ensure that induction is available to all new teachers and that teachers are encouraged to engage in these opportunities (see Box 5.3 for an example of a mandatory induction system in Italy).

Box 5.3 Mandatory induction programmes in Italy

In Italy, since 1982, formal induction programmes have been an official requirement for teachers (at all ISCED levels) in their probation year as permanent teachers in public schools; these programmes are not offered to teachers on temporary contracts, regardless of length of teaching time. The participation in formal induction for new permanent teachers is also mandated by the National Contract for School Personnel.

According to national legislation, the Ministry of Education sets up the formal induction programme, involving the National Institute for Documentation, Innovation and Research in Education (INDIRE), the Ministry's regional branches and schools in organising and implementing the planned induction activities for all new teachers in their probation year assigned that year to the individual schools. In general, if there are no new staff appointments to specific schools in a given year, no formal induction is offered in these schools that year.

Formal induction is currently carried out in blended-learning mode, and a new permanent teacher is generally assigned an expert teacher mentor who also contributes to the formal evaluation process at the end of the new teacher's probation and induction year. The permanent status of the new teacher cannot be confirmed unless he/she has successfully completed the induction activities and passed probation.

On account of new pension laws and limited public expenditure in recent years, there has been very low teacher turnover, which has had a direct impact on the number of new teachers hired on permanent contracts (and undertaking formal induction).

Source: Italy's Ministry of Education.



Mentoring

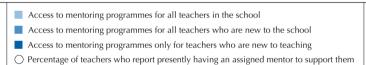
Mentoring can be an effective way of providing teachers with support and collaborative learning opportunities. As shown in Figure 5.6, there is wide variation among the ten countries and economies in the reported availability of mentoring for upper secondary teachers (see also Table 5.7). On average, nearly three-quarters (73%) of teachers work in schools where the principal says there is a mentoring system available. Only 36% of teachers in Mexico work in such schools, while 99% of teachers in Singapore work in schools with the reported availability of a mentoring system. Moreover, when such a mentoring system is in place, the subject field of the mentor and that of the teacher being mentored are generally the same.

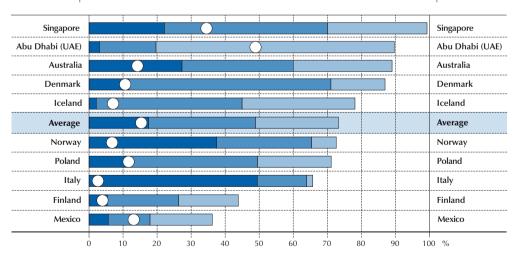
The TALIS data show that despite this reported availability of mentoring systems in schools, very few upper secondary teachers report engaging in mentoring, either as a mentor or as a mentee (Figure 5.6 and Table 5.7). Overall, only 15% of teachers report currently having a mentor assigned to them, while nearly one-fifth (19%) of teachers report currently serving as a mentor for one or more teachers. Among the ten participating countries and economies, engagement in mentoring is most common in Singapore and Abu Dhabi (United Arab Emirates), where larger proportions of teachers report having a mentor (34% and 49%, respectively) and serving as mentors (44% and 30%, respectively). In contrast, fewer than one in ten teachers in Finland (4%), Iceland (7%), Italy (3%) and Norway (7%) reports having a mentor, and fewer than one in ten reports serving as a mentor in Finland (5%) and Italy (4%). This might represent a missed opportunity.

■ Figure 5.6 ■

Access to and participation in mentoring programmes in upper secondary education

Percentage of upper secondary education teachers whose school principal reports the existence of a mentoring system in the school and characteristics of the mentors and the percentage of upper secondary education teachers who report having an assigned mentor!





^{1.} Refers to mentoring by or for teachers at the school. Does not refer to students within the teacher education who are practising as teachers at the school. Countries are ranked in descending order, based on the cumulative percentage of teachers whose school principal reports the existence of a mentoring system in the school.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165979

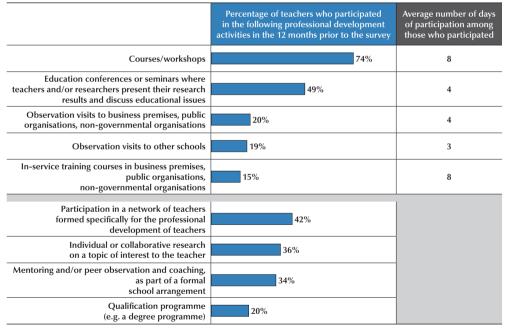


Continuing professional development

Upper secondary teachers report being very much engaged in their continued professional development. More than nine in ten teachers (91%) report having undertaken some professional development activities in the past 12 months (Table 5.8). As shown in Figure 5.7, by far, the most frequent type of professional development undertaken by upper secondary teachers is courses and workshops (see also Table 5.9). On average, nearly three-quarters of teachers report having participated in courses and workshops (74%), while just under half of teachers say they engaged in education conferences or seminars (49%) or that they participated in a network of teachers (42%).

■ Figure 5.7 ■ Professional development recently undertaken by upper secondary education teachers, by type and intensity

Participation rates and average number of days for each type of professional development reported to be undertaken by upper secondary education teachers in the 12 months prior to the survey



Items are ranked in descending order for each block, based on the percentage of teachers who report having participated in professional development activities in the 12 months prior to the survey.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165986

TALIS asked teachers about their level of needs for further development in various key areas related to their work. As shown in Figure 5.8, upper secondary teachers are most likely to identify new technologies in the workplace, ICT skills for teaching and teaching students with special needs as areas of high need for professional development (see also Table 5.10).²



■ Figure 5.8 ■

Teachers' needs for professional development in upper secondary education

Most cited needs for professional development among upper secondary education teachers and the percentage of teachers indicating they have a high level of need in these areas

	1st most cited need	%	2 nd most cited need	%	3 rd most cited need	%
Australia	ICT skills for teaching	13.5	New technologies in the workplace	13.0	Teaching students with special needs ¹	7.1
Denmark	ICT skills for teaching	11.0	Teaching students with special needs ¹	10.4	New technologies in the workplace	8.9
Finland	ICT skills for teaching	16.0	New technologies in the workplace	14.2	Teaching students with special needs ¹	9.8
Iceland	ICT skills for teaching	20.4	New technologies in the workplace	15.4	Knowledge of the curriculum	14.8
Italy	ICT skills for teaching	36.1	New technologies in the workplace	35.7	Teaching in a multicultural or multilingual setting	25.6
Mexico	Teaching students with special needs ¹	36.3	Teaching in a multicultural or multilingual setting	28.9	New technologies in the workplace	22.0
Norway	ICT skills for teaching	11.5	New technologies in the workplace	11.0	Student evaluation and assessment practice	10.8
Poland	Teaching students with special needs ¹	12.9	New technologies in the workplace	12.2	Student behaviour and classroom management	11.1
Singapore	Teaching students with special needs ¹	12.2	ICT skills for teaching	12.1	Student evaluation and assessment practice	10.6
Sub-national entities						
Abu Dhabi (UAE)	Teaching students with special needs ¹	20.7	New technologies in the workplace	19.2	Student career guidance and counselling	12.7

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933165991

In general, these tend to be the top three areas identified by the highest proportion of teachers in most participating countries (Figure 5.8). However, interesting differences emerge for some countries. For example, one in four teachers in Italy and Mexico identifies teaching in a multicultural or multilingual setting as one of the top three areas of high need for professional development. (See Box 5.4 for contextual information about multicultural contexts in Italy.) In Poland, although generally few teachers report a high need for professional development in any area, one of the areas most identified includes student behaviour and classroom management (11%). In Singapore, student evaluation and assessment practice is the third most often cited area for a high need for professional development (11%). These findings show that upper secondary teachers in different countries have specific needs for further development that may be dependent on the national or system context in which they work. Examining the results from a national or local perspective is especially important for identifying teachers' specific needs.



Box 5.4 Immigration in Italy and meeting teachers' professional development needs for teaching in multicultural and multilingual contexts

The need expressed by teachers in Italy for specific skills to help them cope with teaching in a multicultural context has its roots in the strong influx of immigrants the country has experienced, especially in the last 20 years. Unlike other countries, where immigration flows date back many years or decades, the phenomenon is relatively recent for Italy.

In the early 1990s, Italy had a total of only 18 794 pupils with non-Italian citizenship (1990/91 school year). Ten years later (2000/01 school year), their numbers had risen to 147 406 students (+684.32%), then reached 786 630 in the 2012/13 school year (+434% since the beginning of the 21st century). In the light of the demographic decline that Italy is facing, the flow of foreign students (most of whom come from non-EU countries) accounts for the overall increase in the number of students, while compensating for the decline in the number of students with Italian citizenship.

Since the very beginning of this phenomenon, the Italian approach has been to fully integrate all foreign newcomers into the schools through intercultural education as a crosscutting dimension to all subjects and involving all teachers. Primary schools were initially hosting the majority of these students. In the last decade, however, the most significant increase has occurred in upper secondary schools. From 2000/01 to 2012/13, the number of foreign students increased from 18 300 to 175 100 (accounting for 6.6% of the total number of students in ISCED 3). However, learning outcomes data show that their educational careers are frequently characterised by negative results and high dropout rates.

In the light of these facts, the Ministry of Education and Research has recently provided new guidelines (February 2014) to help schools and other relevant stakeholders better face the challenge, and has allocated new funds for teachers' professional development in areas of high immigrant intake (Law 128/2013).

Source: Italy's Ministry of Education.

Barriers to further participation in professional development

To better understand participation in professional development and provide insight into potential policy implications, TALIS asked teachers to indicate barriers to their further participation in such activities. The average responses from this question are presented in Table 5.11. Across the ten participating countries and economies, the reasons that teachers cited most commonly as barriers to their engagement in further professional development are a conflict with the work schedule (53%) and a lack of incentives for participating in professional development (48%). Conflicts with the work schedule appear to be particularly problematic for teachers in Australia, Iceland, Italy and Singapore, where more than three in five teachers cite this reason as a barrier to their engagement in further professional development.

More than one-third of teachers also report that the available opportunities are too expensive or unaffordable (37%) or that there are no relevant professional development offered (38%). This last barrier is especially cited by upper secondary teachers in Italy (70%), Mexico (50%) and Poland (49%).

UPPER SECONDARY TEACHERS' PEDAGOGICAL BELIEFS AND PRACTICES

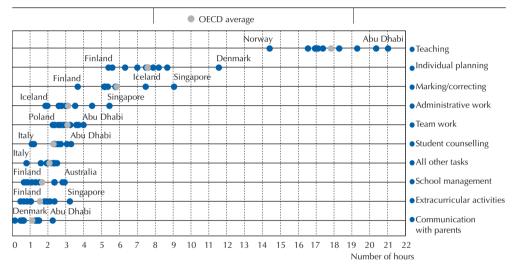
The core of teachers' work is teaching. The *TALIS 2013 Results* report echoes the findings from the first TALIS cycle and shows that lower secondary teachers report spending most of the lesson time and the largest proportion of the working week on teaching (OECD, 2009; 2014). Quality instruction encompasses



the use of a wide variety of teaching practices, and the teaching practices deployed by teachers play an important role in student learning and motivation to learn (Seidel and Shavelson, 2007). Quality instruction is also supported by a key resource in the school – other teachers. Working collaboratively with other teachers to share resources, exchange ideas, and provide support and learning opportunities is also a key element of teachers' work (Clement and Vandenberghe, 2000; Murawski and Swanson, 2001). This section explores upper secondary teachers' pedagogical practices, including their use of student assessment practices, as well as their engagement in collaborative practices with their colleagues.

■ Figure 5.9 ■ Teachers' working hours in upper secondary education

Average number of 60-minute hours upper secondary education teachers report spending on the following activities during the most recent complete calendar week prior to the survey^{1, 2}



^{1.} 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.

For each category, the country with the lowest value is indicated on the left side, and the country with the highest value on the right side. Tasks are ranked in ascending order, based on the average number of hours teachers report spending on their tasks.

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933166009

Teachers' working time

This section examines upper secondary teachers' working time in more detail. On average across all countries, teachers report working 38 hours per week (Table 5.12).³ Total working hours vary from 31 hours in Finland to 48 hours in Singapore. Figure 5.9 presents the number of hours teachers report spending on specific tasks. In particular, teachers report spending the most number of hours teaching (18 hours), followed by planning or preparing lessons (8 hours). In Singapore, teachers also report spending an almost equal amount of time on marking students' work (9 hours) and on preparing lessons (8 hours). It is worth noting the number of hours teachers report spending on team work and dialogue with colleagues in the school (3 hours on average) and how consistent this is across countries (with a range of 2 to 4 hours per week). This is an area countries may want to pay attention to, given the evidence suggesting the strong relationships between collaboration and teacher self-efficacy and job satisfaction (OECD, 2014).

^{2.} Each dot represents a country value except the grey dot representing the average.



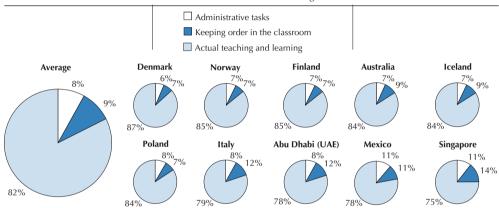
Increased collaboration among colleagues has been known to play an important role in increasing school effectiveness by reducing achievement gaps (Levine and Marcus, 2007).

TALIS also provides information on the distribution of time spent in an upper secondary education classroom during an average lesson (Table 5.13). As shown in Figure 5.10, upper secondary teachers across the ten participating countries and economies report spending their class time in similar ways. On average, teachers say that 82% of their class time during an average lesson goes to actual teaching and learning and comparable proportions of their time go to keeping order in the classroom (9%) and administrative tasks (8%).

■ Figure 5.10 ■

Distribution of class time during an average lesson in upper secondary education

Average proportion of time upper secondary education teachers report spending for each of these activities in an average lesson^{1, 2}



- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. The sum of time spent in an average lesson may not add up to 100% because some answers that did not add up to 100% were accepted. Countries are displayed in descending order, based on the proportion of time they spend on actual teaching and learning.

 Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166010

Teaching practices in upper secondary

Teachers were also asked about specific teaching practices they use frequently in their classrooms (Figure 5.11 and Table 5.14).⁴ On the one hand, it is noteworthy that in most countries and economies, most upper secondary teachers report that they frequently demonstrate to their pupils why new knowledge is useful by referring to a problem from everyday life (68% on average for TALIS participants). Similarly, on average, most teachers say that they let students practice similar tasks until every student has understood the subject (66%). On the other hand, it appears that fewer teachers may be ensuring that the individualised learning needs of all their students are met, as only about one-third of teachers report frequently giving different work to students based on their abilities (35% on average).

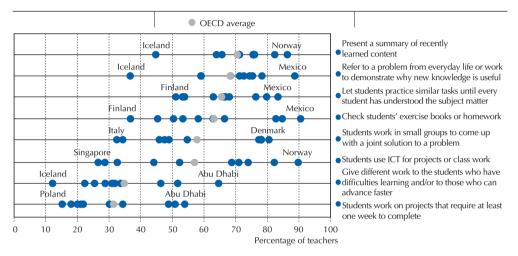
The *TALIS 2013 Results* report explored lower secondary teachers' use of active teaching practices (OECD, 2014). The report draws an important distinction between active and passive teaching strategies, which differ in the degree to which students are engaged in the process of learning. Passive teaching is characterised by strategies involving lecturing and has little student involvement. Active teaching practices occur when students play a central role in the learning process (Adesope and Nesbit, 2013; Orlich et al., 2013). A number of studies point to the positive effects of using active teaching strategies in the classroom. Indeed, the use of active, co-operative and project-based learning strategies have been found

5

to improve student learning (Dunlosky et al., 2013; Johnson and Johnson, 2009). In TALIS, teachers were asked about the frequency they use such active teaching practices that involve (1) students working in small groups to come up with a joint solution to a problem or task, (2) students working on projects that require at least one week to complete, and (3) students using ICT for projects or class work.

• Figure 5.11 • Teaching practices in upper secondary education

Percentage of upper secondary education teachers who report using the following teaching practices "frequently" or "in all or nearly all lessons"^{1, 2}



- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. Each dot represents a country value except the grey dot representing the average.

For each category, the country with the lowest value is indicated on the left side, and the country with the highest value on the right side. Teaching practices are ranked in descending order, based on the percentage of teachers report using them "frequently" or "in all or nearly all lessons". Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166020

These active practices promote skills that students should possess for academic success and may be highly sought after in post-secondary education and the workplace. However, TALIS suggests they are not the most frequently reported by teachers overall (Table 5.14). Just over half of teachers on average report frequently using practices that require students to work in small groups (58%) or require the use of ICT (57%), while fewer than one-third of teachers report students frequently working on projects that take at least one week to complete (31%). Even more striking are the proportions of teachers who report never using some of these practices. Nearly one-quarter of teachers report never having their students work on projects that require at least a week to complete (23%), and more than one in ten report never having their students use ICT (11%), although this proportion is a high as 21% in Poland and 31% in Italy. While only a small proportion of teachers overall report never having their students work in small groups (5%), this proportion reaches 15% in Italy (see Table 5.14.Web).

In contrast, in Denmark and Norway, some of these strategies appear to be more common practices. In these two countries, nearly eight in ten teachers or more report frequently having their students work in small groups or with ICT. As mentioned in Chapter 3, while many of these differences stem from teachers' individual preferences, some may also be explained by national educational programmes. For example, the Ministry of Education in Norway prioritised ICT use throughout the educational sector (see Box 3.1).



Pedagogical beliefs

Teachers' choices of pedagogical practices in their classroom can be influenced by their beliefs about how students learn (Hoy, Davis and Pape, 2006; Leder, Pehkonen and Torner, 2003; Muijs and Reynolds, 2002).

Table 5.15 examines elements related to upper secondary teachers' beliefs about teaching and learning. As shown in the table, teachers in all participating countries and economies overwhelmingly agree that their role as a teacher is to facilitate students' own inquiry (95% of teachers on average). The great majority of teachers on average also agree that thinking and reasoning processes are more important than specific curriculum content (84%) and that students learn best by finding solutions to problems on their own (80%). Most teachers also believe that students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved (90% of teachers on average). In Iceland, the curriculum reform is following this trend and widening the 1999 knowledge-based curriculum (see Box 5.5). Fewer teachers in Italy agree with this statement (68%).

Box 5.5 Iceland's focus on knowledge, skills and competence

The National Curriculum Guide (Law no. 92/2008 and the National Curriculum Guide in 2011 [MESC, 2011a]) includes a general section and has only three compulsory subjects – Icelandic, mathematics and English – across the programmes. The schools have the freedom to retain traditional subjects from the 1999 curriculum or adopt new ones, implement interdisciplinary work and cross-curricular courses according to the needs and diversity of students.

The guide has a definite focus on knowledge, skills and competence-based education as imported from the European Commission (2008) instead of the mostly knowledge-based focus of the 1999 curriculum. In addition, there are six fundamental pillars – literacy, sustainability, democracy and human rights, equality, health and well-being, and creativity – that are meant to guide the curriculum across all sections of school communities from administration to teaching and learning.

Sources: Iceland's Ministry of Education, Science and Culture (http://eng.menntamalaraduneyti.is/publications/curriculum/); Ragnarsdóttir and Jóhannesson (2014); OECD (2012).

Student assessment in upper secondary schools

The relationship between student assessment and student outcomes has been the focus of much empirical research over the past few decades. Different types of assessments have been found to either increase or decrease student motivation and performance depending on how they are designed, implemented and used (OECD, 2013b). Assessment is most effective when it involves a diverse array of methods, including those that require performance, and when it is ongoing rather than episodic (Astin et al., 2013; OECD, 2013b).

TALIS asked upper secondary teachers about the frequency with which they use a variety of methods for assessing their students' learning (Table 5.16). On average, more than three-quarters (78%) of upper secondary teachers report that they observe students while students are working on particular tasks and provide them with immediate feedback frequently or in nearly all lessons. Although there are some differences among countries, this is reported by the majority of teachers in all countries and

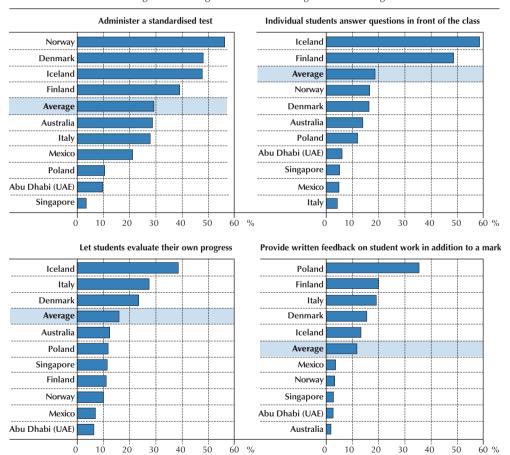


economies, and fewer than one in ten teachers in all ten participating countries or economies reports never doing this.

Figure 5.12 illustrates methods of student assessment for which larger differences among the countries can be seen. For example, three in four teachers or more in Italy and Mexico report asking individual students to answer questions in front of the class, while about half of teachers or more in Finland (49%) and Iceland (58%) report never or almost never doing this in their class. Although more than one-third of teachers in Poland (35%) report never or almost never providing written feedback on student work, more than eight in ten teachers in Australia (82%) and Abu Dhabi (United Arab Emirates) (85%) report doing this frequently or in all or almost all their lessons.

■ Figure 5.12 ■ Assessment of student learning in upper secondary education

Percentage of upper secondary education teachers who report "never or almost never" using the following methods of assessing student learning!



^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Countries are ranked in descending order, based on the percentage of teachers who report "never or almost never" using the following methods of assessing student learning.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166036



The use of standardised tests appears to be less common in Nordic countries. Teachers in these countries are most likely to report never or almost never using such assessment (48% in Denmark, 39% in Finland, 48% in Iceland and 56% in Norway), in contrast to Poland, Singapore and Abu Dhabi (United Arab Emirates), where only 10%, 3% and 10% of teachers, respectively, report never or almost never using such assessments. These findings represent an important difference in the common approach to assessing student learning.

Teacher co-operation and collaboration in upper secondary education

Co-operation implies working together to achieve common goals. For teachers, this may mean exchanging and developing materials or new pedagogical practices, preparing lessons together or team teaching. Such co-operation can also encourage and support teachers and help build and reinforce a culture of shared values and continuous improvement. Research suggests that lower levels of co-operation are restricted to sporadic exchanges of information and materials while higher levels include increasing degrees of interaction, critical reflection, co-ordination and trust (Graesel, Fußangel and Pröbstel, 2006). The *TALIS 2013 Results* report revealed, in most participating countries, strong relationships between co-operation among lower secondary teachers, whether through professional learning or collaborative practices, and higher levels of self-efficacy and job satisfaction (OECD, 2014). However, analyses from both TALIS 2008 and TALIS 2013 suggest that in most countries, basic forms of co-operation among staff are common, while participation in higher levels of co-operation, where teachers work together on the core of their professional activities, is much less common (OECD, 2014; Vieluf et al. 2012).

TALIS 2013 asked teachers about the frequency in which they engage in an array of collaborative activities in their school. Table 5.17 presents the percentages of upper secondary teachers who report engaging in various collaborative behaviours with their colleagues. Consistent with previous findings, teachers tend to be more likely to report engaging in simpler forms of exchange and coordination for teaching as opposed to more complex forms of professional collaboration. More than 90% of teachers on average (and more than 80% in each participating country and economy) report exchanging teaching materials with colleagues, engaging in discussions about specific students, working with other teachers to evaluate student progress and attending team conferences. In comparison, fewer teachers report teaching jointly (64%), observing other teachers' classes and providing feedback (54%), engaging in joint activities across different classes and age groups (70%) and taking part in collaborative professional learning (84%).

The proportion of upper secondary teachers who report never engaging in certain types of collaborative activities is also revealing (Figure 5.13 and Table 5.17.Web). The figure clearly shows that much higher proportions of teachers report never engaging in more complex forms of collaboration (right panel). In particular, nearly three-quarters of teachers in Iceland (74%) and more than four in ten teachers in Italy (42%) and Norway (43%) report never engaging in team teaching. Also, more than two-thirds of teachers in Finland (67%), Iceland (82%) and Italy (70%) report never observing other teachers' classes and providing feedback. Equally important proportions of teachers in Italy (37%), Finland (32%) and Norway (32%) report never taking part in collaborative professional learning. It would be valuable to investigate the reasons or barriers preventing these teachers from engaging in these types of collaborative behaviours.



■ Figure 5.13 ■

Teacher co-operation in upper secondary education

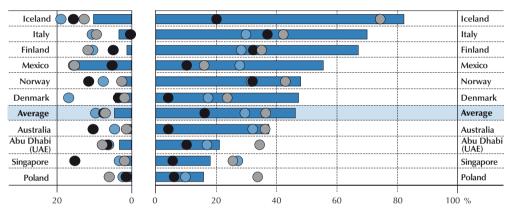
Percentage of upper secondary education teachers who report never doing the following activities

Simpler forms of exchange and coordination for teaching

- Never engage in discussions about the learning development of specific students
- Never exchange teaching materials with colleagues
- Never work with other teachers in my school to ensure common standards in evaluations for assessing student progress
- Never attend team conferences

More complex forms of professional collaborative behaviour

- Never observe other teachers' classes and provide feedback
- Never teach jointly as a team in the same class
- Never engage in joint activities across different classes and age groups (e.g. projects)
- Never take part in collaborative professional learning



Countries are ranked in descending order, based on the percentage of teachers who report never observing other teachers' classes and provide feedback.

Source: OECD, TALIS 2013 Database.

StatLink (1872) http://dx.doi.org/10.1787/888933166040

UPPER SECONDARY TEACHERS' SELF-EFFICACY AND JOB SATISFACTION

This section focuses on teachers' feelings of self-efficacy and teachers' levels of job satisfaction. Teachers' feelings of self-efficacy and job satisfaction can have implications for teachers' retention and commitment to the school, their job performance and the academic achievement of their students (Klassen et al., 2009; Price and Collett, 2012). Although self-efficacy does not measure teachers' actual efficacy in the classroom, it is an important measure of teachers' confidence in their own abilities in the classroom and, as discussed in Chapter 3, has been linked to student outcomes. It is also important to consider teachers' job satisfaction, as it has been shown to be related to teacher absenteeism and attrition (Wriqi, 2008; Zembylas and Papanastasiou, 2004), and a recent study in Norway also suggests that teacher job satisfaction predicts teachers' motivation to leave the teaching profession (Skaalvik and Skaalvik, 2011). This section examines the teacher, classroom and school characteristics that may contribute to higher or lower levels of self-efficacy and job satisfaction.

Self-efficacy

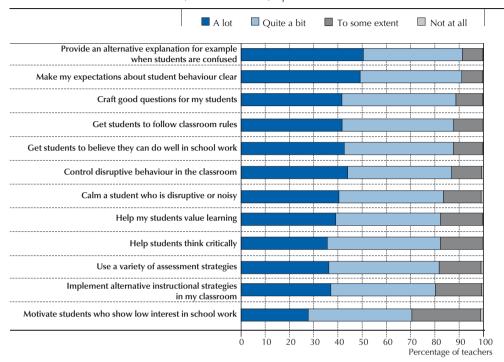
In general, upper secondary teachers report high levels of confidence in their abilities to teach and engage their students and deal with classroom management issues. As shown in Figure 5.14, on average, more than seven in ten teachers show high levels of confidence in accomplishing the elements related to these aspects of teacher self-efficacy (see also Table 5.18).



Figure 5.14

Teachers' self-efficacy in upper secondary education

Percentage of upper secondary education teachers who feel they can do the following "not at all", "to some extent", "quite a bit" or "a lot"



Items are ranked in descending order, based on the percentage of teachers reporting that they can do the following "quite a bit" or "a lot". Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933166059

Regarding aspects of their teaching, 89% of teachers report that they agree "quite a bit" or "quite a lot" that they can craft good questions for their students, 80% that they can implement alternative instructional strategies, 82% that they can use a variety of assessment strategies and 91% that they can provide alternative explanations when students are confused. Slightly fewer teachers in Finland were confident in their abilities to use a variety of assessment strategies (63%), to provide alternative explanations (73%) and to provide alternative instructional strategies (70%). Similarly, fewer teachers in Poland (66%) reported high confidence in their abilities to provide alternative instructional strategies.

With respect to student engagement, although most teachers have high confidence in their abilities on average, comparatively fewer upper secondary teachers in Norway exhibit high confidence in their ability to help their students value learning (53%), motivate students who show low interest in school work (39%) and help students think critically (65%). This is in contrast to neighbouring Denmark, where among the highest proportions of teachers report high levels of self-efficacy in these areas (97%, 76% and 93% respectively).

Finally, relatively fewer teachers in Finland and Singapore tend to report high levels of self-efficacy in the area of student behaviour management (though seven in ten teachers or more in both of these



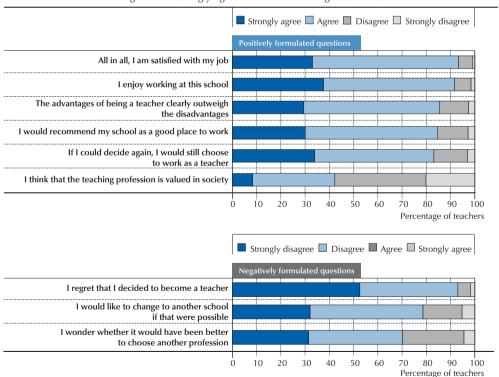
countries still report high self-efficacy). For example, 79% of upper secondary teachers in these two countries report high levels of confidence in their ability to control disruptive behaviour, compared with 87% of teachers on average for all participating countries and economies. Between 70% and 73% of teachers in these two countries report high levels of confidence in their ability to calm disruptive students compared with 84% of teachers on average in all participating countries and economies (Table 5.18.).

Job satisfaction

Upper secondary teachers are generally satisfied with their jobs. As Figure 5.15 shows, about nine in ten teachers or more in all participating countries and economies say that, all in all, they are satisfied with their job (see also Table 5.19). Indeed, the great majority of teachers tend to be satisfied with their work environment: on average, 92% of teachers say they enjoy working at their school, and 85% would recommend their school as a good place to work, while only 21% would like to change schools if that were possible (although this percentage reaches 37% in Singapore).

■ Figure 5.15 ■
Upper secondary teachers' job satisfaction

Percentage of upper secondary education teachers who "strongly disagree", "disagree", "agree" or "strongly agree" with the following statements



Items are ranked in descending order, based on the percentage of teachers who strongly agree or agree with the statement for positively formulated questions. For negatively formulated questions the order is reversed, meaning it is in descending order based on the percentage of teachers who "strongly disagree" or "disagree" with the statement.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166066

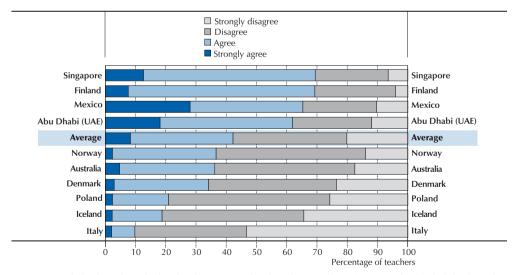
Upper secondary teachers also report being satisfied with their choice of profession. About eight in ten teachers in all participating countries and economies state that if they could decide again they would still choose to work as a teacher (83% on average), and only 7% on average say that they regret that they decided to become a teacher (ranging from 2% in Finland to 12% in Abu Dhabi [United Arab Emirates]). However, nearly half of the teachers in Singapore (45%) wonder whether it would have been better to choose another profession (compared with 30% on average). This perhaps reflects the high educational qualifications and wide choices of careers available to teachers in Singapore.

Figure 5.16 displays the proportion of upper secondary teachers who agree or disagree that their profession is valued in society. Although only 42% of upper secondary teachers on average agree that the teaching profession is valued in society, nearly seven in ten teachers (69%) in Singapore and Finland believe this to be the case (see Box 3.3 for a description of the status of the teaching profession in Finland). In contrast, teachers in Australia (36%), Denmark (34%) and Norway (37%) are much less positive about the status of their profession in society, with only about one-third of teachers agreeing that teaching is valued, as is shown in Figure 5.16. In contrast, teachers in Poland (21%) and Iceland (19%) are much less positive about the status of their profession in society, with only about one-fifth of teachers agreeing that teaching is valued, while in Italy the rate is even lower (10%), as is shown in Figure 5.16. In Italy, this result may be related to the fact that a much lower percentage of teachers than average (60% compared with 85%) agree that the advantages of being a teacher clearly outweigh the disadvantages.

Figure 5.16 Upper secondary teachers' view of the way society value the teaching profession

Percentage of upper secondary education teachers who "strongly disagree", "disagree", "agree" or "strongly agree" with the following statement:

I think that the teaching profession is valued in society



Countries are ranked in descending order, based on the percentage of teachers who "strongly agree" or "agree" that they think that the teaching profession is valued in society.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166073

Generally, male and female upper secondary teachers do not differ in their views regarding whether their profession is valued in society (Table 5.20). However, in Mexico and Italy, male teachers are more



likely than their female colleagues to agree that their profession is valued in society. In some countries, teachers with more teaching experience have more negative views in this respect. Specifically, teachers in Denmark, Iceland, Norway and Poland with more than five years of experience are less likely than their less experienced colleagues to say that their profession is valued by society. This may indicate disillusionment in teachers that have been in the profession for a longer period of time. But providing teachers with more opportunities to actively participate in school decisions can have the opposite influence on these views. As shown in Table 5.20, teachers in all participating countries and economies who say that their school provides teachers with such opportunities are also more likely to believe that teaching is a valued profession in society.

Thus, while TALIS data show that the vast majority of upper secondary teachers are satisfied with their jobs, fewer believe that teaching is a valued profession in society. This perception could impact the recruitment of high-quality professionals into the teaching profession and could also affect whether teachers stay in the profession. Many countries have enacted policies aimed to increase the prestige of the teaching profession in order to avoid these issues (Schleicher, 2011). Further analyses are still needed to examine the origins of these negative perceptions and to uncover the best ways to improve them (such as perhaps ensuring that teachers play a key role in school decision making).

Teacher self-efficacy and job satisfaction in relation to teacher background variables

To a certain extent, teachers' self-efficacy and job satisfaction can be influenced by the demographic characteristics of individual teachers. The TALIS 2013 Results report showed that, in most countries, lower secondary teachers' gender, years of work experience and any training they have received in the content, pedagogy and classroom practice of the subjects they teach are all related to how confident they are in their abilities and how they feel about their job (OECD, 2014). This section investigates the possible relationships between these demographic factors and teacher self-efficacy and job satisfaction for upper secondary teachers.

Table 5.21 shows the relationships between teachers' characteristics and their self-efficacy, while Table 5.22 shows the same for job satisfaction.⁵ In most of the participating countries and economies, male teachers tend to have lower confidence in their abilities. The exceptions are Mexico, Singapore and Abu Dhabi (United Arab Emirates), where there is no difference detected between female and male teachers. Male teachers also tend to be less satisfied with their jobs in Australia, Denmark, Finland and Norway, while they tend to show high job satisfaction in Singapore and Abu Dhabi (United Arab Emirates).

Although having more experience tends to be associated with high levels of self-efficacy, it also tends to be related with lower levels of job satisfaction for upper secondary teachers in many countries. More experienced teachers (teachers with more than five years of experience) show higher levels of selfefficacy than their less experienced colleagues in all countries and economies except in Finland and Poland (where no difference is apparent), but they report being less satisfied with their job in Denmark, Finland, Norway and Poland (although note that in Mexico and Singapore, more experienced teachers report higher levels of job satisfaction than less experienced teachers).

The extent to which the content, pedagogy and classroom practice were included in teachers' formal education is also related to teachers' feelings of self-efficacy and job satisfaction. More specifically, the less teachers report that these elements were included in their formal education and training, the lower



their feelings of self-efficacy and job satisfaction (in all countries and economies except Finland for self-efficacy). These findings underscore the importance of tailoring upper secondary teachers' training to include the content, pedagogy and classroom practice for the subjects they will teach.

Teacher self-efficacy and job satisfaction in relation to school and classroom environment

This section examines the relationships between upper secondary teachers' feelings of self-efficacy and job satisfaction with factors that may be associated with more challenging school and classroom environments. Upper secondary schools are classified as being more challenging if the principal indicated that the student composition of their school included more than 10% of students with a native language different from the language of instruction, more than 10% of students with special needs or more than 30% of students from socio-economically disadvantaged homes. Classrooms are considered to be challenging if more than 10% of students in the classroom are low academic achievers or more than 10% of students have behavioural problems. As for the analyses for the primary (Chapter 3) and lower secondary teachers (OECD, 2014), classrooms in which 10% or more of the students are academically gifted are also included in this category, as teaching to a wide range of student abilities in one class can also be a challenge (Major, 2012).

Table 5.23 shows the relationships between upper secondary teachers' feelings of self-efficacy and the student composition in the school, class size and the student composition in the classroom. The findings are inconsistent across countries for student composition in the school. Although teachers in Australia and Denmark who work in schools with higher proportions of students whose first language is different from the language of instruction show higher self-efficacy, the opposite is the case in Italy, Mexico and Abu Dhabi (United Arab Emirates). In Iceland and Abu Dhabi (United Arab Emirates), teachers working in schools with higher proportions of students with special needs showed lower levels of self-efficacy, while in Finland, teachers working in schools with higher proportions of students from socio-economically disadvantaged homes also have lower levels of confidence in their abilities. This may indicate that upper secondary teachers in Australia and Denmark feel well prepared and supported to work with a linguistically diverse student population. In contrast, in Finland, Iceland, Italy, Mexico or Abu Dhabi (United Arab Emirates), teachers in more challenging schools (whether schools that are linguistically diverse, have lower SES or have higher proportions of students with special needs) may not feel well equipped to face the challenges these student populations may bring to the school.

Class size does not appear to be related to upper secondary teachers' levels of self-efficacy except in Finland, where teachers in larger classrooms tend to show slightly higher levels of confidence in their abilities. On the other hand, the student composition in the classroom is more closely related to teachers' feelings of self-efficacy. Specifically, teachers in Australia, Denmark, Italy, Norway and Poland who report higher proportions of low academic achievers in their class have lower levels of self-efficacy, and in Mexico, Poland and Abu Dhabi (United Arab Emirates), those who work in classrooms with higher proportions of students with behavioural problems have lower self-efficacy. In contrast, teachers who report higher proportions of academically gifted students in their classroom show higher levels of self-efficacy in almost all participating countries and economies.

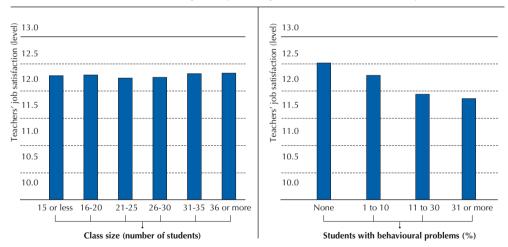
Table 5.24 shows the relationships between upper secondary teachers' levels of job satisfaction and the same school and classroom characteristics previously discussed in relation to self-efficacy. In general, the student composition of the school does not appear to be strongly related to teachers'



job satisfaction, or such relation, when existing, varies across the different countries and economies. Working in a school with greater levels of linguistic diversity among the student population is not related to teacher job satisfaction in any of the participating countries or economies. Moreover, only in Finland and Iceland do teachers who work in schools with higher proportions of students with special needs show lower levels of job satisfaction. Finally, in Australia, Italy and Abu Dhabi (United Arab Emirates), teachers who work in schools with higher proportions of students from socioeconomically disadvantaged homes tend to have lower levels of job satisfaction, but teachers in Finland who work under those conditions have a higher level of job satisfaction.

Perhaps not surprisingly, the classroom environment is much more closely related to teachers' job satisfaction. However, once again, it is not so much the number of students in a classroom that seems to matter, but rather the types of students who are in the classroom (Figure 5.17). In almost all participating countries and economies, teachers who report higher proportions of low academic achievers in their classroom also tend to have lower levels of job satisfaction. In Finland, Italy, Mexico, Poland, Singapore and Abu Dhabi (United Arab Emirates), lower job satisfaction is also associated with higher proportions of students with behavioural problems among teachers. In contrast, teachers in Australia, Italy, Mexico, Norway, Poland and Abu Dhabi (United Arab Emirates) who report having more academically gifted students report higher job satisfaction.

■ Figure 5.17 ■ **Upper secondary teachers' job satisfaction and class composition**Upper secondary teachers' job satisfaction level according to the number of students in the classroom and according to the percentage of students with behavioural problems¹



1. Data on class size and students with behavioural problems are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166088



Notes

- 1. Note that the first employment as a teacher may vary greatly among teachers, thus their reports of participation or lack of participation in induction programmes may refer to periods up to decades prior to the survey. Policies on participation in induction programmes in these cases may have changed significantly.
- 2. The main purpose of ICT in education is to integrate ICT equipment and tools into the teaching-learning process as media and methodology. New technologies (on workplaces) concern the application of science to industrial or commercial objectives by way of machines, structures and tools on a relatively large scale. Since the second half of the 20th century, the new technologies are centred on digital programming techniques.
- 3. Teachers were asked how many total hours they spent during their most recent complete calendar week on all their work-related tasks (including teaching, planning lessons, marking, collaborating with other teachers, participating in staff meetings and on other tasks related to their job at this school). They were asked to include tasks that took place during weekends, evenings or other off-classroom hours.
- 4. Teachers were asked to refer to a randomly chosen class they currently teach from their weekly timetable.
- 5. See Annex A for details about how to interpret the results from these analyses and for details about the variables and controls used in the linear regression analyses.
- 6. To determine the cut-off points for the percentages of students needed to form these categories of more challenging schools, the overall distribution of teachers in schools with certain proportions of students with each type of characteristic was examined. These thresholds of more than 10% or more than 30% were chosen because in each one of these cases, less than one-fifth of the teachers overall work in schools characterised as being more challenging.
- 7. Similarly, the cut-off points were determined by reviewing the distribution of responses and selecting a point where both the representation of the responses and sufficient variability could be meaningfully maintained.

References

Adesope, O.O. and J.C. Nesbit (2013), "Learning with animated and static concept maps", *Learning and Instruction*, Vol. 27, pp. 1-10.

Astin, A.W. et al. (2003), "Nine principles of good practice for assessing student learning", AAHE Assessment Forum, Seattle, WA, June 2003.

Clement, M. and R. Vandenberghe (2000), "Teachers' professional development: A solitary or collegial (ad) venture?", Teaching and Teacher Education, Vol. 16, pp. 81-101.

Danielson, C. (2001), "New trends in teacher evaluation", Educational Leadership, Vol. 58/5, pp. 12-15.

Desimone, L. (2002), "How can comprehensive school reform models be successfully implemented?", Review of Educational Research, Vol. 72/3, pp. 433-479.

Dunlosky et al. (2013), "Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology", *Psychological Science in the Public Interest*, Vol. 14, pp. 4-58.

Graesel, C., K. Fußangel and C. Pröbstel (2006), "Lehrkräfte zur Kooperation anregen – eine Aufgabe für Sisyphos?", Zeitschrift für Pädagogik, Vol. 52/2, pp. 205-219, (available in English at http://www.pedocs.de/volltexte/2011/4454/pdf/ZfPaed 2006 2 Kelchtermans Teacher collaboration collegiality D A.pdf).



Hattie, J. (2009), Visible Learning. A Synthesis of Over 800 Meta-Analyses Relating to Achievement, Routledge, Milton Park, United Kingdom.

Helms-Lorenz, M., B. Slof and W. van de Grift (2013), "First year effects of induction arrangements on beginning teachers' psychological processes", European Journal of Psychology of Education, Vol. 28/4, pp.1265-1287.

Hoy, A.W., H. Davis and S.J. Pape (2006), "Teacher knowledge and beliefs", pp. 715-737, in P.A. Alexander and P.H. Winne (eds.), *Handbook of Educational Psychology* (2nd ed.), Lawrence Erlbaum and Associates, Mahwah, NJ.

Ingersoll, R.M. (2012), "Beginning teacher induction: What the data tell us", Phi Delta Kappan, Vol. 93/8, pp. 47-51.

Johnson, **D.W.** and **R.T. Johnson** (2009), "An educational psychology success story: Social interdependence theory and cooperative learning", *Educational Researcher*, Vol. 38/5, pp. 365-379.

Klassen, R.M. et al. (2009), "Exploring the validity of a teachers' self-efficacy scale in five countries", *Contemporary Educational Psychology*, Vol. 34/1, pp. 67-76.

Leder, G.C., E. Pehkonen and G. Torner (eds.) (2003), Beliefs: A Hidden Variable in Mathematics Education?, Kluwer. Dordrecht.

Levine, T.H. and A.S. Marcus (2007), "Closing the achievement gap through teacher collaboration: Facilitating multiple trajectories of teacher learning," *Journal of Advanced Academics*, Vol. 19/1, pp. 116-138.

LoCasale-Crouch et al. (2012), "The role of the mentor in supporting new teachers: Associations with self-efficacy, reflection, and quality", *Mentoring and Tutoring: Partnership in Learning*, Vol. 20/3, pp. 303-323.

Lustick, **D.** and **G. Sykes** (2006), "National Board Certification as professional development: What are teachers learning?", *Education Policy Analysis Archives*, Vol. 14/5.

Major, A.E. (2012), "Job design for special education teachers", *Current Issues in Education*, Vol. 15/2, http://cie.asu.edu/ojs/index.php/cieatasu/article/view/900/333.

Margo, J. et al. (2008), Those Who Can?, Institute for Public Policy Research (IPPR) Publications, London.

Mead, S., A. Rotherham and R. Brown (2012), The Hangover: Thinking About the Unintended Consequences of the Nation's Teacher Evaluation Binge, Teacher Quality 2.0, American Enterprise Institute, Special Report 2, September 2012.

Milanowski, A. and S. Kimball (2003), "The framework-based teacher performance assessment systems in Cincinnati and Washoe", CPRE Working Paper Series, TC-03-07.

Muijs, D. and D. Reynolds (2002), "Teacher beliefs and behavior: What really matters?", *Journal of Classroom Interaction*, No. 37, pp. 3-15.

Murawski, W.W. and H.L. Swanson (2001), "A meta-analysis of co-teaching research", Remedial and Special Education, Vol. 22, pp. 258-267.

Nusche, D. et al. (2011), OECD Reviews of Evaluation and Assessment in Education: Norway 2011, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264117006-en.

OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en.

OECD (2013a), *Teachers for the 21st Century: Using Evaluation to Improve Teaching*, International Summit on the Teaching Profession, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264193864-en.

OECD (2013b), Synergies for Better Learning: An International Perspective on Evaluation and Assessment, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264190658-en.

THE WORK OF UPPER SECONDARY TEACHERS



OECD (2012), OECD-Iceland Improving Schools Review: Towards a Strategy to Prevent Dropout in Iceland, Results of the OECD-Iceland Workshop Preventing Dropout in Upper Secondary Schools in Iceland, http://www.oecd.org/jceland/49451462.pdf.

OECD (2009), Creating Effective Teaching and Learning Environments: First Results from TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264068780-en.

OECD (2005), *Teachers Matter: Attracting, Developing and Retaining Effective Teachers, Education and Training Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264018044-en.*

Orlich, D.C. et al. (2013), *Teaching Strategies: A Guide to Effective Instruction,* 10th edition, Wadsworth, Cengage Learning, Boston, MA.

Price, H. and J. Collett (2012), "The role of exchange and emotion on commitment: A study using teachers", Social Science Research, Vol. 41, pp. 1469-1479.

Ragnarsdóttir, G. and I.A. Jóhannesson (2014), "Curriculum, crisis and the work and well-being of Icelandic secondary school teachers", Education Inquiry, Vol. 5/1, pp. 43-67.

Santiago, P. et al. (2011), OECD Reviews of Evaluation and Assessment in Education: Australia 2011, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264116672-en.

Schleicher, A. (ed.) (2012), Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from Around the World, International Summit on the Teaching Profession, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174559-en.

Schleicher, A. (2011), Building a High-Quality Teaching Profession: Lessons from Around the World, International Summit on the Teaching Profession, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264113046-en.

Seidel, T. and R.J. Shavelson (2007), "Teaching effectiveness research in the past decade: The role of theory and research design in disentangling meta-analysis research", *Review of Educational Research*, Vol. 77, pp. 454-499.

Shewbride, C. et al. (2011), OECD Reviews of Evaluation and Assessment in Education: Denmark 2011, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264116597-en.

Skaalivk, E.M. and S. Skaalvik (2011), "Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion", *Teaching and Teacher Education*, Vol. 27/6, pp. 1029-1038.

Vandervoort, L., A. Amrein-Beardsley and Berliner, D. (2004), "National board certified teachers and their students' achievement", Education Policy Analysis Archives, Vol. 12/46.

Vieluf S. et al. (2012), *Teaching Practices and Pedagogical Innovation: Evidence from TALIS*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264123540-en.

Watson, N., L. Earl and S. Katz (2003), Large-Scale Education Reform: Life Cycles and Implications for Sustainability, Cfbt, Reading.

Wriqi, C. (2008), "The structure of secondary school teacher job satisfaction and its relationship with attrition and work enthusiasm", *Chinese Education and Society*, Vol. 40/5, pp. 17-31.

Zembylas, M. and **E. Papanastasiou** (2004), "Job satisfaction among school teachers in Cyprus", *Journal of Educational Administration*, Vol. 42, pp. 357-374.



Cross-level comparisons

This chapter draws from the analyses presented in the previous chapters of this report as well as the TALIS 2013 Results: An International Perspective on Teaching and Learning (OECD, 2014) report to provide comparisons between primary, lower secondary and upper secondary school teachers. In doing so, it examines teachers' characteristics, profiles of the schools they work in, classroom characteristics, professional development, teaching practices and feelings and attitudes toward their profession. The comparisons are made across the countries with data available from at least two of these educational levels.



Highlights

- Most teachers are women across the three levels of education. However, the relative proportions
 of male and female teachers differ across the educational levels, with larger proportions of
 female teachers in primary than in secondary schools.
- Further support for teaching students with special needs is in demand across all the educational levels, as evidenced in teachers' reports of their high needs for professional development in this area and principals' reports of shortages of teachers with competencies in teaching students with special needs.
- ICT skills and new technologies training is an area where teachers from primary and lower secondary schools tend to report higher needs than teachers from upper secondary schools. Furthermore, primary and lower secondary teachers are more likely than upper secondary teachers to work in schools whose principals report shortages in ICT equipment and software. However, there are some differences across countries. In general, Singapore and Australia are among the countries with lower reported shortages in ICT equipment and software and learning materials, with little or no difference across the educational levels.
- In general, primary school teachers are more likely than secondary school teachers to report that the feedback they receive on their work positively changes most aspects of their work. Career advancement and salary or financial bonus are exceptions.
- On average, upper secondary teachers are more likely than lower secondary and primary teachers to believe that their profession is valued. However, this is not the case in all countries. At the same time, the vast majority of teachers across all education levels and in all countries report being satisfied with their jobs.
- Overall, teachers report high levels of self-efficacy across all countries and education levels, with a tendency for primary teachers to report feeling more confident in their ability to motivate students in comparison with secondary school teachers.

INTRODUCTION

Previous chapters examined the key characteristics of teachers and teaching environments in primary and upper secondary schools across the participating countries and economies. This chapter draws from these chapters and from *TALIS 2013 Results: An International Perspective on Teaching and Learning* (OECD, 2014) to provide a comparison of teachers' characteristics and beliefs, classroom climate and school characteristics across the levels of education systems. Given the availability of the data, comparisons between all three levels of education (primary, lower secondary and upper secondary) can be made for five countries. Namely, among the countries participating in the OECD Teaching and Learning International Survey (TALIS) in 2013, Denmark, Finland, Mexico, Norway and Poland chose to offer the survey to the teachers in primary and upper secondary schools (i.e. ISCED 1 and ISCED 3, respectively) in addition to those in lower secondary schools (i.e. ISCED 2). Australia, Denmark, Iceland, Italy, Singapore and Abu Dhabi (United Arab Emirates) chose to offer the survey to upper secondary school teachers, while in



Flanders (Belgium) teachers in primary schools also responded to the survey. For these countries and economies, therefore, comparisons across two levels of education are made throughout this chapter.

Anyone thinking back about their own experience in school is likely to remember a number of differences between their primary and secondary school teachers and even the schools themselves. Advancing from primary to secondary schooling is among the most important educational transitions. From the teaching perspective, in most educational systems, this transition can also mark a change from more student-centred learning of young children, who might need help with reading and writing and following instructions, to a more group-centred approach of teaching older children. As children progress through the educational system, the content of the learning changes dramatically as subjects are explored at greater depth, and these changes are accompanied by a change in the demands placed on teachers. As noted in earlier chapters, primary school teachers are often generalists who may spend most of their time with the same class in a school year. Secondary school teachers tend to be specialised in specific subject matters and often teach a number of different classes of pupils throughout a school year. As a result, teaching at each of these educational levels - primary, lower secondary and upper secondary - is likely to have some unique characteristics. The present chapter explores key differences between the educational levels in the surveyed countries and also points out some similarities. The following sections analyse teachers' profiles, the schools in which they work and their professional development across the three educational levels

PROFILES OF THE TEACHERS

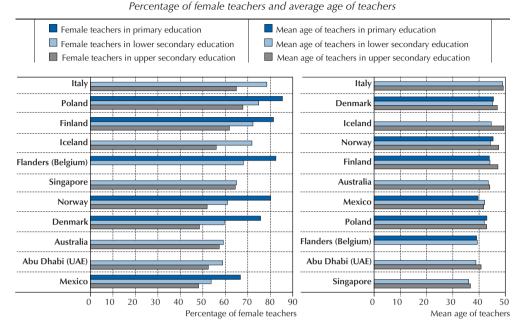
Demographic profiles and teacher work experience

The average age of primary, lower secondary and upper secondary teachers in the five countries that surveyed all three educational levels is similar, ranging from nearly 43 to slightly over 45 years old. As Table 6.1 shows, among countries with available data, the biggest differences in teachers' age between educational levels were observed in Finland and Iceland. In Finland, primary teachers are 44 years old on average and upper secondary teachers are 47 years old on average, while in Iceland lower secondary teachers are 45 years old while upper secondary teachers are 49 years old on average (see also Figure 6.1).

Given the evidence presented in the preceding chapters of this report, it comes as no surprise that the majority of teachers are women across all levels of schooling in most countries, with the exception of upper secondary teachers in Denmark and Mexico. It should be noted, however, that the relative proportions of men and women differ across the educational levels, with larger proportions of female teachers in primary than in secondary schools (Figure 6.1). To illustrate, among the countries for which data are available for all three levels of education, 78% of primary teachers are women, as compared with 64% in lower secondary and 56% in upper secondary. The biggest differences in the distribution of female and male teachers between primary and secondary schools are found in Norway and Denmark, where over three-quarters of primary teachers are women (80% and 76%, respectively) but only about half of the upper secondary teachers are women (52% and 49%, respectively). This difference in gender distribution of teachers in primary and secondary schools is in line with research showing that male teachers might choose to pursue teaching older children for cultural or economic reasons (Skelton, 2003).



■ Figure 6.1 ■
Gender and age of teachers, across ISCED levels



Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166095

Work experience

There is little difference in terms of work experience between teachers in primary, lower secondary and upper secondary schools. As shown in Figure 6.2, for the five countries with data available across all three levels, teachers have about 16 years of teaching experience; for countries with data for two education levels, the average years of teaching experience is between 15 and 16 years. On average for countries reporting on the three education levels, this includes 11 years in their current school for primary and lower secondary teachers and 12 years for upper secondary teachers. These data indicate that TALIS teachers have substantial experience in their profession across all the educational levels (see also Table 6.2).

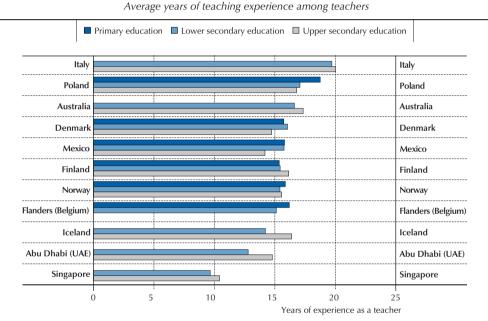
Educational attainment and teacher education and training

In terms of education attainment, in most surveyed countries, most teachers indicate having achieved their highest level of education at the level of university education (ISCED 5) or higher. On average, across these five countries, only about 5% of primary teachers, 3% of lower secondary teachers and about 4% of upper secondary teachers have not completed education at this level. For countries where teachers from two educational levels participated in the study, there was little difference between education levels in terms of teachers' education attainment at the university level (4% primary against 3% lower secondary; and 3% for both upper and lower secondary). There were, however, bigger differences between educational levels in few countries. One case is Mexico, where 19% of primary teachers, 9% of lower secondary teachers and 5% of upper secondary teachers have not attained this level of education (ISCED 5); another is Iceland, where these rates were 10% for lower secondary teachers and 5% for upper



secondary teachers. On the other hand, across the educational levels, a small percentage of teachers (below 4% across all countries and education levels) reported having achieved a level of education equivalent to ISCED 6 (Doctorate). On average, the differences between educational levels were small, with the highest percentage in upper secondary schools (2%) against less than 0.5% in primary and 1% in lower secondary schools (see also Table 6.3). As for teacher education and training, the majority of teachers across all the educational levels report the completion of a teacher education or training programme (Figure 6.3). Moreover, very few differences are seen between the different education levels in the completion of teacher education and training. This is the case in all countries but Mexico, where only one in four upper secondary teachers reports completion of teacher education, as compared with 82% of primary teachers and 62% of lower secondary teachers (see also Table 6.4).

■ Figure 6.2 ■
Work experience of teachers, across ISCED levels



Countries are ranked in descending order based on the results of lower secondary education. **Source**: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166100

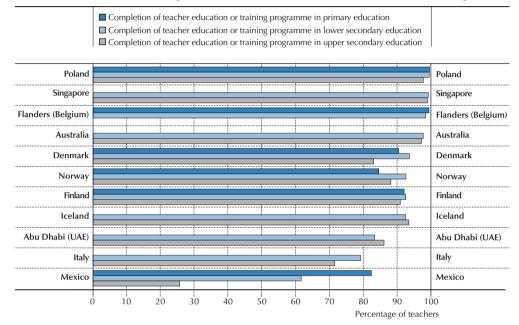
TALIS data show that on average in the surveyed countries, there are small differences in the elements included in the teacher education or training programmes received by primary and secondary schools teachers. Across the countries where data are available for all educational levels, 67% of primary teachers and 70% of lower secondary and upper secondary teachers report having received training on the content of the subject(s) they are teaching. For the countries with data for two education levels, 70% of primary teachers report having this element included, as compared with 71% of lower secondary teachers. The averages are 67% versus 69% for countries with data for lower secondary and upper secondary teachers, respectively. The slightly upward trend in teachers' reports from primary to secondary education is particularly visible in Denmark (53% of primary teachers, 60% of lower secondary and 69% of upper secondary teachers) and Norway (42% of primary, 51% of lower secondary and 58% of upper secondary

teachers). The trend is the opposite for Finland, however, where higher percentages of teachers in primary schools report the inclusion of subject matter in their training (79%) as compared with lower secondary teachers (77%) and upper secondary teachers (64%), as Table 6.4 illustrates.

■ Figure 6.3 ■

Completion and content of teacher education or training programme, across ISCED levels

Percentage of teachers who completed teacher education or a training programme and for whom the following elements were included in their formal education and training



Countries are ranked in descending order based on the results of lower secondary education. **Source:** OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933166115

TALIS also collects data on whether teachers received pedagogical training for all of the subjects they currently teach. On average, in the five countries with data for all education levels, 67% of primary teachers, 69% of lower secondary teachers and 66% of upper secondary teachers report that pedagogy for their subject(s) was included in their education. The percentage of teachers reporting pedagogical training increases from primary to upper secondary education in Denmark – with 53% of primary, 60% of lower secondary and 67% of upper secondary school teachers reporting this element –, as well as in Norway, where the respective percentages for primary, lower secondary and upper secondary teachers are 46%, 51% and 56%. However, the opposite is again the case in Finland, where the frequency of teachers reporting having this element in their education decreases from 79% of primary school teachers to 75% of lower secondary teachers and again to 62% of upper secondary school teachers. Given that in many countries (e.g. Finland) teachers require pedagogical training to qualify as teachers, this difference might reflect the fact that perhaps some teachers do not have pedagogical training in all subjects, as TALIS asks, but instead have pedagogical training in some subjects only. This specialisation might be especially pronounced at the secondary level, where teachers tend to teach only some subjects, unlike in primary schools, where they tend to be generalists.



On average across the countries that surveyed all three educational levels, there are very slight differences for whether practical components were included in teachers' formal education and training, as reported by primary school teachers (62%), lower secondary school teachers (64%) and upper secondary school teachers (63%). For countries with only two levels of education, the differences are also minimal: 65% of primary teachers against 66% of lower secondary teachers, and 62% for lower and upper secondary teachers. The biggest differences between educational levels appear in Denmark, where there is an increase in the percentage of teachers who report receiving practical training, from 44% of primary teachers to 52% of lower secondary teachers and 67% of upper secondary school teachers. The opposite trend can be observed in Mexico, where 66% of primary, 58% of lower secondary and 53% of upper secondary school teachers report having received practical training in the subject being taught, as seen in Table 6.4.

TEACHERS' NEEDS FOR PROFESSIONAL DEVELOPMENT

TALIS also collects data on teachers' needs for professional development. Teaching students with special needs, ICT skills for teaching and new technologies in the workplace are the top three needs for professional development as reported by teachers across all the education levels, as seen in Figure 6.4. The need for professional development in teaching students with special needs is reported more frequently by teachers in primary (25%) and lower secondary (23%) rather than upper secondary schools (16%), across the five countries with data available for all three education levels. The difference is also clear for countries with data for two educational levels: 21% of lower secondary teachers report that need in comparison with 16% of upper secondary teachers (Table 6.5). The trend is visible in all countries but Mexico, where a higher percentage of lower secondary teachers (47%) than primary (42%) or upper secondary teachers (36%) report this need. The biggest difference is observed in Denmark, where 34% of primary teachers report this need for professional development, as compared with 28% of lower secondary teachers and only 10% of upper secondary teachers. In contrast, in Australia and Abu Dhabi (United Arab Emirates), the difference between educational levels is less than 2%, as seen in Table 6.5.

A similar trend is observed in the need for professional development in ICT skills for teaching, with a higher percentage of primary teachers (21%) than lower secondary (17%) or upper secondary (13%) teachers reporting this need in countries with data for three education levels. Among countries with data for two education levels, the need for ICT skills for teaching is also reported less frequently on average when moving up the education level (20% of primary teachers against 16% of lower secondary teachers, and 19% of lower secondary against 16% of upper secondary). The biggest difference appears in Norway, where 25% of primary teachers compared with 18% of lower secondary and 12% of upper secondary teachers report this need. As Table 6.5 also shows, there is no or little (2% or less) difference in the teachers' need for ICT skills reported across different educational levels in Australia, Italy, Poland, Singapore, Abu Dhabi (United Arab Emirates) and Flanders (Belgium).

As Figure 6.4 illustrates, on average in the countries with data for all educational levels, the need for professional development in the area of new technologies in the workplace also tends to be reported slightly less frequently by upper secondary teachers (14%) than by primary and lower secondary teachers (16%). However, the average differences are small also in a comparison of countries with two education levels (16% of primary teachers against 14% of lower secondary teachers, and 17% of lower secondary teachers against 16% of upper secondary teachers). Across all countries, the biggest difference in this need between educational levels is in Mexico: primary teachers (35%), lower secondary teachers (28%)



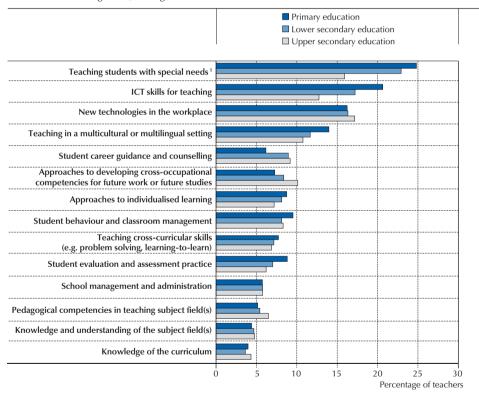
and upper secondary teachers (22%). No or less than 2% difference across education levels is found in Australia, Finland, Poland, Singapore and Abu Dhabi (United Arab Emirates).

In line with the finding that most teachers report receiving education and training in their subject, teachers across all educational levels report little need for professional development in the knowledge and understanding of their subject field. Across the countries for which data are available from the three educational levels, only about 4% of primary teachers and 5% of lower and upper secondary teachers report the need for subject training. Similarly, only 5% of primary and lower secondary teachers, and 6% of upper secondary teachers, report a need for pedagogical development in their subject area. Indeed, less than 10% of teachers in the surveyed countries report needs for professional development in most of the areas covered by the survey (Table 6.5).

■ Figure 6.4 ■

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development in the following areas, average for the five countries with data available for three education levels



Note: Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

*Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166122



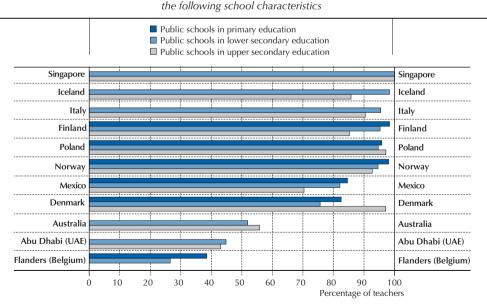
PROFILES OF THE SCHOOLS WHERE TEACHERS WORK

TALIS data indicate that there are differences among primary, lower secondary and upper secondary teachers with respect to the school characteristics where the surveyed teachers work. This section examines the patterns of school type and composition across the three educational levels in the participating countries to provide better understanding of the nature and the challenges of work at each of the educational levels.

School types and competition between schools

Overall, the majority of TALIS teachers work in public schools. Looking at the number of private schools, however, there are differences across the different education levels, as seen in Figure 6.5. In particular, a pattern emerges for countries with data available for all three educational levels, whereby the number of private schools in the sample increases from primary education (8%) to upper secondary education (11%). This trend appears also for countries with data for two education levels: on average in these countries, 17% of primary schools against 22% of lower secondary schools, and 17% of lower secondary schools against 18% of upper secondary schools, are private. To illustrate, in Finland, 98% of primary teachers work in public schools, as compared with 95% of lower secondary and 85% of upper secondary school teachers; in Mexico, the percentages are 85%, 82% and 70% for primary, lower secondary and upper secondary school teachers, respectively. However, this pattern is not observed in all the countries. More private schools at lower levels of education are reported in Australia, Denmark and Poland. To illustrate, in Denmark the percentages of private schools are 3% at the upper secondary level, as compared with 24% at the lower secondary and 17% at the primary levels, as Table 6.6 shows.

 Figure 6.5 School type and school competition, across ISCED levels Percentage of teachers who work in schools where principals reported



Countries are ranked in descending order based on the results of lower secondary education. Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933166133



School principals also report on whether their school competes with other schools for their student intake (Table 6.6). On average across the five countries with data available for the three educational systems, the level of competition appears the highest at the upper secondary level, where 72% of teachers work in schools where principals report competing for students, in comparison to 61% at the lower secondary level and 65% at the primary level. Similar comparisons emerge when considering countries with data for two education levels: 74% at the upper secondary against 64% at the lower secondary level, and 67% at the primary level against 66% at the lower secondary level. When looking at particular countries, the biggest difference between education levels is observed in Iceland, with 75% of upper secondary teachers working in schools that compete for students as compared with 33% of lower secondary teachers. In contrast to this pattern, principals of primary school teachers in Finland report a higher competition for students (with 80% of primary teachers working in competitive schools) than those of their colleagues in lower and upper secondary schools (with 50% and 53% of these teachers, respectively, working in competitive schools). In Norway, the data do not indicate an increase in competition across educational levels, with more teachers in primary and upper secondary schools (51% and 57% of teachers, respectively) than in lower secondary schools (37%) working in schools that compete for students. No differences in competition emerge between different education levels in Australia and Singapore. These data patterns across the countries could reflect different system regulations governing school choice across educational levels.

Availability of qualified teachers in schools across the different educational levels

TALIS asks school principals about shortages in human resources that they consider as impeding their effectiveness as principals. The following sections present areas where principals report having shortages (to at least some extent). When it comes to shortages regarding teachers, a shortage in teachers with competencies to teach special-needs students is most commonly cited by principals. On average across the five countries with data available for three education levels, such shortages are most frequently reported at the lower secondary level (48%), as compared with 37% at the primary level and 33% at the upper secondary level (see Figure 6.6). This pattern is also apparent in countries with data on two education levels (38% at the primary level against 47% at the lower secondary level, and 46% at the lower secondary level against 37% at the upper secondary level) (Table 6.7).

When looking at particular countries, as seen in Table 6.7, in Finland, Iceland, Italy, Mexico, and Norway, more teachers at the lower secondary level than at the other levels are more likely to work in schools where principals report shortages of teachers with competencies to teach special-needs children. On the other hand, in Denmark, the shortages decrease moving up the education ladder, with 52% of teachers working in schools with shortages at the primary level, 40% at the lower secondary level and 28% at the upper secondary level. In contrast to Denmark, the shortages in Poland increase moving up the educational ladder. In Poland, 11% of teachers work in schools where the principals report shortages at the primary level, 20% at the lower secondary level and 24% at the upper secondary level. Analogically, the percentage of teachers working in schools where principals report shortages increases from lower to upper secondary schools in Australia (37% of lower secondary and 45% of upper secondary) and Abu Dhabi (United Arab Emirates) (51% vs. 56% for lower and upper secondary schools, respectively). There is also an increase between primary and lower secondary schools in Flanders (Belgium) (39% to 43%). Hardly any differences appear in Singapore. Hence, these findings, along with the previous conclusions about teachers' reported high levels of needs for professional development in the area of special-needs, indicate that this type of development and teachers with these competencies are in high demand, though in some countries shortages are more pronounced at some education levels than others.



Moreover, looking at the average for the five countries with data available for the three educational levels, there is a growing shortage of qualified teachers, as reported by principals, when moving up the education ladder. Namely, an average of 20% of primary school teachers, as compared with almost 29% of lower secondary and 31% of upper secondary school teachers, work in schools where principals report such a shortage (see also Table 6.7). The biggest difference between educational levels appears in Finland, where 41% of upper secondary teachers work in schools where principals report shortages of qualified teachers, as compared with 18% of primary and 17% of lower secondary teachers, as seen in Figure 6.6. In contrast, no or little (less than 1%) difference between education levels appears in Singapore, Abu Dhabi (United Arab Emirates) and Flanders (Belgium). In Iceland, Italy, Mexico and Norway, the highest shortages are reported at the lower secondary level rather than at other educational levels in these countries.

As Figure 6.6 illustrates, there are also cross-level differences in reported shortages in support personnel. On average in the countries for which data are available for all three levels, the highest number of teachers working in schools where principals report shortages are found at the primary level (51%), compared with 48% at lower secondary and 29% at upper secondary. Indeed, in most countries, the lowest percentage of teachers working with schools with reported shortages in personnel is found at the upper secondary level. For example, in Denmark, 20% of upper secondary school teachers work in schools with reported shortages in personnel, compared with as many as 48% of lower secondary and 56% of primary teachers. In contrast, in Australia more upper secondary teachers than lower secondary teachers work in schools with principals reporting this shortage (35% vs. 28%), while there are very small differences in Singapore (31% vs. 29%) and Abu Dhabi (United Arab Emirates) (55% vs. 53%) (see also Table 6.7).

Availability of ICT equipment and other teaching materials in schools

Furthermore, many principals report shortages in the ICT equipment in schools, with large differences across educational levels, as seen in Figure 6.6. On average in the five countries with data available for all education levels, more than half of primary school teachers (52%) work in schools where principals report shortages or inadequacy of computers for instruction, as compared with 46% of lower secondary teachers and nearly 23% of upper secondary teachers. This trend is also apparent in comparisons for countries with data available for two levels of education: on average, 52% of teachers in primary schools against 43% at the lower secondary level, and 38% of teachers at the lower secondary level against 22% at upper secondary level, work in schools where principals report this shortage. Shortages in computers or software and insufficient Internet access are more likely to be reported by primary and lower secondary teachers' principals than by principals at upper secondary schools in most of the countries. The most striking example of that trend is Norway, where no upper secondary school teachers work in schools where principals report computer shortages, compared with 52% of primary and 48% of lower secondary teachers. In contrast, a higher percentage of upper secondary teachers work in schools with computer shortages in Australia (10% compared with 8% of lower secondary teachers), Singapore (7% as compared with 4% of lower secondary) and Abu Dhabi (United Arab Emirates) (37% compared with 35% of lower secondary teachers), although the differences in these countries are relatively small (see Table 6.7).

On average in countries with data available for three education levels, insufficient Internet access in schools is also more frequently reported by principals of teachers in primary schools (40% of teachers) or lower secondary schools (39%) than by principals at upper secondary schools (17%).

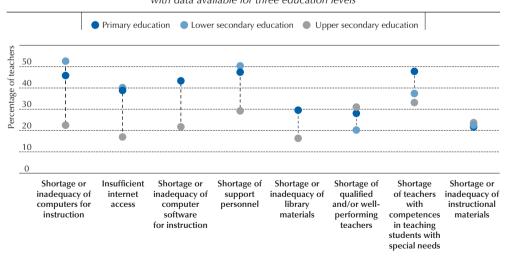


Among countries with data available for two education levels, the differences found are in the same direction, on average: 39% of primary teachers against 37% of lower secondary teachers, and 33% of lower secondary against 17% of upper secondary teachers (Figure 6.6). This trend appears in most countries, apart from Australia and Singapore, where there is no difference between education levels, and Abu Dhabi (United Arab Emirates), where slightly more upper secondary teachers work in schools with reported insufficient Internet access (36% compared with 34% lower secondary) (Table 6.7).

Across the five countries, reports on shortages in computer software for instruction follow the same patterns, with a lower percentage of teachers whose principals report these shortages found in upper secondary schools (21%) than in primary and lower secondary schools (both 43%), as illustrated in Figure 6.6. Shortages in this area also decrease on average moving up the education ladder in countries with data on two education levels: 43% at the primary level against 39% at lower secondary; and 38% of lower secondary teachers against 22% of upper secondary teachers (see also Table 6.7). Exceptions to this trend are found in Australia and Abu Dhabi (United Arab Emirates), where more upper secondary teachers work in schools where principals report software shortage (14% compared with 12% in Australia, and 44% compared with 39% in Abu Dhabi (United Arab Emirates); in Singapore, with no difference between education levels; and in Poland, with no difference between upper secondary and primary teachers (about 32% as compared with 40% lower secondary). Moreover, the reported shortages in library materials are higher for primary and lower secondary teachers (29% for both) than for upper secondary teachers (17%) on average in the five countries. Notably, there is little or no difference between educational levels in the reported shortages in instructional materials. On average in the five countries, 22% of primary and lower secondary teachers and 24% of upper secondary teachers work in schools where principals report this shortage.

■ Figure 6.6 ■
School resources, across ISCED levels

Percentage of teachers whose school principal report that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide quality instruction, average for the five countries with data available for three education levels



Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166144



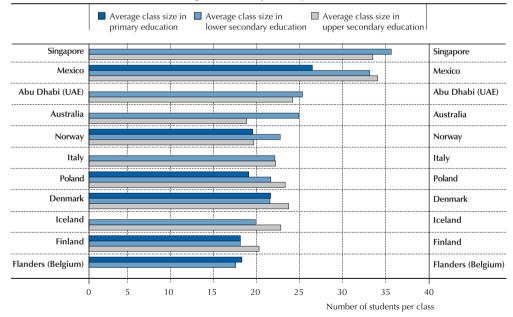
CLASSROOM CHARACTERISTICS

The comparison of TALIS data across education levels indicates that the average class size in countries with data available for all three educational levels increases slightly moving from primary to secondary education: 21 students in primary school, 23 in lower secondary, 24 in upper secondary (Table 6.8). A similar trend appears in countries with data on two education levels (20 students in primary schools against 22 in lower secondary, and 24 students in both lower and upper secondary schools, on average). As shown in Figure 6.7, this trend is well reflected by data from Poland, where 19 students are reported in primary school classes, 21 in lower secondary and 23 in upper secondary school classes, as well as in Mexico, with classrooms of 26, 33 and 34 in primary, lower secondary and upper secondary schools, respectively. An upward trend is somewhat apparent in Finland and Denmark, where primary and lower secondary classes are reported to have about the same number of students (18 in Finland and 21 in Denmark) with more populous classes in upper secondary schools (20 in Finland, 24 in Denmark). In contrast to this, teachers in Australia report a decrease in class size moving up the educational ladder, with lower secondary schools hosting about 25 students in their classes, and upper secondary only 19. In Norway, lower secondary classes are more populous, with 23 students on average, than primary and upper secondary school classes, which are both reported to host about 19 students on average. There are no differences in Italy and Singapore.

■ Figure 6.7 ■

Class size, across ISCED levels

Average class size reported by teachers



Countries are ranked in descending order based on the results of lower secondary education. **Source:** OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166159

COMPOSITION OF THE STUDENT BODY

TALIS data show that teachers at different levels face slightly different classroom compositions in terms of the average percentages of special-needs students, low academic achievers, students with behavioural problems in the classrooms and students from socio-economically disadvantaged homes.

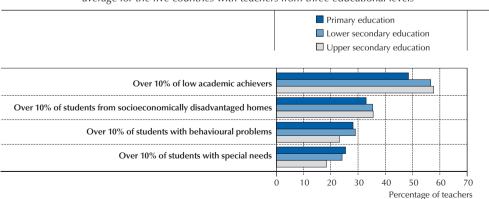
As Figure 6.8 shows, primary teachers are almost as likely to have more than 10% of special-needs students in their classes as lower secondary teachers (25% for primary versus 24% for lower secondary teachers), with upper secondary teachers less likely to report this (18%). Although the patterns of distribution between primary and lower secondary schools differ among countries, lower percentages of primary than upper secondary teachers in all countries report no special-needs children, with the biggest difference reported in Mexico, where 36% of primary teachers compared with 62% of upper secondary (and 43% of lower secondary) school teachers report not having any special-needs children (Table 6.9).

Primary and lower secondary teachers, on average across the five countries, are also more likely to report having over 10% of students with behavioural problems in their classrooms, with 28% of primary school teachers, 29% of lower secondary school teachers and 23% of upper secondary school teachers reporting this (Figure 6.8). In general, only about 17% of primary and 20% of lower secondary school teachers report not having any children with behavioural problems in their classrooms, as compared with 32% of upper secondary school teachers, as shown in Table 6.10. Classrooms with more than 10% of low academic achievers, on the other hand, are more frequently reported by upper secondary (58%) and lower secondary (57%) teachers than by primary teachers (48%). Interestingly, primary and lower secondary teachers are less likely to report having no low academic achievers in their classroom (at 3%) than are upper secondary teachers (6%). However, half (48%) of primary teachers report having less than 10% of low achievers. This suggests a higher number of classrooms with lower (below 10%) distributions of these students in primary rather than lower secondary (41%) or upper secondary schools (38%) (see also Table 6.11). It is also possible that academic achievement is conceived differently at the primary school level, where teaching is more generalised, than at higher educational levels, where subjects become increasingly distinct and the learning specialised.

There is little difference in cross-level distributions of classrooms with more than 10% of students from socio-economically disadvantaged homes as reported by upper secondary teachers (36%), lower secondary teachers (35%) and primary teachers (33%), as seen in Figure 6.8. In the five countries with data available for all levels of education, 22% of primary and upper secondary teachers report no students from disadvantaged homes, as compared with about 19% of lower secondary teachers (Table 6.12).

■ Figure 6.8 ■ Classroom composition, across ISCED levels

Percentage of teachers reporting the following students' characteristics in their class, average for the five countries with teachers from three educational levels



Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink | http://dx.doi.org/10.1787/888933166166



TEACHERS' ACCESS AND PARTICIPATION IN MENTORING AND INDUCTION

TALIS asks teachers about their access and participation in a number of professional training options, among them mentoring and induction. The following section, which compares the different educational levels, reveals that in many countries the similarities outweigh the differences across the levels in these areas

Participation in mentoring

Participation in mentoring programs is reported at rather low levels in most countries. On average among countries with data on two or three education levels, there is little cross-level difference (less than 1%) when it comes to teachers reporting on having a mentor assigned to them. Looking at the particular countries, a few countries have more variation between levels. The biggest differences between primary and upper secondary teachers' reported involvement are in Denmark (11% of upper secondary teachers as compared with 3% of primary and 4% of lower secondary teachers) and Mexico (22% of primary, 17% of lower secondary and 13% of upper secondary teachers) (Table 6.13).

TALLS also asks whether teachers serve as mentors to one or more teachers. Across the five countries with data on three levels of education, it appears that upper secondary teachers are more likely to be mentors than are teachers from lower levels of education, with the average of 14% of upper secondary, 10% of lower secondary and 9% of primary school teachers reporting being a mentor. This trend appears also for countries with two education levels: on average, 9% of primary teachers against 10% of lower secondary teachers, and 16% of lower secondary teachers against 19% of upper secondary teachers report this (Figure 6.9). When considering particular countries, the biggest difference appears in Denmark, where 25% of upper secondary teachers report being a mentor as compared with 13% of lower secondary and 9% of primary teachers. This trend is apparent in most countries with the exceptions of Iceland, Italy, Abu Dhabi (United Arab Emirates) and Flanders (Belgium), where there is little (less than 2%) or no difference between the levels. In Finland and Poland, there is less than 2% difference between upper secondary and primary teachers (Figure 6.9)

Access to formal and informal induction programmes

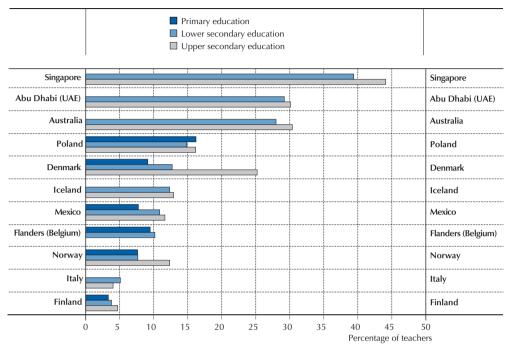
According to principals, access to formal induction programmes for new teachers is on average scarcer for teachers in primary and lower secondary schools than for teachers at upper secondary schools. In countries with data available for the three levels, 59% of primary and 55% of lower secondary teachers work in schools whose principals report no such programmes, as compared with 35% of upper secondary teachers. A similar trend holds for countries with data on two education levels: on average, 52% of teachers at the primary level against 47% of teachers at the lower secondary level, and 36% of teachers at the lower secondary level against 27% of teachers at the upper secondary level, work in schools whose principals report no formal induction programme for new teachers. Singapore is the exception in this instance, as all principals report the availability of some kind of formal induction programme. As Table 6.14 shows, other countries show some deviations from the general trend as well: in Italy, only 14% of lower secondary and 23% of upper secondary teachers work in schools with no formal induction programs, while there is less than 1% cross-level difference in Abu Dhabi (United Arab Emirates).



■ Figure 6.9 ■

Participation in mentoring programmes, across ISCED levels

Percentage of teachers who report currently serving as an assigned mentor for one or more teachers



Countries are ranked in descending order based on the results of lower secondary education. Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166176

A majority of teachers in almost all countries and education levels work in schools where the principal reports some informal induction activities. The exception is Mexico, where only 29% of primary teachers and 39% of lower secondary teachers have informal induction activities in their schools. There is a slight increase on average in the reported availability of informal induction activities for new teachers when moving up the education ladder: among the countries with data on three education levels, 74% of primary, 76% of lower secondary and 78% of upper secondary teachers work in schools whose principals report informal induction activities. A similar trend appears for countries with data on two education levels: 75% of primary against 79% of lower secondary teachers, and 82% of lower secondary and 84% of upper secondary teachers, work in schools where principals report informal induction activities (Table 6.15). Figure 6.10 presents the frequencies of informal induction activities across countries, together with those for formal induction programs for both teachers new to schools and new to teaching.

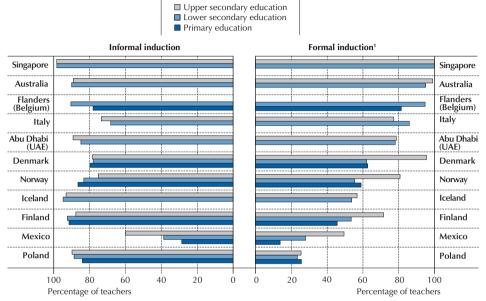
A general and/or administrative introduction to the school for new teachers is also reportedly available for the great majority of teachers across educational levels in almost all countries. Exceptions include Mexico, where 33% of primary and 49% of lower secondary teachers work in schools where the principal reports some general administrative introduction, and Norway, where 44% of primary school teachers work in such schools. On average, in the five countries with data across the three educational levels, 66% of primary, 72% of lower secondary and 78% of upper secondary school teachers work in schools where principals report this form of general introduction (Table 6.15).



■ Figure 6.10 ■

Access to induction programmes for new teachers, across ISCED levels

Percentage of teachers whose schools have informal induction processes for new teachers in their school and formal induction programs for teachers new to schools or new to teaching only



^{1.} Data on formal induction includes principals' reports on schools that offer formal induction to all new teachers in the school and only to the teachers new to schooling.

Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166181

TEACHER FEEDBACK AND APPRAISAL

TALIS asks teachers across all levels about the feedback they receive on their teaching, both formally and informally. The following sections discuss the most striking similarities and differences in the responses of teachers across the different education levels.

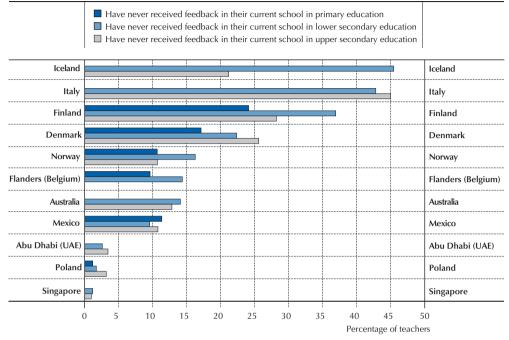
Teacher feedback by source

The majority of teachers across all countries and education levels report receiving some kind of feedback on their work. However, a number of teachers report never receiving feedback in their schools, with 17% of lower secondary, 16% of upper secondary and 13% of primary teachers on average reporting this in countries with data available for all education levels. Among the countries with data on two education levels, on average 12% of primary teachers compared with 17% of lower secondary teachers, and 19% of lower secondary as compared with 16% of upper secondary teachers, report never receiving feedback. The biggest difference between education levels is observed in Finland, with 37% of lower secondary, 28% of upper secondary and 24% of primary teachers reporting never receiving feedback. However, in many countries there is no or less than 2% difference across levels: among them are Australia, Mexico, Poland, Singapore and Abu Dhabi, United Arab Emirates (Figure 6.11).



■ Figure 6.11 ■ Teachers' feedback by source, across ISCED levels

Percentage of teachers who report never having received feedback in their school¹



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.
 Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink @gg http://dx.doi.org/10.1787/888933166194

One of the most frequently cited sources of teacher feedback across the schooling system is the school principal, as seen in Table 6.16. On average across the five countries with data on the three education levels, 64% of primary teachers, 56% of lower second teachers and 43% of upper secondary teachers report having received feedback from their principals. The average of reports from countries with data on two education levels also shows a decrease moving up the education ladder in the percentage of teachers reporting feedback from their principals: 67% of primary teachers against 58% of lower secondary, and 48% of lower secondary against 44% of upper secondary teachers. This trend is apparent in most countries, with the exception of Iceland, where nearly twice as many upper secondary teachers as lower secondary teachers report feedback from their principals (42% versus 21%). Moreover, there is no difference between education levels in Australia (27% of lower secondary and upper secondary teachers), while in Singapore and Abu Dhabi (United Arab Emirates) there is a very slight increase between lower secondary and upper secondary teachers' reports on feedback from principals.

Another important source of feedback is other teachers. On average for countries with data on two or three education levels, teachers at the lower education levels are relatively more likely to report having received feedback from their colleagues than teachers at the upper secondary level. To illustrate, for teachers surveyed in the countries that participated at all three levels, more than half (52%) of primary school teachers report receiving feedback from other teachers, compared with 49% and 43% of lower and



upper secondary school teachers. As Table 6.16 shows, this trend is observed in Denmark, Iceland, Italy, and Norway. However, data from other countries vary. In Australia, 54% of upper secondary teachers, compared with 51% of lower secondary teachers, report receiving feedback from other teachers. Lower secondary teachers report receiving feedback from peers less frequently in Finland (43% as opposed to 57% of primary teachers and 48% of upper secondary school teachers) but more frequently in Poland (51%, as opposed to 45% of primary teachers and 44% of upper secondary school teachers). There are no significant differences between education levels in Singapore, Abu Dhabi (United Arab Emirates) and Flanders (Belgium) (Table 6.16). All in all, the fact that other teachers are among the most frequently reported sources of feedback indicates that this kind of feedback can be an important mechanism for horizontal learning among teachers and a way of sharing teachers' knowledge.

Methods of feedback

The most frequently reported method of receiving feedback across all educational levels is following classroom observation. Among the countries with teachers from the three educational levels participating in the survey, 76% of primary school teachers report such feedback, as compared with 71% of lower secondary and 70% of upper secondary school teachers, as seen in Figure 6.12. Among countries with data on two education levels, on average 78% of primary compared with 73% of lower secondary teachers, and 69% of lower secondary as compared with 68% of upper secondary teachers, report receiving this method of feedback. More than 90% of teachers across all educational levels report feedback following classroom observation in Poland, Singapore and Abu Dhabi (United Arab Emirates), suggesting almost universal access to this method of feedback in these countries. Among teachers who report lower occurrences of this feedback are lower secondary and upper secondary teachers in Iceland (36% and 34%, respectively), as well as those in Italy (41% of lower secondary and 37% of upper secondary school teachers) (Table 6.17). As Figure 6.12 illustrates, feedback following assessment of teachers' content knowledge and self-assessment of teachers' work are other methods with relatively little variance between the three education levels.

TALIS data show that the use of some of the other methods of feedback varies depending on the education level. Notably, average reports of feedback following analysis of students' test scores decrease when moving up the education ladder in countries with data on two or three education levels. To illustrate, 65% of primary, 59% of lower secondary and 52% of upper secondary teachers on average report this method in the five countries for which data are available across the three education levels. Among particular countries, Denmark is one example of this trend, with 56% of primary teachers reporting student tests' analysis as a method for their feedback, as compared with 49% of lower secondary and 25% of upper secondary teachers. However, the trend is not apparent in all countries: upper secondary teachers in Australia are more likely than lower secondary teachers to receive feedback via this method (63% and 56%, respectively), while there is 2% or less difference between teachers from educational levels surveyed in Iceland, Singapore and Abu Dhabi (United Arab Emirates) and between primary and lower secondary teachers in Mexico and Poland (Table 6.17).

Feedback from student surveys is on average a more common method for teachers in upper secondary schools (63% of teachers for countries with data on three levels, 59% for those with data on two levels) than in lower secondary or primary schools (50% of teachers for both levels among countries with data on three levels; 46% of primary and 47-48% of lower secondary teachers among those with data on two levels). This is likely to be related to the students' development and their maturation as they move through the educational system. Still, the increase in the use of student surveys moving up the

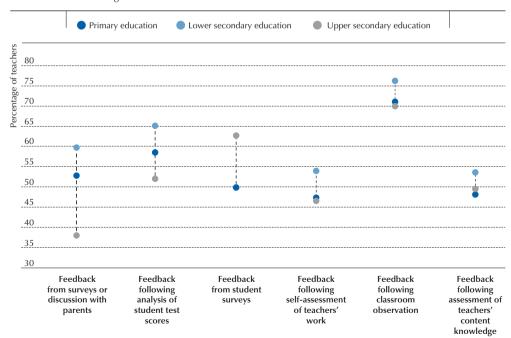


educational ladder is not observed in all countries. For instance, in Australia, a higher percentage of lower secondary teachers report using student survey feedback (40%) than upper secondary teachers (37%). As Table 6.17 shows, the most striking increase in the use of student surveys as a basis of teacher feedback is observed in Iceland, where it is reported by only 17% of lower secondary teachers and nearly three-quarters (74%) of upper secondary teachers.

Interestingly, as students' voice in teachers' feedback increases, parents seem to be less involved in teachers' feedback as their children progress through the education system, on average across the countries with data on two or three education levels. Among these countries, while more than half of teachers report surveys or discussion with parents as a method of teacher feedback in primary (60%) and lower secondary schools (53%), only 38% of upper secondary teachers report this on average (see also Figure 6.12). The decrease in the involvement of parents as students move up the educational levels is nearly universal in all participating countries. The exceptions are Australia and Singapore, where there is less than 1% difference between lower and upper secondary teachers. The biggest relative difference in the usage of parental feedback is found between primary and upper secondary teachers in Denmark (39% versus 8% for primary and upper secondary teachers, respectively) and Finland (52% of primary teachers and 24% of upper secondary teachers) (Table 6.17).

■ Figure 6.12 ■
Teachers' feedback by method, across ISCED levels

Percentage of teachers who report receiving feedback via the following methods, average for the five countries with teachers from three educational levels¹



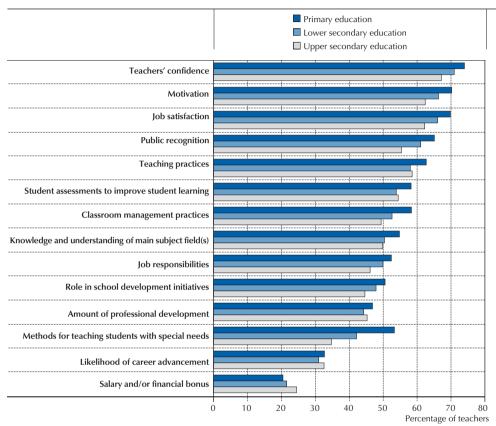
Percentage of teachers reporting receiving feedback via the following methods by at least one body, including: "External individuals or bodies" "Principal", "Member(s) of school management team", "Assigned mentors" or "Other teachers".
 Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166207



Figure 6.13 Outcomes of teacher feedback, across ISCED levels

Percentage of teachers who report a "moderate" or "large" positive change in the following issues after they received feedback on their work at their school, average for the five countries with teachers from three educational levels



Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166212

Outcomes of teacher feedback

On average, for countries with data available for two or three educational levels, primary school teachers are more likely to report positive changes following their feedback in most aspects of their work, except for the likelihood of career advancement and salary or financial bonus, as illustrated by Figure 6.13. For countries with data on three education levels, the biggest differences between educational levels are the reported changes in methods for teaching students with special needs, where more than half of primary teachers report positive change following feedback (53%) as compared with 42% of lower secondary and 35% of upper secondary school teachers. The trend of more positive change reported by primary school teachers appears in all countries. For other categories, the cross-level patterns differ depending on the country, as shown in Table 6.18. For instance, despite the general decrease from the primary level to the upper secondary level in reported positive change in knowledge



and understanding of a teacher's main subject field, upper secondary school teachers in Finland report more positive change (at 42%) than those in primary (36%) and lower secondary schools (33%), as shown in Table 6.18.

Upper secondary teachers are more likely to report positive changes in their salary and financial bonuses (24%) in comparison with lower secondary (22%) and primary school teachers (20%), as illustrated in Figure 6.13. This pattern is present in all countries with data available for the three education levels, with the exception of Poland, where higher percentages of lower secondary (33%) and primary teachers (32%) than upper secondary teachers (30%) report the change. In terms of likelihood of career advancement, positive change is reported by upper secondary teachers as often as primary teachers (33%), compared with 31% of lower secondary teachers, on average among the countries with data on three education levels (see also Figure 6.13). Among the countries with data available for two education levels, primary teachers are only slightly more likely to report this change (30% against 29%, respectively) and there are no differences between upper and lower secondary teachers (33%). When looking at particular countries, there are many differences in the patterns of data. For instance, in Denmark, there is an increase in the reports of positive change from primary (20%) to lower secondary (23%) to upper secondary teachers (27%), while in Mexico there is a decrease between primary teachers' reports (61%) and those of lower and upper secondary teachers (51%), as shown in Table 6.18.

TEACHERS' WORK

In the countries with data available for the three educational levels, teachers report working about 36 hours in the week, on average for each education level. Among the countries with data available for two levels of education, the differences are small: 37 hours for primary teachers against 36 hours for lower secondary teachers, and 37 hours for lower secondary against 38 hours for upper secondary teachers. Most countries and economies do not show more than two-hour differences in the reports of teachers' working hours between primary and secondary schools. Among those with larger differences is Iceland, where upper secondary teachers report working 38 hours as compared with 35 hours for lower secondary teachers. In Flanders (Belgium), on the other hand, primary teachers report working 41 hours as compared with 37 hours reported by lower secondary teachers (see also Table 6.19).

Distribution of tasks in teachers working hours

The most important part of being a teacher is teaching, and TALIS data show that this is what takes up the largest proportion of teachers' time in a working week (see also Table 6.19). On average, as Figure 6.14 illustrates, primary teachers report spending more hours teaching (21 hours) relative to lower secondary teachers (19 hours) and upper secondary teachers (18 hours), in countries for which data from all three levels are available. Among countries with data for two education levels, the same trend emerges. When looking at particular countries, the difference is the most pronounced in Finland, with 23 hours reported by primary teachers, 21 by lower secondary teachers and 17 by upper secondary school teachers. In contrast, in Australia, Italy, Poland, Singapore and Abu Dhabi (United Arab Emirates), there are no differences between education levels.

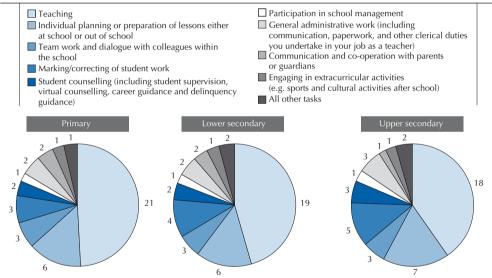
When looking at the other specific tasks of teachers, the hours spent marking and correcting student work seem to increase slightly from primary (3 hours) through lower secondary (4 hours) to upper



secondary school (5 hours), on average among the countries for which data are available for all three educational levels. This trend appears in most countries and is likely to reflect the growing maturity of students as they progress through the educational system. This might be connected to the ability of teachers to assign more individual work and/or more elaborate homework, which then needs more time to be graded. The amount of time that teachers spend communicating with parents or guardians slightly decreases with progress up the educational level as well. On average for countries with data available for two or three education levels, the amount decreases from about two hours in primary and lower secondary schools to about an hour in upper secondary schools. This is in line with the findings on the decreasing contribution of parental feedback to teachers' appraisal from primary to secondary schools. This finding also might reflect the changing nature of interaction with students as they are able to receive more feedback from teachers and learn from it themselves instead of via their parents.

■ Figure 6.14 ■ Teachers' working hours, across ISCED levels

Average number of 60-minute hours teachers in the five countries with data from three educational levels spent on the following activities during the most recent complete calendar week¹



1. 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.

Source: OECD, TALIS 2013 Database. StatLink http://dx.doi.org/10.1787/888933166228

Moreover, TALIS data show that teachers report allocating slightly less time to the planning of lessons in primary and lower secondary than in upper secondary schools on average. In countries with data available for the three levels of education, teachers in primary and lower secondary schools report spending 6 hours on this as compared with 7 hours reported by upper secondary teachers. In countries with data only on two levels of education, there is no difference when only primary and lower secondary teachers are compared (6 hours), while upper secondary teachers report 8 hours as compared with 7 hours reported by lower secondary teachers (Figure 6.14). The biggest difference appears in Denmark, where primary and lower secondary teachers spend 8 hours a week on planning or preparing lessons, while upper secondary teachers spend 12 hours



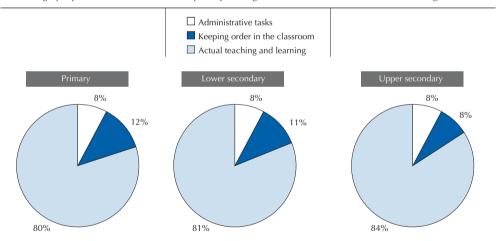
a week, on average. However, in Australia, Poland, Singapore, Abu Dhabi (United Arab Emirates) and Flanders (Belgium), no differences were reported between the levels of education (Table 6.19).

Time spent in the classroom

As with teachers' working hours, the time teachers spend in the classroom seems to be rather evenly distributed across the educational levels, on average for countries with data on two or three education levels. In general, in countries where data are available for all educational levels, teachers spend about 8% of their classroom time on administrative tasks, regardless of education level, as seen in Figure 6.15. The small differences between educational levels in general appear in the allocation of time on keeping order in the classroom and actual teaching and learning. Namely, on average, teachers seem to spend slightly more time on keeping order in the classroom in primary schools (about 12%) and lower secondary (about 11%) than in upper secondary schools (about 8%). In contrast, teachers are able to spend slightly more time on actual teaching and learning in upper secondary schools (84%), relative to their colleagues in lower secondary (81%) and primary schools (80%), with little variation between levels in different countries (see also Table 6.20).

■ Figure 6.15 ■ Distribution of class time during an average lesson, across ISCED levels

Average proportion of time teachers report spending for each of these activities in an average lesson¹



1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

StatLink

http://dx.doi.org/10.1787/888933166230

Teaching practices

Teachers' reports on the teaching practices they use are displayed in Table 6.21. Among the most popular practices, presenting a summary of recently learned content is used by more than 60% of teachers in all countries and across all levels, with the exception of Iceland, where it is reported by 38% of lower secondary and 45% of upper secondary teachers. One of the least frequently used practices across education levels is having students work on projects that require at least one week to complete. This practice is reported by less than one-third or fewer (below 34% and lower) of



teachers across all levels and countries, with the exception of Australia (52% of lower secondary and 51% of upper secondary teachers), Mexico (84% of primary, 57% of lower and 49% of upper secondary teachers) and Abu Dhabi (United Arab Emirates) (53% of lower secondary and 54% of upper secondary teachers). At the same time, there are clear differences between education levels in the use of other practices. For instance, across almost all countries, teachers are less likely to give different work to students who have difficulties learning and/or to those who can advance faster when moving up the education ladder. For countries with data on three education levels, the averages are 65% of primary teachers compared with 47% and 36% of lower and upper secondary teachers, respectively; for countries with data on two education levels, 66% of primary teachers compared with 44% of lower secondary teachers report this. The one exception to this trend is found in Singapore, with 21% of lower secondary teachers reporting this as compared with 25% of upper secondary teachers.

Teachers also tend to check students' exercise books or homework less often moving up the education level. On average, across the education levels in countries with data on three levels, 79% of primary teachers report this practice in comparison with 70% of lower and 55% of upper secondary teachers. Among countries with comparison data for two education levels, the averages are 81% of lower primary teachers against 67% of lower primary teachers, and 72% of lower secondary against 63% of upper secondary teachers. This might reflect the growing independence of students and the accompanying trust of teachers in the students' completion of exercises and homework. One exception to this trend is Iceland, where 63% of upper secondary teachers report checking students' homework compared with 47% of lower secondary teachers. In addition, little (below 2%) or no difference is observed in Australia, Singapore or Abu Dhabi (United Arab Emirates). Finally, another practice with relatively large cross-level differences is students' use of ICT for projects or class work. On average, this practice tends to be reported more often at higher levels of education: 38% of primary, 52% of lower secondary and 64% of upper secondary teachers report it in countries with data for three education levels, while in countries with comparisons for two education levels, it is reported by 39% of primary against 48% of lower secondary teachers and 49% of lower secondary against 57% of upper secondary teachers. This trend is in line with fewer shortages in ICT and less need for ICT training as reported by teachers and principals. However, there are differences among countries: fewer upper secondary than lower secondary teachers report students' use of ICT in Italy, Poland and Singapore, with differences of about 3% or less. In addition, fewer lower secondary teachers than primary teachers report this practice in Finland (18% versus 21%, respectively) and Abu Dhabi (United Arab Emirates) (27% versus 40%, respectively) (see also Table 6.21).

TEACHERS' FEELINGS AND PERCEPTION ON THEIR PROFESSION

The data presented in previous sections tend to concern the more tangible aspects of the teaching profession, such as working hours, school resources, or teachers' demographic characteristics. In contrast, the following sections compare teachers' feelings and perceptions in terms of their job satisfaction and self-efficacy and the extent to which they feel their society values teachers across the different educational levels.

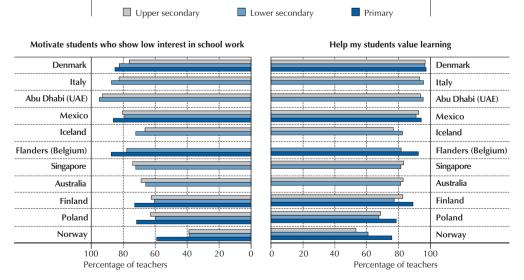


Teachers' self-efficacy

TALIS data show that most teachers believe in their abilities in terms of student engagement, classroom management and instruction, as the cross-country averages range from 64% to 93% of teachers across different levels reporting high confidence in their abilities, depending on the category. As Table 6.21 shows, for countries that offer comparison across two and three education levels, there is relatively little cross-level difference in the average self-efficacy in student engagement in terms of helping students think critically. On average, primary teachers are more confident than secondary teachers in their ability to get students to believe they can do well (91% against 87% for countries with data for primary and lower secondary schools, and 91% against 86% for countries with data on three education levels). A similar pattern emerges for teachers' confidence in helping students to value learning, with 87% of primary teachers against 87% of lower secondary and 79% of upper secondary teachers, and 88% of primary teachers and 79% of lower secondary teachers reporting this for countries with data on only these two levels of education. This trend appears for all countries with available data, apart from Denmark, where there is no difference between educational levels in teachers' confidence (97% of all teachers). In addition, primary teachers report greater confidence, compared with upper and lower secondary teachers, in their ability to motivate students who show low interest in school work (75% of primary teachers versus 64% of lower and upper secondary) in all countries with available data (see also Figure 6.16). These reports of higher self-efficacy of primary teachers may correspond to the higher responsiveness of primary school children to teachers' motivational technics than that of the older students in secondary schools, especially in light of research showing that adolescence can be associated with disruptions in some students' motivation and social-emotional functioning in school (Roeser, Strobel and Quihuis, 2002).

Figure 6.16
 Teacher self-efficacy, across ISCED levels

Percentage of teachers who feel they can do the following "quite a bit" or "a lot"



Countries are ranked in descending order based on the results of lower secondary education on "help my students value learning". Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166248



When it comes to classroom management there is generally little difference across levels, although there appears to be a general trend of slightly higher levels of self-efficacy also in this domain among primary teachers than teachers at higher levels. This trend is more pronounced in the reports of confidence in getting students to follow classroom rules, with an average of 92% of primary teachers, 89% of lower secondary teachers and 86% of upper secondary teachers reporting their confidence in their abilities; while 92% of primary teachers compared to 90% of lower secondary teachers report this in the countries with data on only these two educational levels. In Mexico, however, primary teachers are slightly less confident in this ability than their colleagues (85% versus 86% of lower secondary and 87% of upper secondary teachers). There is little or no difference across levels in terms of self-efficacy in instruction, with the biggest differences observed for the category of implementing alternative instructional strategies (80% of primary, 75% of lower secondary and 78% of upper secondary teachers, on average in the countries with data for these three levels) (see also Table 6.21).

Teachers' job satisfaction and perceptions of being valued by the society

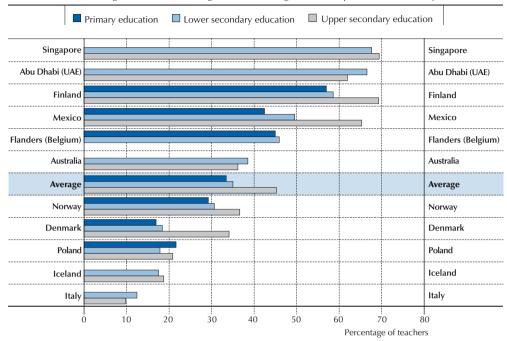
TALIS shows that most teachers, across all levels of education, feel that their profession is not valued by their society. Only in Finland, Singapore, Abu Dhabi (United Arab Emirates), at all levels of education, and in Mexico, at the upper secondary level, does the majority of teachers (between 57% and 69%, depending on the country and educational level) feel that the teaching profession is valued by society (Table 6.21). On average in the countries with data available for the three levels, there is an upward trend, with the highest percentage of reports on the value of the profession among the upper secondary teachers (45%), then lower secondary (35%) and then primary teachers (33%) (Figure 6.17.) Similarly, for countries with data for only two levels, on average only 35% of primary teachers compared with 37% of lower secondary teachers, and 38% of lower secondary teachers compared with 42% of upper secondary teachers, report that their profession is valued. This finding is interesting in light of the fact that in most OECD countries, teacher salaries increase along with the level of education they teach (OECD, 2013). The biggest cross-level differences in this trend are reported in Mexico, where 42% of primary teachers feel that society values teaching, as compared with almost 50% of lower secondary and 65% of upper secondary teachers. However, this trend does not appear or is very weak in Australia, Iceland, Italy, Poland, Singapore and Abu Dhabi (United Arab Emirates) (Table 6.22).

At the same time, TALIS data clearly show that a vast majority of teachers are satisfied with their profession. This is the case across all levels in education and across all the countries. For instance, in Mexico, 98% of teachers across all levels of education report being satisfied with their job. Among the countries with data available for two or three levels of education, there is also little variance across the levels. To illustrate, among the five countries with data on three education levels, 95% of primary and upper secondary teachers and 94% of lower secondary teachers reported high job satisfaction (Table 6.22). This is a striking statistic, which points to the passion most teachers have for their profession.



■ Figure 6.17 ■
Teacher job satisfaction, across ISCED levels

Percentage of teachers who agree that teaching is a valued profession in society



Countries are ranked in descending order based on the results of lower secondary education.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166259

References

OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en.

OECD (2013), Education at a Glance 2013: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2013-en.

Roeser, R.W., K.R. Strobel and G. Quihuis (2002), "Studying early adolescents' academic motivation, social-emotional functioning, and engagement in learning: Variable- and person-centered approaches", *Anxiety, Stress & Coping*, Vol. 15/4, pp. 345-368.

Skelton, C. (2003), "Male primary teachers and perceptions of masculinity", *Education Review*, Vol. 55/2, pp. 195-209.



Key findings and policy implications

Based on the discussions and analyses in this report and the comparisons of teachers and school leaders across all levels of the education systems in the participating countries and economies, this chapter summarises the findings of the report in terms of their policy implications. The areas discussed in this chapter include the distribution of resources across systems, school leadership, the availability of and teacher participation in induction and mentoring programmes, teacher appraisal and feedback and factors related to teacher self-efficacy and job satisfaction.



INTRODUCTION

This report has looked at the working conditions and learning environments across the primary and upper secondary school systems in several of the countries and economies that participated in the OECD Teaching and Learning International Survey (TALIS) in 2013. Although the main focus of the TALIS survey during the 2008 and 2013 cycles has been on lower secondary teachers and schools, TALIS 2013 allowed countries to expand the reach of their data collection to gather a broader view of what is happening in schools across their systems.

The previous chapters provided in-depth examinations of primary and upper secondary teachers' reports of their own experiences in their schools and careers, and how these might relate to both their feelings of confidence in their own abilities as teachers and their levels of job satisfaction. Both teachers and school leaders have provided information about the circumstances in which they work every day, offering a look at the resources to which they do or do not have access, the students who make up their schools and classrooms and the kind of leadership that guides their work. Teachers and school leaders at the primary and upper secondary levels have also given insight into their background characteristics, their education, their own beliefs about teaching and learning and their practices. All of this information paints a picture of the people working in our schools today.

This report also looks at comparisons of selected TALIS indicators across the levels of an education system. Specifically, Chapter 6 examines such comparisons for the five countries that surveyed all three levels of their school system and also evaluates the data for the remaining countries that collected data across two levels. This broad look across education systems enables countries to study the allocation of teacher training and other personnel and material resources to determine where imbalances might lie. It also allows teachers, schools and policy makers to learn from the practices in place at other levels in the system to inform the work occurring in their own schools.

POLICY IMPLICATIONS

This chapter offers a summary of some of the key findings from the report as well as recommendations for policy makers, school leaders and teachers for actions that might serve to improve teaching and learning in schools across an education system.

Ensure an equitable distribution of human and material resources across the school system

The TALIS data across primary, lower secondary and upper secondary schools shed light on resource shortages across all levels of school systems. These reported shortages, however, are different at each level where they occur. For example, as the level of schooling increases (from primary to upper secondary), most countries also report shortages of qualified teachers at increasing rates. This is alarming because the rates of deficiency climb from what is already a high figure: approximately one in five primary teachers across countries work in schools where principals report shortages of qualified teachers at such levels as to hinder instruction.

Other shortages seem to have a larger effect on primary schools. While all countries report some shortages in access to the Internet and ICT at all levels of schooling, for most of the countries, the reported lack of technology resources is higher in primary schools than it is in lower or upper secondary schools. In addition, primary schools report a more significant deficiency of support personnel.



The apparent lack of resources for primary schools is problematic for many reasons. TALIS data also show a higher reported instance of students with special needs and behavioural problems in primary schools as compared with the other school levels for the countries surveyed. Primary teachers are also more likely than colleagues at other levels to report a high area of need for professional development aimed at teaching special-needs students. Thus the dearth of resources in these areas might have more of an impact on the work that occurs in primary schools than in other levels.

Furthermore, TALIS data show that apart from these patterns across education levels, shortages of resources can also be linked to whether a school is located in a rural or urban area or whether it has more students from low socio-economic status (SES) households. For ICT shortages in primary schools, this is also troubling. Students in urban areas or in wealthier homes might have an easier time finding access to technology outside school (in homes or libraries, for example) than they might if they live in rural areas or come from less fortunate families. This means that the only opportunity for these primary students to access technology might be at schools, and if the school does not have enough resources in this area, some students might not have access to technology at all. These primary students are more likely to begin lower secondary school less prepared and might have a more difficult time reaching the level of their better connected peers (OECD, 2012).

Governments should review resource allocations across all levels of the schooling system – and across urban and rural, and high and low SES schools - to ensure a fair and equitable distribution of resources. Special focus should be made on the deficiencies in primary education because it is during this time in children's education that they gain the foundational skills – such as literacy, numeracy and others – that will be the building blocks of their future success in education. Shortages or inadequacies in resources such as ICT may have a particularly negative impact that can have long-term consequences on a student's learning of these building blocks.

Review the process by which teachers can be promoted to leadership positions and endeavour to reduce administrative burden for principals

In TALIS 2013 Results: An International Perspective on Teaching and Learning, gender disparity is reported in terms of the percentage of lower secondary education teachers who are women (68%) versus the percentage who are school leaders (49%) (OECD, 2014), and at no level is this disparity more apparent than in primary schools. Eight of ten primary teachers across the countries surveyed are women, yet only half of the primary school principals are. Given that the great majority of principals were teachers before becoming principals, this suggests that male primary teachers are disproportionately more often promoted to principal than female teachers are.

In upper secondary education, a different issue presents itself. Across the countries surveyed, principals at this level report spending nearly half their time (44%) on administrative tasks and only 34% of their time on average for what many consider the core focus of the school: learning and learners (on average, 19% of time on curriculum and teaching-related tasks and 15% of time on students). Perhaps others at the school are responsible for these tasks, but it might be worth considering whether others at the school could lift some of the administrative burden from principals instead.

Policy makers should review the role of the principal at all levels of the education system but should pay special attention to the aforementioned issues in primary and upper secondary education. If governments want to recruit and retain top candidates as teachers, the teaching profession needs to be



seen as a career in which advancement is possible. Right now, advancement to leadership positions seems less of an option for the majority of primary school teachers across these countries. It is possible, of course, that fewer women become principals because they are content to remain teachers. If this is the case, a career structure needs to be in place to reward and advance teachers even if they choose to stay in the classroom.

The findings from *TALIS 2013 Results: An International Perspective on Teaching and Learning* indicate that principals who reported higher levels of instructional leadership tend to spend more time on curriculum and teaching-related tasks and also have higher levels of job satisfaction (OECD, 2014). Given that only approximately three-quarters (77%) of upper secondary principals and only 66% of primary principals report receiving formal training in instructional leadership, improving access to and participation in this training might be a good place to start.

Provide access to formal induction and mentoring programmes at all levels of the education system, and encourage teachers to participate

A review of the data for lower secondary schools reveals that teachers' participation in induction programmes at the beginning of their schooling was more important than previously realised. Specifically, *TALIS 2013: An International Perspective on Teaching and Learning* found that teacher's previous participation in formal induction programmes appears to be an important predictor of their participation in professional development in later years (OECD, 2014). Thus, the data on the reported availability of and participation in induction programmes at the primary and upper secondary levels is also interesting for policy makers.

In the countries surveyed, over half of primary teachers, on average, work in schools where the principal reports that no formal induction programme is available for new teachers in their schools, and for some countries this percentage is even higher. Even when a formal induction programme is available at the primary level, only 30% of teachers report taking part in it. At the upper secondary level, while more formal induction is available for teachers, on average across the countries surveyed, less than half of upper secondary teachers (45%) report taking part in a formal induction programme and approximately half (51%) report taking part in some informal induction activities.

Participation in induction activities not only influences teachers' future participation in professional development, but induction can serve as a useful orientation and support for teachers new to the profession. Induction offers an opportunity to transfer knowledge at a peer and system level and can provide new teachers with a much-needed support structure that they can lean on as soon as they start working.

The pattern of access to and participation in mentoring programmes is similar to that of induction programmes across a system. Almost half of the primary teachers across the countries surveyed work in a school where the principal reports that there is no access to a mentoring system for teachers at their school. Even for the teachers that do have access, fewer than one in ten participate in mentoring across the six countries. In upper secondary schools, although nearly three-quarters of teachers at this level work in schools where the principals say a mentoring system is available, very few report engaging in mentoring as either a mentor (19%) or mentee (15%).

The lack of emphasis on the importance of mentoring in primary schools might be due to the fact that primary school teachers report getting peer support elsewhere. For example, 80% or more of primary



teachers across countries report engaging in team teaching or other joint activities across classes, as well as taking part in collaborative learning with colleagues. At the upper secondary level, there seems to be a greater instance of mentors being from the same subject discipline as the teachers they are mentoring, which could be because teachers at that level are more specialised to teach certain subjects.

Mentoring has become an increasingly popular form of within-school professional development for teachers, even though the content and format of such programmes vary widely. This might be at least partly due to the evidence showing that teachers who receive more hours of mentoring also show higher student achievement gains than their colleagues who receive fewer hours of mentoring (Rockoff, 2008). Policy makers should provide schools with the support to develop mentoring programmes, including guidance and best practices on successful mentoring relationships. School leaders should take the time to support strong mentoring relationships among the teachers in the school, considering both the subject area taught and the experience in the area being mentored (younger teachers might act as ICT mentors, for example). And teachers should be active participants in these programmes, both as mentors and as recipients of mentoring.

Develop systems of teacher appraisal and feedback that touch on all aspects of teachers' work and career

TALIS 2013 Results: An International Perspective on Teaching and Learning provided many findings and recommendations related to connecting appraisal and feedback to teachers' professional development and making sure that systems of appraisal and feedback in schools are seen as more than administrative exercises (OECD, 2014). When the data are further examined and the reports of primary and upper secondary teachers are included as well, some additional findings are revealed. First, the percentage of teachers who report positive changes as a result of the feedback they receive on their teaching decreases from primary to lower secondary school and from lower secondary to upper secondary school.

In addition, based on the impact that teachers report from feedback across all levels for the countries surveyed, teachers tend to see more benefit from feedback at a personal and emotional level. In other words, teachers report that the feedback they receive has a positive influence on their confidence, motivation and job satisfaction, but they perceive it to have less impact on their career advancement, salary or other financial reward.

In many countries, teachers are still paid according to a fixed scale that might be based on their years of experience or their academic qualifications or certification. Thus it stands to reason that in these instances, results of feedback on teaching might not have much of an impact on salary or career advancement. However, this also means that teachers do not have the opportunity to advance in their careers in the same way as other professionals (i.e. better teaching does not equal more money or career opportunities).

But the fact that teachers do see a benefit from the feedback they receive at a personal level is positive and should be capitalised upon. Job-related outcomes such as increases in teacher job satisfaction, motivation and confidence can lead to improvements in student learning as well as higher levels of teacher retention. Thus, great opportunities remain for school leaders to improve teaching and teachers' confidence and satisfaction by increasing the possibilities for teachers to receive meaningful and constructive feedback on their work. Providing teachers with the time to observe and give feedback to their peers can not only serve these purposes, but can also be an opportunity for professional development for all teachers.



Monitor and find ways to increase teachers' levels of self-efficacy and job satisfaction

The analyses in this report and in *TALIS 2013 Results: An International Perspective on Teaching and Learning* report (OECD, 2014) looked at the variety of factors that might be related to teachers' job satisfaction or feelings of confidence in their own abilities (self-efficacy) and described why both of these outcomes are important to teachers' own successes and behaviours, and how they are related to student achievement. Looking at the data across all levels of education systems makes it apparent that at the upper secondary level, more experienced teachers in all countries surveyed reported higher levels of self-efficacy but lower levels of job satisfaction. The same is true at a primary level for some countries but not all. In simple terms, one could say that teachers with more experience are confident but unhappy. This could be for a variety of reasons but might result in schools losing some of their most experienced – and in some cases most effective – teaching staff.

In primary schools, which already report greater issues with discipline and more challenging issues of classroom composition across the countries surveyed, teachers whose classes contain higher percentages of student with behavioural problems or low academic achievement also report lower job satisfaction and, for some countries, lower self-efficacy. Similar findings were noted for upper secondary school teachers as well.

These analyses provide support for building teacher capacity so that the impact of behavioural problems on teachers – and also on teaching and learning – can be reduced. Professional development that focuses on classroom management or instructional strategies used to reach learners of different paces and abilities could also be beneficial. Again, addressing teacher resource issues by providing additional support staff in the classroom might also help.

The issue of teachers becoming less satisfied with their jobs as they stay in them for longer periods of time is a more significant challenge. This could again be an instance in which providing a more defined career structure or career progression for teachers would help them feel as though they were advancing and receiving recognition for their progress. Or this could be an issue of disillusionment with the profession, since a majority of teachers across all levels, on average, perceive that the teaching profession is not valued by their societies.

References

OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning,* TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en.

OECD (2012), Connected Minds: Technology and Today's Learners, Educational Research and Innovation, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264111011-en.

Rockoff, J. (2008), "Does mentoring reduce turnover and improve skills of new employees? Evidence from teachers in New York City", https://www0.gsb.columbia.edu/faculty/jrockoff/rockoff/mentoring_february_08.pdf.



Annex A

TECHNICAL NOTES ON INDICES AND ANALYSIS USED IN TALIS 2013



ANNEX A

TECHNICAL NOTES ON INDICES AND ANALYSIS USED IN TALIS 2013

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

Construction of indices

This section examines in some detail the composition of indices and other measures used in this report that were derived from the TALIS 2013 teacher and principal questionnaires. Moreover, tables containing the fit indices for each index for each population are available in the *TALIS 2013 Technical Report*. See also the *Technical Report* for the TALIS questionnaires (OECD, 2014).

Teacher self-efficacy

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

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

The questionnaire items forming these indices are as follows:

Efficacy in classroom management

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

Efficacy in instruction

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

Efficacy in student engagement

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

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

Teacher job satisfaction

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

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

The questionnaire items forming these indices are as follows:

Satisfaction with current work environment

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

Satisfaction with profession

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

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

Technical notes on analyses

Technical note on the regression analyses presented in Chapters 3 and 5

Logistic regressions

Chapter 3 and 5 used binary logistic regressions. Population weights and Balanced Repeated Replication (BRR) methodology with Fay's adjustment for variance estimation were used, given the complex sample design of TALIS.

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



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

Namely, log odds model the logit-transformed probability as a linear relationship with the predictor variables. More formally, let y be the binary outcome variable indicating failure/success with 0/1, and p be the probability of y to be 1, so that p = prob(y=1). Let $x_1, ..., x_k$ be a set of predictor variables. Then, the logistic regression of y on $x_1, ..., x_k$ estimates parameter values for $\mathcal{B}_0, \mathcal{B}_1, ..., \mathcal{B}_k$ via the maximum likelihood method of the following equation:

$$logit(p) = log(p/(1-p)) = \beta_0 + \beta_1 x_1 + ... + \beta_k x_k$$

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

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

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

The principal and school variables included in the regression analysis in Chapters 3 and 5 are presented in Tables A.1 and A.3, and the percentages of missing cases for each variable are included in Tables A.2 and A.4. For the binary logistic regression, the first category of the main predictor variable was the baseline category. This means that odds ratios can be interpreted in such a way that for a unit change in the predictor variable (e.g. being a male vs. being a female), the odds ratio of the outcome variable (e.g. thinking that the teaching profession is valued in society) relative to the reference category is expected to change by a factor of the respective parameter estimate, given that the variables in the model are held constant.

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

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



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

Multiple linear regressions

Chapters 3 and 5 used multiple linear regressions. Population weights and BRR methodology with Fay's adjustment for variance estimation were used, given the complex sample design of TALIS.

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

For each country, the population regression line for k explanatory variables $x_1, x_2, ..., x_k$ is defined to be $y = \beta_0 + \beta_1 * x_1 + ... + \beta_k * x_k$, where β_0 is the intercept and β_1 the slope of the line. Statistical software such as SPSS provides fitted values b_0 , b_1 , ..., b_k that estimate the parameters β_0 , β_1 , ..., β_k of the population regression line for the TALIS data. This line describes how the mean response of the chosen dependent variable changes with the explanatory variables in the TALIS database. For example, the slope for the relationship between being male and self-efficacy could be 0.20 in country A, meaning that male teachers in country A on average have self-efficacy levels that are higher by 0.20 points than do female teachers. For continuous variables, the slope reflects the effect on the dependent variable of a one-unit increase in the independent variable.

To facilitate interpretation, the text in the chapter discusses weak, moderate and strong relationships instead of the numerical values of the regression coefficients. Cut-off points for these three categories were regression coefficients that translated into 0.2 and 0.3 standard deviation unit changes, where less than 0.2 is weak, 0.2-0.299 is moderate and 0.3 or higher is strong. These standard deviation unit changes for dichotomous independent variables are obtained by dividing the regression coefficient of the relation (b_{ν}) between the independent variable (x_{ν}) and dependent variable (y) by the standard deviation of the dependent variable for country A $(\sigma_{_{V\!A}})$. This allows for the magnitude of the relation between x_{ν} and y as weak, moderate or strong to be discussed in comparable standard deviation units, accounting for every country's distribution of self-efficacy and job satisfaction scores. For continuous variables such as class size, the size of the relationship was defined as weak, moderate or strong at the threshold of 10 times the unit (β_1 *10 more students).

Tables A.1 and A.3 lists all the variables used in regression analyses in these chapters, and the percentages of missing cases for each variable are included in Tables A.2 and A.4.

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



References

OECD (2014), TALIS 2013 Technical Report, OECD Publishing, Paris.

UCLA: Institute for Digital Research and Education, "Interpreting odds ratios in logistic regression", http://www.ats.ucla.edu/stat/mult_pkg/faq/general/odds_ratio.htm (accessed 6 November 2013).



Table A.1 List of variables in the Chapter 3 regression analyses

Variable	Level	Type of variable	Based on variable(s) in the data set
Teachers' background		7.	
Teacher's gender (0 = female; 1 = male)	Teacher	Independent	TT2G01
Number of years of teaching (0 = 5 years or less; 1 = more than 5 years)	Teacher	Independent	TT2G05B
Teacher's education (0 = ISCED 5B or below; 1 = ISCED 5A or higher)	Teacher	Independent	TT2G10
Inclusion of content elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12A
Inclusion of pedagogy elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12B
Inclusion of classroom practice elements in formal training (1 = yes for all of the subjects I teach; $2 = yes$ for some of the subjects I teach; $3 = no$)	Teacher	Independent	TT2G12C
Subjects taught (original coding)	Teacher	Independent	TT2G15A. 15B. 15C. 15D. 15E. 15G. 15H
Teaching practices			
Teacher self-efficacy (continuous)	Teacher	Dependent	TSELEFFS
Classroom context			
Students whose first language is different from the language of instruction (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35A
Low academic achievers (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35B
Students with behavioural problems (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35D
Academically gifted students (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35F
Class size (continuous)	Teacher	Independent	TT2G38
School climate and job satisfaction			
Teacher job satisfaction (continuous)	Teacher	Dependent	TJOBSATS
This school provides staff with opportunities to actively participate in school decisions (0 = strongly disagree or disagree; 1 = strongly agree or agree)	Teacher	Independent	TT2G44A
I think that teaching is a valued profession in society (0 = strongly disagree or disagree; 1 = strongly agree or agree)	Teacher	Dependent	TT2G46H
School background			
Percentage of students whose first language is different from the language of instruction (0 = 10% or below; 1 = above 10%)	Teacher	Dependent	TC2G15A
Percentage of students with special needs (0 = 10% or below; 1 = above 10%)	Teacher	Dependent	TC2G15B
Percentage of students from socio-economically disadvantaged homes (0 = 30% or below; 1 = above 30%)	Teacher	Dependent	TC2G15C

Source: OECD, TALIS 2013 Database.



The percentage of missing cases for each country for each variable included Table A.2 $\,$ in the Chapter 3 regression analyses

of re-	lumber esponding eachers weighted)	Gender		Highest level of education of teacher	subject(s) taught was included in formal education or training	subject(s) taught was included in formal education or training	subject(s) taught was included in formal education or training	Teaching reading. writing and literature	Teaching mathematics
					Teach	er %			
		TT2G01	TT2G05B	TT2G10	TT2G12A	TT2G12B	TT2G12C	TT2G15A	TT2G15B
Denmark 2	2 088	0.0	2.7	0.4	1.9	1.9	1.9	0.8	0.7
Finland	2 922	0.0	2.0	0.2	0.2	0.2	0.2	1.0	1.0
Mexico	1 291	0.0	12.4	0.9	2.4	2.4	2.4	1.6	1.7
Norway	2 450	0.0	3.5	1.1	1.3	1.2	1.2	1.6	1.6
Poland	3 151	0.0	17.0	0.9	0.5	0.5	0.4	1.4	1.3
Sub-national entities									
Flanders (Belgium)	2 681	0.0	1.6	0.3	0.2	0.2	0.2	0.3	0.3

						Teaching practices	Cla	ssroom cont	ext
	Teaching science	Teaching social studies	Teaching modern foreign languages	Teaching technology	Teaching arts	Teacher self-efficacy	Students whose first language is different from the language of instruction	Low academic achievers	Students with behavioural problems
					Teacher %				
	TT2G15C	TT2G15D	TT2G15E	TT2G15G	TT2G15H	TSELEFFS	TT2G35A	TT2G35B	TT2G35D
Denmark	0.8	0.8	0.8	0.8	0.7	4.3	5.0	5.2	5.6
Finland	1.0	1.0	1.0	1.0	1.1	2.9	3.3	3.6	3.6
Mexico	1.7	1.7	1.7	1.7	1.9	1.3	2.6	2.3	2.4
Norway	1.6	1.7	1.7	1.7	1.6	7.5	9.1	9.2	9.5
Poland	1.5	1.6	1.6	1.7	1.6	0.8	2.2	2.1	1.9
Sub-national entities									
Flanders (Belgium)	100.0	100.0	0.3	100.0	0.4	2.2	3.2	3.4	3.4

	Classroon	ı context	School cli	mate and job s	atisfaction	Sc	hool backgrou	nd
	Academically gifted students	Class size	Teacher job satisfaction	Staff has opportunities to actively participate in school decisions	I think that teaching is a valued profession in society	Students whose first language is different from the language of instruction	Students with special needs	Students from socio- economically disadvantaged homes
				Teach	ner %			
	TT2G35F	TT2G38	TJOBSATS	TT2G44A	TT2G46H	TC2G15A	TC2G15B	TC2G15C
Denmark	5.6	14.6	4.3	4.7	4.5	17.0	17.0	17.0
Finland	3.6	21.6	2.7	2.9	3.0	0.0	0.0	0.0
Mexico	2.1	15.2	1.4	1.9	2.1	4.2	1.5	0.3
Norway	9.7	39.4	8.1	8.4	8.6	16.7	16.7	16.7
Poland	1.7	11.1	0.9	1.5	1.6	0.9	2.7	2.7
Sub-national entities								
Flanders (Belgium)	3.5	19.1	2.5	2.9	2.7	21.9	21.9	21.9

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

Source: OECD, TALIS 2013 Database.



Table A.3 List of variables in the Chapter 5 regression analyses

List of variables in the chapter 5 regression		<u> </u>	
Variable	Level	Type of variable	Based on variable(s) in the data set
Teachers' background			
Teacher's gender (0 = female; 1 = male)	Teacher	Independent	TT2G01
Number of years of teaching (0 = 5 years or less; 1 = more than 5 years)	Teacher	Independent	TT2G05B
Teacher's education (0 = ISCED 5B or below; 1 = ISCED 5A or higher)	Teacher	Independent	TT2G10
Inclusion of content elements in formal training (1 = yes for all of the subjects I teach; $2 = yes$ for some of the subjects I teach; $3 = no$)	Teacher	Independent	TT2G12A
Inclusion of pedagogy elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = no)	Teacher	Independent	TT2G12B
Inclusion of classroom practice elements in formal training (1 = yes for all of the subjects I teach; 2 = yes for some of the subjects I teach; 3 = $n0$)	Teacher	Independent	TT2G12C
Subjects taught (original coding)	Teacher	Independent	TT2G15A. 15B. 15C. 15D. 15E. 15G. 15H
Teaching practices			
Teacher self-efficacy (continuous)	Teacher	Dependent	TSELEFFS
Classroom context			
Students whose first language is different from the language of instruction (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35A
Low academic achievers (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35B
Students with behavioural problems (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35D
Academically gifted students (0 = 10% or below; 1 = more than 10%)	Teacher	Independent	TT2G35F
Class size (continuous)	Teacher	Independent	TT2G38
School climate and job satisfaction			
Teacher job satisfaction (continuous)	Teacher	Dependent	TJOBSATS
This school provides staff with opportunities to actively participate in school decisions (0 = strongly disagree or disagree; 1 = strongly agree or agree)	Teacher	Independent	TT2G44A
I think that teaching is a valued profession in society (0 = strongly disagree or disagree; 1 = strongly agree or agree)	Teacher	Dependent	TT2G46H
School background			
Percentage of students whose first language is different from the language of instruction $(0 = 10\% \text{ or below; } 1 = \text{above } 10\%)$	Teacher	Dependent	TC2G15A
Percentage of students with special needs (0 = 10% or below; 1 = above 10%)	Teacher	Dependent	TC2G15B
Percentage of students from socio-economically disadvantaged homes (0 = 30% or below; 1 = above 30%)	Teacher	Dependent	TC2G15C

Source: OECD, TALIS 2013 Database.



[Part 1/2]

The percentage of missing cases for each country for each variable included Table A.4 in the Chapter 5 regression analyses

			9						
	Number of responding teachers (unweighted	1	Year(s) working as a teacher in total	Highest level of education of teacher	Content of the subject(s) taught was included in formal education or training	Pedagogy of the subject(s) taught was included in formal education or training	Classroom practice in the subject(s) taught was included in formal education or training	Teaching reading. writing and literature	Teaching mathematics
					Teac	her %			
		TT2G01	TT2G05B	TT2G10	TT2G12A	TT2G12B	TT2G12C	TT2G15A	TT2G15B
Australia	1 982	0.0	2.3	1.1	0.8	0.8	0.8	2.9	2.9
Denmark	1 514	0.0	3.6	0.6	3.6	3.6	3.6	1.8	1.7
Finland	2 412	0.0	4.7	1.0	1.0	1.0	1.0	2.2	2.2
Iceland	1 104	0.0	6.0	1.1	1.1	1.2	1.2	4.3	4.4
Italy	3 659	0.0	1.2	0.6	1.7	1.7	1.7	1.1	1.1
Mexico	2 940	0.0	31.7	0.4	2.0	2.1	2.0	1.0	1.1
Norway	2 658	0.0	3.7	1.4	2.6	2.7	2.7	2.7	2.7
Poland	3 289	0.0	17.2	1.2	0.7	0.8	0.8	1.6	1.6
Singapore	3 131	0.0	1.0	0.0	0.1	0.1	0.1	0.5	0.5
Sub-national entities									
Abu Dhabi (United Arab Emirates)	2 472	0.0	3.7	1.1	2.0	2.1	1.9	5.2	5.5
						Teaching practices	Cla	assroom cont	ext
	Teaching science	Teaching social studies	Teaching modern foreign languages	Teaching technology	Teaching arts	Teacher self-efficacy	Students whose first language is different from the language of instruction	Low academic achievers	Students with behavioural problems
					Teacher %				
	TT2G15C	TT2G15D	TT2G15E	TT2G15G	TT2G15H	TSELEFFS	TT2G35A	TT2G35B	TT2G35D
Australia	2.8	2.9	2.9	2.8	2.9	8.4	9.6	9.5	9.7
Denmark	1.7	1.8	1.6	1.6	1.7	3.5	4.5	5.0	4.8
Finland	2.2	2.1	2.2	2.2	2.2	7.6	8.6	9.5	8.6

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

4.3

1.1

1.1

2.6

1.5

0.4

5.6

4.3

1.1

1.1

2.6

1.6

0.5

5.6

4.3

1.1

1.1

2.6

1.6

0.4

5.5

4.4

1.1

1.2

2.5

1.6

0.5

5.6

14.2

2.3

0.4

9.8

1.1

0.8

7.8

15.3

3.0

0.9

10.3

2.2

1.2

11.5

15.4

3.1

1.1

10.5

1.4

1.4

11.5

15.7

3.1

1.0

10.6

1.6

1.4

11.4

Source: OECD, TALIS 2013 Database.

Iceland

Mexico

Norway

Poland

Singapore

Sub-national entities Abu Dhabi (United Arab Emirates)

Italy

StatLink http://dx.doi.org/10.1787/888933166292

4.4

1.1

1.1

2.7

1.6

0.5

5.5

[Part 2/2]
The percentage of missing cases for each country for each variable included
Table A.4 in the Chapter 5 regression analyses

Tuble / ti-1	III tile cila	pter b reg.	C331011 alla	yses		1		
	Classroon	n context	School cli	mate and job s	atisfaction	Sc	chool backgrou	nd
	Academically gifted students	Class size	Teacher job satisfaction	Staff has opportunities to actively participate in school decisions	I think that teaching is a valued profession in society	Students whose first language is different from the language of instruction	Students with special needs	Students from socio- economically disadvantaged homes
				Teach	ner %			
	TT2G35F	TT2G38	TJOBSATS	TT2G44A	TT2G46H	TC2G15A	TC2G15B	TC2G15C
Australia	9.6	16.3	9.2	9.6	9.3	20.5	20.5	20.5
Denmark	4.8	8.7	3.4	4.5	4.0	17.2	20.4	20.4
Finland	9.2	17.5	7.6	7.9	7.8	0.3	0.7	0.3
Iceland	15.8	28.7	14.4	16.5	15.3	12.8	12.8	17.5
Italy	3.0	14.3	2.6	3.2	2.8	3.0	3.0	3.0
Mexico	0.7	10.8	0.7	1.2	0.8	0.4	1.3	1.0
Norway	10.9	23.9	10.3	12.4	10.9	30.2	30.2	30.2
Poland	1.2	9.1	0.8	1.3	1.3	6.3	5.8	5.5
Singapore	1.3	8.7	1.2	0.9	1.5	9.6	9.6	9.1
Sub-national entities								
Abu Dhabi (United Arab Emirates)	11.1	28.1	8.4	8.6	8.9	63.9	63.9	64.7

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

Source: OECD, TALIS 2013 Database.



Annex B

DATA TABLES

All tables in Annex B are available on line.

Chapter 2 tables	192
Chapter 3 tables	209
Chapter 4 tables	227
Chapter 5 tables	247
Chapter 6 tables	270
List of tables only available on line	318



Gender and age distribution of primary teachers

Percentage of primary education teachers with the following characteristics

Table 2.1 and average age of teachers

						Percei	ntage of	f teache	ers in e	ach age	group								
	Fem	Female		Female		_		Under 25 years 25-29 years		30-39 years		40-49	9 years	50-59	years	60 years or more		Average age	
		S.E.		S.E.		S.E.		S.E.	%	S.E.		S.E.		S.E.	Average	S.E.			
Denmark	75.8	(0.8)	0.2	(0.1)	5.5	(0.6)	29.1	(1.1)	28.5	(0.9)	25.8	(1.0)	11.0	(0.7)	45.4	(0.2)			
Finland	81.5	(0.7)	0.4	(0.1)	8.2	(0.7)	26.1	(0.9)	35.2	(1.1)	25.5	(1.1)	4.5	(0.5)	43.9	(0.3)			
Mexico	66.8	(1.5)	5.5	(0.9)	14.2	(1.4)	33.5	(1.5)	25.8	(1.6)	19.1	(1.4)	2.0	(0.6)	39.6	(0.5)			
Norway	80.2	(1.4)	0.7	(0.2)	6.5	(0.6)	24.8	(1.2)	31.4	(1.1)	23.1	(0.9)	13.5	(1.4)	45.3	(0.4)			
Poland	85.5	(0.8)	0.4	(0.2)	7.2	(0.7)	26.5	(1.1)	40.2	(1.1)	24.5	(1.2)	1.1	(0.2)	42.9	(0.3)			
Sub-national entities																			
Flanders (Belgium)	82.6	(0.9)	6.3	(0.6)	16.0	(0.9)	31.8	(1.1)	24.9	(1.0)	20.7	(1.0)	0.4	(0.1)	39.0	(0.3)			
Average	78.7	(0.4)	2.2	(0.2)	9.6	(0.3)	28.6	(0.5)	31.0	(0.5)	23.1	(0.5)	5.4	(0.3)	42.7	(0.1)			

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166308

[Part 1/1]

Primary teachers' educational attainment

 Table 2.2
 Percentage of primary education teachers by highest level of formal education completed

			Highest	level of forma	l education cor	npleted			
	Below ISC	ED level 5	ISCED I	evel 5B ²	ISCED I	evel 5A	ISCED level 6		
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	
Denmark	1.5	(0.3)	0.3	(0.1)	98.1	(0.4)	0.1	(0.0)	
Finland	1.0	(0.4)	3.0	(0.5)	95.4	(0.8)	0.5	(0.2)	
Mexico	19.0	(1.5)	1.0	(0.3)	79.5	(1.6)	0.5	(0.2)	
Norway	1.6	(0.3)	a	a	98.3	(0.3)	0.1	(0.1)	
Poland	0.2	(0.1)	0.6	(0.2)	99.1	(0.2)	0.2	(0.1)	
Sub-national entities									
Flanders (Belgium)	0.3	(0.1)	93.7	(0.6)	6.0	(0.6)	0.0	(0.0)	
Average ³	3.9	(0.3)	19.7	(0.2)	79.4	(0.3)	0.2	(0.1)	

^{1.} Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED level 5A programmes are generally longer and more theory-based, while 5B programmes are typically shorter and more practical and skills oriented. No distinction was made between ISCED level 5A (Bachelor) and ISCED level 5A (Master).

^{2.} Includes Bachelor's degrees in some countries.

^{3.} The averages do not add up to 100 across categories because of the presence of cells that are not applicable "a" in some countries. Source: OECD, TALIS 2013 Database.



Completion and content of teacher education or training programme in primary education

Percentage of primary education teachers who completed teacher education or a training programme and for whom the following elements were included in their formal education Table 2.3 and training.

Tuble 215		aninig.				Elomont	e include	d in form	aal aduc	ation and	l trainine			
	of te	oletion acher ation	Cor	ntent of t being	he subje taught			igogy of				ctice in t	he subje taught	ct(s)
	or tra	aining amme				For some subjects		For all subjects		For some subjects		For all subjects		some jects
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	90.4	(0.8)	53.4	(1.3)	41.6	(1.3)	52.8	(1.5)	41.9	(1.4)	44.1	(1.3)	48.3	(1.2)
Finland	92.0	(1.0)	78.7	(1.1)	16.2	(0.8)	79.1	(1.4)	16.7	(1.1)	63.5	(1.4)	30.2	(1.3)
Mexico	82.3	(1.7)	66.5	(2.0)	23.7	(1.7)	64.0	(1.9)	28.4	(1.5)	65.6	(2.1)	24.5	(1.6)
Norway	84.5	(1.3)	42.4	(1.7)	53.7	(1.8)	45.6	(1.6)	50.2	(1.8)	51.3	(1.1)	41.9	(1.1)
Poland	99.5	(0.2)	93.5	(0.6)	5.7	(0.6)	93.5	(0.7)	5.2	(0.6)	87.0	(0.8)	9.2	(0.7)
Sub-national entities														
Flanders (Belgium)	99.3	(0.2)	83.4	(0.9)	14.8	(0.8)	82.6	(0.8)	16.1	(0.8)	81.1	(1.0)	16.2	(0.9)
Average	91.3	(0.4)	69.7	(0.5)	25.9	(0.5)	69.6	(0.6)	26.4	(0.5)	65.4	(0.5)	28.4	(0.5)

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166327

[Part 1/1] Work experience of primary teachers

Table 2.4 Average years of working experience among primary education teachers in various roles

	Average of working as a teacher a	experience	Average of working as a teach	experience	Average of working in other edu	experience	Average of working in othe	experience
	Average	S.E.	Average	S.E.	Average	S.E.	Average	S.E.
Denmark	11.1	(0.3)	15.8	(0.2)	1.9	(0.1)	5.0	(0.2)
Finland	8.9 (0.2)		15.4	(0.3)	1.9	(0.1)	3.0	(0.1)
Mexico	7.9 (0.4)		15.9	(0.5)	3.0	(0.4)	4.6	(0.5)
Norway	11.1 (0.9)		15.9	(0.7)	3.0	(0.2)	4.2	(0.2)
Poland	14.3	(0.2)	18.8	(0.3)	2.1	(0.2)	2.3	(0.2)
Sub-national entities								
Flanders (Belgium)	13.5	(0.3)	16.3	(0.3)	0.6	(0.1)	1.0	(0.1)
Average	11.2	(0.2)	16.3	(0.2)	2.1	(0.1)	3.3	(0.1)

Source: OECD, TALIS 2013 Database.



Employment contract status of primary teachers

Table 2.5 Percentage of primary education teachers with the following employment characteristics

				n contract: school year		n contract: ear or less
	96.0 (0.5) 75.2 (1.4) 73.7 (2.2) 90.4 (1.0)		%	S.E.	%	S.E.
Denmark	96.0	(0.5)	0.7	(0.2)	3.3	(0.4)
Finland	75.2	(1.4)	3.2	(0.5)	21.5	(1.3)
Mexico	73.7	(2.2)	16.6	(1.7)	9.7	(1.2)
Norway	90.4	(1.0)	2.9	(0.4)	6.7	(0.9)
Poland	87.2	(1.1)	3.2	(0.8)	9.6	(0.9)
Sub-national entities						
Flanders (Belgium)	83.6	(0.8)	3.9	(0.5)	12.5	(0.7)
Average	84.3	(0.5)	5.1	(0.3)	10.6	(0.4)

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166341

[Part 1/1]

Employment status of primary teachers, full time or part time

Percentage of primary education teachers who are employed full time and part time (taking Table 2.6 into account all their current teaching jobs) and the reasons for part-time employment¹

			Part	time	Part	time	Part	time	Reason s	stated for	working p	art time
	Full (more th of full-tin		(71% t of full hou	o 90% I-time	(50% to of full hou	o 70% -time	(less that of full hou	n 50% -time	Teacher to work p		There no pos to work	sibility
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	85.5	(0.8)	10.8	(0.7)	2.5	(0.4)	1.1	(0.2)	81.9	(2.1)	18.1	(2.1)
Finland	96.3	(0.4)	1.8	(0.3)	1.2	(0.2)	0.8	(0.2)	73.0	(5.2)	27.0	(5.2)
Mexico	64.1	(3.3)	8.2	(1.6)	21.1	(2.9)	6.7	(1.5)	28.6	(3.1)	71.4	(3.1)
Norway	74.9	(1.3)	14.0	(1.1)	8.3	(0.6)	2.8	(0.4)	90.1	(1.3)	9.9	(1.3)
Poland	82.6	(1.3)	5.0	(0.8)	7.3	(0.6)	5.1	(0.6)	18.6	(2.6)	81.4	(2.6)
Sub-national entities												
Flanders (Belgium)	76.5	(1.1)	8.5	(0.7)	14.1	(1.0)	0.9	(0.2)	85.9	(1.5)	14.1	(1.5)
	00.0	(O. T)		(0.4)	0.4	(O. E)		(0.0)		(4.0)		(4.0)
Average	80.0	(0.7)	8.0	(0.4)	9.1	(0.5)	2.9	(0.3)	63.0	(1.2)	37.0	(1.2)

 $^{1. \} Cells \ with \ data \ representing \ less \ than \ 5\% \ of \ the \ cases \ are \ shaded \ in \ grey \ and \ should \ be \ interpreted \ with \ caution.$

Source: OECD, TALIS 2013 Database.



Primary school type and school competition

Percentage of primary education teachers who work in schools where principals report the
 Table 2.7
 following school characteristics

	Public :	schools ¹	Private	schools ²	with two other sch least som	at compete o or more ools for at ne of their lents	with one o for at le	at compete ther school ast some students	Schools the compete schools stud	for their
		S.E.		S.E.		S.E.		S.E.		S.E.
Denmark	82.5	(1.8)	17.5	(1.8)	73.1	(4.4)	11.4	(3.2)	15.5	(3.7)
Finland	98.4	(1.2)	1.6	(1.2)	80.0	(3.0)	3.0	(1.2)	17.0	(2.8)
Mexico	84.6	(1.7)	15.4	(1.7)	59.8	(4.9)	18.4	(4.1)	21.8	(3.5)
Norway	98.1	(1.4)	1.9	(1.4)	51.5	(4.4)	18.6	(9.0)	29.9	(8.1)
Poland	95.8	(1.0)	4.2	(1.0)	58.8	(4.4)	26.1	(4.3)	15.1	(3.3)
Sub-national entities										
Flanders (Belgium)	38.5	(2.2)	61.5	(2.2)	77.7	(3.7)	16.3	(3.3)	6.0	(2.2)
Average	83.0	(0.7)	17.0	(0.7)	66.8	(1.7)	15.6	(2.0)	17.5	(1.8)

^{1.} Refers to the percentage of primary education teachers who work in schools where principals report that their school was 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.

Source: OECD, TALIS 2013 Database.

^{2.} Refers to the percentage of primary education teachers who work in schools where principals report that their school was privately managed. This is a school managed by a non-government organisation; e.g., a church, trade union, business or other private institution. In some countries, the privately-managed-schools category includes schools that receive significant funding from the governments (government-dependent private schools).



[Part 1/1]

Primary school composition by first language, special needs and disadvantaged homes Percentage of teachers in primary education who work in schools where principals reported

Percentage of teachers in primary education who work in schools where principals reported

Table 2.8 the following school characteristics

	Schools w	ith the follo	wing percen	tage of stud	ents whose t	first languag	e is different	from the la	language of instruction ¹		
	No	ne	1% to	10%	11% t	o 30%	31% to	o 60%	More th	an 60%	
		S.E.		S.E.		S.E.		S.E.		S.E.	
Denmark	10.6	(2.6)	62.0	(4.5)	23.4	(3.7)	2.2	(1.6)	1.8	(1.3)	
Finland	24.9	(2.8)	57.3	(3.3)	13.7	(2.2)	2.4	(1.2)	1.6	(0.9)	
Mexico	83.7	(3.2)	12.9	(3.2)	3.2	(1.3)	0.3	(0.3)	0.0	(0.0)	
Norway	4.7	(1.7)	62.2	(8.9)	28.2	(8.4)	2.7	(1.7)	2.2	(1.5)	
Poland	88.5	(2.4)	9.5	(2.2)	1.3	(0.9)	0.0	(0.0)	0.8	(0.8)	
Sub-national entities											
Flanders (Belgium)	0.7	(0.7)	57.0	(4.2)	25.8	(3.6)	8.5	(1.9)	8.0	(2.3)	
Average	35.5	(1.0)	43.5	(2.0)	15.9	(1.7)	2.7	(0.5)	2.4	(0.5)	

			Schools wit	h the follow	ing percenta	ge of studer	nts with spec	cial needs ^{1, 2}		
	No	ne	1% to	10%	11% t	o 30%	31% to	o 60%	More th	an 60%
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	0.7	(0.7)	70.1	(4.6)	28.2	(4.5)	0.0	(0.0)	1.0	(1.0)
Finland	5.4	(1.4)	67.5	(3.8)	25.0	(3.4)	1.9	(1.1)	0.2	(0.2)
Mexico	17.5	(3.4)	66.3	(4.0)	16.2	(3.4)	0.0	(0.0)	0.0	(0.0)
Norway	0.4	(0.6)	73.9	(8.7)	25.6	(8.6)	0.0	(0.0)	0.0	(0.0)
Poland	1.8	(0.9)	39.7	(4.3)	44.2	(4.3)	13.1	(2.8)	1.1	(0.8)
Sub-national entities										
Flanders (Belgium)	0.0	(0.0)	50.7	(3.8)	43.2	(3.8)	4.9	(1.8)	1.2	(0.7)
Average	4.3	(0.6)	61.4	(2.1)	30.4	(2.1)	3.3	(0.6)	0.6	(0.2)

	Sc	hools with t	he following	g percentage	of students	from socio	economical	ly disadvant	aged homes	1, 3
	No	ne	1% to	10%	11% t	o 30%	31% t	o 60%	More th	an 60%
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	6.8	(2.4)	69.8	(4.0)	19.7	(3.6)	2.7	(1.4)	1.0	(1.0)
Finland	16.3	(2.8)	55.8	(3.6)	19.9	(3.2)	8.0	(2.2)	0.0	(0.0)
Mexico	10.7	(2.7)	19.5	(3.9)	13.1	(2.9)	28.1	(3.9)	28.6	(4.1)
Norway	14.9	(3.2)	66.6	(4.6)	17.4	(5.2)	1.1	(1.1)	0.0	(0.0)
Poland	3.9	(1.5)	39.3	(3.6)	45.5	(3.4)	9.8	(2.7)	1.6	(1.2)
Sub-national entities										
Flanders (Belgium)	1.6	(1.2)	50.7	(4.4)	31.6	(4.2)	12.5	(2.8)	3.6	(1.5)
	0.0	(4.0)	#0.0	(4 E)	0.4 5	(4.6)	40.4	(4.0)		(0.0)
Average	9.0	(1.0)	50.3	(1.7)	24.5	(1.6)	10.4	(1.0)	5.8	(0.8)

^{1.} These data are broad estimates reported by principals.

Source: OECD, TALIS 2013 Database.

^{2.} 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

^{3. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



School resources in primary education

Percentage of primary education teachers whose school principal reported that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide quality

Table 2.9 instruction

lubic 213	monaction							
		ualified and/or ning teachers	competence	teachers with es in teaching special needs		of vocational chers		r inadequacy onal materials
	%	S.E.		S.E.		S.E.	%	S.E.
Denmark	15.3	(3.2)	51.7	(4.3)	12.5	(2.7)	13.3	(3.3)
Finland	17.7	(3.0)	39.3	(3.7)	3.9	(1.5)	18.9	(3.0)
Mexico	31.5	(4.3)	55.6	(4.6)	55.2	(4.5)	52.0	(3.9)
Norway	27.2	(3.4)	29.9	(4.3)	1.2	(0.9)	16.7	(3.2)
Poland	9.7	(1.9)	10.5	(2.4)	1.2	(0.7)	10.1	(2.6)
Sub-national entities								
Flanders (Belgium)	34.5	(4.1)	38.7	(4.2)	a	a	18.2	(3.5)
Average	22.6	(1.4)	37.6	(1.6)	14.8	(1.1)	21.5	(1.3)

	inadeo compu	tage or quacy of uters for uction		nt internet cess	inadeo compute	tage or Juacy of r software truction	inadequa	age or cy of library erials		of support
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	45.4	(4.5)	36.5	(4.5)	34.5	(4.7)	17.1	(3.6)	55.8	(4.4)
Finland	50.4	(3.7)	35.6	(3.6)	44.0	(3.5)	23.4	(3.2)	57.8	(3.5)
Mexico	80.8	(3.3)	76.4	(4.1)	75.1	(3.8)	52.6	(4.6)	62.4	(4.6)
Norway	52.3	(8.3)	35.3	(8.4)	30.4	(4.2)	30.2	(7.6)	47.0	(4.2)
Poland	32.6	(3.6)	17.3	(3.1)	32.4	(3.7)	23.6	(3.9)	30.8	(4.4)
Sub-national entities										
Flanders (Belgium)	49.4	(4.1)	34.0	(4.3)	39.7	(4.1)	29.5	(3.7)	71.3	(3.5)
Average	51.8	(2.0)	39.2	(2.0)	42.7	(1.6)	29.4	(1.9)	54.2	(1.7)

^{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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.



[Part 1/2]

School resources in primary education, by socio-economic level

Percentage of primary education teachers whose school principal reported that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide quality instruction.

Table 2.10 instruction¹

	per from	ols with centage i socio-e idvantag	of stud	ents ically		ge of qi perforn		and/or achers	com	tage of petence	s in tea	aching	Sho	ortage o	f vocati hers	onal
	30%	or less	More than 30%		econ	socio- omic tus or less)	ecoi sta (mor	socio- nomic atus e than 0%)	eco	socio- nomic atus or less)	ecor st: (mor	socio- nomic atus re than 0%)	ecor	socio- nomic ntus or less)	status (more than	
	% S.E. % S.E.		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.		
Denmark	96.4	(1.7)	3.6	(1.7)	15.9	(3.4)	0.0	(0.0)	51.9	(4.4)	45.6	(24.2)	11.2	(2.7)	47.2	(24.5)
Finland	92.0	(2.2)	8.0	(2.2)	15.5	(2.8)	41.7	(16.1)	36.6	(3.8)	70.6	(13.0)	3.5	(1.5)	7.7	(7.5)
Mexico	43.3	(4.1)	56.7	(4.1)	24.5	(5.9)	36.7	(5.7)	47.1	(7.5)	62.1	(5.7)	44.7	(6.5)	63.3	(6.3)
Norway	98.9	(1.1)	1.1	(1.1)	26.4	(3.3)	100.0	(0.0)	29.1	(4.2)	100.0	(0.0)	1.2	(0.9)	0.0	(0.0)
Poland	88.6	(2.6)	11.4	(2.6)	8.4	(2.2)	11.4	(7.9)	10.5	(2.5)	12.1	(8.5)	1.4	(0.8)	0.0	(0.0)
Sub-national entities																
Flanders (Belgium)	83.9	(3.1)	16.1	(3.1)	33.2	(4.6)	39.9	(9.9)	36.9	(4.5)	47.1	(10.0)	a	a	a	a
Average	83.8	(1.1)	16.2	(1.1)	20.6	(1.6)	38.3	(3.5)	35.4	(1.9)	56.3	(5.2)	12.4	(1.5)	23.7	(5.3)
		3.8 (1.1) 10.2 (1.1)														

	Short	tage of sup	port pers	onnel			inadequa nal materi			ortage or omputers		
	socio-eo sta	gh conomic tus or less)	socio-e	ow conomic atus nan 30%)	Hi socio-ec sta (30% c	onomic tus	socio-e	ow conomic itus ian 30%)	Hi socio-ec sta (30% c	onomic tus	socio-e	ow conomic atus nan 30%)
		S.E.		S.E.		S.E.		S.E.		S.E.	%	S.E.
Denmark	55.8	(4.4)	56.5	(24.0)	12.7	(3.3)	27.0	(23.4)	45.4	(4.7)	45.6	(24.2)
Finland	57.6	(3.7)	60.3	(16.1)	19.6	(3.1)	10.7	(10.1)	50.2	(3.8)	52.8	(16.5)
Mexico	51.3	(6.9)	70.7	(6.0)	38.6	(6.6)	62.0	(5.5)	72.0	(5.4)	87.5	(4.2)
Norway	47.5	(4.2)	0.0	(0.0)	16.9	(3.3)	0.0	(0.0)	52.9	(8.3)	0.0	(0.0)
Poland	30.5	(4.6)	28.1	(11.0)	7.7	(2.4)	20.5	(11.1)	30.9	(3.5)	34.8	(14.2)
Sub-national entities												
Flanders (Belgium)	72.7	(4.0)	67.8	(8.5)	20.3	(4.3)	4.0	(3.2)	50.2	(4.9)	46.0	(10.3)
Average	52.5	(1.9)	47.2	(5.4)	19.3	(1.7)	20.7	(4.8)	50.3	(2.2)	44.4	(5.7)

^{1.} Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution.

Source: OECD, TALIS 2013 Database.

^{2.} These data are broad estimates reported by principals.

^{3. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



School resources in primary education, by socio-economic level

Percentage of primary education teachers whose school principal reported that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide quality

Table 2.10 instruction¹

	Ins	ufficient ii	nternet ac	cess		or inadeo			Shorta		equacy of erials	library
	socio-eo sta	igh conomic itus or less)	Low socio-economic status (more than 30%)		sta	gh conomic tus or less)	socio-eo sta	ow conomic itus ian 30%)	Hi socio-ec sta (30% c	conomic tus	Low socio-economic status (more than 30%	
		S.E.	%	S.E.	%	S.E.	%	S.E.		S.E.	%	S.E.
Denmark	35.4	(4.5)	65.8	(22.4)	34.8	(4.8)	27.0	(23.4)	16.7	(3.6)	27.0	(23.4)
Finland	34.8	(3.7)	44.4	(16.1)	43.3	(3.4)	51.6	(16.1)	22.5	(3.3)	33.6	(15.6)
Mexico	65.4	(7.0)	84.7	(4.7)	62.8	(6.5)	84.3	(4.7)	45.4	(7.2)	58.0	(5.6)
Norway	35.6	(8.5)	0.0	(0.0)	29.6	(4.2)	100.0	(0.0)	30.6	(7.7)	0.0	(0.0)
Poland	13.8	(2.9)	31.0	(13.9)	31.2	(3.9)	31.3	(13.2)	22.5	(3.9)	26.4	(12.7)
Sub-national entities												·
Flanders (Belgium)	34.9	(4.8)	29.2	(9.1)	40.4	(4.8)	31.6	(9.2)	32.6	(4.5)	11.7	(5.4)
Average	36.7	(2.3)	42.5	(5.4)	40.3	(1.9)	54.3	(5.5)	28.4	(2.2)	26.1	(5.3)

- 1. Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution.
- 2. These data are broad estimates reported by principals.
- 3. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.

Source: OECD, TALIS 2013 Database.





[Part 1/3]

School resources in primary education, by school location

Percentage of primary education teachers whose school principal reported that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide quality

 Table 2.11
 instruction

			School loc	ation size						ualified an ning teach		
	15 000 or l	people less	Between and 10 peo	000 000	More 100 000		15 000 or l		and 10	n 15 001 00 000 ople		than D people
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	53.5	(4.2)	34.7	(3.9)	11.8	(2.9)	14.8	(4.4)	13.9	(6.8)	21.6	(13.1)
Finland	39.2	(2.9)	30.9	(3.2)	29.9	(3.0)	19.1	(4.8)	15.0	(5.4)	18.5	(5.6)
Mexico	49.1	(4.2)	8.4	(2.7)	42.6	(4.2)	24.7	(5.6)	26.2	(16.2)	40.3	(7.0)
Norway	65.0	(4.4)	17.0	(3.4)	17.9	(3.8)	33.4	(4.4)	13.8	(7.1)	17.3	(9.1)
Poland	63.5	(2.3)	18.6	(2.7)	17.9	(2.4)	10.1	(2.3)	10.0	(4.9)	8.0	(4.6)
Sub-national entities												
Flanders (Belgium)	64.5	(3.9)	24.8	(3.8)	10.7	(2.7)	33.4	(4.8)	28.9	(8.2)	53.4	(12.6)
Average	55.8	(1.5)	22.4	(1.3)	21.8	(1.3)	22.6	(1.8)	18.0	(3.6)	26.5	(3.8)

	Shorta			competer special ne		aching		Shorta	age of voc	ational tea	achers	
	15 000 or l		and 1	n 15 001 00 000 ople		e than D people	15 000 or l		and 10	n 15 001 00 000 ople	More 100 000	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	45.5	(6.7)	60.3	(7.7)	55.0	(11.6)	15.2	(4.0)	10.9	(5.1)	5.5	(5.4)
Finland	32.2	(4.9)	43.2	(6.4)	44.7	(7.2)	6.0	(3.2)	1.2	(1.2)	3.9	(2.7)
Mexico	65.1	(5.9)	58.5	(17.1)	44.1	(6.6)	57.7	(6.6)	68.5	(17.0)	49.5	(7.4)
Norway	27.8	(5.1)	26.4	(10.1)	40.9	(11.1)	1.8	(1.4)	0.0	(0.0)	0.0	(0.0)
Poland	10.7	(3.2)	15.0	(5.7)	5.6	(3.8)	0.0	(0.0)	2.4	(2.4)	4.4	(3.2)
Sub-national entities												
Flanders (Belgium)	33.3	(4.8)	41.3	(9.0)	64.1	(12.1)	a	a	a	a	a	a
	0.00	(0.4)	40.0	/4.45	40.4	(2.0)	464	(4 =0)	400	(2.6)	40.0	(2.0)
Average	35.8	(2.1)	40.8	(4.1)	42.4	(3.8)	16.1	(1.7)	16.6	(3.6)	12.7	(2.0)

		Shor	tage of su	port pers	onnel		Shor	tage or in	adequacy	of instruct	ional mate	erials
	15 000 or l		and 1	n 15 001 00 000 ople		e than 0 people	15 000 or l		and 1	n 15 001 00 000 ople		than D people
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	52.2	(6.0)	53.9	(9.0)	77.4	(11.8)	17.5	(4.8)	7.8	(4.4)	9.2	(9.6)
Finland	46.9	(5.3)	56.4	(6.4)	73.4	(5.8)	13.6	(4.0)	21.8	(5.4)	22.7	(6.2)
Mexico	66.4	(6.1)	55.7	(17.1)	59.1	(7.0)	55.7	(5.8)	34.8	(16.2)	51.1	(6.6)
Norway	46.5	(4.9)	38.4	(11.5)	56.7	(12.7)	16.0	(3.7)	23.1	(8.5)	13.1	(8.7)
Poland	30.9	(5.9)	23.0	(6.9)	36.3	(9.1)	9.9	(3.6)	13.5	(6.0)	7.6	(4.4)
Sub-national entities												
Flanders (Belgium)	69.2	(4.0)	73.9	(7.4)	77.7	(10.5)	17.8	(3.9)	14.7	(6.4)	28.1	(11.8)
	F2.0	(2.2)	F0.2	(4.2)	62.4	(4.0)	21.0	(1.0)	10.2	(2.6)	22.0	(2.4)
Average	52.0	(2.2)	50.2	(4.3)	63.4	(4.0)	21.8	(1.8)	19.3	(3.6)	22.0	(3.4)

Source: OECD, TALIS 2013 Database.



[Part 2/2]

School resources in primary education, by school location

Percentage of primary education teachers whose school principal reported that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide quality

Table 2.11 instruction

	Shorta	ge or inac	lequacy of	f compute	rs for inst	ruction		Ins	ufficient ii	nternet ac	cess	
		people less	and 1	n 15 001 00 000 ople		e than 0 people		people less	and 1	n 15 001 00 000 ople		e than O people
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	46.6	(6.7)	39.7	(7.2)	55.8	(15.1)	37.6	(5.8)	33.4	(8.7)	40.4	(15.7)
Finland	52.4	(5.7)	49.7	(6.7)	48.6	(6.7)	31.7	(6.2)	38.3	(6.4)	37.9	(6.9)
Mexico	89.9	(3.5)	94.8	(5.5)	67.7	(6.8)	84.0	(4.3)	76.2	(12.6)	67.8	(6.9)
Norway	58.0	(11.7)	42.7	(12.0)	40.6	(12.6)	37.1	(12.2)	28.9	(9.7)	34.5	(13.0)
Poland	34.2	(4.8)	32.2	(8.0)	25.4	(7.0)	17.6	(4.4)	20.5	(7.0)	13.6	(5.5)
Sub-national entities												
Flanders (Belgium)	47.6	(5.1)	50.1	(8.4)	58.9	(12.9)	35.1	(5.1)	33.6	(8.3)	27.9	(11.7)
Average	54.8	(2.8)	51.5	(3.4)	49.5	(4.4)	40.5	(2.8)	38.5	(3.7)	37.0	(4.3)

	Sho	ortage or i		y of comp ruction	uter softw	are	SI	hortage or	inadequa	cy of libra	ry materia	als
	15 000 or	people less	and 1	n 15 001 00 000 ople		e than O people		people less	and 1	n 15 001 00 000 ople		e than 0 people
		S.E.	%	S.E.		S.E.		S.E.		S.E.	%	S.E.
Denmark	31.7	(6.0)	37.4	(9.5)	38.9	(14.9)	16.4	(4.7)	18.8	(5.6)	15.4	(11.2)
Finland	49.2	(6.0)	45.4	(7.1)	35.6	(6.6)	21.6	(5.4)	27.7	(5.9)	21.4	(5.8)
Mexico	78.2	(5.4)	76.2	(12.6)	71.2	(6.3)	49.5	(6.4)	57.0	(17.2)	55.2	(7.1)
Norway	27.3	(4.3)	31.3	(10.6)	40.7	(12.6)	31.9	(11.0)	40.5	(10.3)	14.4	(8.4)
Poland	37.3	(5.1)	23.7	(7.6)	25.5	(7.5)	26.2	(5.4)	14.2	(5.8)	25.5	(7.3)
Sub-national entities												
Flanders (Belgium)	40.7	(5.3)	40.3	(8.5)	32.8	(12.2)	31.7	(4.9)	27.7	(7.8)	20.4	(10.7)
Average	44.1	(2.2)	42.4	(3.9)	40.8	(4.3)	29.5	(2.7)	31.0	(3.9)	25.4	(3.5)

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Class size and classroom composition in primary education

Average class size and percentage of primary education teachers reporting the following Table 2.12 characteristics of students in their class¹

			St	tudents	whose	first la	nguage of instr			om the	languag	ge	Low a	acaden	nic achi	evers
	Average c	lass size²	No	one	1% to	10%	11% to	o 30%	31% t	o 60%	More 60		No	ne	1% to	10%
	Average	S.E.		S.E.	%	S.E.	%	S.E.	%	S.E.		S.E.		S.E.	%	S.E.
Denmark	21.4	(0.2)	39.2	(2.4)	39.3	(1.9)	12.4	(1.8)	4.4	(1.2)	4.6	(1.5)	3.3	(0.6)	50.5	(1.7)
Finland	17.8	(0.3)	55.7	(1.9)	29.5	(1.5)	7.9	(0.9)	3.5	(0.7)	3.4	(0.6)	6.3	(0.7)	41.9	(1.5)
Mexico	26.3	(0.6)	81.0	(2.0)	12.1	(1.4)	2.0	(0.7)	1.4	(0.4)	3.5	(0.9)	2.1	(0.5)	48.9	(1.9)
Norway	19.3	(0.4)	28.1	(4.1)	48.2	(3.2)	14.8	(1.8)	4.4	(1.0)	4.5	(1.3)	2.2	(0.6)	47.4	(1.9)
Poland	18.8	(0.2)	88.0	(1.1)	7.5	(0.8)	1.2	(0.2)	1.0	(0.3)	2.4	(0.5)	2.9	(0.4)	52.3	(1.6)
Sub-national entities																
Flanders (Belgium)	18.0	(0.2)	28.7	(2.0)	37.1	(1.6)	15.4	(1.4)	7.1	(0.9)	11.8	(1.8)	1.6	(0.3)	38.9	(1.5)
Average	20.3	(0.1)	53.5	(1.0)	28.9	(0.8)	9.0	(0.5)	3.6	(0.3)	5.0	(0.5)	3.0	(0.2)	46.6	(0.7)

		Low	acaden	nic achi	evers					Studer	ts with	special	needs3			
	11% t	o 30%	31% t	o 60%	More 60	than	No	one	1% to	10%	11% t	o 30%	31% t	o 60%	More 60	than
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	34.8	(1.3)	6.7	(1.0)	4.8	(0.9)	11.5	(0.8)	57.5	(1.6)	21.8	(1.2)	3.1	(0.4)	6.1	(1.0)
Finland	31.4	(1.3)	10.2	(1.0)	10.3	(0.8)	24.1	(1.3)	46.3	(1.2)	15.2	(1.0)	3.7	(0.6)	10.7	(0.8)
Mexico	35.0	(1.6)	11.2	(1.2)	2.9	(0.4)	35.9	(2.0)	56.3	(2.1)	6.0	(0.8)	1.4	(0.4)	0.5	(0.2)
Norway	39.9	(1.2)	7.4	(1.2)	3.2	(0.6)	9.6	(0.8)	59.7	(1.5)	23.8	(1.0)	3.2	(0.5)	3.6	(0.7)
Poland	34.9	(1.4)	8.0	(0.7)	1.9	(0.4)	14.0	(1.0)	58.2	(1.3)	20.9	(1.0)	5.2	(0.6)	1.7	(0.5)
Sub-national entities																
Flanders (Belgium)	42.4	(1.3)	12.4	(1.0)	4.6	(0.6)	11.9	(0.9)	49.5	(1.2)	27.5	(1.0)	7.6	(0.7)	3.5	(0.5)
Average	36.4	(0.6)	9.3	(0.4)	4.6	(0.3)	17.8	(0.5)	54.6	(0.6)	19.2	(0.4)	4.1	(0.2)	4.3	(0.3)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. These data are reported by primary education teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 3. 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.
- 4. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.

Source: OECD, TALIS 2013 Database.



[Part 2/2]

Class size and classroom composition in primary education

Average class size and percentage of primary education teachers reporting the following Table 2.12 characteristics of students in their class¹

			Stu	ıdents v	vith beh	avioura	l proble	ems			St	udents disa		cio-eco ged hor		lly
	No	one	1% to	10%	11% t	o 30%	31% t	o 60%		than	No	one	1% to	10%	11% t	to 30%
		S.E.	%	S.E.		S.E.		S.E.		S.E.	%	S.E.	%	S.E.		S.E.
Denmark	19.1	(1.2)	55.7	(1.4)	18.2	(1.3)	4.2	(0.7)	2.8	(0.5)	32.7	(2.1)	46.4	(1.7)	13.4	(1.2)
Finland	14.1	(1.2)	47.7	(1.5)	25.7	(1.2)	9.4	(0.7)	3.1	(0.4)	23.7	(1.3)	49.7	(1.4)	18.8	(1.1)
Mexico	11.8	(1.3)	55.6	(1.8)	22.8	(1.4)	7.4	(0.9)	2.4	(0.5)	10.5	(1.7)	21.9	(1.6)	21.5	(1.6)
Norway	22.4	(2.0)	58.2	(1.2)	16.4	(1.7)	2.0	(0.4)	1.0	(0.3)	30.3	(1.7)	52.9	(1.6)	13.3	(1.5)
Poland	15.6	(0.9)	59.1	(1.3)	19.7	(1.0)	4.7	(0.5)	0.8	(0.3)	13.8	(0.9)	53.4	(1.1)	24.0	(1.1)
Sub-national entities																
Flanders (Belgium)	20.8	(1.0)	58.8	(1.2)	16.5	(1.0)	3.2	(0.4)	0.6	(0.3)	19.7	(1.4)	53.9	(1.5)	17.7	(1.2)
	17.0	(0.5)	55.0	(0, 6)	10.0	(0.5)	F 2	(0.2)	1.0	(0.2)	21.0	(0, 6)	16.1	(0, 6)	10.1	(0.5)
Average	17.3	(0.5)	55.8	(0.6)	19.9	(0.5)	5.2	(0.3)	1.8	(0.2)	21.8	(0.6)	46.4	(0.6)	18.1	(0.5)

			cio-ecor ged hom	omically es⁴				Acade	emically	gifted st	udents			
	31% 1	to 60%	More th	nan 60%	No	one	1% to	10%	11% 1	to 30%	31% t	o 60%	More th	nan 60%
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	4.6	(0.9)	2.9	(0.8)	4.1	(0.8)	10.6	(1.1)	22.9	(1.1)	38.4	(1.3)	24.0	(1.4)
Finland	5.9	(0.6)	1.8	(0.3)	11.8	(0.9)	33.2	(1.3)	31.5	(1.3)	20.0	(1.2)	3.6	(0.5)
Mexico	24.6	(1.8)	21.6	(2.1)	21.1	(1.6)	54.0	(2.1)	15.2	(1.3)	7.7	(1.0)	2.0	(0.5)
Norway	3.0	(0.7)	0.5	(0.2)	6.4	(0.7)	34.3	(1.0)	30.1	(1.6)	21.8	(1.5)	7.4	(0.7)
Poland	7.3	(0.8)	1.5	(0.4)	0.8	(0.2)	22.1	(1.3)	31.1	(1.4)	33.2	(1.4)	12.8	(0.8)
Sub-national entities														
Flanders (Belgium)	5.6	(0.7)	3.1	(0.8)	46.1	(1.8)	48.0	(1.5)	5.3	(0.6)	0.4	(0.1)	0.3	(0.1)
Average	8.5	(0.4)	5.2	(0.4)	15.0	(0.5)	33.7	(0.6)	22.7	(0.5)	20.3	(0.5)	8.3	(0.3)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. These data are reported by primary education teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 3. 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.
- 4. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.

Source: OECD, TALIS 2013 Database.



Gender and age distribution of primary education principals

Percentage of principals in primary education with the following characteristics and mean age Table 2.13 of principals

							Pero	entage o	of princip	als in ea	ch age g	roup		
	Fer	nale	Mear	age	Under	30 years	30-39	years	40-49	years	50-59	years	60 years	or more
	%	S.E.	Average	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	37.4	(4.4)	53.0	(0.7)	0.0	(0.0)	8.0	(2.4)	20.2	(3.3)	51.5	(4.3)	20.2	(3.2)
Finland	47.2	(4.1)	49.1	(1.1)	0.0	(0.0)	14.2	(4.5)	31.2	(4.4)	49.4	(5.7)	5.1	(1.8)
Mexico	42.8	(3.9)	45.3	(0.8)	13.8	(2.6)	14.6	(2.9)	30.4	(3.6)	34.5	(3.4)	6.8	(2.0)
Norway	60.2	(7.9)	53.6	(0.9)	0.0	(0.0)	5.9	(3.1)	20.9	(3.2)	50.0	(5.3)	23.2	(4.7)
Poland	72.5	(4.0)	50.2	(0.7)	0.0	(0.0)	3.6	(1.3)	34.7	(5.2)	57.6	(4.7)	4.1	(2.1)
Sub-national entities														
Flanders (Belgium)	59.1	(3.9)	47.6	(0.6)	0.0	(0.0)	16.8	(3.4)	34.6	(4.0)	48.6	(4.5)	0.0	(0.0)
Average	53.2	(2.0)	49.8	(0.3)	2.3	(0.4)	10.5	(1.3)	28.7	(1.6)	48.6	(1.9)	9.9	(1.1)

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166430

[Part 1/1]
Primary education principals' educational attainment

 Table 2.14
 Percentage of principals in primary education by level of education and training completed[†]

			Highes	t level of forma	l education co	mpleted		
	Below ISC	ED level 5	ISCED	level 5B ²	ISCED	level 5A	ISCED	level 6
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	0.7	(0.7)	0.0	(0.0)	99.3	(0.7)	0.0	(0.0)
Finland	0.0	(0.0)	0.3	(0.3)	98.9	(0.6)	0.9	(0.5)
Mexico	14.0	(2.4)	0.0	(0.0)	83.8	(2.7)	2.3	(1.1)
Norway	0.0	(0.0)	a	a	100.0	(0.0)	0.0	(0.0)
Poland	0.0	(0.0)	2.0	(2.8)	96.4	(3.0)	1.6	(1.2)
Sub-national entities								
Flanders (Belgium)	0.7	(0.7)	89.8	(2.9)	9.5	(2.8)	0.0	(0.0)
Average ³	2.6	(0.4)	18.4	(0.8)	81.3	(0.8)	0.8	(0.3)

^{1.} Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED Level 5A programmes are generally longer and more theory-based, while 5B programmes are typically shorter and more practical and skills oriented. No distinction was made between ISCED Level 5A (Bachelor) and ISCED Level 5A (Master).

^{2.} Includes Bachelor degrees in some countries.

^{3.} The averages do not add up to 100 across categories because of the presence of cells that are not applicable "a" in some countries. Source: OECD, TALIS 2013 Database.



[Part 1/1]

Primary education principals' formal education

Percentage of principals in primary education who report that the following elements were Table 2.15 included in their formal education

		School a	dministration	or principal tra	ining programr	ne or course co	mpleted	
		g up a position incipal		up a position incipal		fter taking up as principal	Ne	ever
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	7.0	(2.2)	49.5	(4.4)	7.7	(2.1)	35.9	(3.9)
Finland	57.8	(5.3)	14.4	(3.2)	17.8	(3.1)	10.1	(4.5)
Mexico	18.5	(3.5)	39.0	(3.8)	14.6	(2.7)	27.9	(3.5)
Norway	12.2	(2.7)	45.6	(3.2)	19.4	(3.2)	22.8	(3.2)
Poland	57.2	(4.5)	27.0	(3.8)	15.1	(3.7)	0.7	(0.5)
Sub-national entities								
Flanders (Belgium)	21.7	(3.2)	46.4	(4.4)	22.5	(3.5)	9.4	(2.6)
Average	29.1	(1.5)	37.0	(1.6)	16.2	(1.3)	17.8	(1.3)

			Teacher ed	ucation or train	ing programm	e completed			
		up a position ncipal		up a position ncipal		fter taking up as principal	Never		
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	
Denmark	86.3	(3.3)	0.7	(0.7)	0.0	(0.0)	13.0	(3.2)	
Finland	97.1	(2.4)	0.0	(0.0)	0.6	(0.6)	2.4	(2.4)	
Mexico	78.4	78.4 (3.2)		(1.3)	12.9	(2.5)	6.4	(1.7)	
Norway	95.5	(1.3)	0.6	(0.6)	0.9	(0.9)	3.0	(0.8)	
Poland	a		a		a		a		
Sub-national entities									
Flanders (Belgium)	97.1	(1.5)	0.4	(0.4)	1.6	(1.1)	0.9	(0.9)	
Average	90.9	(1.1)	0.8	(0.3)	3.2	(0.6)	5.1	(0.9)	

			e completed					
		up a position ncipal		up a position incipal		fter taking up as principal	Ne	ever
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	7.6	(2.2)	51.1	(4.3)	22.4	(3.4)	18.9	(3.8)
Finland	9.6	(2.0)	37.7	(5.8)	18.6	(2.8)	34.0	(5.6)
Mexico	17.4 (3.3)		39.3	(4.0)	19.3	(3.0)	23.9	(3.5)
Norway	21.1	(3.3)	23.6	(5.4)	16.1	(7.2)	39.1	(8.9)
Poland	5.3	(1.5)	17.8	(3.0)	10.8	(3.3)	66.2	(4.3)
Sub-national entities								
Flanders (Belgium)	18.2	(3.2)	44.5	(4.0)	15.3	(3.3)	22.0	(3.5)
Average	13.2	(1.1)	35.7	(1.9)	17.1	(1.7)	34.0	(2.2)

Source: OECD, TALIS 2013 Database.



[Part 1/1]

Work experience of primary education principals

Percentage of principals in primary education with the following work experience and Table 2.16 average years of experience in each role

Table 2.10	avera	ge ye	113 01	схрст	CIICC I	ii caci	11010									
				Years v	working	g as a pr	incipal				Years working in other school management roles					
		ge years erience	3 y	than ears rience	l	years rience) years rience	20 y	e than ears rience		e years erience	3 y	than ears rience		years rience
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Denmark	12.3	(0.6)	4.2	(1.7)	42.8	(3.8)	37.7	(4.3)	15.3	(3.1)	2.8	(0.4)	62.2	(4.0)	32.7	(3.6)
Finland	11.7	(1.2)	18.7	(4.4)	31.0	(5.1)	32.3	(5.2)	18.0	(4.4)	2.1	(0.3)	70.0	(4.4)	27.5	(4.3)
Mexico	10.4	(0.8)	16.9	(2.7)	45.8	(3.9)	20.7	(3.3)	16.6	(3.1)	3.4	(0.7)	72.1	(4.4)	18.4	(3.8)
Norway	8.7	(0.7)	12.8	(2.7)	58.7	(4.0)	20.9	(3.3)	7.6	(2.3)	4.0	(0.5)	43.5	(8.7)	51.9	(8.7)
Poland	12.2	(0.8)	4.1	(1.2)	34.4	(5.9)	48.2	(5.8)	13.2	(3.8)	1.9	(0.3)	80.6	(3.1)	11.3	(2.3)
Sub-national entities																
Flanders (Belgium)	7.8	(0.5)	16.4	(3.2)	53.5	(4.3)	27.1	(3.9)	3.0	(1.4)	3.2	(0.6)	73.1	(4.3)	17.3	(3.6)
Average	10.5	(0.3)	12.2	(1.2)	44.4	(1.9)	31.2	(1.8)	12.3	(1.3)	2.9	(0.2)	66.9	(2.1)	26.5	(2.0)

		ars work ool mana			Years working as a teacher										
		years rience	20 y	than ears rience		ge years erience	3 y	than ears rience		years rience) years rience	20 y	than ears rience	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	
Denmark	4.4	(2.0)	0.7	(0.7)	19.7	(0.8)	0.7	(0.7)	23.9	(3.7)	33.8	(3.7)	41.6	(4.2)	
Finland	2.3	(0.9)	0.2	(0.2)	20.0	(1.2)	1.5	(1.0)	22.6	(4.9)	30.4	(4.9)	45.4	(6.0)	
Mexico	2.9	(1.6)	6.7	(2.4)	20.9	(0.8)	3.5	(1.3)	21.2	(2.8)	22.2	(3.6)	53.1	(4.0)	
Norway	4.6	(1.2)	0.0	(0.0)	17.6	(1.2)	0.9	(0.9)	25.5	(4.9)	32.3	(5.3)	41.4	(6.3)	
Poland	7.4	(2.0)	0.7	(0.7)	27.2	(0.6)	0.0	(0.0)	1.2	(0.7)	10.0	(3.1)	88.9	(3.2)	
Sub-national entities															
Flanders (Belgium)	4.6	(1.9)	5.0	(1.9)	18.0	(0.7)	3.1	(1.0)	16.3	(3.2)	43.3	(4.3)	37.3	(4.3)	
Average	4.3	(0.7)	2.2	(0.5)	20.6	(0.4)	1.6	(0.4)	18.4	(1.5)	28.7	(1.7)	51.3	(2.0)	

				Ye	ears working	in other jol	bs				
	Average of expe		Less thar exper		3-10 exper	<u>'</u>	11-20 exper		More than 20 years experience		
		S.E.		S.E.		S.E.		S.E.		S.E.	
Denmark	4.3	(0.7)	65.0	(4.2)	22.8	(3.6)	4.7	(1.9)	7.5	(2.0)	
Finland	2.1	(0.4)	74.2	(5.1)	24.7	(5.1)	0.8	(0.5)	0.3	(0.3)	
Mexico	2.6	(0.5)	69.5	(5.2)	23.3	(4.6)	7.2	(2.8)	0.0	(0.0)	
Norway	2.3	(0.5)	73.5	(7.9)	21.4	(7.7)	3.9	(1.6)	1.2	(0.8)	
Poland	2.0	(0.5)	79.7	(4.0)	16.8	(3.7)	0.0	(0.0)	3.5	(1.6)	
Sub-national entities											
Flanders (Belgium)	1.4	(0.4)	88.1	(2.8)	6.9	(2.1)	2.6	(1.3)	2.3	(1.6)	
Avorago	2.4	(0.2)	75.0	(2.1)	10.2	(2.0)	2.2	(0.7)	2.5	(O F)	
Average	2.4	(0.2)	75.0	(2.1)	19.3	(2.0)	3.2	(0.7)	2.5	(0.5)	

Source: OECD, TALIS 2013 Database.



Principals' working time in primary education

Average proportion of time primary education principals report spending on the following

Table 2.17 activities

	Adminis and lead tasks meeti	dership and	Curric and tea related and me	ching- tasks		Students interactions ³		Parents or guardians interactions ⁴		ctions local gional unity, ss and stry	Oth	er
	Average	S.E.	Average	S.E.	Average	S.E.	Average	S.E.	Average	S.E.	Average	S.E.
Denmark	51.1	(1.4)	18.7	(0.8)	10.0	(0.5)	10.0	(0.4)	6.2	(0.3)	4.1	(0.5)
Finland	40.4	(1.8)	28.8	(2.5)	12.5	(1.1)	10.6	(0.8)	4.3	(0.3)	3.4	(0.5)
Mexico	31.6	(1.1)	25.8	(1.0)	18.0	(0.7)	14.8	(0.5)	7.1	(0.4)	2.8	(0.7)
Norway	a	a	a	a	a	a	a	a	a	a	a	a
Poland	41.6	(1.3)	24.3	(1.1)	13.4	(0.8)	10.1	(0.6)	7.0	(0.4)	3.6	(0.4)
Sub-national entities												
Flanders (Belgium)	45.9	(1.3)	19.6	(0.7)	12.3	(0.5)	11.9	(0.6)	5.2	(0.3)	5.0	(0.7)
Average	42.1	(0.6)	23.4	(0.6)	13.3	(0.3)	11.5	(0.3)	6.0	(0.2)	3.8	(0.2)

^{1.} Including human resource/personnel issues, regulations, report, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state or national education officials.

Source: OECD, TALIS 2013 Database.

^{2.} Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.

^{3.} Including counseling and conversations outside structured learning activities.

^{4.} Including formal and informal interactions.



[Part 1/1]

Principals' leadership in primary education

Percentage of primary education principals who report engaging "often" or "very often" Table 2.18 in the following leadership activities during the 12 months prior to the survey

	teachers classroom	rate with s to solve discipline lems		nstruction lassroom	co-operat teachers	n to support ion among to develop ng practices	that tead responsi improvi	n to ensure thers take ibility for ing their ng skills	that tead responsib students	n to ensure chers feel le for their learning omes
		S.E.		S.E.	%	S.E.		S.E.		S.E.
Denmark	58.5	(3.8)	17.6	(3.2)	36.6	(3.8)	43.1	(4.3)	40.1	(4.2)
Finland	64.8	(4.8)	7.3	(2.2)	42.8	(4.6)	27.3	(3.9)	36.4	(5.2)
Mexico	73.4	(3.6)	54.1	(3.8)	65.0	(3.7)	66.8	(3.4)	75.3	(2.9)
Norway	48.0	(8.2)	18.1	(3.3)	51.4	(4.7)	41.3	(3.8)	36.6	(4.9)
Poland	65.9	(4.7)	72.2	(5.1)	71.4	(4.4)	79.6	(4.1)	87.2	(3.7)
Sub-national entities										
Flanders (Belgium)	43.8	(4.1)	29.1	(3.8)	46.3	(4.6)	50.4	(4.4)	60.7	(4.4)
Average	59.1	(2.1)	33.1	(1.5)	52.3	(1.8)	51.4	(1.6)	56.0	(1.7)

	or guard information	parents ians with on the school performance	and error	r mistakes s in school /e procedures eports	the lesson	oblems with s timetable school	Collaborate with principals from other schools		
		S.E.		S.E.		S.E.	%	S.E.	
Denmark	22.0	(3.7)	18.3	(3.3)	35.4	(4.1)	63.6	(3.9)	
Finland	36.2	(5.9)	41.3	(4.4)	50.5	(4.9)	79.1	(3.3)	
Mexico	84.3	(2.6)	68.7	(3.5)	38.6	(4.0)	45.8	(3.9)	
Norway	34.6	(6.5)	27.4	(7.2)	50.4	(8.8)	70.4	(7.9)	
Poland	81.8	(4.0)	64.4	(4.8)	46.8	(5.2)	79.4	(4.3)	
Sub-national entities									
Flanders (Belgium)	45.3	(4.3)	33.0	(3.8)	38.8	(4.3)	72.0	(3.9)	
Average	50.7	(1.9)	42.2	(1.9)	43.4	(2.2)	68.4	(1.9)	

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166482

[Part 1/1]

Primary education principals' participation in a school development plan

Percentage of primary education principals who report having engaged in the following Table 2.19 activities related to a school development plan in the 12 months prior to the survey

	(including national/interna	and student evaluation results tional assessments) to develop nal goals and programmes	Work on a professional dev	elopment plan for the school
	%	S.E.		S.E.
Denmark	75.4	(3.9)	77.0	(2.6)
Finland	56.3	(6.3)	32.2	(3.5)
Mexico	95.8	(1.8)	76.0	(3.5)
Norway	97.1	(1.5)	74.2	(5.6)
Poland	93.9	(2.5)	97.2	(1.2)
Sub-national entities				
Flanders (Belgium)	74.0	(4.1)	89.0	(2.7)
Average	82.1	(1.5)	74.3	(1.4)

Source: OECD, TALIS 2013 Database.



Teachers' feedback by source of feedback in primary education

Percentage of primary education teachers who report receiving feedback from various sources Table 3.1 and teachers who report never having received feedback in their school

				Have	received	feedback f	rom ²				Have	never
	indiv	ernal iduals odies	School _I	orincipal	of so	nbers chool nent team		gned itors	Other t	eachers	received in their sch	feedback current
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	20.2	(1.1)	47.2	(1.9)	15.5	(1.4)	5.5	(0.6)	64.8	(1.5)	17.1	(1.0)
Finland	24.8	(1.1)	55.1	(1.4)	7.5	(0.8)	1.3	(0.2)	57.1	(1.4)	24.1	(1.4)
Mexico	41.9			(2.2)	43.3	(2.0)	20.6	(1.6)	31.6	(1.7)	11.3	(1.4)
Norway	13.8	(1.0)	52.4	(3.9)	40.2	(3.1)	2.4	(0.4)	62.7	(2.0)	10.7	(1.4)
Poland	35.5	(1.5)	95.4	(0.5)	30.5	(1.5)	24.1	(1.2)	45.2	(1.5)	1.2	(0.3)
Sub-national entities												
Flanders (Belgium)	31.8	(1.2)	81.0	(1.4)	36.9	(1.1)	6.7	(0.7)	19.2	(1.1)	9.6	(0.9)
Average	28.0	(0.6)	67.2	(0.9)	29.0	(0.7)	10.1	(0.4)	46.7	(0.6)	12.3	(0.5)

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

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166511

[Part 1/1]

Methods for providing feedback to teachers in primary education

Percentage of primary education teachers who report receiving feedback via the following Table 3.2 methods^{1, 2}

	follo class	lback wing room vation		ck from surveys	follo assessr teachers	lback wing nent of ' content 'ledge	following of stud	back g analysis ent test ores	follo self-ass	lback wing essment ers' work	from s	back urveys cussion arents
		(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)		(S.E.)		(S.E.)
Denmark	63.8	(1.7)	42.6	(1.4)	33.5	(1.2)	56.2	(1.3)	42.6	(1.2)	39.3	(1.2)
Finland	59.6	(1.5)	31.4	(1.1)	35.0	(1.4)	38.2	(1.5)	28.9	(1.3)	52.4	(1.6)
Mexico	81.7	(1.9)	65.9	(2.2)	76.9	(2.0)	80.0	(1.7)	75.8	(1.9)	73.8	(2.1)
Norway	79.3	(1.5)	47.1	(1.2)	45.2	(1.8)	67.3	(2.2)	55.8	(1.7)	56.5	(1.2)
Poland	97.8	(0.4)	62.2	(1.5)	75.9	(1.2)	83.6	(0.9)	66.2	(1.4)	76.3	(1.2)
Sub-national entities												
Flanders (Belgium)	83.5	(1.2)	28.9	(1.3)	36.8	(1.2)	63.7	(1.1)	43.4	(1.5)	50.2	(1.5)
Average	77.6	(0.6)	46.4	(0.6)	50.5	(0.6)	64.8	(0.6)	52.1	(0.6)	58.1	(0.6)

^{1.} 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.

Source: OECD, TALIS 2013 Database.

^{2.} Percentage of teachers reporting receiving feedback via the following methods by at least one body, including: "External individuals or bodies", "Principal", "Member(s) of school management team", "Assigned mentors" or "Other teachers".



Emphasis of teacher feedback in primary education

Percentage of primary education teachers who report the feedback they received emphasised Table 3.3 the following issues with a "moderate" or "high" importance!

							,					
		dent mance	unders of the	dge and tanding subject d(s)	compe in teacl	gogical tencies hing the field(s)	asses	dent sment ctices	beha and cla	dent viour assroom gement	of stu with s	ching idents special g needs
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	70.7	(1.3)	80.7	(1.0)	86.7	(0.9)	64.9	(1.3)	87.0	(0.9)	73.6	(1.5)
Finland	75.8	(1.4)	79.3	(1.2)	82.6	(1.1)	61.6	(1.7)	86.6	(1.1)	72.8	(1.4)
Mexico	95.2	(0.7)	93.9	(0.8)	92.1	(1.1)	91.3	(1.0)	86.7	(1.5)	67.5	(2.0)
Norway	83.9	(1.2)	75.4	(0.9)	74.4	(1.2)	69.0	(1.8)	88.9	(1.0)	71.2	(1.5)
Poland	93.5	(0.7)	88.8	(0.7)	89.2	(0.9)	91.0	(0.8)	90.7	(1.0)	84.1	(1.2)
Sub-national entities												
Flanders (Belgium)	79.3	(1.0)	71.0	(1.2)	82.7	(1.0)	72.8	(1.2)	81.7	(1.0)	73.6	(1.1)
Average	83.1	(0.4)	81.5	(0.4)	84.6	(0.4)	75.1	(0.5)	86.9	(0.5)	73.8	(0.6)

	Teaching in a multicultural or multilingual setting		Feedback provided to other teachers to help their teaching		Feedback from parents or guardians		Student feedback		Collaboration or working with other teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	39.7	(2.1)	63.2	(1.4)	78.1	(1.0)	81.8	(0.9)	90.2	(0.9)
Finland	27.3	(1.7)	45.0	(1.7)	83.8	(1.2)	73.5	(1.2)	85.8	(1.2)
Mexico	45.4	(2.3)	67.6	(2.0)	78.8	(1.6)	88.5	(1.1)	81.9	(1.4)
Norway	32.6	(2.0)	50.6	(1.1)	73.1	(2.1)	72.4	(2.0)	81.7	(1.5)
Poland	18.2	(1.3)	59.2	(1.5)	77.5	(1.0)	78.0	(1.1)	79.6	(1.0)
Sub-national entities										
Flanders (Belgium)	34.0	(1.9)	31.5	(1.2)	55.3	(1.4)	55.9	(1.3)	77.8	(1.1)
Average	32.9	(0.8)	52.9	(0.6)	74.4	(0.6)	75.0	(0.5)	82.8	(0.5)

^{1.} 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.

Source: OECD, TALIS 2013 Database.



Outcomes of teacher feedback in primary education

Percentage of primary education teachers who report a "moderate" or "large" positive Table 3.4 change in the following issues after they received feedback on their work at their school

	confic	chers'		Job satisfaction		Knowledge and understanding of main subject field(s)		Teaching practices		Student assessments to improve student learning		Classroom management practices		
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	64.3	(1.3)	61.5	(1.2)	59.4	(1.4)	44.8	(1.4)	55.5	(1.6)	43.0	(1.4)	48.4	(1.3)
Finland	69.0	(1.5)	67.7	(1.6)	65.9	(1.6)	36.3	(1.5)	42.2	(1.6)	34.5	(1.2)	39.0	(1.4)
Mexico	92.7	(1.1)	89.0	(1.2)	92.2	(1.0)	89.0	(1.3)	91.0	(1.0)	87.1	(1.4)	86.1	(1.2)
Norway	71.2	(1.4)	60.9	(1.2)	61.2	(1.1)	47.6	(1.1)	60.4	(1.3)	55.7	(1.4)	54.7	(1.3)
Poland	72.1	(1.2)	71.4	(1.1)	69.8	(1.2)	55.9	(1.4)	64.2	(1.4)	70.5	(1.0)	63.2	(1.3)
Sub-national entities														
Flanders (Belgium)	61.3	(1.3)	54.8	(1.3)	51.4	(1.4)	33.9	(1.2)	46.3	(1.3)	44.7	(1.4)	40.7	(1.2)
Average	71.8	(0.5)	67.6	(0.5)	66.7	(0.5)	51.3	(0.6)	59.9	(0.6)	55.9	(0.5)	55.3	(0.5)
	Methods for teaching students with special needs		for teaching				Dolo in			ınt of				.,
		ts with			Jo respons		develo initia		profes develo	sional	Likeli of ca advanc	reer	Salary or fina bon	ancial
		ts with					develo	pment	profes	sional	of ca	reer	or fina	ancial
Denmark	special	ts with needs	recog	nition	respons	ibilities	develo initia	pment tives	profes develo	sional pment	of ca advanc	reer ement	or fina bon	ancial nus
Denmark Finland	special %	ts with needs (S.E.)	recog %	(S.E.)	respons	(S.E.)	develo initia %	pment tives (S.E.)	profes develo	sional pment (S.E.)	of ca advanc	reer cement (S.E.)	or fina bor	ancial nus (S.E.)
	special % 46.9	ts with needs (S.E.)	% 60.1	(S.E.) (1.3)	respons % 45.0	(S.E.)	develo initia % 42.0	pment tives (S.E.) (1.3)	profes develo % 47.3	(S.E.)	of ca advance % 20.3	(S.E.)	or fina bor % 8.8	(S.E.) (0.7)
Finland	% 46.9 41.1	(S.E.) (1.3) (1.6)	% 60.1 59.0	(S.E.) (1.3) (1.8)	respons % 45.0 40.8	(S.E.) (1.4) (1.8)	develo initia % 42.0 36.2	(S.E.) (1.3) (1.3)	profess develo % 47.3 28.0	(S.E.) (1.3) (1.4)	of ca advance % 20.3 14.6	(S.E.) (1.1) (1.2)	or fina bon % 8.8 12.8	(S.E.) (0.7) (1.0)
Finland Mexico	% 46.9 41.1 63.5	(S.E.) (1.3) (1.6) (2.2)	% 60.1 59.0 68.6	(S.E.) (1.3) (1.8) (2.1)	respons % 45.0 40.8 89.1	(S.E.) (1.4) (1.8) (1.2)	develo initia % 42.0 36.2 72.0	(S.E.) (1.3) (1.3) (1.8)	## profess development	(S.E.) (1.3) (1.4) (1.7)	of ca advance % 20.3 14.6 60.9	(S.E.) (1.1) (1.2) (2.1)	or fina bon % 8.8 12.8 29.4	(S.E.) (0.7) (1.0) (2.2)
Finland Mexico Norway	% 46.9 41.1 63.5 47.2	(S.E.) (1.3) (1.6) (2.2) (1.3)	recog % 60.1 59.0 68.6 65.3	(S.E.) (1.3) (1.8) (2.1) (1.2)	respons % 45.0 40.8 89.1 31.0	(S.E.) (1.4) (1.8) (1.2) (1.6)	develo initia % 42.0 36.2 72.0 37.7	(S.E.) (1.3) (1.3) (1.8) (1.7)	profess develoe % 47.3 28.0 77.3 25.2	(S.E.) (1.3) (1.4) (1.7) (1.9)	of ca advance % 20.3 14.6 60.9 16.1	(S.E.) (1.1) (1.2) (2.1) (1.1)	or fina bon 8.8 12.8 29.4 19.2	(S.E.) (0.7) (1.0) (2.2) (1.2)
Finland Mexico Norway Poland	% 46.9 41.1 63.5 47.2	(S.E.) (1.3) (1.6) (2.2) (1.3)	recog % 60.1 59.0 68.6 65.3	(S.E.) (1.3) (1.8) (2.1) (1.2)	respons % 45.0 40.8 89.1 31.0	(S.E.) (1.4) (1.8) (1.2) (1.6)	develo initia % 42.0 36.2 72.0 37.7	(S.E.) (1.3) (1.3) (1.8) (1.7)	profess develoe % 47.3 28.0 77.3 25.2	(S.E.) (1.3) (1.4) (1.7) (1.9)	of ca advance % 20.3 14.6 60.9 16.1	(S.E.) (1.1) (1.2) (2.1) (1.1)	or fina bon 8.8 12.8 29.4 19.2	(S.E.) (0.7) (1.0) (2.2) (1.2)

^{1.} 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. Source: OECD, TALIS 2013 Database.



Access to and participation in induction programmes in primary education

Percentage of primary education teachers whose school principal reports the existence of induction processes for new teachers in the school and the percentage of primary education teachers who report having taken part in an induction programme during their first regular employment as a teacher.

 Table 3.5
 employment as a teacher

	Access to induction programmes or activities (reported by principals)									Participation in induction programmes or activities (reported by teachers)						
	For all new teachers to the school		Only for teachers new to teaching¹		No induction programme		Informal induction activities (not part of an induction programme) for new teachers		General and/or administrative introduction to the school for new teachers		Took part in a formal induction programme		Took part in informal induction activities not part of an induction programme		Took part in a general and/or administrative introduction to the school	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	53.5	(4.9)	9.2	(2.7)	37.3	(4.7)	80.0	(3.6)	82.0	(4.0)	28.4	(1.4)	37.6	(1.0)	25.3	(0.9)
Finland	43.4	(3.5)	2.3	(1.2)	54.3	(3.6)	91.8	(1.7)	93.4	(1.9)	15.9	(0.9)	51.1	(1.4)	45.1	(1.2)
Mexico	12.5	(2.6)	1.3	(1.1)	86.2	(2.8)	28.7	(4.2)	33.4	(4.4)	59.6	(1.8)	47.5	(2.0)	46.6	(2.0)
Norway	19.1	(3.8)	39.9	(5.0)	41.0	(5.0)	86.7	(3.1)	44.3	(4.5)	10.1	(0.7)	31.3	(1.3)	16.5	(0.9)
Poland	18.7	(3.4)	7.0	(2.0)	74.3	(3.6)	84.3	(3.1)	75.9	(4.1)	45.1	(1.0)	59.0	(1.2)	50.9	(1.2)
Sub-national entities																
Flanders (Belgium)	74.1	(3.6)	7.4	(2.3)	18.5	(3.2)	78.3	(3.6)	83.3	(3.1)	18.8	(1.1)	22.6	(0.9)	26.9	(1.0)
	0.00	(4 E)	44.0	(4.4)	=0.0	(4.6)	== 0	(4.0)	co =	(4 =)	00.6	(O. E)		(O. E)	0 = 0	(0.5)
Average	36.9	(1.5)	11.2	(1.1)	52.0	(1.6)	75.0	(1.3)	68.7	(1.5)	29.6	(0.5)	41.5	(0.5)	35.2	(0.5)

^{1.} The data presented in the column entitled "For all new teachers to the school" are derived from questions 33A and 34 of the principal questionnaire (PQ). They present the percentage of teachers who work in schools where the principal reports that there is an induction programme for new teachers (PQ33A) and who reports that all teachers who are new to the school are offered an induction programme (PQ34). The data presented in the column entitled "Only for teachers new to teaching" are also derived from questions PQ33A and PQ34. They present the percentage of teachers who work in schools where the principal reports that there is an induction programme for new teachers (PQ33A) and who reports that only teachers who are new to teaching are offered an induction programme (PQ34). The data presented in the column entitled "No induction programme for new teachers" are derived from question PQ33A and represent the percentage of teachers who work in schools where the principal reports that there is no induction programme for new teachers. The percentages presented in these three columns add up to 100%. Source: OECD, TALIS 2013 Database.



Mentoring programmes in primary education

Percentage of primary education teachers whose school principal reports the existence of a mentoring system in the school and characteristics of the mentors and the percentage

Table 3.6 of primary education teachers who report being involved in mentoring activities1

			Access to me	ntoring program	mes (reported	by principals)							
		Target group of mentoring system											
	Only for teachers who are new to teaching			teachers to the school		teachers school	There is no access to a mentoring system for teachers in the school						
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)					
Denmark	26.5	(3.9)	36.5	(3.8)	2.4	(1.3)	34.6	(4.4)					
Finland	2.9	(1.1)	21.1	(2.8)	11.9	(2.4)	64.1	(3.3)					
Mexico	2.4	(1.9)	3.1	(1.7)	20.4	(3.9)	74.1	(4.2)					
Norway	47.5	(4.8)	20.6	(3.8)	2.2	(1.5)	29.6	(4.3)					
Poland	16.9	(3.0)	30.1	(4.3)	28.4	(3.9)	24.6	(3.8)					
Sub-national entities													
Flanders (Belgium)	9.3	(2.4)	25.9	(4.0)	10.8	(2.5)	54.0	(4.5)					
Average	17.6	(1.3)	22.9	(1.4)	12.7	(1.1)	46.9	(1.7)					

			ess to mento (reported by	Participation in mentoring programmes (reported by teachers)						
	Th		eld(s) of the the teacher l	who prese	hers ently have	Teachers who serve as an assigned mento				
	Most of the time		Sometimes		Rarely o	or never		ed mentor ort them	for one or more teachers	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	28.3	(5.6)	62.0	(5.6)	9.7	(3.1)	3.4	(0.5)	9.1	(0.7)
Finland	88.2	(4.0)	7.1	(3.1)	4.7	(2.8)	3.6	(0.5)	3.3	(0.4)
Mexico	60.0	(9.0)	35.0	(7.8)	5.0	(6.1)	21.7	(2.1)	7.8	(1.2)
Norway	70.4	(6.8)	29.6	(6.8)	0.0	(0.0)	3.6	(0.5)	7.6	(0.6)
Poland	76.5	(3.8)	20.8	(3.9)	2.7	(1.7)	10.8	(0.8)	16.2	(1.0)
Sub-national entities										
Flanders (Belgium)	75.7	(5.6)	21.6	(5.3)	2.7	(1.9)	6.3	(0.6)	9.5	(0.6)
Average	66.5	(2.5)	29.4	(2.3)	4.1	(1.3)	8.2	(0.4)	8.9	(0.3)

^{1.} Refers to mentoring by or for teachers at the school. Does not refer to students within the teacher education who are practising as teachers at the school.

Source: OECD, TALIS 2013 Database.



Primary teachers' participation in professional development and personal financial cost involved

Participation rates and reported personal financial cost of professional development activities

Table 3.7 undertaken by primary education teachers in the 12 months prior to the survey

	who under	of teachers rtook some	Percentage of teachers who had to pay for "none", "some" or "all" of the professional development activities undertaken								
	professional development activities in the previous 12 months ¹		N	one	So	me	All				
	% (S.E.)		%	(S.E.)	%	(S.E.)	%	(S.E.)			
Denmark	87.6	(1.0)	84.8	(1.0)	14.0	(0.9)	1.2	(0.3)			
Finland	80.6	(1.0)	78.7	(1.3)	17.7	(1.3)	3.6	(0.6)			
Mexico	96.9	(0.6)	66.9	(2.6)	23.6	(1.8)	9.5	(1.5)			
Norway	89.1	(0.9)	85.7	(0.8)	11.0	(0.7)	3.3	(0.4)			
Poland	95.0	(0.5)	59.7	(1.6)	29.2	(1.4)	11.1	(0.9)			
Sub-national entities											
Flanders (Belgium)	88.9	(0.8)	88.8	(0.8)	8.3	(0.7)	2.9	(0.4)			
Average	89.7	(0.3)	77.4	(0.6)	17.3	(0.5)	5.3	(0.3)			

^{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 conference or seminar", "observation visits to other schools", "observation visits to business premises, public organisations, non-governmental organisations", "in-service training courses in business premises, public organisations, non-governmental organisations", "qualification programme (e.g. a degree programme)", "participation in a network of teachers formed specifically for the professional development of teachers", "individual or collaborative research on a topic of interest to you professionally", "mentoring and/ or peer observation and coaching, as part of a formal school arrangement".

Source: OECD, TALIS 2013 Database.



Teachers' needs for professional development in primary education

Percentage of primary education teachers indicating they have a high level of need Table 3.8 for professional development in the following areas

lable 3.6	TOT PIC	r professional development in the following areas														
	Knowledge and understanding of the subject field(s)		and understanding of cor the subject field(s) sub		compe in tea subject	ogical tencies ching field(s)	curric	the culum	evaluat assess prac	sment ctice		hing	beha and cla manag	dent viour ssroom gement	Sch manag an adminis	gement nd
			%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)		
Denmark	7.1	(8.0)	7.0	(0.7)	2.6	(0.4)	7.7	(0.6)	23.4	(1.2)	12.8	(1.0)	2.1	(0.4)		
Finland	2.0	(0.3)	3.0	(0.5)	2.6	(0.4)	5.2	(0.4)	19.1	(1.3)	9.0	(0.7)	2.6	(0.4)		
Mexico	4.7	(8.0)	7.3	(1.1)	7.4	(0.9)	9.7	(1.3)	24.3	(1.5)	9.2	(1.0)	14.8	(1.2)		
Norway	7.0	(0.6)	6.6	(0.6)	4.7	(0.4)	17.3	(1.2)	24.9	(1.1)	5.6	(0.7)	2.9	(0.6)		
Poland	1.2	(0.3)	1.8	(0.3)	2.4	(0.3)	4.2	(0.5)	11.6	(0.8)	10.9	(0.8)	6.3	(0.7)		
Sub-national entities																
Flanders (Belgium)	1.2	(0.2)	1.6	(0.3)	1.2	(0.2)	6.1	(0.7)	17.2	(0.9)	6.3	(0.6)	2.3	(0.4)		
Average	3.9	(0.2)	4.5	(0.3)	3.5	(0.2)	8.4	(0.3)	20.1	(0.5)	9.0	(0.3)	5.2	(0.3)		
	Appro to individ lear	o ualised		hing ts with needs ¹	a multion	ing in cultural ilingual ting	Teac curri skills prok solv learni lea	cular (e.g. olem ing, ng-to-	Approto develored corrections for full work or students.	eloping oss- ational tencies uture r future	techno in	ew blogies the place	Student guidan couns	ce and		
	individ	o ualised	studen	ts with	a multion	cultural ilingual	cro curri skills prok solv learni	oss- cular (e.g. olem ing, ng-to-	to deve cro occupa compe for fu work o	eloping oss- ational tencies uture r future	techno in	ologies the	guidan	ce and		
Denmark	individ lear	o ualised ning	studen special	ts with needs ¹	a multio or mult sett	cultural ilingual ting	cro curri skills prok solv learni lea	cular (e.g. olem ing, ng-to- rn)	to deve cro occupa compe for fo work of	eloping oss- ational tencies uture r future dies	techno in work	ologies the place	guidan couns	ce and elling		
Denmark Finland	individ lear	ualised ning (S.E.)	studen special %	ts with needs ¹ (S.E.)	a multion or mult sett	cultural ilingual ting (S.E.)	cro curri skills prok solv learni lea	cular (e.g. olem ing, ng-to- rn) (S.E.)	to deve cro occupa compe for fi work of stud	eloping oss- ational tencies uture r future dies (S.E.)	techno in work	ologies the place (S.E.)	guidan couns %	ce and elling (S.E.)		
	individ lear % 5.8	ualised ning (S.E.) (0.5)	studen special % 34.1	ts with needs ¹ (S.E.)	a multion or multi-sett	cultural ilingual ting (S.E.) (0.8)	cro curri skills prok solv learni lea %	cular (e.g. ollem ing, ng-to- rn) (S.E.)	to deve	eloping sss- ational tencies uture r future dies (S.E.)	techno in work %	ologies the place (S.E.) (0.9)	guidan couns % 1.8	(S.E.)		
Finland	individ learn % 5.8 7.5	(0.5) (0.7)	studen special % 34.1 16.7	(S.E.) (1.3) (1.1)	a multion multisett % 8.7 4.9	cultural ilingual ting (S.E.) (0.8) (0.6)	cro curri skills prok solv learni lea % 5.7 4.0	cular (e.g. olem ing, ng-to- rn) (S.E.) (0.5)	to deversity to de	eloping sss- ational tencies ature r future dies (S.E.) (0.5) (0.2)	techno in work % 13.4 13.1	blogies the place (S.E.) (0.9) (1.1)	guidan couns % 1.8 0.8	(S.E.) (0.3) (0.2)		
Finland Mexico	% 5.8 7.5	(0.5) (0.7) (1.2)	studen special % 34.1 16.7 41.6	(S.E.) (1.3) (1.1) (2.1)	a multion multisett % 8.7 4.9 39.3	(0.8) (0.6) (1.9)	cro curri skills prob solv learni lea % 5.7 4.0	cular (e.g. olem ing, ng-to-rn) (S.E.) (0.5) (0.4)	to dever cro occupate for fit work or students. 4.0 1.0 21.1	eloping oss- ational tencies uture r future dies (S.E.) (0.5) (0.2) (1.6)	techno in work % 13.4 13.1 34.9	blogies the place (S.E.) (0.9) (1.1) (1.9)	guidan couns % 1.8 0.8 21.8	(0.2) (1.6)		
Finland Mexico Norway	to individual learn % 5.8 7.5 13.8 6.4	(0.5) (0.7) (1.2) (0.6)	studen special % 34.1 16.7 41.6 13.6	ts with needs ¹ (S.E.) (1.3) (1.1) (2.1) (0.8)	a multion multi-sett % 8.7 4.9 39.3 11.8	(0.8) (0.6) (1.9)	cro curri skills prob solv learni lea % 5.7 4.0 13.2 9.7	cular (e.g. olem ing, ng-to-rn) (S.E.) (0.5) (0.4) (1.2) (0.9)	to dever crooccupa compe for fit work or stude % 4.0 1.0 21.1 4.8	eloping oss- ational tencies uture r future dies (0.5) (0.2) (1.6) (0.5)	techno in work % 13.4 13.1 34.9 6.5	(0.9) (1.1) (1.9) (0.5)	guidan couns % 1.8 0.8 21.8 3.5	(S.E.) (0.3) (0.2) (1.6) (0.4)		
Finland Mexico Norway Poland	to individual learn % 5.8 7.5 13.8 6.4	(0.5) (0.7) (1.2) (0.6)	studen special % 34.1 16.7 41.6 13.6	ts with needs ¹ (S.E.) (1.3) (1.1) (2.1) (0.8)	a multion multi-sett % 8.7 4.9 39.3 11.8	(0.8) (0.6) (1.9)	cro curri skills prob solv learni lea % 5.7 4.0 13.2 9.7	cular (e.g. olem ing, ng-to-rn) (S.E.) (0.5) (0.4) (1.2) (0.9)	to dever crooccupa compe for fit work or stude % 4.0 1.0 21.1 4.8	eloping oss- ational tencies uture r future dies (0.5) (0.2) (1.6) (0.5)	techno in work % 13.4 13.1 34.9 6.5	(0.9) (1.1) (1.9) (0.5)	guidan couns % 1.8 0.8 21.8 3.5	(S.E.) (0.3) (0.2) (1.6) (0.4)		

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.



Teachers' working hours in primary education

Average number of 60-minute hours spent on the following activities during the most recent Table 3.9 complete calendar week^{1, 2}

	Total w hou			s spent aching	on in plan prepa lessons school	rs spent dividual ning or ration of s either at or out of	Hours spi team wor dialogue colleagues the sch	k and with within	Hours marl correc studen	ting of	on st coun: (incl stuc super vir couns career g and deli	s spent dudent selling uding dent vision, tual selling, guidance inquency ance)
	Average	(S.E.)	Average	(S.E.)	Average		Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Denmark	39.2	(0.2)	20.3	(0.1)	7.6	(0.1)	3.6	(0.1)	2.5	(0.1)	1.2	(0.0)
Finland	31.2	(0.4)	23.2	(0.2)	4.1	(0.1)	2.1	(0.1)	2.0	(0.1)	0.8	(0.0)
Mexico	34.5	(0.8)	23.7	(0.4)	5.7	(0.2)	2.7	(0.2)	4.0	(0.1)	2.4	(0.2)
Norway	38.0	(0.2)	17.2	(0.2)	7.2	(0.1)	3.8	(0.1)	2.5	(0.1)	1.7	(0.0)
Poland	36.9	(0.3)	18.9	(0.2)	5.6	(0.1)	2.2	(0.1)	4.0	(0.1)	1.9	(0.1)
Sub-national entities												
Flanders (Belgium)	41.0	(0.3)	22.8	(0.1)	6.0	(0.1)	2.1	(0.1)	4.5	(0.1)	1.3	(0.1)
Average	36.8	(0.2)	21.0	(0.1)	6.0	(0.1)	2.8	(0.0)	3.2	(0.0)	1.5	(0.0)
	Hours spent in participation in school management		a w co pa othe yo nt your	Hours spo on gener dministra ork (inclu ommunica aperwork, er clerical u underta job as a t	al tive ding tion, and duties ke in	communi co-opera	spent on cation and ition with r guardians	in ex activit and cu	spent eng stracurricu ties (e.g. s lltural acti ter school	lar oorts vities	Hours s	
	Average	(S.E.)	Ave	rage	(S.E.)	Average	(S.E.)	Avera	ge (S.	E.)	Average	(S.E.)
Denmark	0.7	(0.1)	1	.9	(0.1)	1.9	(0.1)	0.7	(0	.1)	1.7	(0.1)
Finland	0.4	(0.0)	1	.1	(0.0)	1.4	(0.0)	0.4	(0	.0)	0.6	(0.0)

Source: OECD, TALIS 2013 Database.

Mexico

Norway

Poland

Average

Sub-national entities Flanders (Belgium)

StatLink http://dx.doi.org/10.1787/888933166614

1.8

1.1

0.9

1.2

1.0

(0.1)

(0.1)

(0.1)

(0.0)

(0.0)

2.6

2.6

2.6

2.6

2.2

(0.1)

(0.1)

(0.1)

(0.1)

(0.0)

2.4

1.6

1.6

1.2

1.7

(0.1)

(0.1)

(0.1)

(0.1)

(0.0)

2.4

0.6

2.2

1.0

1.2

(0.1)

(0.0)

(0.1)

(0.1)

(0.0)

2.2

1.1

1.8

1.4

1.5

(0.2)

(0.1)

(0.1)

(0.1)

(0.0)

^{1.} 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.

^{2.} Note that the activities listed are not necessarily mutually exclusive and so the individual activities may not add up to the total working time.

^{3.} 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.



Distribution of class time during an average lesson in primary education

Average proportion of time primary education teachers report spending for each of these Table 3.10 activities in an average lesson^{1,2}

	A -l!!	ative tasks	V!	41	A -4 4	
				n the classroom		ng and learning
	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	6.1	(0.2)	14.4	(0.3)	79.4	(0.4)
Finland	6.2	(0.1)	14.4	(0.4)	78.9	(0.4)
Mexico	11.6	(0.3)	13.1	(0.3)	75.3	(0.5)
Norway	7.0	(0.2)	11.8	(0.5)	80.8	(0.6)
Poland	7.4	(0.1)	8.7	(0.3)	83.2	(0.3)
Sub-national entities						
Flanders (Belgium)	8.2	(0.2)	12.7	(0.3)	79.0	(0.4)
Average	7.7	(0.1)	12.5	(0.2)	79.4	(0.2)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

StatLink http://dx.doi.org/10.1787/888933166629

[Part 1/1]

Teaching practices in primary education

Percentage of primary education teachers who use the following teaching practices

Table 3.11 "frequently" or "in all or nearly all lessons"

	sum of red lear con	ent a mary cently rned tent	diffe wo to stud who diffic lear and/ those can ac fas	erent ork the lents have ulties ning for to e who dvance ster	prol freeverye or we demo w ne know is u	r to a blem om day life orsk to orstrate hy ew /ledge seful	prac simila until t kno that stude under the si ma	udents ctice r tasks eacher ows every nt has rstood ubject	stud exer bool home	rcise ks or ework	wor small to co w a jo solut a pro or	lents -k in groups me up ith jint ion to oblem task	wor project requ le one w com	lents k on ts that ire at ast eek to plete	for pr or c	nts use CT rojects class ork
Denmark	% 79.0	(S.E.)	62.5	(S.E.)	61.1	(S.E.)	62.9	(S.E.)	70.6	(S.E.)	% 58.9	(S.E.)	21.9	(S.E.)	% 44.3	(S.E.)
Finland	72.7	(1.3)	59.6	(1.3)	70.0	(1.1)	70.0	(1.5)	80.3	(1.1)	31.6	(1.5)	11.9	(0.9)	20.7	(1.3)
Mexico	61.2	(1.9)	52.1	(2.0)	88.2	(1.2)	89.9	(1.0)	97.7	(0.5)	84.7	(1.6)	83.9	(1.3)	39.7	(2.2)
Norway	92.8	(1.4)	82.5	(1.1)	54.2	(1.6)	83.2	(1.8)	92.8	(0.8)	64.9	(1.5)	23.5	(1.3)	57.2	(1.8)
Poland	76.5	(1.0)	68.0	(1.2)	80.8	(1.0)	85.9	(0.8)	72.5	(1.1)	46.5	(1.5)	15.1	(1.0)	29.4	(1.3)
Sub-national entities																
Flanders (Belgium)	67.6	(1.2)	74.2	(1.2)	77.8	(0.9)	75.8	(1.1)	89.5	(0.7)	58.7	(1.3)	32.4	(1.4)	40.4	(1.3)
Average	75.0	(0.5)	66.5	(0.6)	72.0	(0.5)	78.0	(0.5)	83.9	(0.4)	57.5	(0.6)	31.4	(0.5)	38.6	(0.7)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. **Source**: OECD, TALIS 2013 Database.

^{2.} The sum of time spent in an average lesson may not add up to 100% because some answers that did not add up to 100% were accepted. **Source:** OECD, TALIS 2013 Database.



Teachers' beliefs about teaching and learning in primary education

Percentage of primary education teachers who "agree" or "strongly agree" with the following Table 3.12 statements

	My role as a teacher is to facilitate students' own inquiry		by finding	learn best g solutions on their own	to think o to practica themselv the teacher	uld be allowed of solutions al problems wes before shows them are solved	processes important t	nd reasoning s are more han specific m content
		(S.E.)		(S.E.)	%	(S.E.)		(S.E.)
Denmark	98.4	(0.3)	92.1	(0.7)	95.3	(0.5)	82.6	(1.0)
Finland	97.8	(0.3)	85.8	(0.9)	95.4	(0.6)	92.0	(0.7)
Mexico	94.6	(0.7)	86.7	(1.1)	95.9	(0.7)	74.3	(1.6)
Norway	93.5	(1.0)	51.9	(2.1)	95.0	(0.8)	77.3	(0.9)
Poland	93.8	(0.6)	89.5	(0.7)	93.9	(0.5)	87.1	(0.9)
Sub-national entities								
Flanders (Belgium)	99.5	(0.1)	90.9	(0.7)	97.3	(0.4)	78.9	(1.0)
Average	96.3	(0.2)	82.8	(0.5)	95.5	(0.2)	82.0	(0.4)

Source: OECD, TALIS 2013 Database.



Teachers' use of student assessment practices in primary education

Percentage of primary education teachers who report using the following methods

Table 3.13 of assessing student learning!

Table 3.13	ot ass	of assessing student learning ¹								T						
		Deve	lop and	admini	ster ow	n assess	ment				Admini	ster a st	andardi	ised test	t	
		er or t never	Occas	ionally	Frequ	uently	or n	all early ssons		er or t never	Occas	ionally	Frequ	iently		all early ssons
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)		(S.E.)
Denmark	6.7	(0.6)	40.5	(1.3)	45.4	(1.3)	7.4	(0.7)	24.6	(1.1)	59.6	(1.3)	15.2	(1.0)	0.6	(0.2)
Finland	8.4	(0.8)	44.5	(1.4)	42.2	(1.5)	4.9	(0.5)	12.6	(1.2)	29.7	(1.1)	55.5	(1.3)	2.2	(0.5)
Mexico	5.7	(0.9)	30.2	(1.9)	44.1	(1.9)	20.0	(1.9)	6.9	(0.9)	29.6	(1.7)	47.1	(1.9)	16.4	(1.5)
Norway	7.7	(0.7)	47.9	(1.4)	43.5	(1.3)	0.9	(0.4)	9.7	(1.0)	57.3	(2.8)	32.3	(2.7)	0.7	(0.5)
Poland	6.7	(0.6)	33.5	(1.4)	44.8	(1.2)	14.9	(1.4)	9.1	(0.8)	37.3	(1.2)	51.3	(1.2)	2.3	(0.4)
Sub-national entities																
Flanders (Belgium)	7.4	(0.7)	34.1	(1.3)	49.6	(1.3)	8.8	(0.9)	7.9	(0.5)	17.5	(1.1)	61.2	(1.3)	13.4	(1.0)
Handers (Beigiuin)	7.4	(0.7)	34.1	(1.3)	49.0	(1.3)	0.0	(0.5)	7.9	(0.3)	17.3	(1.1)	01.2	(1.3)	13.4	(1.0)
Average	7.1	(0.3)	38.5	(0.6)	44.9	(0.6)	9.5	(0.4)	11.8	(0.4)	38.5	(0.7)	43.7	(0.7)	5.9	(0.3)
									Provide written feedback			dback o	n stude	nt work	in add	ition
	Indivi			nswer q	r questions in front of the class						numeri					
								all								all
		er or t never	Occas	ionally	Frequ	iently		early ssons		er or t never	Occas	ionally	Frequ	iently		early ssons
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	16.2	(0.8)	35.4	(1.1)	37.8	(1.3)	10.6	(0.7)	39.1	(1.3)	31.6	(1.2)	26.9	(1.0)	2.5	(0.3)
Finland	68.7	(1.1)	18.0	(1.1)	10.1	(0.6)	3.2	(0.4)	17.0	(1.3)	56.7	(1.3)	25.3	(1.2)	1.1	(0.5)
Mexico	2.1	(0.5)	13.6	(1.3)	51.4	(1.8)	33.0	(1.8)	1.7	(0.5)	15.2	(1.5)	55.2	(1.8)	27.9	(1.6)
Norway	7.5	(1.1)	30.3	(1.1)	46.4	(1.3)	15.9	(1.7)	26.9	(1.4)	29.1	(2.4)	41.7	(2.4)	2.3	(0.4)
Poland	12.4	(0.9)	43.5	(1.2)	35.7	(1.2)	8.3	(0.8)	19.8	(0.9)	30.6	(1.1)	39.0	(1.1)	10.6	(0.9)
Sub-national entities																
Flanders (Belgium)	30.1	(1.1)	28.4	(1.0)	30.7	(1.1)	10.8	(0.8)	4.1	(0.4)	22.5	(1.0)	50.7	(1.2)	22.7	(1.2)
Handers (Beigiuin)	30.1	(1.1)	20.4	(1.0)	30.7	(1.1)	10.0	(0.0)	4.1	(0.4)	22.3	(1.0)	30.7	(1.2)	22.7	(1.2)
Average	22.8	(0.4)	28.2	(0.5)	35.3	(0.5)	13.6	(0.5)	18.1	(0.4)	30.9	(0.6)	39.8	(0.6)	11.2	(0.4)
						,			Ob	serve st	udents	when w	orking	on parti	icular ta	ısks
		Let st	udents	evaluat	e their o	own pro	gress			a	nd prov	ide imn	nediate	feedbac	k	
	Nov	er or						all early	Nov	er or						all early
		t never	Occas	ionally	Frequ	iently		ssons		t never	Occas	ionally	Frequ	iently		ssons
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	22.8	(1.2)	54.8	(1.2)	20.1	(1.2)	2.4	(0.4)	2.8	(0.4)	25.8	(1.0)	50.6	(1.1)	20.8	(0.9)
Finland	5.8	(0.7)	64.0	(1.8)	28.9	(1.6)	1.3	(0.3)	0.4	(0.1)	17.5	(1.1)	48.7	(1.2)	33.4	(1.3)
Mexico	2.9	(0.6)	22.4	(1.8)	51.2	(2.0)	23.4	(1.7)	0.6	(0.3)	7.0	(0.9)	47.5	(1.8)	44.9	(1.9)
Norway	8.3	(0.8)	58.1	(1.7)	32.5	(1.7)	1.1	(0.2)	0.6	(0.2)	22.4	(1.3)	60.7	(1.5)	16.3	(1.7)
Poland	5.3	(0.6)	44.2	(1.4)	45.1	(1.6)	5.4	(0.8)	0.4	(0.2)	8.3	(0.7)	48.0	(1.6)	43.3	(1.6)
Sub-national entities																
Flanders (Belgium)	21.3	(1.0)	50.2	(1.1)	26.6	(1.1)	1.9	(0.3)	2.1	(0.4)	15.5	(0.8)	51.7	(1.2)	30.6	(1.1)
rianuers (beigium)	21.3	(1.0)	30.2	(1.1)	20.0	(1.1)	1.9	(0.3)	2.1	(0.4)	13.3	(0.0)	31.7	(1.2)	50.0	(1.1)
Average	11.1	(0.3)	48.9	(0.6)	34.1	(0.6)	5.9	(0.3)	1.2	(0.1)	16.1	(0.4)	51.2	(0.6)	31.5	(0.6)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. **Source:** OECD, TALIS 2013 Database.



Teacher co-operation in primary education

Table 3.14 Percentage of primary education teachers who report doing the following activities1

				ssional		ration								for tea		
	Teach jointly as a team in the same class		Observe other teachers' classes and provide		in j activ activ diffe classe age g	gage oint vities ross erent es and groups rojects)	collab profes	part in orative ssional ning	teac mate w	ange hing erials ith agues	discu abou lear develo of sp	ge in ssions it the ning opment ecific lents	other t in my to er com stand in eval for ass	with eachers school nsure mon dards uations sessing dent gress		d team rences
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	92.2	(0.9)	58.4	(1.7)	96.5	(0.5)	94.6	(0.5)	98.8	(0.3)	99.2	(0.2)	90.6	(0.7)	99.1	(0.3)
Finland	86.6	(1.3)	35.7	(1.4)	91.5	(0.8)	68.4	(1.2)	94.3	(0.8)	99.6	(0.1)	92.3	(0.8)	93.8	(0.8)
Mexico	91.0	(1.1)	48.7	(2.1)	75.3	(1.6)	95.3	(0.9)	92.4	(1.0)	88.4	(1.3)	85.9	(1.6)	96.6	(0.5)
Norway	67.9	(1.7)	52.4	(2.2)	88.0	(1.6)	73.4	(1.8)	98.3	(0.3)	98.3	(0.5)	95.0	(0.5)	95.8	(0.9)
Poland	72.1	(1.2)	84.1	(1.2)	95.2	(0.5)	94.9	(0.6)	96.1	(0.5)	99.5	(0.2)	98.6	(0.3)	98.1	(0.3)
Sub-national entities																
Flanders (Belgium)	69.4	(1.3)	25.1	(1.5)	96.6	(0.4)	69.0	(1.1)	95.7	(0.5)	94.5	(0.4)	84.8	(0.9)	98.6	(0.2)
Average	79.9	(0.5)	50.7	(0.7)	90.5	(0.4)	82.6	(0.5)	95.9	(0.3)	96.6	(0.3)	91.2	(0.4)	97.0	(0.2)

^{1.} Sum of all response categories for each question included question 33 of the teacher questionnaire, only excluding the "never" category. It is the sum of teachers who report doing the activity "once a year or less", "2-4 times a year", "5-10 times a year", "1-3 times a month" or "once a year" or "once a year", "5-10 times a year", "1-3 times a month" or "once a year", "5-10 times a year", "1-3 times a month" or "once a year", "1-3 times a month" or "once a year", "1-3 times a ye

Source: OECD, TALIS 2013 Database.



Teachers' self-efficacy in primary education

Percentage of primary education teachers who feel they can do the following "quite a bit" Table 3.15 or "a lot"

			Self-effi	cacy in stu	udent enga	agement			Self-efficacy in classroom management				
	Get students to believe they can do well in school work		Help my students value learning		who sh inte	students ow low erest ol work		tudents ritically	behavio	disruptive ur in the room	expec about	e my tations student our clear	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Denmark	98.8	(0.3)	97.3	(0.4)	85.1	(0.9)	88.9	(0.7)	95.8	(0.5)	98.5	(0.3)	
Finland	89.7	(0.9)	89.1	(0.8)	72.8	(1.3)	75.5	(1.1)	90.0	(0.8)	95.5	(0.6)	
Mexico	87.7	(1.1)	94.3	(0.7)	86.2	(1.1)	89.5	(1.0)	86.1	(1.1)	85.9	(1.2)	
Norway	90.9	(1.0)	75.8	(1.5)	59.0	(2.0)	59.9	(3.1)	84.5	(2.2)	91.6	(1.9)	
Poland	88.3	(0.7)	78.5	(1.0)	71.6	(1.4)	80.5	(1.0)	90.5	(0.7)	95.5	(0.6)	
Sub-national entities													
Flanders (Belgium)	96.6	(0.4)	92.5	(0.5)	87.5	(0.7)	89.2	(0.8)	96.4	(0.4)	97.7	(0.4)	
Average	92.0	(0.3)	87.9	(0.4)	77.1	(0.5)	80.6	(0.6)	90.5	(0.5)	94.1	(0.4)	

	Self-efficacy in classroom management				Self-efficacy in instruction								
	Get students to follow classroom rules		Calm a student		ques	good tions students	Use a of asse	variety essment egies	Provi altern explana examp stude	de an native ntion for le when nts are fused	alter instru strat	ement native ctional egies lassroom	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Denmark	96.1	(0.4)	93.2	(0.6)	96.1	(0.5)	77.5	(1.3)	98.1	(0.3)	89.0	(0.8)	
Finland	92.0	(0.8)	85.4	(1.0)	93.6	(0.6)	68.2	(1.3)	81.6	(1.0)	76.3	(1.2)	
Mexico	85.9	(1.3)	77.3	(1.3)	83.9	(1.4)	83.4	(1.5)	93.4	(0.8)	90.2	(1.0)	
Norway	89.1	(1.4)	86.0	(2.2)	78.4	(2.7)	60.7	(2.7)	86.6	(1.5)	72.4	(1.7)	
Poland	94.4	(0.5)	89.2	(1.1)	85.3	(1.1)	88.3	(0.9)	88.0	(1.1)	70.8	(1.4)	
Sub-national entities													
Flanders (Belgium)	97.2	(0.4)	96.3	(0.4)	94.9	(0.5)	76.7	(1.0)	97.6	(0.3)	75.2	(0.9)	
Average	92.4	(0.4)	87.9	(0.5)	88.7	(0.6)	75.8	(0.6)	90.9	(0.4)	79.0	(0.5)	

Source: OECD, TALIS 2013 Database.



Teachers' job satisfaction in primary education

Percentage of primary education teachers who "agree" or "strongly agree" with the following Table 3.16 statements

	in society		I am satisfied with my performance in this school		of being clearly of	rantages a teacher outweigh Ivantages	again, I v choose	d decide vould still to work eacher	I decided	et that to become acher
	%	(S.E.)			%	(S.E.)	%	(S.E.)	%	(S.E.)
Denmark	16.9	(1.1)	98.6	(0.2)	88.3	(0.9)	77.4	(1.0)	5.3	(0.5)
Finland	57.0	(1.5)	95.9	(0.5)	96.5	(0.4)	87.0	(0.8)	3.8	(0.4)
Mexico	42.4	(1.8)	97.8	(0.5)	74.8	(1.8)	94.3	(0.9)	4.6	(0.7)
Norway	29.2	(1.7)	97.2	(0.6)	93.1	(8.0)	78.8	(1.0)	8.0	(0.8)
Poland	21.6	(1.4)	95.9	(0.5)	81.0	(1.0)	83.9	(1.0)	6.9	(0.6)
Sub-national entities										
Flanders (Belgium)	45.0	(1.4)	94.2	(0.5)	82.3	(0.9)	83.6	(0.9)	4.7	(0.5)
Average	35.4	(0.6)	96.6	(0.2)	86.0	(0.4)	84.1	(0.4)	5.5	(0.2)
	it would l	choose	school if	ld like to another that were sible		working school	my school	commend as a good o work		ıll, I am vith my job
	it would l	have been choose	to change school if	to another that were			my school	as a good		
Denmark	it would l better to another p	nave been o choose orofession	to change school if poss	to another that were sible	at this	school	my school place t	as a good o work	satisfied w	ith my job
Denmark Finland	it would I better to another p	nave been o choose profession (S.E.)	to change school if poss	to another that were sible (S.E.)	at this	school (S.E.)	my school place t %	as a good o work (S.E.)	satisfied w	(S.E.)
	it would better to another p % 34.5	chave been o choose profession (S.E.)	to change school if poss % 11.3	to another that were sible (S.E.) (0.9)	at this % 94.1	(S.E.) (0.6)	my school place t % 86.9	as a good o work (S.E.) (1.2)	satisfied w % 93.2	(S.E.) (0.7)
Finland	it would I better to another p % 34.5 23.4	have been o choose profession (S.E.) (1.3) (1.1)	to change school if poss % 11.3 16.7	to another that were sible (S.E.) (0.9) (1.0)	at this % 94.1 92.3	(S.E.) (0.6) (0.7)	my school place t % 86.9 87.9	(S.E.) (1.2) (1.0)	93.2 92.9	(S.E.) (0.7) (0.6)
Finland Mexico	it would better to another p % 34.5 23.4 12.1	(S.E.) (1.3) (1.1) (1.2)	to change school if poss % 11.3 16.7 31.9	to another that were sible (S.E.) (0.9) (1.0) (1.9)	at this % 94.1 92.3 95.3	(S.E.) (0.6) (0.7) (0.8)	my school place t % 86.9 87.9 90.6	(S.E.) (1.2) (1.0) (1.2)	93.2 92.9 98.1	(S.E.) (0.7) (0.6) (0.4)
Finland Mexico Norway	it would leave to another possible service another possible service se	(1.3) (1.1) (1.2) (1.3)	to change school if poss % 11.3 16.7 31.9 9.8	to another that were sible (S.E.) (0.9) (1.0) (1.9) (0.7)	at this % 94.1 92.3 95.3 97.4	(S.E.) (0.6) (0.7) (0.8) (0.4)	my school place t % 86.9 87.9 90.6 93.1	(s.E.) (1.2) (1.0) (1.2) (1.0)	93.2 92.9 98.1 96.1	(S.E.) (0.7) (0.6) (0.4) (0.7)
Finland Mexico Norway Poland	it would leave to another possible service another possible service se	(1.3) (1.1) (1.2) (1.3)	to change school if poss % 11.3 16.7 31.9 9.8	to another that were sible (S.E.) (0.9) (1.0) (1.9) (0.7)	at this % 94.1 92.3 95.3 97.4	(S.E.) (0.6) (0.7) (0.8) (0.4)	my school place t % 86.9 87.9 90.6 93.1	(s.E.) (1.2) (1.0) (1.2) (1.0)	93.2 92.9 98.1 96.1	(S.E.) (0.7) (0.6) (0.4) (0.7)

Source: OECD, TALIS 2013 Database.

Relationship between teacher and school characteristics and societal value of teaching in primary education

Significant results in the logistic regressions of teachers' perception of how society views Table 3.17 the teaching profession with the following teachers' characteristics in primary education1

	Teachers who think that the teaching profession is valued in society ²											
			Deper	ndent on:								
	۸	1ale³		years of teaching erience ⁴	opportunities to	rovides staff with actively participate ol decisions ⁵						
		Odds ratios ⁶		Odds ratios ⁶	ß	Odds ratios ⁶						
Denmark					0.74	2.09						
Finland					0.31	1.37						
Mexico	0.49	1.64			0.53	1.70						
Norway	-0.42	0.66	-0.74	0.48								
Poland	0.40	1.50			0.83	2.30						
Sub-national entities												
Flanders (Belgium)	0.30	1.35	-0.32	0.72	0.72	2.06						

- 1. Cells are blank when no significant relationship was found. Significance was tested at the 5% level, controlling for teachers' educational attainment, subject(s) taught and content, pedagogy and classroom practice elements of the subject(s) taught included in formal education or
- 2. Dichotomous variable where the reference category is the combination of "strongly disagree" and "disagree".
- 3. Dichotomous variable where the reference category is female.
- 4. The work experience variable was dichotomised, with 5 years as a cut-off point. Five years or less was the reference category. Coefficients and odds ratios therefore represent the association of having worked as a teacher in total for more than 5 years in comparison with 5 years or less.
- 5. Dichotomous variable where the reference category is the combination of "strongly disagree" and "disagree".
- 6. This is the exponentiated beta. Please refer to the technical annex for interpretation of odds ratios.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166721

[Part 1/1]

Relationship between teachers' characteristics and their self-efficacy in primary

Significant variables in the multiple linear regressions of teachers' self-efficacy with Table 3.18 the following teachers' characteristics in primary education1

	Teachers' self-efficacy ²											
			Depend	lent on:								
	Ma	Ile^3		ears of teaching ience ⁴	practice element	gy and classroom s of the subject(s) formal education ⁵						
		(S.E.)	ß	(S.E.)	ß	(S.E.)						
Denmark	-0.43	0.08	0.50	0.10	-0.07	0.02						
Finland	-0.34	0.11	0.46	0.13	-0.14	0.04						
Mexico					-0.11	0.03						
Norway	-0.28	0.11	0.34	0.11	-0.15	0.05						
Poland	-0.40	0.09			-0.20	0.08						
Sub-national entities												
Flanders (Belgium)			0.32	0.08	-0.08	0.02						

- 1. Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Teachers' educational attainment was controlled for.
- 2. Continuous variable.
- 3. Dichotomous variable where the reference category is female.
- 4. The work experience variable was dichotomised, with 5 years as a cut-off point. Five years or less was the reference category. Coefficients and odds ratios therefore represent the association of having worked as a teacher in total for more than 5 years in comparison to 5 years or less.
- 5. The scores on TT2G12A, 12B and 12C were combined. This variable therefore represents the total extent to which content, pedagogy and classroom practice elements of subject(s) the teacher currently teaches were included in his or her formal education. Because higher scores indicate that these elements were included to a lesser extent or not at all for the subject the teacher currently teaches, negative scores indicate that less preparation is negatively associated with total self-efficacy and job satisfaction scores.

Source: OECD, TALIS 2013 Database.



Relationship between teachers' characteristics and their job satisfaction in primary education

Significant variables in the multiple linear regressions of teachers' job satisfaction with the Table 3.19 following teachers' characteristics in primary education¹

			Teachers' job	satisfaction ²		
			Depend	dent on:		
	Ma	ale^3		ears of teaching ience ⁴	practice element	gy and classroom s of the subject(s) formal education ⁵
		(S.E.)		(S.E.)	В	(S.E.)
Denmark	-0.30	0.09	-0.32	0.14		
Finland	-0.46	0.11			-0.07	0.03
Mexico						
Norway	-0.47	0.11	-0.54	0.16	-0.13	0.04
Poland	-0.25	0.12			-0.15	0.04
Sub-national entities						
Flanders (Belgium)	-0.37	0.12	-0.45	0.10	-0.15	0.04

^{1.} Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Teachers' educational attainment was controlled for.

- 2. Continuous variable.
- 3. Dichotomous variable where the reference category is female.
- 4. The work experience variable was dichotomised, with 5 years as a cut-off point. Five years or less was the reference category. Coefficients and odds ratios therefore represent the association of having worked as a teacher in total for more than 5 years in comparison to 5 years or less.
- 5. The scores on TT2G12A, 12B and 12C were combined. This variable therefore represents the total extent to which content, pedagogy and classroom practice elements of subject(s) the teacher currently teaches were included in his or her formal education. Because higher scores indicate that these elements were included to a lesser extent or not at all for the subject the teacher currently teaches, negative scores indicate that less preparation is negatively associated with total self-efficacy and job satisfaction scores.

Source: OECD, TALIS 2013 Database.

Relationship between classroom and school environment and teachers' self-efficacy in primary education

Significant variables in the multiple linear regressions of teachers' self-efficacy with Table 3 20 the following classroom environment and school environment in primary education¹

lubic 3:20		Teachers' self-efficacy ²												
						Tea	achers' s	elf-effica	ıcy ²					
		Model		ol enviror dent on:	ment)3				Model 2		om envird dent on:	onment)	1	
	first lan differe the la	ts whose iguage is int from inguage ruction ⁵	Students with special needs ^{6,7} Students with special needs ^{6,7}				Class	size ¹⁰	Low ac		Studen behav probl	ioural	Academicall gifted students ¹³	
	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)
Denmark									- 0.26	0.08	- 0.26	0.10		
Finland	0.27	0.12												
Mexico									- 0.25	0.10				
Norway					0.54	0.25	0.02	0.01			- 0.39	0.15		
Poland									- 0.26	0.09			0.26	0.09
Sub-national entities														
Flanders (Belgium)					0.20	0.09	- 0.01	0.01						

- 1. Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution. These results are not highlighted in the text of the report.
- 3. The first model consists of three variables on student characteristics collected in the principal questionnaire.
- 4. The second model consists of data from the teacher questionnaire on the composition of a target class.
- 5. The reference category is 10% or less of students whose first language is different from the language of instruction. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 6. The reference category is 10% or less of students with special needs. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 7. Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.
- 8. The reference category is 30% or less of students from socio-economically disadvantaged homes. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student
- 9. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 10. Continuous variable where the data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable
- 11. The reference category is 10% or less of students are low academic achievers. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 12. The reference category is 10% or less of students with behavioural problems. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 13. The reference category is 10% or less of students are academically gifted. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.



Relationship between classroom and school environment and teachers' job satisfaction in primary education

Significant variables in the multiple linear regressions of teachers' job satisfaction with Table 3.21 the following classroom environment and school environment in primary education¹

Table 3.21	1170 101	Teachers' job satisfaction ²												
						Teac	hers' jo	b satisfac	tion ²					
		Model		ol enviror dent on:	ment)3				Model 2		om envird dent on:	onment)	1	
	first lan differen the lar	udents whose st language is ifferent from he language f instruction struction (S.E.) B (S.E.)				lents socio- mically antaged nes ^{8, 9}	Class	s size ¹⁰	Low academic achievers ¹¹		Students with behavioural problems ¹²			mically ted ents ¹³
	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)
Denmark	- 0.26	0.13			0.43	0.21			- 0.35	0.11	- 0.36	0.12	0.41	0.16
Finland									- 0.27	0.12	- 0.44	0.11		
Mexico											-0.24	0.09		
Norway											- 0.39	0.13		
Poland	0.33	0.15							- 0.27	0.09			0.36	0.10
Sub-national entities														
Flanders (Belgium)									- 0.27	0.10	- 0.62	0.12		

- 1. Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution. These results are not highlighted in the text of the report.
- 2. Continuous variable
- 3. The first model consists of three variables on student characteristics collected in the principal questionnaire.
- 4. The second model consists of data from the teacher questionnaire on the composition of a target class.
- 5. The reference category is 10% or less of students whose first language is different from the language of instruction. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 6. The reference category is 10% or less of students with special needs. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 7. Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.
- 8. The reference category is 30% or less of students from socio-economically disadvantaged homes. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 9. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may vary among the countries. The disadvantaged homes countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 10. Continuous variable where the data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 11. The reference category is 10% or less of students are low academic achievers. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 12. The reference category is 10% or less of students with behavioural problems. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 13. The reference category is 10% or less of students are academically gifted. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.



Gender and age distribution of upper secondary teachers

Percentage of upper secondary education teachers with the following characteristics and Table 4.1 average age of teachers

Tuble 4.1	average age of teachers															
						Percei	ntage o	f teache	ers in ea	ach age	group					
	Fen	nale	Under 25 years		25-29 years		30-39	years	40-49	years	50-59	years	60 y or n		Average	e age
		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)	Average	(S.E.)
Australia	57.4	(1.2)	2.9	(0.4)	10.2	(0.8)	24.3	(1.2)	26.3	(1.0)	27.5	(1.1)	8.8	(0.9)	44.0	(0.3)
Denmark	48.5	(1.5)	0.2	(0.1)	5.7	(0.5)	25.6	(1.2)	26.1	(1.2)	25.1	(0.8)	17.3	(1.1)	46.9	(0.3)
Finland	61.9	(2.6)	0.5	(0.3)	3.5	(0.4)	20.6	(1.3)	31.8	(0.9)	32.3	(1.4)	11.3	(1.4)	47.1	(0.4)
Iceland	56.0	(1.4)	0.0	(0.0)	2.3	(0.4)	18.8	(1.1)	26.6	(1.3)	32.0	(1.4)	20.3	(1.2)	49.4	(0.3)
Italy	65.0	(1.0)	0.1	(0.1)	1.3	(0.2)	15.5	(0.7)	29.1	(0.7)	44.0	(8.0)	9.9	(0.6)	49.1	(0.2)
Mexico	48.2	(1.2)	2.9	(0.5)	11.4	(0.9)	31.4	(1.4)	27.5	(1.0)	21.1	(1.0)	5.6	(0.6)	41.7	(0.4)
Norway	52.0	(1.2)	0.3	(0.1)	5.5	(0.7)	20.0	(1.1)	30.2	(1.1)	26.7	(1.2)	17.3	(1.0)	47.4	(0.4)
Poland	67.9	(1.2)	0.4	(0.1)	7.0	(0.5)	33.9	(1.2)	32.0	(1.2)	22.3	(0.9)	4.4	(0.5)	42.8	(0.3)
Singapore	64.5	(0.9)	4.1	(0.4)	22.3	(0.8)	40.8	(0.9)	21.0	(8.0)	10.0	(0.5)	1.9	(0.3)	36.6	(0.2)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	52.5	(1.4)	0.9	(0.2)	8.1	(0.8)	40.1	(1.1)	32.9	(0.9)	15.6	(0.8)	2.4	(0.4)	40.7	(0.3)
Average	57.4	(0.5)	1.2	(0.1)	7.7	(0.2)	27.1	(0.4)	28.4	(0.3)	25.7	(0.3)	9.9	(0.3)	44.6	(0.1)

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166859

[Part 1/1]

Upper secondary teachers' educational attainment

Percentage of upper secondary education teachers by highest level of formal education Table 4.2 completed[†]

			Highes	t level of forma	l education cor	npleted		
	Below ISC	ED level 5	ISCED I	evel 5B ²	ISCED	level 5A	ISCED	level 6
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	0.1	(0.1)	0.2	(0.1)	98.6	(0.3)	1.1	(0.2)
Denmark	6.8	(1.3)	3.8	(0.6)	87.4	(1.2)	2.0	(0.4)
Finland	1.4	(0.4)	11.9	(2.2)	84.5	(2.0)	2.2	(0.4)
Iceland	4.7	(0.6)	11.7	(0.8)	81.1	(1.1)	2.5	(0.4)
Italy	6.1	(0.4)	4.6	(0.3)	85.6	(0.7)	3.7	(0.5)
Mexico	4.9	(0.6)	2.4	(0.4)	91.4	(0.8)	1.4	(0.2)
Norway	4.8	(0.6)	a	a	94.5	(0.6)	0.7	(0.2)
Poland	0.5	(0.2)	0.8	(0.2)	97.3	(0.4)	1.4	(0.3)
Singapore	0.7	(0.2)	3.5	(0.4)	95.5	(0.4)	0.3	(0.1)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	0.6	(0.2)	3.1	(0.4)	94.5	(0.4)	1.8	(0.2)
Average	3.1	(0.2)	4.7	(0.3)	91.0	(0.3)	1.7	(0.1)

^{1.} Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED level 5A programmes are generally longer and more theory-based, while 5B programmes are typically shorter and more practical and skills oriented. No distinction was made between ISCED level 5A (Bachelor) and ISCED level 5A (Master).

Source: OECD, TALIS 2013 Database.

^{2.} Includes Bachelor's degrees in some countries.



Completion and content of teacher education or training programme for upper secondary teachers

Percentage of upper secondary education teachers who completed teacher education or training programme and for whom the following elements were included in their formal Table 4.3 education and training

						Elements	include	d in forn	nal educ	ation and	l training	3		
	of te	oletion acher cation	Cor	ntent of t being	he subje taught	ct(s)	Peda	ngogy of being	the subje	ect(s)	Pra	ctice in t being	he subje taught	ct(s)
	or tra	aining amme	For all subjects		For some subjects		For all subjects		For some subjects			r all jects		some jects
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	97.1	(0.4)	65.5	(1.0)	28.3	(1.0)	68.6	(1.1)	26.8	(1.1)	72.6	(1.0)	24.9	(0.9)
Denmark	83.0	(1.4)	69.1	(2.4)	12.6	(1.2)	67.1	(1.9)	18.3	(1.7)	66.8	(1.9)	17.7	(1.6)
Finland	90.8	(1.9)	64.3	(2.3)	25.3	(1.8)	62.5	(2.6)	30.1	(2.0)	59.1	(2.1)	34.0	(2.1)
Iceland	93.4	(0.8)	53.3	(1.4)	26.5	(1.3)	47.8	(1.4)	32.5	(1.3)	48.7	(1.3)	35.0	(1.4)
Italy	71.4	(0.9)	68.7	(0.9)	20.8	(0.8)	55.9	(0.9)	22.5	(0.7)	27.5	(1.1)	9.5	(0.5)
Mexico	25.6	(1.4)	68.6	(1.1)	21.8	(1.0)	61.0	(1.3)	26.8	(1.2)	53.5	(1.2)	24.8	(1.0)
Norway	88.1	(1.0)	58.5	(1.0)	31.1	(1.0)	55.7	(1.2)	37.3	(1.1)	55.3	(1.4)	35.3	(1.2)
Poland	97.7	(0.5)	88.9	(0.7)	9.1	(0.7)	85.9	(0.7)	10.5	(0.7)	79.7	(0.9)	13.7	(0.9)
Singapore	98.9	(0.2)	78.6	(0.8)	17.3	(0.8)	84.5	(0.8)	13.6	(0.7)	84.9	(0.7)	12.9	(0.6)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	86.0	(1.0)	77.1	(1.1)	16.6	(0.9)	73.6	(1.3)	18.2	(1.0)	75.8	(1.2)	15.6	(0.9)
Average	83.2	(0.3)	69.3	(0.4)	21.0	(0.3)	66.3	(0.5)	23.7	(0.4)	62.4	(0.4)	22.3	(0.4)

Source: OECD, TALIS 2013 Database.

StatLink as http://dx.doi.org/10.1787/888933166874

[Part 1/1]

Work experience of upper secondary teachers

Table 4.4 Average years of working experience among upper secondary education teachers in various roles

Table 4.4	Average years or working experience among apper secondary education reachers in various roles									
	Average years of working experience as a teacher at this school		Averag of working as a teach	experience	Average of working in other edu	experience	Average years of working experience in other jobs			
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)		
Australia	8.9	(0.2)	17.4	(0.3)	1.7	(0.1)	5.2	(0.2)		
Denmark	11.7	(0.4)	14.8	(0.4)	2.4	(0.2)	6.1	(0.4)		
Finland	12.5	(0.6)	16.2	(0.3)	2.0	(0.2)	6.7	(0.3)		
Iceland	12.1	(0.3)	16.4	(0.4)	3.3	(0.2)	10.6	(0.3)		
Italy	9.7	(0.2)	20.1	(0.2)	1.1	(0.1)	3.4	(0.1)		
Mexico	11.1	(0.3)	14.2	(0.4)	4.3	(0.3)	10.5	(0.3)		
Norway	11.1	(0.3)	15.6	(0.4)	3.0	(0.2)	7.0	(0.3)		
Poland	12.6	(0.2)	16.9	(0.2)	3.1	(0.3)	4.3	(0.3)		
Singapore	6.4	(0.1)	10.5	(0.2)	1.3	(0.1)	1.6	(0.1)		
Sub-national entities										
Abu Dhabi (United Arab Emirates)	5.7	(0.2)	14.8	(0.2)	1.6	(0.1)	1.8	(0.1)		
Ανωνοσο	10.2	(0.1)	15.7	(0.1)	2.4	(0.1)	5.7	(0.1)		
Average	10.2	(0.1)	15./	(0.1)	2.4	(0.1)	5./	(0.1)		

Source: OECD, TALIS 2013 Database.

DATA TABLES: ANNEX B

Employment contract status of upper secondary teachers

Table 4.5 Percentage of upper secondary education teachers with the following employment characteristics

130,010 110					Torring emproyment enaracteristics			
	Permanent	ly employed		n contract: school year		n contract: rear or less		
	%	(S.E.)	%	(S.E.)	%	(S.E.)		
Australia	89.9	(0.8)	3.1	(0.3)	7.0	(0.7)		
Denmark	92.0	(0.8)	1.1	(0.3)	6.9	(0.8)		
Finland	82.3	(1.4)	4.9	(0.7)	12.8	(1.1)		
Iceland	77.7	(1.3)	6.1	(0.7)	16.2	(1.1)		
Italy	78.6	(1.1)	a	a	21.4	(1.1)		
Mexico	59.9	(2.5)	16.4	(1.1)	23.7	(2.3)		
Norway	90.9	(0.8)	3.1	(0.4)	6.0	(0.6)		
Poland	83.1	(0.9)	3.7	(0.4)	13.2	(0.8)		
Singapore	92.3	(0.5)	5.4	(0.4)	2.3	(0.3)		
Sub-national entities								
Abu Dhabi (United Arab Emirates)	43.5	(2.2)	29.3	(1.5)	27.2	(1.7)		
Average	79.0	(0.4)	8.1	(0.3)	13.7	(0.4)		

^{1.} The averages do not add up to 100 across categories because of the presence of cells that are not applicable "a". Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166898

Employment status of upper secondary teachers, full time or part time

Percentage of primary education teachers who are employed full time and part time (taking Table 4.6 into account all their current teaching jobs) and the reasons for part-time employment¹

			Part	time	Part	time	Part	time	Reason	stated for	working p	art time
	(more th	Full time (more than 90% of full-time hours)		(71%-90% of full-time hours)		(50%-70% of full-time hours)		an 50% I-time urs)		r chose part time	There no pos to work	sibility
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	85.7	(0.9)	7.9	(0.6)	5.0	(0.7)	1.5	(0.3)	92.6	(1.7)	7.4	(1.7)
Denmark	87.0	(0.9)	5.9	(0.7)	4.9	(0.8)	2.3	(0.4)	72.8	(3.7)	27.2	(3.7)
Finland	90.0	(2.0)	3.4	(1.0)	4.4	(0.8)	2.2	(0.5)	77.1	(5.9)	22.9	(5.9)
Iceland	82.9	(1.2)	4.5	(0.6)	5.6	(0.7)	7.1	(0.8)	69.8	(3.3)	30.2	(3.3)
Italy	84.3	(0.9)	4.8	(0.4)	6.1	(0.4)	4.8	(0.6)	52.2	(2.5)	47.8	(2.5)
Mexico	36.1	(1.8)	15.8	(1.0)	22.3	(1.2)	25.8	(1.5)	27.1	(1.7)	72.9	(1.7)
Norway	80.1	(1.1)	9.0	(0.7)	8.2	(0.7)	2.7	(0.4)	73.4	(2.1)	26.6	(2.1)
Poland	81.3	(1.1)	5.9	(0.6)	7.9	(0.8)	4.8	(0.5)	31.3	(2.6)	68.7	(2.6)
Singapore	96.5	(0.3)	2.1	(0.2)	1.4	(0.2)	0.0	(0.0)	92.7	(2.7)	7.3	(2.7)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	98.8	(0.2)	0.4	(0.1)	0.6	(0.2)	0.2	(0.1)	39.4	(10.1)	60.6	(10.1)
Average	82.3	(0.4)	6.0	(0.2)	6.6	(0.2)	5.1	(0.2)	62.9	(1.4)	37.1	(1.4)

^{1.} Cells with data representing less than 5% of the cases are shaded in grey and should be interpreted with caution. Source: OECD, TALIS 2013 Database.



Upper secondary school type and school competition

Percentage of upper secondary education teachers who work in schools where principal Table 4.7 reports the following school characteristics

100010 111		ports the renorming strice characteristics								
	Public so	chools ¹	Private s	chools²	Schools that co two or more of for at least so stude	other schools ome of their	Schools that c one othe for at lea of their s	r school st some		
		(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)		
Australia	55.8	(4.0)	44.2	(4.0)	92.3	(2.7)	4.3	(2.1)		
Denmark	97.1	(1.6)	2.9	(1.6)	88.8	(4.0)	9.3	(3.5)		
Finland	85.3	(3.9)	14.7	(3.9)	53.2	(6.3)	17.0	(3.9)		
Iceland	85.8	(0.1)	14.2	(0.1)	75.2	(0.1)	13.4	(0.1)		
Italy	90.4	(1.4)	9.6	(1.4)	56.5	(4.9)	22.9	(4.9)		
Mexico	70.4	(1.7)	29.6	(1.7)	79.2	(4.0)	14.5	(3.5)		
Norway	92.7	(2.1)	7.3	(2.1)	56.6	(7.5)	18.2	(6.1)		
Poland	97.2	(1.4)	2.8	(1.4)	84.0	(3.7)	11.6	(3.0)		
Singapore	100.0	(0.0)	0.0	(0.0)	98.3	(0.0)	0.0	(0.0)		
Sub-national entities										
Abu Dhabi (United Arab Emirates)	43.0	(3.3)	57.0	(3.3)	60.3	(4.3)	17.9	(4.0)		
Average	81.8	(0.7)	18.2	(0.7)	74.4	(1.4)	12.9	(1.1)		

					Programme	es offered		
	Schools that do not compete with other schools for their students ³		General and or technical progra	education	General ed programmes		Vocational o education pr exclus	ogrammes
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	3.5	(1.8)	85.2	(3.8)	14.5	(3.7)	0.4	(0.5)
Denmark	1.9	(1.9)	20.8	(3.3)	69.7	(3.7)	9.6	(2.5)
Finland	29.8	(5.1)	9.8	(5.3)	40.3	(4.5)	49.9	(6.1)
Iceland	11.4	(0.1)	68.7	(0.1)	31.3	(0.1)	0.0	(0.0)
Italy	20.5	(3.4)	34.5	(3.4)	34.2	(2.3)	31.0	(2.9)
Mexico	6.3	(1.9)	22.3	(3.2)	56.4	(3.5)	21.3	(3.3)
Norway	25.3	(6.1)	82.1	(5.0)	11.6	(4.0)	6.3	(3.1)
Poland	4.5	(2.1)	37.6	(3.9)	20.7	(2.3)	41.6	(3.2)
Singapore	1.7	(0.0)	0.0	(0.0)	100.0	(0.0)	0.0	(0.0)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	21.8	(4.0)	10.0	(3.8)	88.6	(3.5)	1.4	(1.4)
Average	12.7	(1.0)	37.1	(1.1)	46.7	(1.0)	16.1	(0.9)

^{1.} Refers to the percentage of primary education teachers who work in schools where principals report that their school was 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.

Source: OECD, TALIS 2013 Database.

^{2.} Refers to the percentage of primary education teachers who work in schools where principals report that their school was privately managed. This is a school managed by a non-government organisation; e.g., a church, trade union, business or other private institution. In some countries, the privately-managed-schools category includes schools that receive significant funding from the governments (government-dependent private schools).

^{3.} For general education programmes.



Upper secondary education school composition by first language, special needs and disadvantaged homes

Percentage of upper secondary education teachers who work in schools where principal
 Table 4.8
 reports the following school characteristics

	School	s with th	e followi		ntage of languag			irst lang	uage is d	ifferent	Schools with the following percentage of students with special needs ^{1, 2}			
	No	one	1% to	10%	11% t	o 30%	31% to 60%		More th	an 60%	No	ne	1% to	10%
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	2.3	(1.3)	67.1	(4.8)	12.9	(3.2)	11.9	(3.2)	5.8	(3.3)	0.4	(0.4)	85.8	(3.6)
Denmark	5.5	(2.8)	64.6	(6.1)	25.9	(7.3)	4.0	(3.1)	0.0	(0.0)	1.5	(1.5)	64.2	(6.1)
Finland	10.3	(2.2)	73.5	(3.7)	14.1	(3.3)	0.8	(0.6)	1.3	(0.9)	21.5	(2.8)	33.1	(4.3)
Iceland	2.9	(0.0)	97.1	(0.0)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	6.3	(0.0)	57.8	(0.1)
Italy	15.8	(2.5)	63.3	(3.6)	17.9	(2.6)	3.1	(1.1)	0.0	(0.0)	5.7	(1.5)	74.8	(3.5)
Mexico	75.3	(3.0)	20.2	(2.8)	1.0	(0.7)	1.7	(0.9)	1.7	(0.9)	45.1	(3.7)	50.8	(4.1)
Norway	4.6	(2.8)	81.2	(5.9)	10.9	(4.5)	3.3	(2.6)	0.0	(0.0)	1.2	(0.9)	65.8	(7.5)
Poland	88.8	(3.3)	11.2	(3.3)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	3.8	(1.4)	76.3	(3.7)
Singapore	0.7	(0.0)	9.1	(0.1)	24.8	(0.1)	32.7	(0.1)	32.7	(0.1)	3.9	(0.1)	94.8	(0.1)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	60.6	(6.5)	11.4	(4.3)	1.5	(1.1)	5.1	(2.9)	21.5	(5.6)	27.0	(5.6)	70.8	(5.8)
Average	26.7	(1.0)	49.9	(1.3)	10.9	(1.0)	6.3	(0.6)	6.3	(0.7)	11.6	(0.8)	67.4	(1.4)

				ollowing special								ng perce y disadv				
	11% 1	to 30%	31% t	o 60%		than	No	one	1% to	o 10%	11% 1	o 30%	31% t	o 60%		than
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	13.2	(3.5)	0.6	(0.6)	0.0	(0.0)	3.4	(1.9)	30.5	(5.3)	35.0	(5.3)	20.6	(5.2)	10.6	(3.9)
Denmark	27.1	(4.8)	7.2	(5.2)	0.0	(0.0)	4.8	(2.7)	56.7	(6.0)	26.9	(5.8)	11.6	(5.7)	0.0	(0.0)
Finland	43.9	(5.1)	1.6	(1.3)	0.0	(0.0)	14.7	(3.3)	59.8	(7.4)	23.4	(7.5)	2.2	(1.3)	0.0	(0.0)
Iceland	35.9	(0.1)	0.0	(0.0)	0.0	(0.0)	1.6	(0.0)	74.8	(0.1)	23.7	(0.1)	0.0	(0.0)	0.0	(0.0)
Italy	18.5	(3.1)	1.1	(0.7)	0.0	(0.0)	9.7	(2.2)	47.6	(3.7)	26.1	(3.5)	13.2	(2.6)	3.4	(1.3)
Mexico	2.9	(2.6)	1.2	(1.2)	0.0	(0.0)	12.0	(2.1)	18.2	(3.1)	26.7	(3.7)	28.8	(3.4)	14.4	(2.4)
Norway	32.3	(7.6)	0.7	(0.7)	0.0	(0.0)	13.4	(4.5)	71.0	(6.4)	13.7	(4.8)	1.9	(1.3)	0.0	(0.0)
Poland	17.3	(4.1)	2.5	(2.5)	0.0	(0.0)	1.4	(1.4)	36.2	(5.7)	39.0	(6.2)	18.6	(4.5)	4.7	(2.2)
Singapore	1.3	(0.0)	0.0	(0.0)	0.0	(0.0)	4.2	(0.1)	46.1	(0.1)	45.6	(0.1)	3.5	(0.1)	0.6	(0.0)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	2.2	(2.2)	0.0	(0.0)	0.0	(0.0)	27.9	(5.4)	34.7	(6.2)	26.6	(6.4)	8.2	(4.1)	2.6	(2.7)
Average	19.5	(1.2)	1.5	(0.6)	0.0	(0.0)	9.3	(0.9)	47.6	(1.6)	28.7	(1.6)	10.8	(1.1)	3.6	(0.6)

^{1.} These data are broad estimates reported by principals.

Source: OECD, TALIS 2013 Database.

^{2.} 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

^{3. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



School resources in upper secondary education

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide quality instruction

Table 4.9	quality inst	ruction	es imiaci	u 101 01 10	Joine exter	ne the senot	or o capacity	to provide
		ualified and/or ning teachers	competence	teachers with es in teaching special needs		of vocational chers		r inadequacy onal materials
	%	(S.E.)		(S.E.)		(S.E.)	%	(S.E.)
Australia	53.9	(5.6)	45.4	(6.1)	21.9	(4.5)	17.0	(4.9)
Denmark	24.1	(5.3)	27.9	(5.4)	27.2	(5.6)	5.7	(2.6)
Finland	41.5	(5.1)	37.9	(7.8)	26.7	(5.2)	18.7	(4.9)
Iceland	1.5	(0.1)	24.2	(0.1)	6.2	(0.1)	50.1	(0.2)
Italy	35.5	(4.0)	35.1	(3.3)	15.7	(2.6)	42.6	(3.5)
Mexico	35.7	(3.9)	34.3	(3.7)	30.3	(3.6)	38.9	(3.9)
Norway	30.9	(6.5)	41.3	(6.2)	23.1	(6.4)	5.9	(2.6)
Poland	21.5	(5.1)	23.9	(4.7)	26.4	(6.0)	48.7	(5.2)
Singapore	51.4	(0.1)	47.9	(0.1)	10.3	(0.1)	1.2	(0.0)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	59.2	(5.5)	56.3	(4.8)	33.6	(4.9)	33.7	(4.5)
Average	35.5	(1.5)	37.4	(1.5)	22.1	(1.4)	26.3	(1.2)

	inadeq compu	age or uacy of ters for action		nt internet	inadeq computer	age or uacy of r software ruction	inadequac	age or y of library erials	Shortage o	of support
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	10.4	(3.0)	14.3	(3.4)	14.1	(3.7)	11.4	(4.6)	35.4	(6.1)
Denmark	3.9	(1.4)	7.4	(3.5)	3.9	(1.7)	2.0	(1.4)	20.2	(4.8)
Finland	19.6	(3.6)	14.9	(3.2)	23.5	(4.1)	11.4	(3.0)	36.7	(7.1)
Iceland	21.2	(0.1)	9.5	(0.1)	15.6	(0.1)	1.7	(0.0)	19.2	(0.1)
Italy	36.1	(3.8)	21.1	(2.7)	31.9	(3.4)	28.4	(3.3)	47.2	(3.5)
Mexico	47.2	(4.1)	48.8	(4.1)	41.9	(4.0)	43.9	(3.9)	47.2	(3.6)
Norway	0.0	(0.0)	3.6	(1.8)	5.5	(2.4)	7.1	(3.0)	19.9	(5.0)
Poland	42.5	(5.4)	10.7	(3.0)	32.5	(4.7)	18.5	(4.7)	21.5	(3.2)
Singapore	6.5	(0.0)	7.1	(0.1)	7.4	(0.1)	4.5	(0.1)	30.5	(0.1)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	37.3	(4.6)	35.7	(4.8)	43.6	(5.1)	47.0	(4.3)	55.2	(4.4)
Average	22.5	(1.0)	17.3	(1.0)	22.0	(1.1)	17.6	(1.0)	33.3	(1.4)

^{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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.



School resources in upper secondary education, by socio-economic level

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide

Table 4.10 quality instruction1

	perc from	entage socio-e	the follo of stude conomi ed hom	ents cally			ialified iing tea		comp	etence	eachers s in tea special	ching	Sho	rtage of teac		onal
	30% 0	or less	More 30		High secon	omic tus	econ sta (more	socio- omic tus e than %)	High second	omic tus	econ sta (more	socio- omic tus e than %)	High second	omic tus	econ sta (more	socio- omic tus e than %)
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	68.8	(5.5)	31.2	(5.5)	55.9	(5.9)	50.5	(12.8)	44.9	(6.4)	47.2	(12.3)	24.9	(5.9)	15.8	(6.7)
Denmark	88.4	(5.7)	11.6	(5.7)	26.5	(5.7)	6.0	(6.0)	27.6	(5.5)	30.0	(23.7)	30.5	(5.9)	2.4	(4.1)
Finland	97.8	(1.3)	2.2	(1.3)	41.7	(5.1)	32.4	(28.0)	37.3	(7.9)	61.7	(30.0)	26.5	(5.3)	32.4	(28.0)
Iceland	100.0	(0.0)	0.0	(0.0)	1.6	(0.1)	a	a	19.9	(0.1)	a	a	6.6	(0.1)	a	a
Italy	83.4	(2.7)	16.6	(2.7)	34.3	(4.4)	37.9	(8.9)	33.6	(3.6)	41.8	(8.9)	11.3	(2.5)	34.3	(8.9)
Mexico	56.8	(3.6)	43.2	(3.6)	31.0	(5.6)	41.2	(5.5)	27.3	(5.1)	43.1	(5.7)	24.7	(5.0)	38.7	(5.1)
Norway	98.1	(1.3)	1.9	(1.3)	32.0	(6.9)	39.0	(34.1)	42.5	(6.5)	61.0	(34.1)	24.4	(6.8)	0.0	(0.0)
Poland	76.7	(4.9)	23.3	(4.9)	22.6	(5.8)	17.8	(10.9)	26.3	(5.9)	16.1	(7.0)	21.9	(5.8)	42.0	(12.0)
Singapore	96.0	(0.1)	4.0	(0.1)	52.3	(0.1)	29.5	(0.6)	48.1	(0.1)	42.9	(0.7)	10.8	(0.1)	0.0	(0.0)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	89.2	(4.9)	10.8	(4.9)	64.5	(7.1)	100.0	(0.0)	70.0	(5.4)	88.4	(12.6)	34.1	(7.1)	39.3	(23.3)
Average	85.5	(1.2)	14.5	(1.2)	36.2	(1.7)	39.4	(5.4)	37.7	(1.7)	48.0	(6.2)	21.6	(1.6)	22.8	(4.5)

	Short	age of sup	port pers	onnel			inadequa nal mater		Shortage		quacy of corruction	omputers
	Hi socio-ec sta (30% c	tus	socio-e	conomic tus nan 30%)	Hi socio-ec sta (30% c	tus	socio-e	ow conomic itus ian 30%)	Hi socio-ec sta (30% c	onomic tus	socio-e	conomic tus nan 30%)
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	29.9	(6.0)	46.2	(12.8)	11.5	(3.3)	29.4	(13.0)	9.0	(3.6)	13.6	(6.3)
Denmark	17.7	(4.8)	39.3	(25.9)	6.2	(2.9)	2.4	(4.1)	3.8	(1.5)	3.9	(5.0)
Finland	37.6	(7.3)	0.0	(0.0)	18.4	(5.1)	32.4	(28.0)	18.5	(3.4)	67.6	(28.0)
Iceland	20.3	(0.1)	a	a	52.9	(0.2)	a	a	22.4	(0.1)	a	a
Italy	43.8	(4.0)	62.4	(8.0)	40.1	(4.0)	59.7	(8.7)	36.8	(4.3)	31.9	(8.0)
Mexico	36.3	(5.1)	62.3	(5.7)	23.4	(4.3)	59.2	(6.4)	30.2	(4.9)	69.6	(5.0)
Norway	19.0	(4.9)	61.0	(34.1)	6.3	(2.8)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)
Poland	21.4	(3.8)	19.1	(8.2)	43.7	(5.9)	64.1	(11.5)	38.2	(6.9)	54.8	(11.6)
Singapore	30.6	(0.1)	29.5	(0.6)	1.3	(0.0)	0.0	(0.0)	6.3	(0.0)	13.2	(0.5)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	64.1	(6.2)	100.0	(0.0)	40.5	(6.9)	88.4	(12.6)	46.3	(7.4)	88.4	(12.6)
Average	32.1	(1.5)	46.6	(5.2)	24.4	(1.3)	37.3	(4.1)	21.1	(1.3)	38.1	(3.9)

^{1.} Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution.

Source: OECD, TALIS 2013 Database.

^{2.} These data are broad estimates reported by principals.

^{3. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



[Part 2/2]

School resources in upper secondary education, by socio-economic level

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" their school's capacity to provide quality instruction.

Table 4.10 quality instruction¹

	Inst	ufficient in	nternet ac	cess			quacy of c		Sł		inadequa materials	
	socio-ec sta	gh conomic tus or less)	socio-e sta	ow conomic atus nan 30%)	socio-ec sta		socio-e	ow conomic itus an 30%)	Hi socio-ec sta (30% c	tus	socio-e	ow conomic itus ian 30%)
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	9.9	(3.6)	24.3	(9.6)	12.4	(4.6)	18.0	(6.9)	6.3	(2.9)	23.1	(12.0)
Denmark	4.9	(2.5)	25.9	(23.5)	3.6	(1.9)	5.8	(5.3)	1.9	(1.5)	2.2	(2.2)
Finland	15.2	(3.3)	0.0	(0.0)	23.2	(4.2)	38.3	(30.0)	11.7	(3.0)	0.0	(0.0)
Iceland	10.0	(0.1)	a	a	16.5	(0.1)	a	a	1.8	(0.0)	a	a
Italy	22.7	(3.1)	13.0	(6.1)	32.2	(3.9)	31.6	(9.2)	27.4	(3.8)	36.5	(7.9)
Mexico	38.8	(5.6)	62.0	(5.8)	29.3	(5.0)	58.3	(6.0)	31.0	(4.4)	60.9	(5.8)
Norway	3.8	(1.9)	0.0	(0.0)	5.8	(2.5)	0.0	(0.0)	7.5	(3.1)	0.0	(0.0)
Poland	7.4	(2.1)	18.6	(9.4)	30.6	(4.8)	36.6	(11.1)	20.0	(5.5)	10.9	(5.9)
Singapore	6.8	(0.1)	13.2	(0.5)	7.1	(0.1)	13.2	(0.5)	3.5	(0.1)	27.4	(0.6)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	45.8	(7.4)	76.8	(20.8)	50.8	(7.4)	76.8	(20.8)	67.3	(5.6)	40.4	(23.3)
Average	16.5	(1.2)	26.0	(3.9)	21.2	(1.3)	30.9	(4.5)	17.8	(1.1)	22.4	(3.2)

^{1.} Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution.

Source: OECD, TALIS 2013 Database.

^{2.} These data are broad estimates reported by principals.

^{3. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



[Part 1/3]

School resources in upper secondary education, by school location

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide

 Table 4.11
 quality instruction

			School lo	cation size						ualified and		
		people less	15 00	veen 11 and 1 people		e than D people) people less	15 0	ween 01 and 0 people		e than 0 people
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	11.5	(3.6)	14.9	(4.5)	73.5	(4.7)	61.6	(12.6)	68.2	(14.1)	49.8	(6.9)
Denmark	10.7	(2.3)	44.1	(5.7)	45.2	(6.5)	29.3	(15.2)	28.4	(8.0)	18.4	(8.0)
Finland	22.3	(3.5)	38.7	(5.6)	39.0	(5.8)	22.7	(7.0)	43.7	(10.4)	49.7	(8.5)
Iceland	29.1	(0.2)	45.0	(0.2)	26.0	(0.1)	5.1	(0.2)	0.0	(0.0)	0.0	(0.0)
Italy	21.7	(3.7)	52.4	(3.7)	25.9	(2.6)	54.2	(9.9)	28.8	(4.7)	34.1	(6.2)
Mexico	18.8	(3.0)	18.3	(2.4)	62.9	(3.4)	37.3	(8.2)	47.3	(8.5)	32.7	(5.0)
Norway	37.1	(5.8)	46.7	(7.2)	16.1	(5.0)	36.7	(8.9)	25.8	(11.0)	32.0	(14.4)
Poland	31.3	(4.3)	33.4	(3.7)	35.3	(4.7)	21.9	(11.9)	23.4	(6.0)	19.5	(8.3)
Singapore	a	a	a	a	100.0	(0.0)	a	a	a	a	51.4	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	20.8	(3.7)	20.8	(4.1)	58.4	(4.8)	55.8	(9.8)	61.2	(11.0)	58.8	(7.6)
Average ¹	22.6	(1.2)	34.9	(1.5)	48.2	(1.4)	36.1	(3.4)	36.3	(3.0)	34.6	(2.4)

				rs with con ts with spec				Short	age of vo	cational tea	chers	
) people less	15 0	ween 01 and 0 people		e than 0 people) people less	15 0	ween 01 and 0 people		e than 0 people
		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)
Australia	35.1	(14.2)	44.5	(15.1)	47.2	(6.5)	37.2	(12.3)	30.3	(16.4)	17.8	(4.3)
Denmark	13.8	(8.7)	34.2	(8.0)	25.0	(9.4)	43.2	(13.0)	29.6	(8.2)	20.5	(8.2)
Finland	33.0	(7.6)	51.6	(14.0)	26.6	(11.3)	11.1	(5.9)	22.3	(11.5)	39.4	(7.9)
Iceland	26.4	(0.2)	15.5	(0.2)	36.8	(0.3)	20.0	(0.2)	0.0	(0.0)	0.0	(0.0)
Italy	21.7	(6.9)	41.4	(4.6)	34.2	(6.3)	16.7	(6.6)	17.5	(3.8)	11.6	(4.4)
Mexico	32.5	(8.4)	38.7	(9.6)	34.5	(5.1)	35.9	(8.0)	39.4	(7.9)	26.9	(4.6)
Norway	39.6	(9.2)	46.7	(12.7)	30.6	(12.6)	24.7	(8.5)	20.0	(9.3)	27.8	(14.4)
Poland	23.8	(12.0)	25.1	(6.0)	23.2	(6.2)	27.7	(13.3)	21.9	(5.9)	29.8	(9.2)
Singapore	a	a	a	a	47.9	(0.1)	a	a	a	a	10.3	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	63.3	(10.4)	76.4	(9.7)	45.4	(5.8)	40.0	(9.7)	48.2	(11.5)	24.5	(6.1)
Average ¹	32.1	(3.1)	41.6	(3.3)	35.1	(2.4)	28.5	(3.2)	25.5	(3.1)	20.9	(2.3)

^{1.} Average do not add to 100% because of the presence of not applicable "a" cases.

Source: OECD, TALIS 2013 Database.



[Part 2/3]

School resources in upper secondary education, by school location

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide

Table 4.11 quality instruction

		Shor	tage of su	pport perso	onnel					r inadequae onal materi		
) people less	15 0	ween 01 and 0 people		e than 0 people) people less	15 0	ween 01 and 0 people		e than 0 people
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	26.6	(13.4)	48.3	(15.0)	34.1	(6.8)	31.1	(11.3)	17.0	(15.4)	14.7	(6.2)
Denmark	22.5	(7.0)	16.4	(5.7)	23.5	(9.5)	11.2	(7.6)	4.5	(3.5)	5.5	(4.3)
Finland	29.3	(6.9)	41.6	(13.2)	36.1	(10.3)	26.3	(12.0)	22.2	(10.2)	11.2	(4.9)
Iceland	7.3	(0.0)	28.7	(0.2)	16.1	(0.2)	27.1	(0.3)	57.3	(0.2)	63.2	(0.3)
Italy	45.6	(9.3)	42.0	(4.6)	59.8	(6.9)	36.7	(9.0)	47.2	(4.4)	38.9	(6.5)
Mexico	60.2	(8.3)	57.3	(9.1)	39.0	(4.9)	60.0	(9.4)	43.9	(9.8)	32.2	(4.5)
Norway	19.3	(6.2)	22.5	(9.9)	14.4	(8.7)	8.0	(4.8)	0.0	(0.0)	17.6	(10.1)
Poland	19.6	(5.4)	27.0	(6.3)	18.1	(4.5)	48.7	(14.0)	39.1	(6.5)	57.5	(7.5)
Singapore	a	a	a	a	30.5	(0.1)	a	a	a	a	1.2	(0.0)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	70.7	(9.2)	53.5	(12.3)	49.0	(6.1)	43.1	(10.3)	38.2	(13.0)	27.3	(5.7)
Average ¹	33.5	(2.7)	37.5	(3.2)	32.1	(2.1)	32.5	(3.2)	29.9	(2.9)	26.9	(1.8)

		Shortage		quacy of co truction	mputers			Ins	ufficient i	nternet acc	ess	
) people less	15 00	ween 01 and 0 people		e than 0 people) people less	15 0	ween 01 and 0 people		e than D people
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	27.6	(14.3)	8.2	(8.4)	8.1	(3.3)	18.4	(9.8)	6.2	(6.2)	15.3	(4.1)
Denmark	8.1	(6.6)	3.4	(2.0)	3.3	(2.2)	16.2	(11.0)	4.3	(3.8)	8.3	(6.4)
Finland	31.1	(8.0)	14.2	(5.4)	18.5	(4.9)	19.2	(5.6)	12.1	(5.0)	15.2	(5.4)
Iceland	0.0	(0.0)	37.9	(0.2)	16.1	(0.2)	0.0	(0.0)	11.8	(0.2)	16.1	(0.2)
Italy	31.8	(9.5)	38.4	(4.7)	35.8	(6.6)	21.9	(7.3)	19.2	(3.6)	24.5	(5.4)
Mexico	67.6	(8.7)	53.9	(9.4)	39.5	(4.8)	66.9	(8.1)	48.8	(10.0)	42.0	(5.4)
Norway	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	4.7	(3.8)	2.5	(2.1)	4.1	(4.2)
Poland	56.1	(12.9)	37.2	(6.3)	34.7	(10.0)	15.1	(7.7)	7.8	(3.6)	8.7	(3.4)
Singapore	a	a	a	a	6.5	(0.0)	a	a	a	a	7.1	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	47.2	(9.7)	28.6	(11.7)	35.5	(6.1)	52.3	(9.8)	28.3	(11.8)	30.8	(5.5)
Average ¹	30.0	(3.0)	24.6	(2.2)	19.8	(1.6)	23.9	(2.6)	15.7	(2.1)	17.2	(1.4)

^{1.} Average do not add to 100% because of the presence of not applicable "a" cases.

Source: OECD, TALIS 2013 Database.



[Part 3/3]

School resources in upper secondary education, by school location

Percentage of upper secondary education teachers whose school principal reports that the following resources issues hinder "a lot" or "to some extent" the school's capacity to provide quality instruction

 Table 4.11
 quality instruction

	S	shortage or		cy of compo truction	uter softw	are		Shortage o	r inadequa	acy of libra	ry material	s
		0 people less	15 0	ween 01 and 0 people		e than 0 people		0 people less	15 0	ween 01 and 0 people		e than O people
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	27.6	(14.3)	31.4	(16.3)	8.4	(2.8)	12.0	(9.3)	8.2	(8.4)	12.0	(5.9)
Denmark	14.1	(8.6)	4.9	(2.8)	0.0	(0.0)	3.9	(3.8)	0.6	(0.4)	2.9	(3.0)
Finland	44.0	(10.7)	14.3	(5.3)	21.3	(6.3)	24.3	(12.2)	9.6	(3.6)	6.1	(2.9)
Iceland	0.0	(0.0)	25.4	(0.2)	16.1	(0.2)	5.9	(0.0)	0.0	(0.0)	0.0	(0.0)
Italy	29.6	(8.6)	33.6	(4.5)	31.0	(5.9)	35.8	(9.6)	23.4	(3.9)	32.7	(6.2)
Mexico	52.4	(9.6)	45.2	(10.7)	36.2	(4.8)	68.3	(8.4)	45.9	(10.5)	36.4	(4.5)
Norway	2.3	(2.3)	1.9	(1.9)	22.6	(11.0)	5.0	(3.0)	8.1	(5.7)	9.2	(6.5)
Poland	38.8	(10.7)	38.5	(6.3)	21.3	(5.5)	23.8	(13.0)	19.3	(5.0)	12.1	(4.5)
Singapore	a	a	a	a	7.4	(0.1)	a	a	a	a	4.5	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	60.2	(9.4)	36.1	(12.3)	39.0	(6.3)	53.8	(10.6)	37.0	(9.8)	46.9	(5.8)
Average ¹	29.9	(3.1)	25.7	(2.8)	20.3	(1.7)	25.9	(3.0)	16.9	(2.1)	16.3	(1.4)

^{1.} Average do not add to 100% because of the presence of not applicable "a" cases.

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Class size and classroom composition in upper secondary education

Average class size and percentage of upper secondary education teachers who report the Table 4.12 following characteristics of students in their class¹

		9	Students whose first language is different from the language													
				Student	s whos	e first la		is diffe ruction	rent fro	m the la	anguag	e	Low	acaden	nic achi	evers
	Aver class		N	one	1% to	o 10%	11% 1	to 30%	31% t	o 60%		than	No	one	1% to	o 10%
	Average	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	18.5	(0.4)	37.7	(3.2)	40.6	(2.6)	10.5	(1.2)	5.5	(1.1)	5.7	(1.4)	11.0	(1.2)	37.1	(2.2)
Denmark	23.5	(0.3)	34.5	(2.6)	49.1	(2.0)	11.0	(1.7)	3.9	(1.2)	1.5	(0.5)	5.2	(0.8)	40.2	(2.3)
Finland	20.0	(0.4)	42.0	(2.1)	46.4	(2.3)	6.5	(0.9)	1.8	(0.3)	3.3	(0.8)	14.0	(0.9)	32.9	(1.5)
Iceland	22.6	(0.4)	38.6	(1.5)	50.9	(1.6)	7.6	(0.9)	0.4	(0.2)	2.4	(0.5)	11.2	(1.1)	45.5	(1.8)
Italy	21.9	(0.2)	50.6	(1.5)	39.0	(1.4)	7.2	(0.8)	2.3	(0.4)	1.0	(0.2)	3.3	(0.3)	42.3	(1.2)
Mexico	33.9	(0.6)	77.5	(1.7)	15.1	(1.4)	2.3	(0.4)	1.4	(0.3)	3.8	(0.7)	2.6	(0.4)	38.6	(1.3)
Norway	19.4	(0.4)	35.1	(1.7)	48.1	(1.9)	11.7	(1.6)	2.7	(0.6)	2.3	(0.5)	3.8	(0.7)	38.6	(1.7)
Poland	23.1	(0.3)	89.1	(0.9)	6.1	(0.8)	1.2	(0.3)	0.9	(0.3)	2.7	(0.4)	2.9	(0.5)	32.3	(1.2)
Singapore	33.4	(0.2)	5.0	(0.4)	20.2	(0.6)	26.4	(0.8)	29.0	(0.8)	19.4	(0.7)	5.1	(0.4)	26.3	(0.8)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	24.0	(0.4)	45.6	(2.2)	12.5	(0.9)	5.8	(0.9)	8.2	(0.8)	27.9	(1.6)	5.0	(0.6)	44.4	(1.3)
Average	24.0	(0.1)	45.6	(0.6)	32.8	(0.5)	9.0	(0.3)	5.6	(0.2)	7.0	(0.3)	6.4	(0.2)	37.8	(0.5)

		Low	acaden	nic achie	evers					Studer	ıts with	special	needs ³			
	11% t	o 30%	31% t	o 60%		than	No	one	1% to	10%	11% 1	o 30%	31% t	o 60%		than 0%
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	33.0	(1.7)	13.3	(1.5)	5.6	(0.9)	34.2	(1.9)	52.8	(1.4)	10.0	(1.0)	2.0	(0.5)	1.0	(0.4)
Denmark	34.8	(1.6)	15.3	(1.5)	4.5	(1.1)	31.0	(2.0)	45.9	(1.7)	18.4	(1.5)	3.0	(0.6)	1.6	(0.6)
Finland	31.0	(1.0)	15.0	(1.3)	7.0	(1.2)	32.0	(2.7)	47.7	(3.0)	14.8	(2.4)	3.9	(1.4)	1.6	(0.6)
Iceland	27.9	(1.4)	10.2	(1.0)	5.2	(0.6)	22.2	(1.4)	49.9	(1.6)	19.0	(1.2)	3.9	(0.7)	5.0	(0.7)
Italy	38.3	(0.9)	13.2	(0.8)	2.9	(0.4)	37.4	(1.5)	51.8	(1.5)	8.9	(0.6)	1.6	(0.3)	0.3	(0.1)
Mexico	34.1	(1.1)	20.0	(1.0)	4.7	(0.5)	62.1	(1.4)	33.4	(1.3)	3.2	(0.5)	0.8	(0.2)	0.5	(0.2)
Norway	34.8	(1.3)	13.6	(0.9)	9.1	(1.1)	28.0	(1.6)	43.5	(1.3)	16.5	(1.2)	5.2	(0.5)	6.9	(1.0)
Poland	34.1	(1.4)	22.0	(1.0)	8.7	(0.8)	23.7	(1.1)	61.0	(1.5)	12.2	(1.4)	2.6	(0.5)	0.5	(0.1)
Singapore	29.9	(0.9)	24.1	(0.8)	14.6	(0.5)	33.2	(0.9)	57.4	(1.0)	7.3	(0.5)	1.6	(0.2)	0.5	(0.1)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	33.3	(1.3)	13.2	(0.9)	4.1	(0.4)	53.4	(1.6)	38.2	(1.5)	5.3	(0.6)	1.9	(0.4)	1.1	(0.2)
Average	33.1	(0.4)	16.0	(0.3)	6.6	(0.3)	35.7	(0.5)	48.1	(0.5)	11.5	(0.4)	2.7	(0.2)	1.9	(0.2)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} These data are reported by upper secondary education teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

^{3.} 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

^{4. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



[Part 2/2]

Class size and classroom composition in upper secondary education

Average class size and percentage of upper secondary education teachers who report the following characteristics of students in their class¹

		-	Stu	ıdents v	vith beh	avioura	l proble	ems			St	udents disa		cio-eco ged hor		lly
	No	one	1% to	10%	11% 1	to 30%	31% t	o 60%		than	No	one	1% to	o 10%	11% t	o 30%
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	37.5	(1.6)	41.1	(1.6)	16.3	(1.3)	3.8	(0.5)	1.3	(0.3)	27.1	(2.1)	38.1	(2.3)	20.4	(1.8)
Denmark	46.3	(1.9)	41.5	(1.8)	9.7	(1.1)	2.0	(0.4)	0.5	(0.3)	30.8	(1.9)	45.5	(1.8)	18.3	(1.2)
Finland	36.3	(2.4)	42.6	(1.5)	16.3	(2.1)	4.7	(1.6)	0.1	(0.0)	23.3	(1.7)	49.2	(2.8)	22.5	(1.0)
Iceland	27.6	(1.5)	51.9	(1.6)	13.9	(1.1)	4.3	(0.6)	2.3	(0.4)	21.2	(1.4)	50.7	(1.6)	22.0	(1.4)
Italy	40.0	(1.1)	42.4	(1.0)	13.0	(0.7)	3.8	(0.4)	0.8	(0.2)	36.0	(1.2)	43.4	(0.9)	14.3	(0.7)
Mexico	10.0	(0.9)	52.2	(1.5)	24.7	(1.2)	10.5	(0.7)	2.6	(0.4)	13.5	(1.2)	27.9	(1.4)	25.0	(1.0)
Norway	46.4	(1.6)	37.1	(1.5)	11.0	(1.0)	3.7	(0.4)	1.9	(0.3)	31.7	(1.4)	46.5	(1.5)	15.1	(0.9)
Poland	21.9	(1.5)	50.2	(1.3)	19.8	(1.1)	6.6	(0.8)	1.5	(0.3)	10.1	(0.8)	43.9	(1.1)	31.1	(1.1)
Singapore	13.7	(0.7)	51.9	(1.0)	24.4	(0.8)	7.9	(0.5)	2.0	(0.3)	10.1	(0.5)	44.0	(0.8)	29.7	(0.9)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	20.4	(1.3)	53.4	(1.3)	16.9	(1.1)	7.3	(0.7)	2.0	(0.4)	57.1	(2.0)	32.0	(1.6)	6.8	(0.7)
Average	30.0	(0.5)	46.4	(0.5)	16.6	(0.4)	5.5	(0.2)	1.5	(0.1)	26.1	(0.5)	42.1	(0.5)	20.5	(0.4)

			cio-econ ged hom	/				Acade	emically	gifted stu	ıdents			
	31% t	o 60%	More th	an 60%	No	ne	1% to	10%	11% t	0 30%	31% t	o 60%	More th	an 60%
		(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)
Australia	10.1	(1.3)	4.3	(1.0)	21.7	(1.4)	49.4	(1.5)	17.8	(1.2)	7.8	(0.9)	3.3	(1.1)
Denmark	4.9	(1.0)	0.5	(0.3)	1.4	(0.4)	20.5	(1.8)	28.3	(1.6)	30.6	(2.1)	19.2	(1.8)
Finland	4.3	(1.3)	0.6	(0.2)	8.1	(1.3)	44.5	(2.2)	25.1	(1.7)	17.1	(1.4)	5.2	(0.7)
Iceland	5.0	(0.7)	1.1	(0.3)	4.6	(0.7)	24.8	(1.4)	29.3	(1.5)	26.6	(1.3)	14.7	(1.2)
Italy	4.8	(0.5)	1.5	(0.3)	17.5	(0.9)	54.0	(1.0)	20.0	(0.8)	7.2	(0.4)	1.3	(0.2)
Mexico	20.9	(1.1)	12.7	(1.1)	6.7	(0.6)	57.5	(1.1)	21.9	(1.0)	9.7	(0.7)	4.3	(0.4)
Norway	5.1	(0.7)	1.5	(0.4)	6.7	(0.6)	32.7	(1.4)	27.4	(1.0)	23.1	(1.1)	10.3	(1.2)
Poland	12.6	(1.0)	2.2	(0.3)	6.5	(0.6)	52.6	(1.6)	23.4	(1.5)	12.2	(0.9)	5.2	(0.6)
Singapore	13.1	(0.7)	3.2	(0.3)	45.4	(0.8)	37.4	(0.8)	10.1	(0.6)	4.3	(0.3)	2.9	(0.3)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	2.7	(0.4)	1.3	(0.3)	3.8	(0.5)	44.0	(1.5)	26.2	(1.0)	17.1	(1.1)	9.0	(0.8)
Average	8.4	(0.3)	2.9	(0.2)	12.2	(0.3)	41.7	(0.5)	22.9	(0.4)	15.6	(0.4)	7.5	(0.3)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. These data are reported by upper secondary education teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{3.} 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

^{4. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.



Gender and age distribution of upper secondary principals

Percentage of upper secondary education principals with the following characteristics and Table 4.13 mean age of principals

							Pero	entage o	of princip	als in ea	ch age g	roup		
	Fer	nale	Mear	age	Under	30 years	30-39	years	40-49	years	50-59	years	60 years	or more
	%	(S.E.)	Average	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	39.5	(5.8)	54.4	(8.0)	0.0	(0.0)	5.0	(2.3)	16.3	(4.7)	58.8	(5.8)	19.8	(5.1)
Denmark	46.0	(5.6)	52.1	(0.8)	0.0	(0.0)	4.6	(2.3)	31.1	(4.9)	51.9	(5.4)	12.3	(3.3)
Finland	44.9	(4.5)	53.1	(0.7)	0.0	(0.0)	6.6	(1.7)	24.0	(4.6)	43.4	(4.2)	26.1	(4.0)
Iceland	42.2	(11.2)	55.6	(1.1)	0.0	(0.0)	0.0	(0.0)	16.9	(7.6)	59.1	(9.7)	24.0	(8.7)
Italy	48.1	(4.0)	58.5	(0.8)	0.0	(0.0)	0.3	(0.3)	10.9	(3.3)	38.7	(3.5)	50.1	(4.5)
Mexico	40.9	(4.6)	45.8	(0.9)	7.0	(2.1)	24.6	(4.2)	31.5	(4.6)	23.1	(3.8)	13.8	(2.9)
Norway	49.2	(5.0)	53.7	(0.8)	0.0	(0.0)	4.1	(2.3)	24.4	(5.2)	46.5	(5.3)	24.9	(5.3)
Poland	52.6	(5.0)	50.0	(1.1)	0.0	(0.0)	8.4	(4.6)	36.5	(3.8)	47.7	(6.2)	7.3	(1.9)
Singapore	54.0	(4.3)	48.3	(0.5)	0.0	(0.0)	10.5	(2.7)	40.5	(4.4)	45.6	(4.1)	3.4	(1.8)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	46.6	(4.0)	49.5	(0.7)	0.0	(0.0)	7.4	(2.4)	46.5	(3.7)	32.0	(4.1)	14.1	(3.1)
Average	46.4	(1.8)	52.1	(0.3)	0.7	(0.2)	7.1	(0.8)	27.9	(1.5)	44.7	(1.7)	19.6	(1.4)

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933166983

[Part 1/1]

Upper secondary education principals' educational attainmentPercentage of upper secondary education principals by level of education and training completed¹

			Highes	t level of forma	l education co	mpleted		
	Below ISC	CED level 5	ISCED	level 5B ²	ISCED	level 5A	ISCED	level 6
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	0.0	(0.0)	0.0	(0.0)	96.1	(1.6)	3.9	(1.6)
Denmark	1.8	(1.3)	2.5	(1.2)	91.1	(2.9)	4.6	(2.3)
Finland	0.0	(0.0)	2.1	(1.6)	86.8	(2.6)	11.1	(3.3)
Iceland	0.0	(0.0)	0.0	(0.0)	95.8	(4.3)	4.2	(4.3)
Italy	0.3	(0.3)	0.4	(0.5)	97.0	(1.4)	2.4	(1.2)
Mexico	2.9	(2.1)	0.0	(0.0)	93.1	(2.8)	3.9	(1.9)
Norway	0.0	(0.0)	a	a	100.0	(0.0)	0.0	(0.0)
Poland	0.2	(0.2)	0.0	(0.0)	99.2	(0.5)	0.7	(0.5)
Singapore	0.0	(0.0)	0.0	(0.0)	97.4	(1.3)	2.6	(1.3)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	0.0	(0.0)	3.3	(1.6)	88.5	(2.6)	8.2	(2.3)
Average ³	0.5	(0.2)	0.9	(0.3)	94.5	(0.7)	4.2	(0.7)

Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED Level 5A programmes are generally longer and more theory-based, while 5B programmes are typically shorter and more practical and skills oriented. No distinction was made between ISCED Level 5A (Bachelor) and ISCED Level 5A (Master).

^{2.} Includes Bachelor degrees in some countries.

^{3.} The averages do not add up to 100 across categories because of the presence of cells that are not applicable "a" in some countries. Source: OECD, TALIS 2013 Database.



Upper secondary education principals' formal education

Percentage of upper secondary education principals for whom the following elements were Table 4.15 included in their formal education

	School a	administra	tion or pri	incipal tra	ining prog	ramme or	course co	mpleted			tion or tra	
	ир а р	taking osition ncipal	ирар	taking osition ncipal	taking up	and after a position ncipal		ever	ир а р	taking osition ncipal	ир а р	taking osition ncipal
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	21.4	(3.9)	23.6	(5.6)	27.7	(6.5)	27.3	(4.5)	87.1	(4.3)	1.6	(1.1)
Denmark	13.2	(4.0)	21.3	(5.3)	4.1	(2.0)	61.4	(6.6)	73.6	(4.5)	0.7	(0.7)
Finland	57.7	(6.1)	11.6	(2.6)	16.6	(5.3)	14.1	(4.5)	95.3	(1.9)	2.0	(1.6)
Iceland	28.2	(9.6)	25.3	(9.9)	12.7	(4.4)	33.8	(9.6)	76.0	(9.7)	4.2	(4.3)
Italy	26.4	(3.2)	27.7	(4.0)	37.8	(4.2)	8.1	(2.1)	49.7	(4.1)	18.3	(2.9)
Mexico	17.2	(3.1)	32.8	(4.8)	27.4	(4.0)	22.5	(4.2)	38.6	(4.9)	9.7	(3.3)
Norway	21.2	(5.2)	33.5	(6.5)	23.5	(5.1)	21.8	(5.2)	82.4	(5.6)	1.8	(1.8)
Poland	68.0	(6.9)	18.0	(6.2)	13.2	(4.2)	0.9	(0.9)	42.5	(4.2)	5.0	(2.3)
Singapore	63.8	(4.4)	5.4	(2.1)	23.5	(3.7)	7.3	(2.2)	86.0	(2.6)	0.7	(0.7)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	29.1	(4.2)	23.5	(3.9)	38.2	(3.9)	9.2	(2.1)	42.8	(4.2)	16.4	(3.1)
Average	34.6	(1.7)	22.3	(1.7)	22.5	(1.4)	20.6	(1.5)	67.4	(1.6)	6.0	(0.8)

		her educa rogramme				Instruc	tional lea	dership tra	nining or c	ourse con	npleted	
	after ta a posi	e and king up tion as cipal	Ne	ver	ир а р	e taking position incipal	ирар	taking osition ncipal	after ta a posi	e and king up tion as cipal	Ne	ver
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	9.0	(3.7)	2.3	(1.9)	23.4	(4.8)	26.7	(4.8)	23.3	(5.9)	26.6	(5.5)
Denmark	4.2	(2.2)	21.6	(4.2)	7.9	(3.0)	50.5	(6.0)	18.6	(4.2)	23.0	(4.3)
Finland	1.6	(1.0)	1.1	(0.8)	14.2	(3.6)	29.1	(5.1)	26.5	(5.9)	30.1	(5.3)
Iceland	15.5	(7.7)	4.2	(4.3)	38.0	(11.5)	21.1	(9.5)	28.2	(9.0)	12.7	(7.6)
Italy	24.1	(3.5)	7.9	(2.2)	20.8	(3.3)	24.5	(3.9)	26.3	(4.1)	28.4	(3.6)
Mexico	5.8	(2.5)	46.0	(5.0)	23.1	(4.2)	36.3	(4.9)	22.5	(3.6)	18.0	(4.4)
Norway	4.1	(2.5)	11.7	(4.6)	40.0	(6.2)	15.5	(4.9)	21.4	(5.5)	23.2	(5.2)
Poland	47.4	(5.1)	5.1	(1.7)	13.2	(5.1)	17.5	(5.8)	16.3	(4.8)	53.0	(7.6)
Singapore	10.0	(2.6)	3.3	(1.5)	47.9	(4.5)	4.6	(1.8)	38.2	(4.0)	9.3	(2.5)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	34.1	(4.2)	6.7	(2.4)	26.3	(4.0)	29.6	(4.0)	37.5	(4.1)	6.7	(2.3)
Average	15.6	(1.2)	11.0	(1.0)	25.5	(1.7)	25.5	(1.7)	25.9	(1.7)	23.1	(1.6)

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Work experience of upper secondary education principals

Percentage of upper secondary education principals with the following work experience and Table 4.16 average years of experience in each role

				,	Years working	as a principa	ıl			
	Average of expe		Less than experi		3-10 y experi			years ience	More than exper	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	7.6	(0.5)	19.0	(5.0)	56.2	(6.2)	23.1	(4.4)	1.7	(1.0)
Denmark	11.2	(0.8)	12.0	(3.6)	40.7	(5.9)	35.4	(5.9)	11.9	(3.4)
Finland	11.1	(0.9)	17.7	(4.5)	32.9	(3.9)	36.4	(4.4)	13.0	(3.0)
Iceland	9.0	(1.6)	26.5	(9.6)	35.3	(9.6)	33.9	(10.7)	4.4	(4.5)
Italy	12.2	(0.8)	3.7	(1.6)	55.5	(4.5)	19.2	(3.7)	21.6	(3.4)
Mexico	9.3	(0.8)	21.8	(3.6)	48.0	(4.1)	17.2	(3.2)	13.0	(3.0)
Norway	7.8	(0.7)	21.2	(5.7)	54.1	(6.3)	20.0	(4.2)	4.7	(2.4)
Poland	9.3	(0.8)	20.6	(6.3)	42.4	(6.4)	25.4	(5.2)	11.7	(2.9)
Singapore	7.5	(0.4)	19.6	(3.3)	53.0	(4.5)	26.1	(3.7)	1.3	(0.9)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	9.3	(0.7)	18.2	(3.4)	45.4	(4.4)	27.3	(4.0)	9.1	(2.8)
Average	9.4	(0.3)	18.0	(1.6)	46.3	(1.8)	26.4	(1.7)	9.3	(0.9)

				Years work	ing in other s	chool manage	ement roles			
	Average of expe		Less than experi		3-10 exper	4	11-20 experi		More 20 years ex	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	11.9	(0.9)	11.1	(4.0)	38.7	(5.5)	37.6	(5.8)	12.5	(4.9)
Denmark	5.0	(0.7)	49.2	(5.3)	34.7	(5.4)	15.5	(5.2)	0.6	(0.6)
Finland	3.6	(0.5)	65.3	(4.5)	22.8	(3.6)	9.4	(3.0)	2.5	(1.3)
Iceland	4.6	(0.9)	42.2	(8.4)	45.1	(10.6)	12.7	(7.4)	0.0	(0.0)
Italy	7.9	(0.7)	25.1	(3.6)	44.8	(5.0)	23.6	(3.6)	6.5	(2.5)
Mexico	5.3	(0.6)	50.2	(4.3)	31.2	(3.9)	12.9	(2.7)	5.7	(2.0)
Norway	7.7	(0.8)	22.4	(5.0)	49.9	(5.9)	23.0	(5.4)	4.7	(2.4)
Poland	5.7	(1.0)	53.9	(6.8)	19.0	(3.5)	21.4	(6.6)	5.6	(1.3)
Singapore	7.6	(0.5)	10.1	(2.4)	69.8	(4.0)	18.1	(3.5)	2.0	(1.2)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	7.1	(0.6)	16.7	(3.2)	65.0	(4.3)	10.7	(2.7)	7.6	(2.2)
Average	6.6	(0.2)	34.6	(1.6)	42.1	(1.8)	18.5	(1.5)	4.8	(0.7)

Source: OECD, TALIS 2013 Database.



[Part 2/2]

Work experience of upper secondary education principals

Percentage of upper secondary education principals with the following work experience and
 Table 4.16
 average years of experience in each role

					Years working	as a teacher	•			
	Averag of expe		Less than exper		3-10 exper	,		years ience		than experience
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	24.8	(1.2)	1.6	(1.6)	10.2	(3.2)	20.5	(4.1)	67.7	(4.9)
Denmark	16.5	(1.0)	9.8	(4.5)	18.8	(3.5)	39.9	(5.2)	31.4	(4.3)
Finland	13.6	(0.8)	7.1	(2.4)	41.4	(4.5)	29.2	(4.2)	22.3	(3.6)
Iceland	18.7	(2.4)	0.0	(0.0)	21.1	(8.2)	40.9	(11.2)	38.0	(11.0)
Italy	22.0	(0.7)	0.0	(0.0)	9.1	(2.5)	33.9	(4.3)	57.0	(4.3)
Mexico	17.1	(0.9)	7.2	(2.3)	27.9	(5.0)	32.1	(4.7)	32.8	(4.0)
Norway	17.0	(1.0)	4.1	(2.4)	25.4	(4.6)	40.4	(4.7)	30.0	(5.5)
Poland	23.7	(1.0)	0.8	(0.8)	4.5	(3.1)	29.6	(6.2)	65.1	(5.5)
Singapore	14.9	(0.8)	1.3	(0.9)	38.1	(4.2)	35.6	(3.9)	25.0	(4.0)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	13.4	(0.8)	5.0	(2.0)	49.7	(3.8)	24.3	(4.0)	21.1	(3.8)
Average	18.2	(0.4)	3.7	(0.7)	24.6	(1.4)	32.6	(1.8)	39.0	(1.7)

				Y	ears working	in other jo	bs			
	Average of expe		Less than exper		3-10 exper	<u>′</u>	11-20 experi		More than experi	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	2.7	(0.8)	69.7	(6.0)	23.5	(5.0)	4.1	(2.5)	2.7	(2.7)
Denmark	4.6	(0.8)	51.7	(5.1)	36.9	(5.6)	7.8	(4.0)	3.6	(2.5)
Finland	4.4	(0.5)	47.0	(4.7)	42.7	(6.0)	8.0	(3.4)	2.3	(1.2)
Iceland	7.5	(1.6)	39.7	(10.9)	35.3	(10.7)	16.2	(5.2)	8.8	(5.2)
Italy	1.9	(0.4)	79.2	(3.6)	16.4	(3.2)	2.8	(1.5)	1.6	(1.3)
Mexico	10.0	(1.2)	38.6	(4.9)	25.8	(4.1)	17.0	(3.8)	18.6	(3.6)
Norway	4.9	(0.7)	51.1	(6.1)	35.3	(5.7)	10.0	(2.9)	3.5	(2.0)
Poland	2.4	(0.6)	76.1	(7.1)	19.6	(6.9)	2.4	(1.2)	1.9	(1.1)
Singapore	1.3	(0.4)	86.7	(2.8)	11.3	(2.6)	1.3	(0.9)	0.7	(0.7)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	2.1	(0.5)	79.5	(3.7)	14.4	(3.1)	4.4	(1.9)	1.8	(1.2)
Average	4.2	(0.3)	61.9	(1.9)	26.1	(1.8)	7.4	(1.0)	4.6	(0.8)

Source: OECD, TALIS 2013 Database.



Principals' working time in upper secondary education

Average proportion of time upper secondary education principals report spending Table 4.17 on the following activities

Table 4.17	OII tile I	OHOVVIII	y activiti	103								
	Adminis and leac tasks meeti	lership and	Curric and tea related and me	ching- I tasks	Stude interac		Pare or guai interac	dians	Interac with I and reg commo busines indus	ocal gional unity, ss and	Oth	er
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia	49.0	(2.0)	16.7	(1.0)	15.0	(1.3)	11.7	(0.7)	5.8	(0.3)	1.9	(0.4)
Denmark	50.7	(1.9)	19.4	(1.2)	11.0	(0.7)	3.7	(0.4)	10.5	(0.9)	4.7	(0.6)
Finland	54.9	(1.4)	16.6	(0.9)	10.0	(0.7)	4.6	(0.3)	10.2	(1.4)	3.9	(0.5)
Iceland	50.0	(4.0)	15.5	(1.5)	14.2	(1.7)	5.3	(0.5)	7.5	(1.1)	7.5	(2.0)
Italy	37.2	(1.4)	23.3	(0.7)	16.3	(0.7)	12.3	(0.6)	8.7	(0.4)	2.2	(0.5)
Mexico	35.2	(1.5)	21.6	(1.0)	20.1	(1.0)	12.4	(0.5)	7.8	(0.5)	3.1	(0.4)
Norway	a	a	a	a	a	a	a	a	a	a	a	a
Poland	42.6	(1.4)	20.9	(0.8)	14.1	(1.0)	9.6	(0.5)	8.4	(0.4)	4.5	(0.5)
Singapore	44.5	(1.3)	21.9	(0.7)	15.5	(0.6)	9.4	(0.4)	6.0	(0.3)	2.8	(0.4)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	34.0	(1.4)	22.8	(0.8)	19.2	(0.7)	13.4	(0.6)	7.6	(0.4)	3.0	(0.4)
	I		I		1		I		I		l	

^{1.} Including human resource/personnel issues, regulations, report, school budget, preparing timetables and class composition, strategic planning, leadership and management activities, responding to requests from district, regional, state or national education officials.

(0.3)

9.1

(0.2)

8.0

(0.2)

(0.3)

15.0

(0.7)

19.8

(0.3)

Source: OECD, TALIS 2013 Database.

Average

StatLink http://dx.doi.org/10.1787/888933167026

44.2

^{2.} Including developing curriculum, teaching, classroom observations, student evaluation, mentoring teachers, teacher professional development.

^{3.} Including counseling and conversations outside structured learning activities.

^{4.} Including formal and informal interactions.



Principals' leadership in upper secondary education

Percentage of upper secondary education principals who report having engaged "often" or Table 4.18 "very often" in the following leadership activities during the 12 months prior to the survey

	Collaborate with teachers to solve classroom discipline problems			nstruction lassroom	co-operat	n to support tion among to develop ing practices	that teac responsi improvi	n to ensure thers take bility for ing their ng skills	Take action to ensur that teachers feel responsible for their students' learning outcomes		
		(S.E.)	%	(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)	
Australia	35.0	(6.1)	27.2	(5.5)	58.8	(5.6)	79.4	(5.1)	75.9	(3.9)	
Denmark	26.4	(5.4)	17.3	(4.2)	50.6	(5.1)	53.4	(5.6)	51.3	(5.1)	
Finland	14.4	(2.7)	3.6	(1.5)	55.4	(6.0)	58.4	(5.0)	60.1	(5.0)	
Iceland	21.1	(7.4)	12.7	(7.0)	57.8	(10.9)	49.3	(7.4)	70.4	(9.3)	
Italy	76.0	(3.9)	43.9	(4.1)	62.9	(4.3)	63.7	(4.1)	65.1	(4.1)	
Mexico	63.5	(5.3)	47.5	(4.1)	67.1	(4.2)	76.8	(3.9)	82.5	(3.4)	
Norway	27.6	(5.9)	6.5	(2.9)	51.1	(7.0)	54.1	(5.2)	55.2	(6.3)	
Poland	46.9	(5.0)	65.7	(3.0)	59.6	(4.9)	76.1	(5.5)	85.1	(3.5)	
Singapore	61.5	(4.3)	58.2	(4.1)	66.9	(3.9)	84.5	(3.3)	91.3	(2.4)	
Sub-national entities											
Abu Dhabi (United Arab Emirates)	84.3	(3.6)	85.9	(2.9)	93.0	(2.5)	93.8	(2.0)	93.0	(2.5)	
Average	45.7	(1.6)	36.8	(1.3)	62.3	(1.9)	68.9	(1.6)	73.0	(1.6)	

	Provide parents or guardians with information on the school and student performance		and error administrativ	r mistakes s in school ve procedures eports	the lesson	oblems with s timetable school	Collaborate with principals from other schools		
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Australia	74.4	(4.7)	54.0	(6.1)	9.9	(3.0)	61.4	(5.9)	
Denmark	11.8	(3.5)	23.8	(4.6)	42.1	(5.8)	64.6	(6.3)	
Finland	12.9	(2.9)	51.5	(4.8)	48.3	(4.4)	85.1	(3.6)	
Iceland	33.8	(9.6)	22.0	(8.7)	21.1	(9.2)	78.9	(6.4)	
Italy	82.0	(3.3)	73.9	(3.4)	41.1	(4.3)	45.4	(4.6)	
Mexico	83.7	(3.0)	80.1	(4.1)	59.2	(4.5)	44.1	(4.1)	
Norway	15.8	(3.4)	33.6	(5.7)	23.4	(4.8)	56.5	(6.4)	
Poland	77.0	(4.3)	54.9	(7.4)	27.7	(6.1)	68.8	(6.9)	
Singapore	67.4	(4.3)	66.1	(4.2)	31.8	(3.9)	35.8	(4.0)	
Sub-national entities									
Abu Dhabi (United Arab Emirates)	89.5	89.5 (2.7)		(3.9)	76.2	(3.7)	57.5	(4.9)	
Average	54.8	(1.5)	54.2	(1.7)	38.1 (1.7)		59.8	(1.7)	

Source: OECD, TALIS 2013 Database.



Upper secondary principals' participation in a school development plan

Percentage of upper secondary education principals who report having engaged in the Table 4.19 following activities related to a school development plan in the 12 months prior to the survey

	(including national/interna	and student evaluation results tional assessments) to develop	Work on a professional development plan for the scho					
	the school's education	nal goals and programmes (S.E.)	work on a professional dev	(S.E.)				
Australia	94.4	(3.5)	93.4	(3.6)				
Denmark	78.0	(5.0)	79.6	(4.2)				
Finland	75.9	(5.4)	53.5	(4.7)				
Iceland	78.9	(8.2)	78.9	(9.2)				
Italy	90.5	(2.5)	72.6	(3.3)				
Mexico	92.7	(2.6)	84.6	(3.5)				
Norway	100.0	(0.0)	80.8	(4.4)				
Poland	84.1	(4.1)	95.2	(2.1)				
Singapore	99.3	(0.7)	98.7	(1.0)				
Sub-national entities								
Abu Dhabi (United Arab Emirates)	95.5	(2.0)	99.1	(0.9)				
Average	88.9	(1.3)	83.6	(1.4)				

Source: OECD, TALIS 2013 Database.



Teachers' feedback by source of feedback in upper secondary education

Percentage of upper secondary education teachers who report receiving feedback from Table 5.1 various sources and teachers who report never having received feedback in their school'

				Have	received	feedback f	rom ²				Have	never
	External individuals or bodies		School principal		of so	nbers chool nent team	Assigned mentors		Other teachers		received feedback in their current school ³	
	%	% (S.E.)		(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	19.0	(1.0)	26.7	(1.9)	58.5	(1.6)	19.8	(1.3)	53.8	(1.9)	12.8	(1.0)
Denmark	14.8	(1.3)	40.4	(2.3)	19.3	(1.7)	13.0	(1.4)	44.7	(1.9)	25.6	(1.9)
Finland	15.7	(1.5)	31.2	(2.2)	18.4	(2.1)	3.5	(0.8)	48.2	(2.0)	28.2	(1.4)
Iceland	4.7	(0.8)	41.7	(1.5)	44.6	(1.7)	5.4	(0.8)	19.4	(1.3)	21.2	(1.2)
Italy	14.4	(0.7)	25.3	(1.3)	17.6	(0.9)	2.1	(0.3)	35.9	(1.2)	45.0	(1.3)
Mexico	26.7	(1.2)	40.8	(2.1)	64.0	(1.6)	20.8	(1.0)	32.9	(1.3)	10.8	(0.9)
Norway	9.8	(0.8)	15.9	(1.0)	71.4	(2.1)	4.5	(0.7)	46.9	(1.5)	10.7	(1.3)
Poland	25.9	(1.2)	87.0	(1.2)	52.4	(2.4)	23.1	(1.3)	44.2	(1.3)	3.2	(0.6)
Singapore	11.6	(0.6)	53.9	(0.9)	81.6	(0.8)	36.2	(0.9)	43.7	(1.0)	1.0	(0.2)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	25.1	(1.4)	77.3	(1.9)	66.7	(1.5)	51.5	(1.8)	19.8	(1.0)	3.4	(0.6)
Average	16.8	(0.4)	44.0	(0.5)	49.5	(0.5)	18.0	(0.4)	39.0	(0.5)	16.2	(0.4)

^{1.} 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.

Source: OECD, TALIS 2013 Database.

^{2.} Refers to the percentage of teachers receiving feedback from respective bodies for at least one item from question 28 of the teacher questionnaire. The same teacher can receive feedback from different bodies via different methods.

^{3.} Refers to the percentage of teachers reporting never having received feedback in their school for any of the items surveyed in question 28 from the teacher questionnaire.



Methods for providing feedback to upper secondary education teachers

Percentage of upper secondary education teachers who report receiving feedback via the Table 5.2 following methods^{1, 2}

	Feedback following classroom observation		Feedback from student surveys		Feedback following assessment of teachers' content knowledge		Feedback following analysis of student test scores		Feedback following self-assessment of teachers' work		Feedback from surveys or discussion with parents	
	% (S.E.)		% (S.E.)		%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	68.3	(1.8)	37.2	(2.0)	34.1	(1.3)	63.0	(1.3)	48.1	(1.7)	40.1	(1.3)
Denmark	57.9	(2.2)	47.7	(2.2)	28.5	(1.7)	24.6	(1.9)	32.9	(2.1)	7.7	(1.0)
Finland	52.0	(2.3)	49.3	(2.4)	39.3	(1.6)	27.9	(1.1)	23.6	(2.1)	23.6	(1.5)
Iceland	34.2	(1.7)	74.3	(1.4)	20.1	(1.4)	28.4	(1.6)	16.2	(1.3)	18.0	(1.3)
Italy	36.9	(1.1)	34.6	(1.1)	25.2	(1.1)	40.6	(1.3)	21.1	(1.0)	37.5	(1.3)
Mexico	75.1	(1.4)	76.6	(1.7)	66.0	(1.4)	74.8	(1.3)	68.2	(1.4)	59.5	(1.6)
Norway	69.7	(2.2)	77.9	(1.5)	44.0	(1.7)	57.4	(1.8)	50.3	(1.6)	34.1	(1.6)
Poland	95.8	(0.6)	61.9	(1.6)	69.8	(1.5)	75.4	(1.1)	57.2	(1.8)	65.8	(1.1)
Singapore	96.4	(0.4)	63.8	(0.9)	68.3	(0.8)	82.7	(0.7)	87.2	(0.7)	52.1	(1.0)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	94.6	(0.8)	69.5	(1.9)	79.1	(1.3)	83.5	(1.5)	82.0	(1.6)	74.1	(1.6)
Average	68.1	(0.5)	59.3	(0.5)	47.4	(0.4)	55.8	(0.4)	48.7	(0.5)	41.2	(0.4)

^{1.} 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.

Source: OECD, TALIS 2013 Database.

^{2.} Percentage of teachers who report having received feedback via the following methods by at least one body, including: "External individuals or bodies", "Principal", "Member(s) of school management team", "Assigned mentors" or "Other teachers".



Emphasis of teacher feedback in upper secondary education

Percentage of upper secondary education teachers who report the feedback they received Table 5.3 emphasised the following issues with a "moderate" or "high" importance¹

	Student performance		Knowledge and understanding of the subject field(s)		compe in teacl	Pedagogical competencies in teaching the subject field(s)		Student assessment practices		dent viour ssroom gement	Teaching of students with special learning needs	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	88.4	(1.1)	71.1	(1.2)	73.6	(1.2)	77.2	(1.4)	67.4	(1.4)	46.7	(1.8)
Denmark	53.6	(2.0)	73.3	(1.8)	86.8	(1.1)	58.1	(2.2)	83.8	(1.5)	35.0	(2.0)
Finland	81.5	(1.6)	80.3	(1.2)	78.6	(1.6)	66.9	(1.9)	64.3	(1.4)	50.2	(3.7)
Iceland	59.8	(1.7)	51.0	(2.2)	60.1	(2.0)	48.9	(2.1)	45.0	(2.2)	26.3	(1.5)
Italy	94.9	(0.5)	88.6	(0.9)	86.1	(1.0)	87.2	(0.9)	91.0	(0.8)	78.2	(1.4)
Mexico	87.4	(0.8)	83.7	(0.9)	81.0	(0.9)	80.5	(0.9)	81.1	(1.1)	38.6	(1.4)
Norway	69.8	(1.6)	67.3	(1.5)	67.1	(1.9)	74.8	(1.6)	82.4	(1.4)	44.8	(1.8)
Poland	89.3	(0.8)	85.6	(0.9)	85.4	(1.0)	89.7	(0.8)	86.1	(1.0)	70.8	(1.2)
Singapore	94.4	(0.5)	86.8	(0.6)	89.4	(0.5)	86.0	(0.5)	85.1	(0.7)	42.6	(1.0)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	89.3	(0.8)	81.9	(1.1)	83.9	(0.9)	85.2	(1.1)	83.6	(1.0)	55.5	(1.6)
Average	80.9	(0.4)	77.0	(0.4)	79.2	(0.4)	75.4	(0.5)	77.0	(0.4)	48.9	(0.6)

	Teaching in a multicultural or multilingual setting		to other t	provided eachers to r teaching		ck from guardians	Student	feedback	Collaboration or working with other teachers		
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Australia	26.5	(1.7)	49.0	(1.9)	57.2	(1.4)	65.2	(1.6)	71.0	(1.9)	
Denmark	27.6	(2.0)	48.8	(2.2)	19.1	(1.6)	83.2	(1.6)	79.8	(1.4)	
Finland	31.1	(2.9)	34.3	(2.5)	54.6	(2.9)	88.3	(1.5)	78.6	(1.4)	
Iceland	17.7	(1.6)	20.9	(1.7)	19.0	(1.4)	78.0	(1.6)	44.0	(1.9)	
Italy	54.6	(1.6)	66.3	(1.3)	86.8	(0.7)	91.7	(0.6)	87.9	(0.9)	
Mexico	34.6	(1.3)	52.3	(1.3)	53.2	(1.6)	81.0	(1.0)	68.1	(1.5)	
Norway	22.6	(1.4)	34.5	(1.6)	41.9	(1.5)	82.4	(1.4)	71.1	(1.2)	
Poland	17.1	(0.8)	54.8	(1.5)	67.2	(1.1)	74.0	(0.9)	73.5	(1.3)	
Singapore	36.6	(1.0)	60.4	(1.0)	61.3	(0.9)	75.3	(0.9)	74.5	(0.7)	
Sub-national entities											
Abu Dhabi (United Arab Emirates)	59.0	(1.2)	69.2	(1.2)	79.4	(1.2)	80.6	(1.2)	81.0	(1.1)	
Average	32.7	(0.5)	49.0	(0.5)	54.0	(0.5)	79.9	(0.4)	73.0	(0.4)	

^{1.} 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.

Source: OECD, TALIS 2013 Database.



[Part 1/1]

Outcomes of teacher feedback in upper secondary education

Percentage of upper secondary education teachers who report a "moderate" or "large" positive

Table 5.4 change in the following issues after they received feedback on their work at their school¹

	Teachers' confidence		Motivation		Job satisfaction		Knowledge and understanding of main subject field(s)		Teaching practices		Student assessments to improve student learning		Classroom management practices	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	52.6	(1.6)	47.1	(1.5)	43.4	(1.6)	32.9	(1.4)	42.2	(1.9)	43.2	(1.7)	34.8	(1.7)
Denmark	58.0	(2.0)	54.8	(1.9)	51.7	(1.9)	38.4	(2.3)	52.8	(2.3)	42.1	(1.8)	40.3	(2.2)
Finland	60.9	(1.7)	58.4	(1.7)	57.7	(2.1)	42.3	(2.6)	47.4	(1.7)	40.7	(2.7)	28.7	(1.7)
Iceland	51.9	(2.3)	46.7	(2.1)	46.9	(2.1)	27.2	(1.8)	43.5	(2.1)	37.9	(1.9)	32.5	(1.7)
Italy	71.6	(1.2)	73.7	(1.1)	72.4	(1.1)	55.9	(1.6)	65.2	(1.4)	64.7	(1.5)	61.8	(1.4)
Mexico	88.1	(0.9)	85.5	(1.0)	87.8	(0.8)	80.8	(1.1)	85.9	(1.0)	81.5	(1.0)	80.9	(1.1)
Norway	61.7	(1.4)	47.9	(1.4)	49.7	(1.4)	36.1	(1.7)	45.9	(1.4)	44.3	(1.4)	40.1	(1.6)
Poland	66.8	(1.6)	65.0	(1.2)	64.0	(1.3)	51.4	(1.5)	60.4	(1.4)	63.2	(1.9)	56.7	(1.5)
Singapore	69.1	(0.8)	63.2	(0.9)	61.6	(0.9)	60.3	(0.8)	67.3	(0.8)	62.2	(0.8)	59.4	(0.9)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	76.3	(1.4)	70.8	(1.6)	64.1	(1.6)	60.7	(1.5)	72.4	(1.4)	73.7	(1.4)	69.5	(1.6)
Average	65.7	(0.5)	61.3	(0.5)	59.9	(0.5)	48.6	(0.5)	58.3	(0.5)	55.4	(0.5)	50.5	(0.5)

	Methods for teaching students with special needs		Public recognition		Job responsibilities		Role in school development initiatives		Amount of professional development		Likelihood of career advancement		Salary and/ or financial bonus	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	22.4	(1.5)	40.4	(1.7)	39.1	(1.6)	40.0	(1.5)	31.4	(1.4)	30.6	(1.4)	11.9	(1.0)
Denmark	24.7	(1.6)	50.5	(2.4)	39.6	(2.0)	34.4	(2.5)	46.8	(1.6)	26.7	(2.2)	17.7	(1.7)
Finland	27.6	(1.8)	50.7	(1.6)	37.8	(1.5)	38.4	(3.7)	35.1	(2.0)	19.1	(2.4)	19.2	(1.8)
Iceland	19.2	(1.5)	30.4	(2.0)	21.4	(1.8)	29.8	(2.0)	21.4	(1.5)	11.1	(1.4)	12.1	(1.3)
Italy	52.9	(1.5)	51.0	(1.4)	a	a	40.9	(1.4)	43.8	(1.6)	a	a	a	a
Mexico	43.8	(1.3)	60.3	(1.4)	76.4	(1.1)	57.6	(1.3)	64.2	(1.4)	51.3	(1.6)	32.7	(1.2)
Norway	25.4	(1.5)	48.8	(1.1)	24.6	(1.2)	30.0	(1.2)	26.6	(1.5)	15.8	(1.3)	22.7	(1.1)
Poland	52.0	(1.4)	66.3	(1.4)	52.2	(1.5)	62.5	(1.2)	53.4	(1.2)	49.7	(1.3)	30.0	(1.3)
Singapore	36.7	(8.0)	50.8	(0.9)	59.1	(0.9)	51.0	(0.9)	49.8	(0.8)	46.3	(8.0)	40.2	(0.8)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	44.9	(1.6)	71.0	(1.7)	66.9	(1.6)	68.4	(1.4)	63.5	(1.7)	44.6	(1.6)	29.0	(1.4)
Average	35.0	(0.5)	52.0	(0.5)	46.3	(0.5)	45.3	(0.6)	43.6	(0.5)	32.8	(0.5)	23.9	(0.4)

^{1.} 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.

Source: OECD, TALIS 2013 Database.



Access to induction programmes in upper secondary education

Percentage of upper secondary education teachers whose school principal reports the Table 5.5 existence of induction processes for new teachers in the school¹

lable 5.5	exister	ice oi i	Hauctic	Informal induction activities for new teachers										
					Formal i	nduction					ction acti of an indu			
	admini introdu the sch		For al teacher sche	s to the	teachers	y for s new to hing ²	No ind program new tea	nme for	Amoi princ		who re	ipals ported o formal	princip repor access t	ong als who ted no o formal oction
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	97.7	(1.3)	92.9	(3.1)	6.1	(2.9)	1.0	(1.0)	89.4	(3.2)	89.3	(3.2)	100.0	(0.0)
Denmark	99.6	(0.4)	90.8	(3.6)	4.8	(3.3)	4.4	(1.8)	78.8	(4.9)	77.8	(5.1)	100.0	(0.0)
Finland	94.4	(3.3)	71.4	(4.4)	0.2	(0.2)	28.4	(4.4)	87.9	(4.8)	88.5	(5.2)	86.4	(10.2)
Iceland	83.3	(0.1)	50.2	(0.2)	6.6	(0.1)	43.2	(0.2)	93.4	(0.1)	88.4	(0.1)	100.0	(0.0)
Italy	71.6	(3.3)	21.5	(2.9)	55.8	(3.6)	22.7	(2.6)	73.7	(2.9)	74.8	(3.2)	69.6	(7.8)
Mexico	75.3	(3.3)	46.1	(4.0)	3.4	(1.6)	50.5	(3.9)	60.0	(4.4)	75.3	(5.1)	44.6	(6.0)
Norway	74.1	(5.9)	69.5	(6.2)	11.4	(4.6)	19.2	(4.9)	75.4	(6.6)	73.4	(7.8)	83.9	(12.0)
Poland	82.5	(4.4)	20.4	(5.2)	5.2	(2.2)	74.5	(5.6)	90.1	(3.4)	83.0	(9.9)	92.6	(2.3)
Singapore	100.0	(0.0)	99.3	(0.0)	0.7	(0.0)	0.0	(0.0)	98.6	(0.0)	98.6	(0.0)	a	a
Sub-national entities														
Abu Dhabi (United Arab Emirates)	97.8	(1.1)	77.2	(4.2)	1.6	(1.2)	21.3	(4.1)	89.5	(2.8)	87.7	(3.5)	96.1	(3.0)
Average	87.6	(1.0)	63.9	(1.2)	9.6	(0.8)	26.5	(1.1)	83.7	(1.2)	83.7	(1.6)	85.9	(2.1)

^{1.} Cells with data representing less than 5% of the cases are shaded in grey and should be interpreted with caution. These results are not highlighted in the text of the report.

^{2.} The data presented in the column entitled "For all new teachers to the school" are derived from questions 33A and 34 of the principal questionnaire (PQ). They present the percentage of teachers who work in schools where the principal reports that there is an induction programme for new teachers (PQ33A) and who reports that all teachers who are new to the school are offered an induction programme (PQ34). The data presented in the column entitled "Only for teachers new to teaching" are also derived from questions PQ33A and PQ34. They present the percentage of teachers who work in schools where the principal reports that there is an induction programme for new teachers (PQ33A) and who reports that only teachers who are new to teaching are offered an induction programme (PQ34). The data presented in the column entitled "No induction programme for new teachers" are derived from question PQ33A and represent the percentage of teachers who work in schools where the principal reports that there is no induction programme for new teachers. The percentages presented in these three columns add up to 100%. Source: OECD, TALIS 2013 Database.



Participation in induction programmes in upper secondary education

Percentage of upper secondary education teachers who report having taken part Table 5.6 in an induction programme during their first regular employment as a teacher

							rt in informa art of an ind			
	and/or adn introd	n a general ninistrative uction school		in a formal programme	Among al	I teachers	took part i	chers who n a formal programme	Among tea did not ta a formal progra	ke part in induction
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	61.9	(1.3)	53.2	(1.4)	52.8	(1.6)	56.9	(1.9)	48.2	(2.1)
Denmark	44.3	(1.8)	45.0	(1.6)	55.7	(1.6)	65.7	(2.6)	47.5	(1.6)
Finland	46.8	(2.0)	24.7	(1.3)	55.5	(2.9)	62.1	(2.6)	53.5	(3.5)
Iceland	36.3	(1.7)	17.9	(1.3)	42.4	(1.6)	52.9	(3.9)	40.1	(1.8)
Italy	48.7	(1.0)	46.5	(1.0)	31.1	(0.8)	29.5	(1.3)	32.6	(1.2)
Mexico	52.4	(1.3)	64.2	(1.3)	57.1	(1.2)	63.9	(1.2)	45.1	(2.0)
Norway	25.0	(1.1)	12.0	(1.0)	44.2	(1.3)	50.4	(3.2)	43.6	(1.4)
Poland	50.2	(1.4)	35.9	(1.6)	57.9	(1.3)	68.2	(2.3)	52.1	(1.6)
Singapore	80.0	(0.8)	76.2	(0.8)	60.3	(0.9)	63.7	(1.0)	49.7	(1.8)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	56.9	(1.2)	71.5	(1.4)	52.1	(1.5)	59.3	(1.6)	34.0	(2.3)
Average	50.3	(0.4)	44.7	(0.4)	50.9	(0.5)	57.3	(0.7)	44.6	(0.6)

Source: OECD, TALIS 2013 Database.



Mentoring programmes in upper secondary education

Percentage of upper secondary education teachers whose school principal reports the existence of a mentoring system in the school and characteristics of the mentors and the percentage of upper secondary education teachers who report being involved

Table 5.7 in mentoring activities¹

			Access to me	ntoring prograr	nmes (reported	by principals)		
			T	arget group of i	mentoring syste	em		
		achers who o teaching		achers who the school		teachers school	a mentor	o access to ing system in the school
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	27.3	(4.8)	32.7	(4.7)	29.0	(5.2)	11.0	(4.1)
Denmark	11.7	(3.3)	59.4	(6.1)	15.9	(4.2)	13.1	(3.6)
Finland	5.4	(3.0)	21.0	(3.2)	17.5	(4.2)	56.2	(6.0)
Iceland	2.1	(0.1)	42.8	(0.2)	33.2	(0.1)	21.9	(0.1)
Italy	49.4	(3.7)	14.5	(2.5)	1.8	(0.9)	34.3	(3.3)
Mexico	5.6	(1.9)	12.3	(2.6)	18.3	(3.2)	63.8	(3.9)
Norway	37.5	(6.7)	27.9	(6.2)	7.2	(3.4)	27.4	(6.5)
Poland	10.6	(2.7)	38.9	(4.4)	21.6	(3.1)	28.9	(4.6)
Singapore	22.1	(0.1)	47.9	(0.1)	29.2	(0.1)	0.7	(0.0)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	3.1	(2.0)	16.6	(3.9)	70.0	(4.6)	10.3	(3.3)
Average	17.5	(1.1)	31.4	(1.3)	24.4	(1.1)	26.8	(1.3)

		Acce		ring progran y principals)			Particip	ation in mei reported b	ntoring prog y teachers)	
				he mentor is er being men		3	have an	ho presently assigned	reachers w	ho serve as
	Most of	the time	Some	etimes	Rarely	or never		o support em		re teachers
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	59.6	(5.6)	32.9	(5.7)	7.5	(3.0)	14.2	(1.1)	30.4	(1.2)
Denmark	82.6	(5.2)	17.4	(5.2)	0.0	(0.0)	10.6	(1.1)	25.2	(1.5)
Finland	65.8	(5.7)	31.4	(5.4)	2.8	(1.5)	3.9	(1.3)	4.7	(0.7)
Iceland	78.8	(0.1)	17.3	(0.1)	3.9	(0.0)	7.0	(0.8)	12.9	(1.1)
Italy	92.0	(2.3)	5.0	(1.8)	3.0	(1.5)	2.6	(0.4)	4.0	(0.4)
Mexico	63.0	(6.9)	25.1	(5.8)	11.9	(4.3)	13.1	(1.1)	11.7	(1.0)
Norway	70.7	(7.5)	29.3	(7.5)	0.0	(0.0)	6.8	(0.6)	12.3	(0.9)
Poland	83.9	(6.6)	16.1	(6.6)	0.0	(0.0)	11.6	(0.8)	16.2	(1.0)
Singapore	85.5	(0.1)	13.1	(0.1)	1.4	(0.0)	34.5	(1.0)	44.1	(0.8)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	68.6	(5.4)	28.4	(5.2)	3.0	(1.7)	48.9	(1.9)	30.1	(1.0)
Average	75.1	(1.6)	21.6	(1.6)	3.3	(0.6)	15.3	(0.3)	19.2	(0.3)

^{1.} Refers to mentoring by or for teachers at the school. Does not refer to students within the teacher education who are practising as teachers at the school.

Source: OECD, TALIS 2013 Database.



Upper secondary teachers' participation in professional development and personal financial cost involved

Participation rates and reported personal financial cost of professional development activities

Table 5.8 undertaken by upper secondary education teachers in the 12 months prior to the survey

	undertook son	teachers who ne professional	Per	centage of teac of the profe		to pay for "non oment activities		all"
		activities in the 12 months ¹	N	one	So	me	A	.II
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	97.0	(0.5)	73.2	(1.3)	25.7	(1.2)	1.1	(0.3)
Denmark	94.1	(0.8)	85.7	(1.0)	12.6	(1.1)	1.7	(0.5)
Finland	84.1	(1.9)	67.5	(1.8)	28.7	(1.8)	3.8	(0.8)
Iceland	85.5	(1.1)	59.7	(1.7)	31.3	(1.6)	9.1	(1.1)
Italy	76.0	(1.1)	59.5	(1.2)	21.9	(1.0)	18.6	(0.9)
Mexico	94.0	(0.7)	58.9	(1.6)	27.4	(1.3)	13.7	(1.0)
Norway	91.4	(0.8)	76.1	(1.1)	20.2	(0.9)	3.7	(0.4)
Poland	93.3	(0.5)	59.6	(1.6)	29.1	(1.4)	11.3	(0.8)
Singapore	97.9	(0.3)	90.5	(0.5)	9.0	(0.5)	0.5	(0.1)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	94.0	(0.8)	61.2	(1.7)	35.3	(1.7)	3.5	(0.5)
Average	90.7	(0.3)	69.2	(0.4)	24.1	(0.4)	6.7	(0.2)

^{1.} Percentage of teachers who participated to at least one of the following professional development activities in the 12 months prior to the survey: "courses/workshops", "education conference or seminar", "observation visits to other schools", "observation visits to business premises, public organisations, non-governmental organisations", "in-service training courses in business premises, public organisations, non-governmental organisations", "qualification programme (e.g. a degree programme)", "participation in a network of teachers formed specifically for the professional development of teachers", "individual or collaborative research on a topic of interest to you professionally", "mentoring and/or peer observation and coaching, as part of a formal school arrangement".

Source: OECD, TALIS 2013 Database.



Type of professional development recently undertaken by upper secondary teachers Participation rates and average number of days for each type of professional development reported to be undertaken by lower secondary education teachers in the 12 months prior to

Table 5.9 the survey1

	C	ourses/\	worksho	pps	semi and/o their	ation co nars wh r resear researc ss educ	ere tea chers p h result	chers resent s and	Obsei		visits to ools	other	busin	ess pre ganisat	on visits mises, p ions, no organis	ublic n-
		entage achers	Averag	ge days		ntage ichers	Averag	ge days		ntage chers	Averag	ge days	Perce of tea		Averag	e days
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	88.6	(0.9)	4.5	(0.2)	61.2	(1.4)	3.1	(0.2)	15.3	(0.9)	2.4	(0.3)	14.9	(1.0)	2.9	(0.3)
Denmark	80.6	(1.1)	4.5	(0.2)	54.9	(2.2)	2.9	(0.5)	11.0	(1.0)	4.4	(1.2)	24.3	(1.7)	3.5	(0.5)
Finland	63.3	(1.9)	3.9	(0.3)	38.8	(1.2)	2.7	(0.2)	32.0	(2.1)	2.4	(0.1)	31.8	(2.1)	2.8	(0.3)
Iceland	55.5	(1.5)	5.2	(0.4)	42.8	(1.6)	2.7	(0.2)	30.8	(1.4)	2.3	(0.1)	22.0	(1.2)	3.2	(0.4)
Italy	45.7	(1.7)	8.0	(0.5)	35.6	(1.1)	3.3	(0.1)	7.4	(0.5)	3.6	(0.3)	9.1	(0.5)	3.3	(0.5)
Mexico	81.4	(1.4)	26.0	(1.4)	38.8	(1.3)	10.4	(1.0)	12.7	(1.0)	7.4	(1.2)	16.8	(1.0)	11.2	(1.4)
Norway	66.2	(1.6)	3.5	(0.2)	44.7	(1.5)	2.6	(0.1)	11.4	(1.2)	2.5	(0.3)	16.2	(0.8)	3.7	(0.4)
Poland	79.8	(0.9)	8.7	(0.7)	55.7	(1.2)	3.4	(0.2)	11.3	(0.8)	2.8	(0.2)	13.6	(0.9)	5.3	(0.5)
Singapore	93.0	(0.4)	10.1	(0.4)	61.9	(0.8)	3.5	(0.1)	25.1	(0.8)	2.6	(0.2)	21.6	(0.7)	2.1	(0.1)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	83.9	(1.3)	10.4	(0.6)	51.8	(1.4)	4.1	(0.2)	28.5	(1.3)	2.7	(0.1)	31.9	(1.3)	3.4	(0.5)
Average	73.8	(0.4)	8.5	(0.2)	48.6	(0.4)	3.9	(0.1)	18.5	(0.4)	3.3	(0.2)	20.2	(0.4)	4.1	(0.2)

	prem non-g	e training ises, publi overnmen	c organisa	tions,	progr (e.g. a progra	ication amme degree amme)	in a no of teache specific the pro- develo of tea	pation etwork rs formed cally for fessional opment achers	or colla resea a topic o to the	ridual borative rch on of interest teacher	peer obs and co as part o sch arrang	ng and/or servation paching, f a formal nool gement
		achers	Averaş	ge days		chers		chers		chers		achers
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	23.1	(0.9)	3.3	(0.2)	10.8	(0.8)	57.1	(1.5)	38.7	(1.3)	44.5	(1.6)
Denmark	9.0	(0.7)	5.6	(0.8)	13.9	(1.2)	40.9	(1.6)	28.6	(1.7)	34.3	(2.1)
Finland	13.4	(1.0)	3.0	(0.3)	18.1	(1.9)	35.3	(1.6)	14.6	(1.5)	7.4	(1.1)
Iceland	6.4	(0.8)	6.4	(1.7)	12.1	(1.0)	44.6	(1.4)	27.9	(1.4)	15.7	(1.2)
Italy	5.0	(0.5)	9.2	(1.1)	11.2	(0.6)	19.0	(1.0)	48.8	(1.0)	9.9	(0.6)
Mexico	18.4	(0.9)	22.7	(2.3)	52.7	(1.5)	36.3	(1.3)	48.1	(1.1)	19.8	(1.0)
Norway	8.7	(0.7)	3.5	(0.5)	18.6	(1.1)	48.5	(2.1)	19.1	(0.8)	34.9	(2.6)
Poland	16.1	(0.9)	10.6	(2.0)	35.3	(1.1)	37.8	(1.2)	39.0	(1.1)	42.2	(1.2)
Singapore	16.1	(0.7)	6.5	(0.7)	8.8	(0.6)	54.4	(0.8)	45.2	(0.9)	66.6	(0.8)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	34.2	(1.4)	5.9	(0.4)	16.3	(1.0)	45.9	(1.5)	50.2	(1.6)	62.7	(1.6)
Average	15.0	(0.3)	7.7	(0.4)	19.8	(0.4)	42.0	(0.5)	36.0	(0.4)	33.8	(0.5)

^{1.} Cells with data representing less than 5% of the cases are shaded in grey and should be interpreted with caution. These results are not highlighted in the text of the report.

Source: OECD, TALIS 2013 Database.



[Part 1/1]

Teachers' needs for professional development in upper secondary education

Percentage of upper secondary education teachers who indicate they have a high level of **Table 5.10** need for professional development in the following areas

	Knowled underst of the st	anding subject	Pedag compete teaching field	ncies in subject	Knowle the cur	edge of riculum	Stud evaluati assess prac	ion and ment	ICT sk teac	ills for hing	and cla	viour		stration
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	1.6	(0.3)	1.7	(0.3)	2.0	(0.4)	2.7	(0.4)	13.5	(0.9)	2.6	(0.4)	3.6	(0.5)
Denmark	4.4	(0.5)	8.1	(0.9)	3.5	(0.6)	5.1	(0.6)	11.0	(1.1)	7.8	(8.0)	2.9	(0.6)
Finland	4.7	(0.8)	4.0	(0.7)	4.0	(0.8)	3.2	(0.5)	16.0	(0.9)	8.4	(0.9)	3.6	(0.7)
Iceland	9.1	(0.9)	8.5	(0.9)	14.8	(1.2)	13.4	(1.0)	20.4	(1.3)	12.7	(1.1)	4.3	(0.7)
Italy	19.0	(0.7)	22.6	(0.8)	8.5	(0.6)	22.4	(0.9)	36.1	(1.2)	22.6	(0.8)	10.4	(0.6)
Mexico	4.4	(0.5)	11.0	(1.0)	5.5	(0.6)	8.4	(0.7)	14.9	(0.9)	8.8	(0.7)	12.8	(0.7)
Norway	7.7	(0.5)	7.0	(0.6)	5.1	(0.6)	10.8	(0.7)	11.5	(0.7)	5.4	(0.4)	2.7	(0.4)
Poland	2.5	(0.4)	2.4	(0.3)	3.6	(0.5)	3.5	(0.7)	10.3	(0.7)	11.1	(0.7)	6.7	(0.5)
Singapore	4.7	(0.4)	7.7	(0.5)	6.0	(0.5)	10.6	(0.6)	12.1	(0.6)	7.1	(0.4)	6.9	(0.5)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	3.1	(0.5)	4.3	(0.5)	4.0	(0.5)	5.9	(0.6)	11.5	(0.9)	6.0	(0.6)	11.1	(0.8)
Average	6.1	(0.2)	7.7	(0.2)	5.7	(0.2)	8.6	(0.2)	15.7	(0.3)	9.3	(0.2)	6.5	(0.2)
	Approa individ lear	ualised	Teac studen special	ts with	Teachi multic or mult sett	ultural ilingual	Teac cross-cu skills problem learni lea	rricular (e.g. solving, ng-to-	Appro to deve cro occupa compe for future	eloping oss- ational tencies re work		ogies in	Student guidan couns	ce and

	Approa individ lear	ualised ning		hing ts with needs ¹	multic or mult	ng in a ultural ilingual ing	cross-cu skills problem learni lea	(e.g. solving, ng-to- rn)	for futu or future	eloping oss- ational tencies re work		ogies in	Student guidan couns	ce and
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	5.4	(0.7)	7.1	(0.6)	3.9	(0.5)	4.2	(0.4)	4.9	(0.7)	13.0	(1.0)	4.3	(0.6)
Denmark	5.1	(0.6)	10.4	(1.2)	4.3	(0.7)	4.8	(0.6)	3.8	(0.6)	8.9	(0.7)	3.2	(0.7)
Finland	7.8	(0.7)	9.8	(0.6)	6.1	(0.7)	4.3	(0.7)	3.1	(0.6)	14.2	(1.2)	2.2	(0.6)
Iceland	8.9	(0.9)	11.1	(1.0)	9.1	(1.0)	6.9	(8.0)	8.7	(0.9)	15.4	(1.1)	5.5	(0.7)
Italy	17.6	(8.0)	25.3	(1.0)	25.6	(0.8)	21.6	(8.0)	20.2	(0.7)	35.7	(0.9)	19.2	(0.8)
Mexico	12.1	(8.0)	36.3	(1.3)	28.9	(1.4)	11.4	(8.0)	16.1	(1.0)	22.0	(1.1)	16.4	(0.9)
Norway	4.5	(0.4)	10.1	(0.9)	7.6	(0.8)	7.6	(0.6)	8.1	(0.6)	11.0	(0.9)	5.0	(0.5)
Poland	6.4	(0.6)	12.9	(0.9)	7.0	(0.5)	6.2	(0.5)	5.2	(0.6)	12.2	(0.7)	7.0	(0.8)
Singapore	8.8	(0.5)	12.2	(0.6)	4.6	(0.4)	7.9	(0.5)	8.7	(0.5)	9.6	(0.6)	6.9	(0.5)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	6.9	(0.7)	20.7	(1.0)	11.3	(0.8)	7.1	(0.7)	12.5	(0.9)	19.2	(1.0)	12.7	(0.8)
Average	8.4	(0.2)	15.6	(0.3)	10.8	(0.3)	8.2	(0.2)	9.1	(0.2)	16.1	(0.3)	8.2	(0.2)

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.



Barriers to teachers' participation in professional development

Percentage of upper secondary education teachers who indicate that they "agree" or "strongly agree" that the following reasons represent barriers to their participation

Table 5.11 in professional development

	pre-rec (e. qualific experi	Do not have the pre-requisites (e.g. qualifications, experience, seniority) (S.E.)		sional ment is ensive/ rdable	of em	s a lack ployer port	Profes develo conflic my v sche	pment ts with vork	Lack of due to respons		There relegates profes develo offe	vant sional	particip	are no ives for pating in ctivities
			%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	6.9	(0.9)	43.7	(1.9)	22.5	(1.1)	60.2	(1.2)	31.5	(1.2)	23.0	(1.2)	39.2	(1.4)
Denmark	8.2	(0.9)	29.0	(1.6)	25.3	(1.4)	47.3	(1.6)	21.4	(1.1)	35.7	(1.6)	34.6	(1.8)
Finland	5.0	(0.9)	17.8	(1.0)	22.7	(1.5)	48.8	(1.9)	26.9	(1.5)	34.6	(1.5)	39.6	(1.3)
Iceland	5.4	(0.7)	33.9	(1.5)	26.7	(1.6)	63.4	(1.6)	40.6	(1.5)	39.6	(1.4)	49.3	(1.5)
Italy	14.2	(0.8)	53.9	(1.0)	46.8	(1.2)	62.0	(0.9)	40.7	(1.0)	70.4	(1.0)	85.5	(0.7)
Mexico	25.2	(1.0)	48.4	(1.2)	55.9	(1.5)	46.3	(1.4)	21.3	(0.9)	49.8	(1.7)	62.2	(1.7)
Norway	4.8	(0.6)	29.6	(1.1)	27.4	(2.0)	57.0	(1.5)	31.2	(1.1)	18.9	(1.0)	31.1	(1.6)
Poland	6.0	(0.6)	52.6	(1.3)	24.9	(1.1)	35.1	(1.1)	44.5	(1.1)	49.0	(1.2)	44.8	(1.5)
Singapore	14.3	(0.7)	16.9	(0.7)	19.6	(0.7)	61.5	(1.0)	44.4	(1.0)	21.7	(0.8)	34.7	(0.9)
Sub-national entities														
Abu Dhabi (United Arab Emirates)	4.1	(0.5)	39.9	(1.6)	39.3	(1.8)	47.6	(1.4)	24.0	(1.2)	39.1	(1.4)	57.7	(1.3)
Average	9.4	(0.2)	36.6	(0.4)	31.1	(0.5)	52.9	(0.4)	32.7	(0.4)	38.2	(0.4)	47.9	(0.4)

Source: OECD, TALIS 2013 Database.



[Part 1/1]

Teachers' working hours in upper secondary education

Average number of 60-minute hours spent on the following activities during the most recent Table 5.12 complete calendar week^{1, 2}

	Total wo	rs³	Hours spent teaching	on	individu or pre of lesse at scho of s	spent on al planning eparation ons either ool or out school	Hours s on team and dial with colle within the	work ogue eagues school	marking/o of stude	spent correcting ent work	guida	ounselling g student on, virtual elling, uidance nquency ance)
	%	(S.E.)		.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	43.6	(0.4)		0.2)	7.5	(0.2)	3.6	(0.1)	5.8	(0.2)	2.3	(0.1)
Denmark	41.9	(0.3)		0.3)	11.6		2.9	(0.1)	5.8	(0.2)	2.7	(0.2)
Finland	31.3	(0.5)		0.3)	5.4		2.7	(0.1)	3.7	(0.2)	2.3	(0.3)
Iceland	38.3	(0.6)		0.3)	8.7	(0.2)	2.6	(0.1)	7.5	(0.2)	1.2	(0.1)
Italy	31.7	(0.3)		0.1)	6.3	(0.1)	3.1	(0.1)	5.2	(0.1)	1.1	(0.0)
Mexico	33.6	(0.6)		0.5)	7.0	(,	2.4	(0.1)	5.2	(0.2)	3.0	(0.1)
Norway	37.9	(0.2)		0.2)	7.9		3.2	(0.1)	5.8	(0.2)	2.3	(0.1)
Poland	37.8	(0.3)		0.2)	5.6		2.3	(0.1)	5.1	(0.1)	2.4	(0.1)
Singapore	47.8	(0.3)	17.0 (0.1)	8.2	(0.1)	3.7	(0.1)	9.1	(0.1)	2.6	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	37.7	(0.5)	21.0 (0.2)	7.6	(0.2)	4.0	(0.2)	5.3	(0.1)	3.3	(0.1)
Average	38.2	(0.1)	17.9 (0.1)	7.6	(0.1)	3.0	(0.0)	5.8	(0.1)	2.3	(0.0)
	participati mana	Hours spent in participation in school management		incluc unicat rk and dutie e in yo teache	strative ding tion, I other s you our job er)	communio co-opera parents or	pent on cation and tion with guardians	in ex activity and cu af	spent eng ctracurricu ties (e.g. sp iltural acti ter school	oorts vities I	Hours spen other to	asks
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%		.E.)	%	(S.E.)
Australia	2.9	(0.2)	4.5		(0.1)	1.3	(0.1)			(0.1)	2.3	(0.1)
Denmark	0.9	(0.1)	2.6		(0.1)	0.1	(0.0)			(0.1)	2.2	(0.2)
Finland	0.6	(0.1)	2.6		(0.2)	0.6	(0.1)			(0.1)	1.9	(0.2)
Iceland	0.7	(0.1)	2.0		(0.1)	0.5	(0.0)			(0.1)	2.4	(0.2)
Italy	1.1	(0.0)	1.8		(0.1)	1.4	(0.0)			(0.1)	0.8	(0.1)
Mexico	2.3	(0.2)	3.0		(0.1)	1.5	(0.1)			(0.1)	2.1	(0.1)
Norway	1.5	(0.1)	3.0		(0.1)	0.6	(0.0)			(0.1)	1.6	(0.1)
Poland	1.3	(0.1)	2.8		(0.1)	1.4	(0.0)			(0.1)	1.9	(0.1)
Singapore	2.4	(0.1)	5.4		(0.1)	1.5	(0.0)		3.2	(0.1)	2.5	(0.1)
Sub-national entities												

2.3

1.1

(0.1)

(0.0)

(0.1)

(0.0)

2.4

1.5

(0.1)

(0.0)

2.3

(0.2)

(0.0)

Source: OECD, TALIS 2013 Database.

Abu Dhabi (United Arab Emirates)

Average

StatLink http://dx.doi.org/10.1787/888933167193

2.8

(0.1)

(0.0)

3.5

3.1

^{1.} 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.

^{2.} Note that the activities listed are not necessarily mutually exclusive and so the individual activities may not add up to the total working time.

^{3.} 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.



	Administr	ative tasks	Keeping order i	n the classroom	Actual teachir	ng and learning
	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	6.7	(0.2)	9.2	(0.5)	83.8	(0.6)
Denmark	6.3	(0.2)	6.8	(0.2)	86.7	(0.3)
Finland	7.1	(0.4)	7.1	(0.4)	85.4	(0.7)
Iceland	7.1	(0.2)	8.8	(0.4)	83.8	(0.5)
Italy	7.9	(0.1)	11.7	(0.3)	79.5	(0.4)
Mexico	11.2	(0.2)	10.8	(0.2)	77.5	(0.3)
Norway	7.2	(0.2)	6.8	(0.2)	85.5	(0.4)
Poland	8.3	(0.2)	7.3	(0.3)	83.6	(0.4)
Singapore	10.6	(0.2)	14.2	(0.2)	75.0	(0.3)
Sub-national entities						
Abu Dhabi (United Arab Emirates)	7.8	(0.2)	11.8	(0.5)	78.2	(0.7)
Average	8.0	(0.1)	9.5	(0.1)	81.9	(0.1)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.



^{2.} The sum of time spent in an average lesson may not add up to 100% because some answers that did not add up to 100% were accepted. **Source:** OECD, TALIS 2013 Database.

Teaching practices in upper secondary education

Percentage of upper secondary education teachers who use the following teaching practices

Table 5.14 "frequently" or "in all or nearly all lessons"

1

	sum of re- lear con	ent a mary cently rned itent	work stud who diffic learnir or to who advanc	ents have ulties ig and/ those can e faster	proble everyo or wo demon why knowl	r to a m from lay life ork to nstrate new edge is eful	prac simila until t kno that stude under the su ma	udents ctice r tasks eacher ows every nt has rstood ubject tter	stud exer book home	eck ents' rcise ks or ework	wor small to con with a solution probl	lents k in groups me up a joint on to a em or sk	on pr that r at l one to cor	ts work ojects equire east week nplete	use 10 proje class	lents CT for cts or work
Australia	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
	76.0	(1.2)	33.7	(1.3)	72.6	(1.3)	66.8	(1.1)	66.5	(1.5)	45.9	(1.7)	50.9	(1.4)	68.8	(1.8)
Denmark	75.5	(1.4)	22.3	(1.3)	68.3	(1.8)	53.9	(1.7)	45.3	(1.8)	80.5	(1.2)	21.9	(1.6)	82.2	(1.4)
Finland	65.7	(1.3)	28.8	(2.0)	74.4	(2.6)	51.1	(2.1)	36.8	(2.6)	54.7	(2.2)	18.0	(1.9)	44.2	(2.5)
Iceland	44.8	(1.8)	12.2	(1.1)	36.7	(1.8)	53.2	(1.8)	62.9	(1.6)	47.5	(1.8)	30.1	(1.4)	52.3	(1.4)
Italy	63.9	(0.9)	31.8	(1.1)	78.3	(0.9)	65.6	(1.1)	58.2	(0.9)	34.4	(1.1)	20.0	(1.0)	28.7	(1.1)
Mexico	70.5	(1.1)	30.9	(1.3)	88.7	(0.8)	83.4	(0.9)	90.5	(0.9)	78.1	(1.1)	48.8	(1.5)	71.0	(1.3)
Norway	86.3	(0.7)	46.3	(1.7)	59.1	(1.1)	62.9	(1.5)	50.4	(1.3)	78.1	(1.5)	34.3	(1.2)	89.8	(0.7)
Poland	75.6	(1.2)	51.7	(1.4)	75.3	(1.2)	76.4	(1.2)	53.3	(1.5)	49.0	(1.4)	15.2	(0.9)	32.6	(1.1)
Singapore	71.2	(0.8)	25.4	(0.9)	59.0	(1.0)	68.0	(0.9)	82.7	(0.7)	32.5	(0.9)	21.1	(0.8)	26.6	(0.9)
Sub-national entities Abu Dhabi (United Arab Emirates)	82.4	(1.1)	64.6	(1.6)	71.2	(1.1)	79.8	(1.2)	84.7	(1.2)	77.3	(1.4)	53.9	(1.5)	74.0	(1.1)
Average	71.2	(0.4)	34.8	(0.4)	68.4	(0.5)	66.1	(0.4)	63.1	(0.5)	57.8	(0.5)	31.4	(0.4)	57.0	(0.4)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. **Source**: OECD, TALIS 2013 Database.

StatLink is http://dx.doi.org/10.1787/888933167217

[Part 1/1]

Teachers' beliefs about teaching and learning in upper secondary education Percentage of upper secondary education teachers who "agree" or "strongly agree"

Table 5.15 with the following statements

	My role as is to facilita own ii	te students'	by finding	learn best 3 solutions on their own	to think o to practica themselv the teacher	ld be allowed f solutions Il problems es before shows them are solved	processes important t	d reasoning are more han specific m content
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	92.9	(0.7)	73.5	(1.5)	91.3	(0.5)	77.5	(1.4)
Denmark	95.6	(1.0)	90.8	(1.1)	92.6	(0.7)	79.9	(1.1)
Finland	97.6	(0.6)	80.5	(1.4)	91.4	(1.5)	87.2	(0.9)
Iceland	98.6	(0.4)	88.8	(1.0)	87.4	(1.1)	89.7	(1.0)
Italy	91.5	(0.5)	63.0	(0.9)	68.3	(0.9)	86.3	(0.6)
Mexico	92.9	(0.8)	82.6	(1.0)	92.2	(0.7)	75.0	(1.0)
Norway	96.9	(0.3)	56.8	(1.0)	93.6	(0.6)	75.4	(1.1)
Poland	91.9	(0.7)	83.9	(0.9)	91.1	(0.6)	82.6	(0.7)
Singapore	95.7	(0.4)	89.1	(0.6)	97.8	(0.3)	95.1	(0.4)
Sub-national entities								
Abu Dhabi (United Arab Emirates)	96.2	(0.4)	91.1	(0.7)	95.4	(0.4)	89.2	(0.8)
Average	95.0	(0.2)	80.0	(0.3)	90.1	(0.3)	83.8	(0.3)

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Teachers' use of student assessment practices in upper secondary education

Percentage of upper secondary education teachers who report using the following methods Table 5.16 of assessing student learning¹

		Deve	lop and	admini	ster ow	n asses	sment				Admini	ster a st	andard	ised tes	t	
		er or t never	Occas	ionally	Frequ	uently		r nearly ssons		er or t never	Occas	ionally	Frequ	uently		r nearly essons
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	6.0	(0.7)	19.8	(1.4)	53.9	(1.3)	20.3	(1.1)	28.7	(1.4)	40.5	(1.2)	26.2	(1.2)	4.6	(0.6)
Denmark	7.1	(0.8)	43.9	(1.2)	41.3	(1.7)	7.7	(1.3)	48.0	(2.3)	41.1	(1.9)	9.5	(0.9)	1.4	(0.4)
Finland	6.9	(1.6)	23.3	(1.2)	55.6	(1.4)	14.2	(1.4)	39.1	(2.5)	35.7	(1.9)	21.7	(1.8)	3.5	(0.5)
Iceland	7.1	(0.9)	31.8	(1.6)	52.1	(1.7)	8.9	(1.0)	47.6	(1.8)	32.5	(1.5)	19.2	(1.4)	0.7	(0.3)
Italy	10.8	(0.7)	18.8	(0.8)	54.5	(1.0)	16.0	(0.8)	27.8	(0.9)	41.2	(1.0)	27.8	(1.0)	3.2	(0.3)
Mexico	4.2	(0.7)	15.5	(1.1)	54.6	(1.2)	25.7	(1.1)	21.1	(1.2)	30.4	(1.1)	39.4	(1.3)	9.0	(0.7)
Norway	4.2	(0.5)	37.9	(1.2)	55.2	(1.2)	2.7	(0.4)	56.2	(1.6)	34.4	(1.4)	9.2	(0.7)	0.2	(0.1)
Poland	7.8	(0.7)	31.9	(1.2)	46.8	(1.4)	13.4	(1.0)	10.5	(0.9)	40.9	(1.1)	45.6	(1.2)	3.0	(0.4)
Singapore	4.0	(0.3)	29.2	(0.8)	53.0	(0.9)	13.8	(0.7)	3.4	(0.3)	26.2	(0.8)	58.9	(0.8)	11.4	(0.6)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	1.9	(0.6)	11.4	(1.0)	40.3	(1.3)	46.4	(1.6)	9.8	(1.2)	24.8	(1.5)	40.2	(1.5)	25.2	(1.5)
Average	6.0	(0.3)	26.3	(0.4)	50.7	(0.4)	16.9	(0.3)	29.2	(0.5)	34.8	(0.4)	29.8	(0.4)	6.2	(0.2)

	Indivi	dual stu	idents a	nswer o	uestion	s in fro	nt of th	e class	Prov			dback o numeri				
		er or t never	Occas	ionally	Frequ	iently		r nearly ssons		er or t never	Occas	ionally	Frequ	uently		r nearly ssons
		(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)
Australia	14.0	(0.9)	33.8	(1.4)	37.4	(1.7)	14.8	(1.0)	1.8	(0.4)	16.5	(1.4)	63.5	(1.6)	18.2	(0.9)
Denmark	16.3	(1.2)	31.4	(1.4)	35.4	(2.0)	16.9	(1.3)	15.4	(1.5)	21.7	(1.0)	52.1	(1.6)	10.8	(0.9)
Finland	48.6	(1.4)	33.1	(1.4)	12.8	(1.0)	5.6	(0.7)	19.7	(1.2)	41.5	(1.5)	34.4	(2.2)	4.4	(0.7)
Iceland	58.4	(1.6)	32.8	(1.6)	7.1	(0.9)	1.6	(0.4)	13.2	(1.2)	36.7	(1.5)	46.1	(1.7)	4.0	(0.7)
Italy	4.2	(0.4)	15.0	(0.7)	51.4	(1.1)	29.3	(0.9)	19.0	(0.8)	33.5	(0.9)	35.6	(0.9)	11.9	(0.6)
Mexico	4.9	(0.6)	21.1	(0.9)	47.1	(1.2)	27.0	(1.2)	3.6	(0.4)	17.4	(1.0)	52.4	(1.2)	26.7	(1.3)
Norway	16.6	(1.2)	42.8	(1.7)	32.2	(1.4)	8.4	(0.9)	3.2	(0.5)	19.9	(1.0)	66.7	(1.3)	10.1	(0.8)
Poland	12.0	(1.0)	43.7	(1.4)	35.3	(1.5)	9.0	(0.7)	35.2	(1.1)	31.2	(1.2)	26.3	(1.4)	7.2	(0.8)
Singapore	5.1	(0.4)	37.4	(1.0)	44.7	(1.0)	12.7	(0.7)	2.8	(0.3)	21.7	(0.9)	55.5	(1.1)	20.1	(0.8)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	6.0	(0.8)	33.6	(1.1)	36.5	(1.2)	23.9	(1.2)	2.6	(0.6)	12.9	(0.9)	48.4	(1.3)	36.1	(1.2)
Average	18.6	(0.3)	32.5	(0.4)	34.0	(0.4)	14.9	(0.3)	11.7	(0.3)	25.3	(0.4)	48.1	(0.5)	14.9	(0.3)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. Source: OECD, TALIS 2013 Database.



[Part 2/2]

Teachers' use of student assessment practices in upper secondary education

Percentage of upper secondary education teachers who report using the following methods

Table 5.16 of assessing student learning¹

		a describing state of the control of														
		Let st	tudents	evaluat	e their	own pr	ogress		Ob			when w ide imn				asks
		er or t never	Occas	ionally	Freq	uently		r nearly ssons		er or t never	Occas	ionally	Frequ	uently		r nearly essons
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	12.4	(1.0)	51.7	(1.3)	31.9	(1.0)	4.0	(0.6)	0.8	(0.3)	11.7	(0.9)	52.0	(1.7)	35.6	(1.6)
Denmark	23.5	(1.5)	55.6	(1.9)	19.6	(1.5)	1.3	(0.4)	5.1	(0.7)	26.3	(1.0)	48.3	(1.6)	20.3	(1.3)
Finland	11.1	(1.2)	46.0	(2.1)	36.2	(2.0)	6.6	(2.1)	2.3	(0.4)	22.9	(1.6)	51.5	(2.2)	23.4	(2.2)
Iceland	38.6	(1.7)	47.7	(1.6)	12.9	(1.2)	0.8	(0.3)	5.6	(0.7)	30.9	(1.7)	37.6	(1.7)	25.9	(1.4)
Italy	27.4	(0.9)	45.1	(1.1)	22.2	(0.9)	5.3	(0.4)	6.0	(0.5)	26.7	(1.0)	49.6	(1.0)	17.7	(0.9)
Mexico	7.0	(0.7)	34.8	(1.1)	42.2	(1.1)	16.0	(1.1)	0.4	(0.2)	7.3	(0.7)	46.1	(1.2)	46.2	(1.2)
Norway	10.1	(1.0)	59.3	(1.1)	28.8	(1.0)	1.8	(0.3)	1.7	(0.3)	29.6	(1.1)	57.5	(1.1)	11.2	(0.9)
Poland	11.8	(0.9)	54.1	(1.1)	30.8	(1.1)	3.2	(0.5)	0.5	(0.1)	12.9	(0.8)	54.2	(1.3)	32.4	(1.5)
Singapore	11.5	(0.6)	53.8	(0.9)	31.3	(0.9)	3.4	(0.4)	0.8	(0.1)	22.4	(0.8)	56.6	(1.1)	20.2	(0.8)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	6.4	(0.8)	41.4	(1.3)	39.0	(1.4)	13.3	(0.9)	0.5	(0.2)	7.2	(0.7)	43.8	(1.4)	48.4	(1.4)
Average	16.0	(0.3)	49.0	(0.4)	29.5	(0.4)	5.6	(0.3)	2.4	(0.1)	19.8	(0.3)	49.7	(0.5)	28.1	(0.4)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/888933167248

[Part 1/1]

Teacher co-operation in upper secondary education Table 5.17 Percentage of upper secondary education teachers who report doing the following activities'

			Profe	ssional	collabo	ration				Exch	ange an	d coord	lination	for tea	ching	
	as a to	jointly eam in ne class	teac classo pro feed	e other hers' es and vide back	joint ac aci diffe classe age g	nge in ctivities ross erent es and groups rojects)	collab profes lear	ning	teac materi colle	aange hing als with agues	discu abou lear develo of sp stud	ge in ssions it the ning opment ecific lents	other t in my to er com standa evalu for ass stud pros	with eachers school nsure mon ards in ations sessing dent gress	Attend confe	d team rences
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	63.8	(1.9)	62.5	(1.8)	67.9	(1.4)	95.8	(0.5)	98.7	(0.3)	98.6	(0.3)	95.5	(0.6)	89.8	(8.0)
Denmark	76.3	(1.5)	52.7	(1.8)	82.7	(1.0)	95.9	(0.6)	98.2	(0.4)	95.7	(0.7)	83.2	(0.9)	96.5	(0.7)
Finland	64.9	(2.3)	32.9	(2.1)	71.7	(1.7)	67.7	(1.5)	88.4	(1.0)	98.8	(0.3)	89.7	(1.5)	95.1	(0.8)
Iceland	25.6	(1.4)	17.7	(1.2)	25.8	(1.4)	79.9	(1.3)	87.4	(1.1)	89.9	(0.9)	81.2	(1.3)	84.5	(1.3)
Italy	57.8	(1.2)	29.9	(0.9)	70.1	(1.0)	63.0	(1.2)	90.6	(0.5)	96.7	(0.3)	89.5	(0.6)	99.8	(0.1)
Mexico	84.0	(1.0)	44.5	(1.4)	72.2	(1.4)	89.8	(0.9)	84.8	(1.0)	84.8	(0.9)	84.5	(1.1)	94.9	(0.7)
Norway	57.0	(1.5)	52.0	(1.9)	68.5	(1.9)	67.9	(1.8)	97.4	(0.4)	97.1	(0.5)	92.5	(0.8)	88.6	(1.1)
Poland	66.2	(1.3)	84.2	(1.4)	90.2	(0.9)	93.9	(0.7)	94.1	(0.7)	98.6	(0.2)	97.8	(0.4)	98.6	(0.4)
Singapore	74.4	(0.8)	81.9	(0.7)	72.8	(0.8)	94.4	(0.4)	98.2	(0.2)	97.6	(0.3)	96.8	(0.3)	84.9	(0.6)
Sub-national entities																
Abu Dhabi (United Arab Emirates)	65.6	(1.7)	78.9	(1.7)	83.0	(1.2)	89.8	(1.1)	92.2	(0.8)	96.8	(0.5)	93.9	(0.7)	93.5	(0.7)
Average	63.6	(0.5)	53.7	(0.5)	70.5	(0.4)	83.8	(0.3)	93.0	(0.2)	95.5	(0.2)	90.5	(0.3)	92.6	(0.3)

^{1.} Sum of all response categories for each question included question 33 of the teacher questionnaire, only excluding the "never" category. It is the sum of teachers who report doing the activity "once a year or less", "2-4 times a year", "5-10 times a year", "1-3 times a month" or "once a week or more".

Source: OECD, TALIS 2013 Database.



[Part 1/1]

Teachers' self-efficacy in upper secondary education

Percentage of upper secondary education teachers who feel they can do the following "quite Table 5.18" a bit" or "a lot"

			Self-effi	cacy in stu	udent eng	agement			Self-effica	acy in clas	sroom ma	nagement
	believe do well	dents to they can in school ork		students earning	who sh interest	students low low in school ork		tudents ritically	behavio	disruptive ur in the room	expectati student l	e my ons about behaviour ear
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	87.7	(1.0)	82.9	(1.2)	68.8	(1.4)	84.0	(1.1)	87.3	(1.0)	94.8	(0.6)
Denmark	98.1	(0.4)	96.7	(0.5)	76.2	(1.7)	93.3	(0.7)	95.0	(0.7)	95.3	(0.6)
Finland	86.7	(1.1)	82.7	(1.5)	62.5	(2.0)	76.2	(1.1)	78.8	(1.8)	85.8	(1.7)
Iceland	82.5	(1.2)	76.7	(1.5)	66.3	(1.4)	73.6	(1.6)	87.8	(1.1)	88.2	(1.1)
Italy	96.3	(0.4)	93.2	(0.5)	82.6	(0.7)	95.0	(0.4)	90.5	(0.6)	91.8	(0.5)
Mexico	90.2	(0.7)	92.7	(0.6)	80.4	(1.0)	89.6	(0.6)	87.8	(0.8)	90.0	(0.6)
Norway	74.4	(1.3)	53.3	(1.4)	38.9	(1.3)	65.3	(1.0)	81.6	(1.0)	85.6	(0.9)
Poland	80.8	(1.0)	68.8	(1.2)	62.9	(1.4)	74.8	(1.0)	88.3	(0.8)	94.3	(0.6)
Singapore	85.0	(0.7)	83.2	(0.7)	74.0	(0.8)	76.4	(0.8)	78.5	(0.7)	89.2	(0.6)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	95.9	(0.5)	93.8	(0.6)	92.9	(0.6)	94.7	(0.6)	94.0	(0.7)	96.3	(0.4)
Average	87.8	(0.3)	82.4	(0.3)	70.6	(0.4)	82.3	(0.3)	87.0	(0.3)	91.1	(0.3)

	Self-effica	acy in clas	sroom ma	nagement			Sel	f-efficacy	in instruct	ion		
	follow c	dents to lassroom les	who is d	student isruptive ioisy	question	good ns for my lents	of asse	variety ssment egies	alteri explana exampl studei	de an native ition for e when nts are used	Imple alterr instrue strategie class	ctional es in my
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	92.6	(0.7)	82.3	(1.1)	87.8	(0.9)	88.3	(1.0)	95.7	(0.5)	83.2	(1.0)
Denmark	89.2	(0.9)	94.5	(0.7)	97.6	(0.4)	79.9	(1.2)	97.9	(0.5)	91.4	(0.8)
Finland	81.7	(1.7)	69.9	(1.6)	89.4	(0.8)	62.6	(2.6)	73.1	(2.2)	70.2	(2.8)
Iceland	86.5	(1.2)	80.9	(1.3)	94.7	(0.7)	85.1	(1.3)	92.5	(0.9)	75.9	(1.3)
Italy	92.5	(0.5)	86.7	(0.7)	93.4	(0.5)	87.7	(0.6)	97.5	(0.3)	84.9	(0.7)
Mexico	87.0	(0.8)	82.8	(1.0)	88.6	(0.7)	86.8	(0.8)	95.0	(0.5)	88.9	(0.9)
Norway	79.4	(0.9)	82.6	(1.1)	78.0	(1.1)	73.6	(0.9)	88.7	(0.9)	72.4	(0.9)
Poland	91.1	(1.0)	88.6	(1.0)	79.3	(1.1)	88.1	(0.7)	86.7	(1.1)	66.1	(1.2)
Singapore	83.6	(0.7)	73.3	(0.8)	83.3	(0.7)	72.4	(0.8)	89.9	(0.6)	74.5	(0.9)
Sub-national entities												
Abu Dhabi (United Arab Emirates)	94.3	(0.6)	93.8	(0.7)	95.5	(0.7)	93.6	(0.6)	97.6	(0.4)	95.4	(0.5)
Average	87.8	(0.3)	83.5	(0.3)	88.7	(0.3)	81.8	(0.4)	91.5	(0.3)	80.3	(0.4)

Source: OECD, TALIS 2013 Database.



[Part 1/1] Teachers' job satisfaction in upper secondary education

Percentage of upper secondary education teachers who "agree" or "strongly agree" with the
 Table 5.19
 following statements

	teaching	that the profession in society	my perf	sfied with ormance school	of being clearly of	antages a teacher outweigh Ivantages	again, I v choose to	d decide vould still o work as acher	I decided	et that to become acher
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	36.2	(1.4)	96.7	(0.5)	90.7	(1.0)	82.6	(1.3)	6.3	(0.7)
Denmark	34.1	(1.5)	98.4	(0.4)	91.8	(0.8)	85.0	(1.3)	3.8	(0.7)
Finland	69.3	(1.4)	95.3	(1.0)	96.2	(0.6)	86.5	(1.0)	2.5	(0.4)
Iceland	18.8	(1.4)	96.1	(0.7)	94.0	(0.7)	78.1	(1.3)	7.0	(0.9)
Italy	9.8	(0.5)	90.5	(0.7)	59.5	(1.0)	82.7	(0.7)	9.2	(0.6)
Mexico	65.3	(1.3)	97.6	(0.3)	83.5	(0.8)	96.1	(0.5)	3.0	(0.4)
Norway	36.6	(1.0)	95.5	(0.5)	93.1	(0.7)	78.9	(1.3)	8.0	(0.7)
Poland	20.9	(1.2)	93.6	(0.5)	79.0	(1.1)	81.2	(0.9)	8.8	(0.7)
Singapore	69.4	(0.9)	89.1	(0.6)	84.0	(0.6)	80.0	(0.7)	10.2	(0.5)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	61.9	(1.4)	95.7	(0.5)	81.0	(1.1)	79.5	(0.9)	11.8	(0.8)
Average	42.2	(0.4)	94.8	(0.2)	85.3	(0.3)	83.1	(0.3)	7.0	(0.2)

	it would better to	whether have been o choose orofession	change to school if	l like to o another that were sible		working school	my school	commend as a good o work		ll, I am rith my job
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia	32.2	(1.3)	20.1	(1.6)	94.7	(0.6)	89.5	(1.1)	93.0	(0.8)
Denmark	29.8	(1.6)	13.9	(1.3)	94.8	(0.6)	85.3	(1.6)	94.7	(0.6)
Finland	24.6	(0.9)	19.6	(1.3)	90.2	(1.2)	82.3	(2.2)	91.9	(0.7)
Iceland	34.9	(1.5)	17.4	(1.1)	93.6	(0.8)	89.8	(1.0)	94.7	(0.8)
Italy	20.9	(0.8)	23.2	(1.0)	87.7	(0.8)	83.1	(1.3)	91.9	(0.5)
Mexico	9.6	(0.7)	21.4	(1.2)	96.2	(0.5)	89.3	(0.8)	98.1	(0.3)
Norway	32.0	(1.5)	11.7	(1.2)	94.7	(0.6)	91.2	(1.0)	94.9	(0.5)
Poland	33.1	(1.4)	17.2	(1.2)	92.2	(0.6)	81.9	(1.1)	93.5	(0.7)
Singapore	45.3	(0.9)	37.4	(1.0)	86.0	(0.6)	72.2	(0.8)	89.1	(0.5)
Sub-national entities										
Abu Dhabi (United Arab Emirates)	36.2	(1.3)	32.3	(1.6)	86.1	(1.2)	81.9	(1.4)	90.5	(0.7)
Average	29.9	(0.4)	21.4	(0.4)	91.6	(0.2)	84.7	(0.4)	93.2	(0.2)

Source: OECD, TALIS 2013 Database.

Relationship between teacher and school characteristics and societal value of teaching in upper secondary education

Significant results in the logistic regressions of teachers' perception of how society views the teaching profession with the following teachers' characteristics in upper secondary education1

		Teachers who	think that the teac	hing profession is val	ued in society ²	_
			Depe	ndent on:		
	N	tale³		years of teaching erience ⁴	opportunities to	rovides staff with actively participate I decisions ⁵
	ß	Odds ratios ⁶	ß	Odds ratios ⁶	ß	Odds ratios ⁶
Australia					0.49	1.63
Denmark			(0.28)	0.76	0.66	1.93
Finland					0.53	1.71
Iceland			(0.52)	0.59	0.84	2.31
Italy	0.55	1.74			0.86	2.35
Mexico	0.41	1.51			0.94	2.57
Norway			(0.40)	0.67	0.69	1.98
Poland			(0.55)	0.57	0.91	2.48
Singapore					1.04	2.83
Sub-national entities						
Abu Dhabi (United Arab Emirates)					0.79	2.21

^{1.} Cells are blank when no significant relationship was found. Significance was tested at the 5% level, controlling for teachers' educational attainment, subject(s) taught and content, pedagogy and classroom practice elements of the subject(s) taught included in formal education or training.

- 2. Dichotomous variable where the reference category is the combination of "strongly disagree" and "disagree".
- 3. Dichotomous variable where the reference category is female.

- 5. Dichotomous variable where the reference category is the combination of "strongly disagree" and "disagree".
- 6. This is the exponentiated beta. Please refer to the technical annex for interpretation of odds ratios.

Source: OECD, TALIS 2013 Database.

^{4.} The work experience variable was dichotomised, with 5 years as a cut-off point. Five years or less was the reference category. Coefficients and odds ratios therefore represent the association of having worked as a teacher in total for more than 5 years in comparison with 5 years or less.



Relationship between teachers' characteristics and their self-efficacy in upper secondary education

Significant variables in the multiple linear regressions of teachers' self-efficacy with the Table 5.21 following teachers' characteristics in upper secondary education¹

			Teachers' se			
			Depend	lent on:		
	Ma	lle³	More than 5 ye		practice element	gy and classroom s of the subject(s) formal education ⁵
	ß	(S.E.)	ß	(S.E.)	В	(S.E.)
Australia	(0.48)	0.09	0.44	0.10	(0.12)	0.03
Denmark	(0.28)	0.09	0.31	0.09	(0.09)	0.02
Finland	(0.23)	0.11				
Iceland	(0.29)	0.14	0.36	0.16	(0.11)	0.04
Italy	(0.32)	0.06	0.41	0.11	(0.05)	0.01
Mexico			0.22	0.11	(0.18)	0.03
Norway	(0.22)	0.08	0.28	0.08	(0.10)	0.02
Poland	(0.20)	0.07			(0.14)	0.05
Singapore			0.75	0.08	(0.13)	0.03
Sub-national entities						
Abu Dhabi (United Arab Emirates)			0.67	0.13	(0.10)	0.03

^{1.} Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Teachers' educational attainment was controlled for.

- 2. Continuous variable.
- 3. Dichotomous variable where the reference category is female.
- 4. The work experience variable was dichotomised, with 5 years as a cut-off point. Five years or less was the reference category. Coefficients and odds ratios therefore represent the association of having worked as a teacher in total for more than 5 years in comparison to 5 years or less.
- 5. The scores on TT2G12A, 12B and 12C were combined. This variable therefore represents the total extent to which content, pedagogy and classroom practice elements of subject(s) the teacher currently teaches were included in his or her formal education. Because higher scores indicate that these elements were included to a lesser extent or not at all for the subject the teacher currently teaches, negative scores indicate that less preparation is negatively associated with total self-efficacy and job satisfaction scores.

Source: OECD, TALIS 2013 Database.



Relationship between teachers' characteristics and their job satisfaction in upper secondary education

Significant variables in the multiple linear regressions of teachers' job satisfaction with the Table 5.22 following teachers' characteristics in upper secondary education¹

			Teachers' job	satisfaction ²		
			Depend	lent on:		
	Ma	le³	More than 5 ye exper		Content, pedagos practice elements taught included in	of the subject(s)
	ß	(S.E.)	ß	(S.E.)	В	(S.E.)
Australia	(0.41)	0.07			(0.14)	0.04
Denmark	(0.27)	0.11	(0.42)	0.15	(0.10)	0.03
Finland	(0.23)	0.08	(0.28)	0.13	(0.09)	0.03
Iceland					(0.10)	0.04
Italy					(0.05)	0.02
Mexico			0.26	0.10	(0.12)	0.02
Norway	(0.27)	0.10	(0.40)	0.09	(0.13)	0.03
Poland			(0.29)	0.14	(0.07)	0.03
Singapore	0.25	0.07	0.15	0.07	(0.15)	0.03
Sub-national entities						
Abu Dhabi (United Arab Emirates)	0.24	0.10			(0.14)	0.04

^{1.} Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Teachers' educational attainment was controlled for.

- 2. Continuous variable.
- 3. Dichotomous variable where the reference category is female.
- 4. The work experience variable was dichotomised, with 5 years as a cut-off point. Five years or less was the reference category. Coefficients and odds ratios therefore represent the association of having worked as a teacher in total for more than 5 years in comparison to 5 years or less.
- 5. The scores on TT2G12A, 12B and 12C were combined. This variable therefore represents the total extent to which content, pedagogy and classroom practice elements of subject(s) the teacher currently teaches were included in his or her formal education. Because higher scores indicate that these elements were included to a lesser extent or not at all for the subject the teacher currently teaches, negative scores indicate that less preparation is negatively associated with total self-efficacy and job satisfaction scores.

Source: OECD, TALIS 2013 Database.



Relationship between classroom and school environment and teachers' self-efficacy in upper secondary education

Significant variables in the multiple linear regressions of teachers' self-efficacy with the Table 5.23 following classroom environment and school environment in upper secondary education¹

						Tea	achers' s	elf-effica	ıcy²					
		Model	1 (schoo Depend	l enviror lent on:	ment) ³				Model 2		om envird dent on:	onment)	1	
	Students first lang different the lang of instr	guage is nt from	Studen special	ts with needs ^{6,7}	Stud from s econor disadva hom	socio- nically intaged	Class	size ¹⁰	Low ac		Studen behav probl	ioural	gif	mically ted ents ¹³
	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)
Australia	0.28	0.12							- 0.21	0.10			0.33	0.11
Denmark	0.28	0.12							- 0.27	0.08				
Finland					- 0.51	0.16	0.02	0.01						
Iceland			- 0.34	0.14									0.31	0.12
Italy	- 0.20	0.09							- 0.12	0.06			0.41	0.07
Mexico	- 0.45	0.22									- 0.19	0.09	0.28	0.09
Norway									- 0.22	0.11			0.39	0.08
Poland									- 0.18	0.07	- 0.34	0.09	0.25	0.09
Singapore														
Sub-national entities														
Abu Dhabi (United Arab Emirates)	- 0.31	0.13	- 0.47	0.08							- 0.70	0.12	0.41	0.08

- 1. Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution. These results are not highlighted in the text of the report.
- 2. Continuous variable.
- 3. The first model consists of three variables on student characteristics collected in the principal questionnaire.
- 4. The second model consists of data from the teacher questionnaire on the composition of a target class.
- 5. The reference category is 10% or less of students whose first language is different from the language of instruction. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 6. The reference category is 10% or less of students with special needs. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 7. Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.
- 8. The reference category is 30% or less of students from socio-economically disadvantaged homes. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 9. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 10. Continuous variable where the data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 11. The reference category is 10% or less of students are low academic achievers. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 12. The reference category is 10% or less of students with behavioural problems. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 13. The reference category is 10% or less of students are academically gifted. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.



Relationship between classroom and school environment and teachers' job satisfaction in upper secondary education

Significant variables in the multiple linear regressions of teachers' job satisfaction with the Table 5.24 following classroom environment and school environment in upper secondary education¹

					Teac	hers' jol	satisfac	tion ²					
	Model	1 (schoo Depend		nment) ³				Model 2		om envird dent on:	onment)	1	
	Students whose first language is different from the language of instruction ⁵	first language is different from the language Students with			ents socio- nically intaged es ^{8, 9}	Class	size ¹⁰	Low ac		Studen behav probl	ioural		mically ted ents ¹³
	ß (S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)	ß	(S.E.)
Australia				- 0.41	0.15			- 0.37	0.13			0.23	0.10
Denmark													
Finland		- 0.23	0.10	0.44	0.17	0.01	0.00	- 0.29	0.11	- 0.49	0.17		
Iceland		- 0.58	0.13					- 0.41	0.14				
Italy				- 0.27	0.11			- 0.21	0.08	- 0.54	0.10	0.50	0.07
Mexico						0.01	0.00	- 0.16	0.07	- 0.30	0.06	0.17	0.06
Norway								- 0.34	0.11			0.39	0.09
Poland								- 0.29	0.08	- 0.57	0.08	0.16	0.07
Singapore								- 0.20	0.08	- 0.34	0.08		
Sub-national entities													
Abu Dhabi (United Arab Emirates)				- 0.48	0.16			- 0.27	0.12	- 0.83	0.12	0.37	0.09

- 1. Cells are blank when no significant relationship was found. Significance was tested at the 5% level. Cells with data representing fewer than 5% of the cases are shaded in grey and should be interpreted with caution. These results are not highlighted in the text of the report.
- 2. Continuous variable.
- 3. The first model consists of three variables on student characteristics collected in the principal questionnaire.
- 4. The second model consists of data from the teacher questionnaire on the composition of a target class.
- 5. The reference category is 10% or less of students whose first language is different from the language of instruction. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about
- 6. The reference category is 10% or less of students with special needs. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 7. Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.
- 8. The reference category is 30% or less of students from socio-economically disadvantaged homes. This variable is derived from the principal questionnaire and represents the percentage of teachers working in schools where the principal reported this information about student characteristics.
- 9. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 10. Continuous variable where the data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 11. The reference category is 10% or less of students are low academic achievers. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 12. The reference category is 10% or less of students with behavioural problems. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 13. The reference category is 10% or less of students are academically gifted. Data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.



Gender and age of teachers, across ISCED levels

 Table 6.1
 Percentage of female teachers and average age of teachers

			Female 1	teachers				A	verage age	of teache	ers	
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			59.2	(1.4)	57.4	(1.2)			43.4	(0.3)	44.0	(0.3)
Denmark	75.8	(0.8)	59.6	(1.2)	48.5	(1.5)	45.4	(0.2)	45.0	(0.3)	46.9	(0.3)
Finland	81.5	(0.7)	72.4	(0.7)	61.9	(2.6)	43.9	(0.3)	44.1	(0.2)	47.1	(0.4)
Iceland			71.9	(1.2)	56.0	(1.4)			44.6	(0.3)	49.4	(0.3)
Italy			78.5	(0.7)	65.0	(1.0)			48.9	(0.2)	49.1	(0.2)
Mexico			53.8	(1.1)	48.2	(1.2)	39.6	(0.5)	42.1	(0.3)	41.7	(0.4)
Norway	80.2	(1.4)	61.0	(1.0)	52.0	(1.2)	45.3	(0.4)	44.2	(0.4)	47.4	(0.4)
Poland	85.5	(0.8)	74.9	(1.0)	67.9	(1.2)	42.9	(0.3)	41.9	(0.2)	42.8	(0.3)
Singapore			65.0	(0.9)	64.5	(0.9)			36.0	(0.2)	36.6	(0.2)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			58.9	(1.9)	52.5	(1.4)			38.7	(0.3)	40.7	(0.3)
Flanders (Belgium)	82.6	(0.9)	68.1	(1.4)			39.0	(0.3)	39.3	(0.2)		
Average 1 ¹	78.7	(0.4)	65.0	(0.4)			42.7	(0.1)	42.8	(0.1)		
Average 2 ²			65.5	(0.4)	57.4	(0.5)			42.9	(0.1)	44.6	(0.1)
Average 3 ³	78.0	(0.5)	64.3	(0.5)	55.7	(0.7)	43.4	(0.2)	43.5	(0.1)	45.2	(0.2)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders (Belgium)).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



Work experience of teachers, across ISCED levels

Table 6.2 Average years of working experience among teachers in various roles

Table 0.2			Average years of working experience as a teacher Average years of working experience as a teacher Average years of working experience as a teacher													
	Avera	ge years	of working at this		ce as a tea	cher	Avera	ige years	of working in to		ce as a tea	cher				
	Prim	ary	Lower se	condary	Upper se	condary	Prim	nary	Lower se	condary	Upper se	condary				
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)				
Australia			8.7	(0.2)	8.9	(0.2)			16.7	(0.3)	17.4	(0.3)				
Denmark	11.1	(0.3)	12.0	(0.4)	11.7	(0.4)	15.8	(0.2)	16.1	(0.3)	14.8	(0.4)				
Finland	8.9	(0.2)	10.5	(0.2)	12.5	(0.6)	15.4	(0.3)	15.5	(0.2)	16.2	(0.3)				
Iceland			10.0	(0.2)	12.1	(0.3)			14.3	(0.3)	16.4	(0.4)				
Italy			8.1	(0.2)	9.7	(0.2)			19.8	(0.3)	20.1	(0.2)				
Mexico	7.9	(0.4)	11.3	(0.3)	11.1	(0.3)	15.9	(0.5)	15.8	(0.3)	14.2	(0.4)				
Norway	11.1	(0.9)	10.8	(0.4)	11.1	(0.3)	15.9	(0.7)	15.5	(0.4)	15.6	(0.4)				
Poland	14.3	(0.2)	11.2	(0.2)	12.6	(0.2)	18.8	(0.3)	17.1	(0.2)	16.9	(0.2)				
Singapore			5.6	(0.1)	6.4	(0.1)			9.7	(0.2)	10.5	(0.2)				
Sub-national entities																
Abu Dhabi (United Arab Emirates)			5.5	(0.2)	5.7	(0.2)			12.8	(0.2)	14.8	(0.2)				
Flanders (Belgium)	13.5	(0.3)	12.7	(0.2)			16.3	(0.3)	15.2	(0.2)						
Average 1 ¹	11.2	(0.2)	11.4	(0.1)			16.3	(0.2)	15.9	(0.1)						
Average 2 ²			9.4	(0.1)	10.2	(0.1)			15.3	(0.1)	15.7	(0.1)				
Average 3 ³	10.7	(0.2)	11.2	(0.1)	11.8	(0.2)	16.4	(0.2)	16.0	(0.1)	15.5	(0.2)				

			years of wo					Average	years of w in othe		perience	
	Prim	ary	Lower se	condary	Upper se	condary	Prim	ary	Lower se	condary	Upper se	condary
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia			1.8	(0.1)	1.7	(0.1)			5.6	(0.2)	5.2	(0.2)
Denmark	1.9	(0.1)	1.9	(0.1)	2.4	(0.2)	5.0	(0.2)	4.4	(0.2)	6.1	(0.4)
Finland	1.9	(0.1)	1.2	(0.1)	2.0	(0.2)	3.0	(0.1)	3.2	(0.1)	6.7	(0.3)
Iceland			4.0	(0.2)	3.3	(0.2)			9.6	(0.3)	10.6	(0.3)
Italy			1.2	(0.1)	1.1	(0.1)			2.9	(0.1)	3.4	(0.1)
Mexico	3.0	(0.4)	4.5	(0.3)	4.3	(0.3)	4.6	(0.5)	7.4	(0.4)	10.5	(0.3)
Norway	3.0	(0.2)	1.9	(0.1)	3.0	(0.2)	4.2	(0.2)	4.2	(0.2)	7.0	(0.3)
Poland	2.1	(0.2)	2.1	(0.1)	3.1	(0.3)	2.3	(0.2)	1.8	(0.1)	4.3	(0.3)
Singapore			1.2	(0.1)	1.3	(0.1)			1.9	(0.1)	1.6	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			1.4	(0.1)	1.6	(0.1)			1.4	(0.1)	1.8	(0.1)
Flanders (Belgium)	0.6	(0.1)	0.8	(0.1)			1.0	(0.1)	2.1	(0.1)		
. 41	2.1	(0.1)	2.1	(0.1)			2.2	(0.1)	2.0	(0.1)		
Average 1 ¹	2.1	(0.1)	2.1	(0.1)			3.3	(0.1)	3.8	(0.1)		
Average 2 ²			2.1	(0.0)	2.4	(0.1)			4.2	(0.1)	5.7	(0.1)
Average 3 ³	2.4	(0.1)	2.3	(0.1)	3.0	(0.1)	3.8	(0.1)	4.2	(0.1)	6.9	(0.1)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway



[Part 1/1]
Teachers' educational attainment, across ISCED levels

Table 6.3 Percentage of teachers by highest level of formal education completed

	Highest	t level of f	ormal edu	cation bel	ow ISCED	level 5	Highe	st level of	formal ed	ucation is	ISCED lev	el 5B²
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			0.1	(0.1)	0.1	(0.1)			0.0	(0.0)	0.2	(0.1)
Denmark	1.5	(0.3)	2.1	(0.5)	6.8	(1.3)	0.3	(0.1)	0.6	(0.2)	3.8	(0.6)
Finland	1.0	(0.4)	1.1	(0.2)	1.4	(0.4)	3.0	(0.5)	2.9	(0.4)	11.9	(2.2)
Iceland			10.0	(0.9)	4.7	(0.6)			4.7	(0.5)	11.7	(0.8)
Italy			3.6	(0.4)	6.1	(0.4)			15.8	(0.6)	4.6	(0.3)
Mexico	19.0	(1.5)	8.7	(0.6)	4.9	(0.6)	1.0	(0.3)	1.5	(0.2)	2.4	(0.4)
Norway	1.6	(0.3)	2.0	(0.4)	4.8	(0.6)	a	a	a	a	a	a
Poland	0.2	(0.1)	0.1	(0.0)	0.5	(0.2)	0.6	(0.2)	0.0	(0.0)	0.8	(0.2)
Singapore			1.8	(0.2)	0.7	(0.2)			5.5	(0.4)	3.5	(0.4)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			1.8	(0.7)	0.6	(0.2)			4.7	(0.6)	3.1	(0.4)
Flanders (Belgium)	0.3	(0.1)	2.6	(0.3)			93.7	(0.6)	85.4	(0.8)		
Average 1 ³	3.9	(0.3)	2.7	(0.2)			19.7	(0.2)	18.1	(0.2)		
Average 2 ⁴			3.1	(0.2)	3.1	(0.2)			4.0	(0.1)	4.7	(0.3)
Average 35	4.7	(0.3)	2.8	(0.2)	3.7	(0.3)	1.2	(0.1)	1.3	(0.1)	4.7	(0.6)
1												

	Highe	st level of	formal ed	ucation is	ISCED lev	el 5A	High	est level o	f formal ed	lucation i	s ISCED le	vel 6
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
		(S.E.)	%	(S.E.)		(S.E.)		(S.E.)	%	(S.E.)		(S.E.)
Australia			98.9	(0.2)	98.6	(0.3)			0.9	(0.2)	1.1	(0.2)
Denmark	98.1	(0.4)	97.1	(0.5)	87.4	(1.2)	0.1	(0.0)	0.2	(0.1)	2.0	(0.4)
Finland	95.4	(0.8)	94.5	(0.5)	84.5	(2.0)	0.5	(0.2)	1.4	(0.3)	2.2	(0.4)
Iceland			85.3	(1.0)	81.1	(1.1)			0.0	(0.0)	2.5	(0.4)
Italy			78.1	(0.7)	85.6	(0.7)			2.5	(0.4)	3.7	(0.5)
Mexico	79.5	(1.6)	89.1	(0.7)	91.4	(0.8)	0.5	(0.2)	0.7	(0.2)	1.4	(0.2)
Norway	98.3	(0.3)	97.9	(0.4)	94.5	(0.6)	0.1	(0.1)	0.1	(0.1)	0.7	(0.2)
Poland	99.1	(0.2)	98.8	(0.2)	97.3	(0.4)	0.2	(0.1)	1.1	(0.2)	1.4	(0.3)
Singapore			92.4	(0.5)	95.5	(0.4)			0.3	(0.1)	0.3	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			92.6	(0.9)	94.5	(0.4)			0.9	(0.3)	1.8	(0.2)
Flanders (Belgium)	6.0	(0.6)	11.8	(0.8)			0.0	(0.0)	0.2	(0.1)		
Average 1 ³	79.4	(0.3)	81.5	(0.2)			0.2	(0.1)	0.6	(0.1)		
Average 2 ⁴			92.5	(0.2)	91.0	(0.3)			0.8	(0.1)	1.7	(0.1)
Average 3 ⁵	94.1	(0.4)	95.5	(0.2)	91.0	(0.5)	0.3	(0.1)	0.7	(0.1)	1.5	(0.1)

^{1.} Education categories are based on the International Standard Classification of Education (ISCED 1997). ISCED level 5A programmes are generally longer and more theory-based, while 5B programmes are typically shorter and more practical and skills oriented. No distinction was made between ISCED level 5A (Bachelor) and ISCED level 5A (Master).

Source: OECD, TALIS 2013 Database.

^{2.} Includes Bachelor's degrees in some countries.

^{3.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{4.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{5.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/2]

Completion and content of teacher education or training programme, across ISCED levels

Percentage of teachers who completed teacher education or a training programme and for whom the following elements were included in their formal education

Table 6.4 and training

		C	letion of te		4:		Eleme		led in forn all subject		ion and tra ught	aining
			r training					Content	of the subj	ject(s) bei	ng taught	
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	econdary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			97.6	(0.3)	97.1	(0.4)			62.2	(1.1)	65.5	(1.0)
Denmark	90.4	(0.8)	93.5	(0.9)	83.0	(1.4)	53.4	(1.3)	60.2	(1.1)	69.1	(2.4)
Finland	92.0	(1.0)	92.5	(0.7)	90.8	(1.9)	78.7	(1.1)	77.1	(0.9)	64.3	(2.3)
Iceland			92.4	(0.7)	93.4	(0.8)			41.7	(1.2)	53.3	(1.4)
Italy			79.1	(0.8)	71.4	(0.9)			69.4	(1.0)	68.7	(0.9)
Mexico	82.3	(1.7)	61.5	(1.2)	25.6	(1.4)	66.5	(2.0)	67.4	(1.0)	68.6	(1.1)
Norway	84.5	(1.3)	92.5	(0.9)	88.1	(1.0)	42.4	(1.7)	51.4	(1.3)	58.5	(1.0)
Poland	99.5	(0.2)	99.4	(0.1)	97.7	(0.5)	93.5	(0.6)	95.0	(0.4)	88.9	(0.7)
Singapore			99.1	(0.2)	98.9	(0.2)			77.8	(0.7)	78.6	(0.8)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			83.3	(1.1)	86.0	(1.0)			72.2	(1.5)	77.1	(1.1)
Flanders (Belgium)	99.3	(0.2)	98.3	(0.3)			83.4	(0.9)	76.5	(1.1)		
Average 1 ¹	91.3	(0.4)	89.6	(0.3)			69.7	(0.5)	71.3	(0.4)		
Average 2 ²			89.1	(0.2)	83.2	(0.3)			67.4	(0.3)	69.3	(0.4)
Average 3 ³	89.7	(0.5)	87.9	(0.4)	77.0	(0.6)	66.9	(0.6)	70.2	(0.4)	69.9	(0.7)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/2]

Completion and content of teacher education or training programme, across ISCED levels

Percentage of teachers who completed teacher education or a training programme and for whom the following elements were included in their formal education and training

Table 6.4 Elements included in formal education and training for all subjects being taught Pedagogy of the subject(s) being taught Practice in the subject(s) being taught Primary Lower secondary Upper secondary Lower secondary Upper secondary Primary Australia 64.0 (1.2)68.6 (1.1)70.1 (1.2)72.6 (1.0)Denmark 52.8 (1.5)60.3 (1.1)67.1 (1.9)44.1 (1.3)52.3 (1.4)66.8 (1.9)Finland 79.1 (1.4)75.1 (0.9)62.5 (2.6)63.5 (1.4)69.2 (1.0)59 1 (2.1)Iceland 47.8 43.1 (1.3)(1.4)42.2 (1.2)(1.3)(0.9)Italy 62.6 (1.0)55.9 (0.9)35.5 27.5 (1.1)Mexico 64.0 (1.9)64.3 (1.1)61.0 (1.3)65.6 (2.1)57.7 (1.2)53.5 (1.2)Norway 45.6 (1.6)50.6 (1.3)55.7 (1.2)51.3 (1.1)50.7 (1.5)55.3 (1.4)94 7 85.9 (0.7)88.1 79.7 Poland 93.5 (0.7)(0.4)87.0 (0.8)(0.6)(0.9)Singapore 82.0 (0.7)84.5 (0.8)82.6 (0.7)84.9 (0.7)Sub-national entities Abu Dhabi (United Arab Emirates) 67.1 (1.5)73.6 (1.3)70.9 (1.6)75.8 (1.2)(1.0) Flanders (Belgium) 82.6 (0.8)80.5 (1.0)81.1 77.6 (1.0)Average 11 69.6 (0.6)70.9 (0.4)65.4 (0.5)65.9 (0.5)Average 22 66.4 (0.3)66.3 (0.5)61.9 (0.4)62.4 (0.4)

(0.7)

62.3

(0.6)

63.6

(0.5)

62.9

(0.7)

66.4

Source: OECD, TALIS 2013 Database.

Average 33

StatLink http://dx.doi.org/10.1787/888933167473

67.0

(0.6)

69.0

(0.5)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

	Knowl	edge and	understan	ding of th	e subject f	ield(s)	Pedago	gical com	petencies	in teachir	ng subject	field(s)
	Prin	nary	Lower se	condary	Upper se	econdary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			2.4	(0.5)	1.6	(0.3)			2.8	(0.5)	1.7	(0.3)
Denmark	7.1	(0.8)	6.4	(0.8)	4.4	(0.5)	7.0	(0.7)	6.0	(0.7)	8.1	(0.9)
Finland	2.0	(0.3)	3.8	(0.4)	4.7	(0.8)	3.0	(0.5)	3.4	(0.4)	4.0	(0.7)
Iceland			9.0	(0.8)	9.1	(0.9)			8.5	(0.8)	8.5	(0.9)
Italy			16.6	(0.7)	19.0	(0.7)			23.5	(1.0)	22.6	(0.8)
Mexico	4.7	(0.8)	4.4	(0.6)	4.4	(0.5)	7.3	(1.1)	8.0	(0.8)	11.0	(1.0)
Norway	7.0	(0.6)	7.1	(0.7)	7.7	(0.5)	6.6	(0.6)	7.9	(0.7)	7.0	(0.6)
Poland	1.2	(0.3)	1.8	(0.3)	2.5	(0.4)	1.8	(0.3)	1.8	(0.3)	2.4	(0.3)
Singapore			6.2	(0.4)	4.7	(0.4)			9.9	(0.6)	7.7	(0.5)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			2.3	(0.4)	3.1	(0.5)			4.0	(0.6)	4.3	(0.5)
Flanders (Belgium)	1.2	(0.2)	3.0	(0.3)			1.6	(0.3)	2.9	(0.4)		
Average 1 ²	3.9	(0.2)	4.4	(0.2)			4.5	(0.3)	5.0	(0.2)		
Average 2 ³			6.0	(0.2)	6.1	(0.2)			7.6	(0.2)	7.7	(0.2)
Average 3 ⁴	4.4	(0.3)	4.7	(0.3)	4.8	(0.3)	5.1	(0.3)	5.4	(0.3)	6.5	(0.3)

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

		Knov	wledge of	the curric	ulum		St	udent eva	luation an	d assessm	ent practio	ce
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			3.7	(0.5)	2.0	(0.4)			3.3	(0.4)	2.7	(0.4)
Denmark	2.6	(0.4)	3.2	(0.4)	3.5	(0.6)	7.7	(0.6)	7.5	(0.8)	5.1	(0.6)
Finland	2.6	(0.4)	3.4	(0.3)	4.0	(0.8)	5.2	(0.4)	3.9	(0.4)	3.2	(0.5)
Iceland			22.7	(1.2)	14.8	(1.2)			18.2	(1.1)	13.4	(1.0)
Italy			11.3	(0.6)	8.5	(0.6)			22.9	(1.0)	22.4	(0.9)
Mexico	7.4	(0.9)	5.0	(0.5)	5.5	(0.6)	9.7	(1.3)	8.0	(0.6)	8.4	(0.7)
Norway	4.7	(0.4)	4.5	(0.4)	5.1	(0.6)	17.3	(1.2)	12.4	(1.2)	10.8	(0.7)
Poland	2.4	(0.3)	2.1	(0.3)	3.6	(0.5)	4.2	(0.5)	3.3	(0.4)	3.5	(0.7)
Singapore			7.1	(0.4)	6.0	(0.5)			11.9	(0.6)	10.6	(0.6)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			3.3	(0.4)	4.0	(0.5)			4.7	(0.5)	5.9	(0.6)
Flanders (Belgium)	1.2	(0.2)	2.7	(0.3)			6.1	(0.7)	6.9	(0.6)		
Average 1 ²	3.5	(0.2)	3.5	(0.2)			8.4	(0.3)	7.0	(0.3)		
Average 2 ³			6.6	(0.2)	5.7	(0.2)			9.6	(0.2)	8.6	(0.2)
Average 3 ⁴	4.0	(0.2)	3.6	(0.2)	4.3	(0.3)	8.8	(0.4)	7.0	(0.3)	6.2	(0.3)

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 3/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

		- 1	CT skills fo	or teachin	g		Stu	dent beha	viour and	classroom	managem	ent
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			13.6	(0.9)	13.5	(0.9)			3.8	(0.6)	2.6	(0.4)
Denmark	23.4	(1.2)	18.7	(1.2)	11.0	(1.1)	12.8	(1.0)	6.9	(0.7)	7.8	(0.8)
Finland	19.1	(1.3)	17.5	(1.0)	16.0	(0.9)	9.0	(0.7)	7.8	(0.6)	8.4	(0.9)
Iceland			28.6	(1.5)	20.4	(1.3)			14.2	(1.0)	12.7	(1.1)
Italy			35.9	(0.8)	36.1	(1.2)			28.6	(1.0)	22.6	(0.8)
Mexico	24.3	(1.5)	21.0	(1.0)	14.9	(0.9)	9.2	(1.0)	8.6	(0.6)	8.8	(0.7)
Norway	24.9	(1.1)	18.3	(1.4)	11.5	(0.7)	5.6	(0.7)	4.3	(0.5)	5.4	(0.4)
Poland	11.6	(0.8)	10.6	(0.8)	10.3	(0.7)	10.9	(0.8)	13.1	(0.7)	11.1	(0.7)
Singapore			11.8	(0.6)	12.1	(0.6)			9.3	(0.5)	7.1	(0.4)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			9.5	(0.8)	11.5	(0.9)			6.1	(0.6)	6.0	(0.6)
Flanders (Belgium)	17.2	(0.9)	10.5	(0.7)			6.3	(0.6)	4.9	(0.4)		
Average 1 ²	20.1	(0.5)	16.1	(0.4)			9.0	(0.3)	7.6	(0.2)		
Average 2 ³			18.5	(0.3)	15.7	(0.3)			10.3	(0.2)	9.3	(0.2)
Average 3 ⁴	20.6	(0.5)	17.2	(0.5)	12.7	(0.4)	9.5	(0.4)	8.1	(0.3)	8.3	(0.3)

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland)



[Part 4/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

		School m	anagement	t and adm	inistration		Approaches to individualised learning							
		nary		condary		econdary	Prin	nary	Lower se	condary	Upper se	condary		
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)		
Australia			4.9	(0.7)	3.6	(0.5)			6.2	(0.8)	5.4	(0.7)		
Denmark	2.1	(0.4)	3.1	(0.6)	2.9	(0.6)	5.8	(0.5)	4.3	(0.6)	5.1	(0.6)		
Finland	2.6	(0.4)	1.9	(0.3)	3.6	(0.7)	7.5	(0.7)	8.3	(0.6)	7.8	(0.7)		
Iceland			4.9	(0.8)	4.3	(0.7)			11.8	(1.0)	8.9	(0.9)		
Italy			9.9	(0.7)	10.4	(0.6)			22.1	(0.8)	17.6	(0.8)		
Mexico	14.8	(1.2)	15.4	(0.8)	12.8	(0.7)	13.8	(1.2)	13.6	(0.8)	12.1	(0.8)		
Norway	2.9	(0.6)	2.5	(0.3)	2.7	(0.4)	6.4	(0.6)	5.2	(0.5)	4.5	(0.4)		
Poland	6.3	(0.7)	6.0	(0.4)	6.7	(0.5)	10.1	(0.7)	9.2	(0.5)	6.4	(0.6)		
Singapore			7.4	(0.4)	6.9	(0.5)			10.1	(0.6)	8.8	(0.5)		
Sub-national entities														
Abu Dhabi (United Arab Emirates)			12.2	(0.8)	11.1	(0.8)			8.2	(0.6)	6.9	(0.7)		
Flanders (Belgium)	2.3	(0.4)	1.8	(0.3)			7.8	(0.6)	6.6	(0.6)				
Average 1 ²	5.2	(0.3)	5.1	(0.2)			8.6	(0.3)	7.9	(0.3)				
Average 2 ³			6.8	(0.2)	6.5	(0.2)			9.9	(0.2)	8.4	(0.2)		
Average 3 ⁴	5.7	(0.3)	5.8	(0.2)	5.8	(0.3)	8.7	(0.4)	8.1	(0.3)	7.2	(0.3)		

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland)



[Part 5/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

		Teaching	students v	with speci	al needs1		Teaching in a multicultural or multilingual setting						
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Australia			8.2	(0.8)	7.1	(0.6)			4.4	(0.7)	3.9	(0.5)	
Denmark	34.1	(1.3)	27.7	(1.3)	10.4	(1.2)	8.7	(0.8)	6.8	(0.7)	4.3	(0.7)	
Finland	16.7	(1.1)	12.6	(0.8)	9.8	(0.6)	4.9	(0.6)	5.4	(0.6)	6.1	(0.7)	
Iceland			16.1	(1.1)	11.1	(1.0)			8.9	(0.8)	9.1	(1.0)	
Italy			32.3	(1.0)	25.3	(1.0)			27.4	(0.9)	25.6	(0.8)	
Mexico	41.6	(2.1)	47.4	(1.2)	36.3	(1.3)	39.3	(1.9)	33.2	(1.0)	28.9	(1.4)	
Norway	13.6	(0.8)	12.4	(0.9)	10.1	(0.9)	11.8	(1.0)	7.4	(1.0)	7.6	(0.8)	
Poland	18.2	(1.3)	14.4	(0.8)	12.9	(0.9)	5.2	(0.5)	5.5	(0.5)	7.0	(0.5)	
Singapore			15.0	(0.5)	12.2	(0.6)			4.9	(0.4)	4.6	(0.4)	
Sub-national entities													
Abu Dhabi (United Arab Emirates)			22.6	(1.1)	20.7	(1.0)			12.9	(0.9)	11.3	(0.8)	
Flanders (Belgium)	8.8	(0.7)	5.3	(0.5)			4.2	(0.5)	3.1	(0.5)			
Average 1 ²	22.2	(0.5)	20.0	(0.4)			12.4	(0.4)	10.2	(0.3)			
Average 2 ³			20.9	(0.3)	15.6	(0.3)			11.7	(0.2)	10.8	(0.3)	
Average 3 ⁴	24.8	(0.6)	22.9	(0.5)	15.9	(0.4)	14.0	(0.5)	11.7	(0.4)	10.8	(0.4)	

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 6/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

			ning cross- lem solvin				Approaches to developing cross-occupational competencies for future work or future studies							
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary		
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)		
Australia			3.1	(0.4)	4.2	(0.4)			4.2	(0.5)	4.9	(0.7)		
Denmark	5.7	(0.5)	5.1	(0.6)	4.8	(0.6)	4.0	(0.5)	5.6	(0.7)	3.8	(0.6)		
Finland	4.0	(0.4)	4.3	(0.5)	4.3	(0.7)	1.0	(0.2)	1.3	(0.2)	3.1	(0.6)		
Iceland			6.6	(0.7)	6.9	(0.8)			7.8	(0.8)	8.7	(0.9)		
Italy			22.3	(0.7)	21.6	(0.8)			16.4	(0.8)	20.2	(0.7)		
Mexico	13.2	(1.2)	11.2	(0.7)	11.4	(0.8)	21.1	(1.6)	17.8	(0.8)	16.1	(1.0)		
Norway	9.7	(0.9)	8.0	(0.9)	7.6	(0.6)	4.8	(0.5)	6.7	(0.5)	8.1	(0.6)		
Poland	6.1	(0.5)	7.2	(0.6)	6.2	(0.5)	3.1	(0.3)	3.9	(0.3)	5.2	(0.6)		
Singapore			8.3	(0.5)	7.9	(0.5)			9.2	(0.6)	8.7	(0.5)		
Sub-national entities														
Abu Dhabi (United Arab Emirates)			7.1	(0.6)	7.1	(0.7)			11.1	(0.8)	12.5	(0.9)		
Flanders (Belgium)	4.1	(0.5)	3.2	(0.3)			a	a	2.1	(0.3)				
Average 1 ²	7.1	(0.3)	6.5	(0.3)			6.8	(0.4)	6.2	(0.2)				
Average 2 ³			8.3	(0.2)	8.2	(0.2)			8.4	(0.2)	9.1	(0.2)		
Average 3 ⁴	7.7	(0.3)	7.2	(0.3)	6.9	(0.3)	6.8	(0.4)	7.1	(0.2)	7.3	(0.3)		

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 7/7]

Teachers' needs for professional development, across ISCED levels

Percentage of teachers indicating they have a high level of need for professional development Table 6.5 in the following areas

		New te	chnologies	in the wo	rkplace		Student career guidance and counselling						
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Australia			12.5	(0.8)	13.0	(1.0)			5.9	(1.0)	4.3	(0.6)	
Denmark	13.4	(0.9)	14.0	(1.1)	8.9	(0.7)	1.8	(0.3)	3.6	(0.5)	3.2	(0.7)	
Finland	13.1	(1.1)	13.9	(0.8)	14.2	(1.2)	0.8	(0.2)	1.5	(0.3)	2.2	(0.6)	
Iceland			19.1	(1.2)	15.4	(1.1)			6.4	(0.7)	5.5	(0.7)	
Italy			32.2	(0.9)	35.7	(0.9)			18.7	(0.8)	19.2	(0.8)	
Mexico	34.9	(1.9)	28.1	(1.1)	22.0	(1.1)	21.8	(1.6)	21.2	(1.0)	16.4	(0.9)	
Norway	6.5	(0.5)	8.7	(0.5)	11.0	(0.9)	3.5	(0.4)	5.0	(0.6)	5.0	(0.5)	
Poland	11.2	(0.9)	13.2	(0.8)	12.2	(0.7)	4.0	(0.6)	7.2	(0.6)	7.0	(0.8)	
Singapore			9.8	(0.6)	9.6	(0.6)			7.8	(0.5)	6.9	(0.5)	
Sub-national entities													
Abu Dhabi (United Arab Emirates)			17.7	(1.3)	19.2	(1.0)			11.8	(0.9)	12.7	(0.8)	
Flanders (Belgium)	a	a	4.8	(0.5)			1.8	(0.3)	2.1	(0.3)			
Average 1 ²	15.8	(0.5)	13.8	(0.3)			5.6	(0.3)	6.8	(0.2)			
Average 2 ³			16.9	(0.3)	16.1	(0.3)			8.9	(0.2)	8.2	(0.2)	
Average 3 ⁴	15.8	(0.5)	15.6	(0.4)	13.6	(0.4)	6.4	(0.4)	7.7	(0.3)	6.8	(0.3)	

^{1.} Special need 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special need student and who is not. That is why a formal identification is stressed above.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway



School type and school competition, across ISCED levels

Percentage of teachers who work in schools where principals reported the following school Table 6.6 characteristics

			Public s	chools1			Schools		pete with least some			schools
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)		(S.E.)	%	(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)
Australia			51.9	(3.6)	55.8	(4.0)			91.3	(1.9)	92.3	(2.7)
Denmark	82.5	(1.8)	75.6	(2.8)	97.1	(1.6)	73.1	(4.4)	75.8	(4.4)	88.8	(4.0)
Finland	98.4	(1.2)	95.3	(1.6)	85.3	(3.9)	80.0	(3.0)	50.1	(4.3)	53.2	(6.3)
Iceland			98.4	(0.0)	85.8	(0.1)			33.4	(0.1)	75.2	(0.1)
Italy			95.5	(0.2)	90.4	(1.4)			53.3	(4.1)	56.5	(4.9)
Mexico	84.6	(1.7)	82.1	(1.0)	70.4	(1.7)	59.8	(4.9)	76.4	(3.5)	79.2	(4.0)
Norway	98.1	(1.4)	94.6	(3.1)	92.7	(2.1)	51.5	(4.4)	37.1	(5.6)	56.6	(7.5)
Poland	95.8	(1.0)	94.7	(1.4)	97.2	(1.4)	58.8	(4.4)	66.3	(3.1)	84.0	(3.7)
Singapore			100.0	(0.0)	100.0	(0.0)			98.4	(0.1)	98.3	(0.0)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			44.8	(2.8)	43.0	(3.3)			54.1	(4.2)	60.3	(4.3)
Flanders (Belgium)	38.5	(2.2)	26.5	(1.3)			77.7	(3.7)	89.6	(2.9)		
Average 1 ²	83.0	(0.7)	78.1	(0.8)			66.8	(1.7)	65.9	(1.7)		
Average 2 ³			83.3	(0.7)	81.8	(0.7)			63.6	(1.1)	74.4	(1.4)
Average 3 ⁴	91.9	(0.6)	88.5	(1.0)	88.5	(1.0)	64.6	(1.9)	61.1	(1.9)	72.3	(2.4)

^{1.} Refers to the percentage of teachers who work in schools where principals reported that their school was 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.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/2]

School resources, across ISCED levels

Percentage of teachers whose school principal reported that the following resources issues Table 6.7 hinder "a lot" or "to some extent" their school's capacity to provide quality instruction

	Shortas	e of quali	ified and/o	r well-per	forming te	eachers			of teachers			
	Prin	<u> </u>	Lower se		Upper se		Prin		Lower se		Upper se	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			47.8	(6.3)	53.9	(5.6)			37.4	(6.1)	45.4	(6.1)
Denmark	15.3	(3.2)	14.8	(3.5)	24.1	(5.3)	51.7	(4.3)	40.5	(5.1)	27.9	(5.4)
Finland	17.7	(3.0)	17.1	(3.3)	41.5	(5.1)	39.3	(3.7)	56.0	(4.8)	37.9	(7.8)
Iceland			13.9	(0.1)	1.5	(0.1)			28.4	(0.1)	24.2	(0.1)
Italy			38.3	(3.5)	35.5	(4.0)			58.0	(3.7)	35.1	(3.3)
Mexico	31.5	(4.3)	56.0	(3.8)	35.7	(3.9)	55.6	(4.6)	58.1	(3.9)	34.3	(3.7)
Norway	27.2	(3.4)	43.1	(7.3)	30.9	(6.5)	29.9	(4.3)	64.8	(6.6)	41.3	(6.2)
Poland	9.7	(1.9)	12.7	(2.7)	21.5	(5.1)	10.5	(2.4)	19.8	(3.1)	23.9	(4.7)
Singapore			50.5	(0.3)	51.4	(0.1)			48.4	(0.3)	47.9	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			59.8	(5.0)	59.2	(5.5)			51.3	(4.6)	56.3	(4.8)
Flanders (Belgium)	34.5	(4.1)	33.4	(4.8)			38.7	(4.2)	42.7	(4.7)		
Average 1 ¹	22.6	(1.4)	29.5	(1.8)			37.6	(1.6)	47.0	(2.0)		
Average 2 ²			35.4	(1.3)	35.5	(1.5)			46.3	(1.4)	37.4	(1.5)
Average 3 ³	20.3	(1.5)	28.7	(2.0)	30.7	(2.3)	37.4	(1.8)	47.8	(2.2)	33.1	(2.6)

	Shor	tage or in	adequacy o	of instruct	ional mate	erials	Shortage or inadequacy of computers for instruction						
	Prin	nary	Lower se	condary	Upper se	econdary	Prin	nary	Lower se	condary	Upper se	condary	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Australia			13.9	(3.9)	17.0	(4.9)			8.0	(2.3)	10.4	(3.0)	
Denmark	13.3	(3.3)	19.8	(3.7)	5.7	(2.6)	45.4	(4.5)	40.6	(4.9)	3.9	(1.4)	
Finland	18.9	(3.0)	22.3	(4.2)	18.7	(4.9)	50.4	(3.7)	46.4	(4.4)	19.6	(3.6)	
Iceland			13.8	(0.1)	50.1	(0.2)			49.4	(0.1)	21.2	(0.1)	
Italy			56.4	(3.9)	42.6	(3.5)			56.0	(3.9)	36.1	(3.8)	
Mexico	52.0	(3.9)	38.9	(3.4)	38.9	(3.9)	80.8	(3.3)	66.7	(3.2)	47.2	(4.1)	
Norway	16.7	(3.2)	15.1	(4.3)	5.9	(2.6)	52.3	(8.3)	48.4	(6.9)	0.0	(0.0)	
Poland	10.1	(2.6)	11.7	(2.7)	48.7	(5.2)	32.6	(3.6)	29.0	(4.0)	42.5	(5.4)	
Singapore			1.3	(0.0)	1.2	(0.0)			4.3	(0.0)	6.5	(0.0)	
Sub-national entities													
Abu Dhabi (United Arab Emirates)			28.5	(3.8)	33.7	(4.5)			35.0	(4.1)	37.3	(4.6)	
Flanders (Belgium)	18.2	(3.5)	10.1	(2.5)			49.4	(4.1)	29.5	(4.4)			
	04.5	(4.0)	40.	<i>(</i> 4. 1)			=4.0	(0.0)	40.4	(4.0)			
Average 1 ¹	21.5	(1.3)	19.7	(1.4)			51.8	(2.0)	43.4	(1.9)			
Average 2 ²			22.2	(1.1)	26.3	(1.2)			38.4	(1.2)	22.5	(1.0)	
Average 3 ³	22.2	(1.4)	21.6	(1.7)	23.6	(1.8)	52.3	(2.2)	46.2	(2.2)	22.6	(1.5)	

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/2]

School resources, across ISCED levels

Percentage of teachers whose school principal reported that the following resources issues

Table 6.7 hinder "a lot" or "to some extent" their school's capacity to provide quality instruction

		Ins	ufficient in	ternet acc	cess		Sho	ortage or i	inadequacy for inst		uter softw	are
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
		(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)		(S.E.)
Australia			14.6	(3.2)	14.3	(3.4)			12.0	(3.5)	14.1	(3.7)
Denmark	36.5	(4.5)	37.5	(4.9)	7.4	(3.5)	34.5	(4.7)	29.6	(4.2)	3.9	(1.7)
Finland	35.6	(3.6)	32.8	(4.2)	14.9	(3.2)	44.0	(3.5)	45.8	(4.1)	23.5	(4.1)
Iceland			29.6	(0.1)	9.5	(0.1)			54.1	(0.1)	15.6	(0.1)
Italy			47.4	(3.9)	21.1	(2.7)			53.8	(3.9)	31.9	(3.4)
Mexico	76.4	(4.1)	64.9	(3.6)	48.8	(4.1)	75.1	(3.8)	65.5	(3.3)	41.9	(4.0)
Norway	35.3	(8.4)	37.8	(5.6)	3.6	(1.8)	30.4	(4.2)	35.3	(5.5)	5.5	(2.4)
Poland	17.3	(3.1)	21.2	(3.7)	10.7	(3.0)	32.4	(3.7)	40.1	(4.0)	32.5	(4.7)
Singapore			6.5	(0.1)	7.1	(0.1)			7.1	(0.2)	7.4	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			33.8	(4.1)	35.7	(4.8)			39.4	(4.1)	43.6	(5.1)
Flanders (Belgium)	34.0	(4.3)	25.8	(4.4)			39.7	(4.1)	19.0	(3.8)		
4 41	20.2	(2.0)	267	(1.0)			40.7	(1.6)	20.2	(4.7)		
Average 1 ¹	39.2	(2.0)	36.7	(1.8)			42.7	(1.6)	39.2	(1.7)		
Average 2 ²			32.6	(1.2)	17.3	(1.0)			38.3	(1.2)	22.0	(1.1)
Average 3 ³	40.2	(2.3)	38.8	(2.0)	17.1	(1.4)	43.3	(1.8)	43.2	(1.9)	21.4	(1.6)

	SI	nortage or	inadequa	cy of libra	ry materia	ıls	Shortage of support personnel						
	Prin	nary	Lower se	condary	Upper se	econdary	Prin	nary	Lower se	condary	Upper se	condary	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	
Australia			6.5	(1.9)	11.4	(4.6)			28.2	(4.6)	35.4	(6.1)	
Denmark	17.1	(3.6)	18.4	(4.0)	2.0	(1.4)	55.8	(4.4)	48.3	(5.3)	20.2	(4.8)	
Finland	23.4	(3.2)	25.6	(4.1)	11.4	(3.0)	57.8	(3.5)	51.5	(4.2)	36.7	(7.1)	
Iceland			17.1	(0.1)	1.7	(0.0)			23.3	(0.1)	19.2	(0.1)	
Italy			43.6	(3.7)	28.4	(3.3)			77.5	(2.9)	47.2	(3.5)	
Mexico	52.6	(4.6)	51.0	(3.5)	43.9	(3.9)	62.4	(4.6)	59.6	(3.5)	47.2	(3.6)	
Norway	30.2	(7.6)	29.7	(5.8)	7.1	(3.0)	47.0	(4.2)	46.4	(5.6)	19.9	(5.0)	
Poland	23.6	(3.9)	21.7	(3.6)	18.5	(4.7)	30.8	(4.4)	32.3	(4.2)	21.5	(3.2)	
Singapore			4.6	(0.1)	4.5	(0.1)			29.3	(0.2)	30.5	(0.1)	
Sub-national entities													
Abu Dhabi (United Arab Emirates)			39.3	(4.5)	47.0	(4.3)			52.7	(4.7)	55.2	(4.4)	
Flanders (Belgium)	29.5	(3.7)	12.3	(2.7)			71.3	(3.5)	45.3	(4.4)			
. 41	20.4	(1.0)	26.4	(1.7)			540	(1.7)	47.0	(4.0)			
Average 1 ¹	29.4	(1.9)	26.4	(1.7)			54.2	(1.7)	47.2	(1.9)			
Average 2 ²			25.7	(1.1)	17.6	(1.0)			44.9	(1.3)	33.3	(1.4)	
Average 3 ³	29.4	(2.2)	29.3	(1.9)	16.6	(1.5)	50.7	(1.9)	47.6	(2.1)	29.1	(2.2)	

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/1] Class sizes, across ISCED levels

Table 6.8 Average class size reported by teachers

	Average class size ¹ Primary Lower secondary Upper secondary												
	Prir	nary	Lower se	econdary	Upper se	econdary							
	%	(S.E.)	%	(S.E.)	%	(S.E.)							
Australia			24.7	(0.7)	18.5	(0.4)							
Denmark	21.4	(0.2)	21.2	(0.2)	23.5	(0.3)							
Finland	17.8	(0.3)	17.8	(0.2)	20.0	(0.4)							
Iceland			19.6	(0.3)	22.6	(0.4)							
Italy			21.8	(0.2)	21.9	(0.2)							
Mexico	26.3	(0.6)	33.0	(0.6)	33.9	(0.6)							
Norway	19.3	(0.4)	22.5	(0.5)	19.4	(0.4)							
Poland	18.8	(0.2)	21.4	(0.2)	23.1	(0.3)							
Singapore			35.5	(0.2)	33.4	(0.2)							
Sub-national entities													
Abu Dhabi (United Arab Emirates)			25.1	(0.6)	24.0	(0.4)							
Flanders (Belgium)	18.0	(0.2)	17.3	(0.3)									
Average 1 ²	20.3	(0.1)	22.2	(0.1)									
Average 2 ³			24.3	(0.1)	24.0	(0.1)							
Average 3 ⁴	20.7	(0.2)	23.2	(0.2)	24.0	(0.2)							

- 1. From a randomly chosen class teachers currently teach in their weekly timetable.
- 2. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 3. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 4. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Classroom composition – Students with special needs, across ISCED levels

Table 6.9 Percentage of teachers reporting the following students' characteristics in their class!

							S	tudent	ents with special needs ²									
			No	ne					1% to	10%					11% to	30%		
	Prin	nary	Lov		Up secor		Prin	nary	Lov		Up secor		Prin	nary	Lov secor		Up secor	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			16.6	(1.2)	34.2	(1.9)			62.1	(1.6)	52.8	(1.4)			16.2	(1.0)	10.0	(1.0)
Denmark	11.5	(0.8)	18.1	(1.3)	31.0	(2.0)	57.5	(1.6)	52.3	(1.7)	45.9	(1.7)	21.8	(1.2)	18.3	(1.3)	18.4	(1.5)
Finland	24.1	(1.3)	30.7	(1.3)	32.0	(2.7)	46.3	(1.2)	46.9	(1.3)	47.7	(3.0)	15.2	(1.0)	12.5	(0.8)	14.8	(2.4)
Iceland			12.7	(1.0)	22.2	(1.4)			49.6	(1.3)	49.9	(1.6)			26.2	(1.2)	19.0	(1.2)
Italy			11.1	(0.8)	37.4	(1.5)			69.1	(1.0)	51.8	(1.5)			16.4	(0.8)	8.9	(0.6)
Mexico	35.9	(2.0)	42.5	(1.5)	62.1	(1.4)	56.3	(2.1)	51.0	(1.4)	33.4	(1.3)	6.0	(0.8)	4.7	(0.5)	3.2	(0.5)
Norway	9.6	(0.8)	6.8	(0.9)	28.0	(1.6)	59.7	(1.5)	59.2	(2.6)	43.5	(1.3)	23.8	(1.0)	28.9	(2.6)	16.5	(1.2)
Poland	14.0	(1.0)	13.1	(0.7)	23.7	(1.1)	58.2	(1.3)	59.0	(1.4)	61.0	(1.5)	20.9	(1.0)	21.3	(1.3)	12.2	(1.4)
Singapore			25.0	(0.9)	33.2	(0.9)			61.8	(1.0)	57.4	(1.0)			10.2	(0.6)	7.3	(0.5)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			46.6	(2.1)	53.4	(1.6)			45.7	(1.7)	38.2	(1.5)			5.1	(0.7)	5.3	(0.6)
Flanders (Belgium)	11.9	(0.9)	9.9	(0.8)			49.5	(1.2)	47.1	(1.6)			27.5	(1.0)	27.5	(0.9)		
Average 1 ³	17.8	(0.5)	20.2	(0.5)			54.6	(0.6)	52.6	(0.7)			19.2	(0.4)	18.9	(0.6)		
Average 2 ⁴			22.3	(0.4)	35.7	(0.5)			55.7	(0.5)	48.1	(0.5)			16.0	(0.4)	11.5	(0.4)
Average 3 ⁵	19.0	(0.6)	22.2	(0.5)	35.4	(0.8)	55.6	(0.7)	53.7	(0.8)	46.3	(0.8)	17.5	(0.5)	17.1	(0.7)	13.0	(0.7)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.

^{3.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{4.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{5.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/2]

Classroom composition – Students with special needs, across ISCED levels Percentage of teachers reporting the following students' characteristics in their class¹

					Stud	ents with	special ne	eds ²				
			31% to	o 60%					More th	an 60%		
	Prin	nary	Lov secor		Up _l secon		Prin	nary	Lov secon		Up _l secor	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			3.4	(0.8)	2.0	(0.5)			1.7	(0.5)	1.0	(0.4)
Denmark	3.1	(0.4)	3.3	(0.5)	3.0	(0.6)	6.1	(1.0)	8.0	(1.7)	1.6	(0.6)
Finland	3.7	(0.6)	2.2	(0.5)	3.9	(1.4)	10.7	(0.8)	7.7	(0.5)	1.6	(0.6)
Iceland			5.2	(0.6)	3.9	(0.7)			6.3	(0.6)	5.0	(0.7)
Italy			2.6	(0.3)	1.6	(0.3)			0.7	(0.2)	0.3	(0.1)
Mexico	1.4	(0.4)	1.3	(0.2)	0.8	(0.2)	0.5	(0.2)	0.5	(0.1)	0.5	(0.2)
Norway	3.2	(0.5)	2.1	(0.3)	5.2	(0.5)	3.6	(0.7)	3.1	(0.4)	6.9	(1.0)
Poland	5.2	(0.6)	4.8	(0.6)	2.6	(0.5)	1.7	(0.5)	1.8	(0.3)	0.5	(0.1)
Singapore			2.7	(0.3)	1.6	(0.2)			0.3	(0.1)	0.5	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			1.8	(0.3)	1.9	(0.4)			0.9	(0.2)	1.1	(0.2)
Flanders (Belgium)	7.6	(0.7)	10.7	(0.9)			3.5	(0.5)	4.8	(0.6)		
Average 1 ³	4.1	(0.2)	4.1	(0.2)			4.3	(0.3)	4.3	(0.3)		
Average 2 ⁴			2.9	(0.1)	2.7	(0.2)			3.1	(0.2)	1.9	(0.2)
Average 3 ⁵	3.3	(0.2)	2.7	(0.2)	3.1	(0.3)	4.5	(0.3)	4.2	(0.4)	2.2	(0.3)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. 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 work. Some teachers perceive all students as unique learners and thus having some special learning needs. For the purpose of this survey, it is important to assure a more objective judgment of who is a special-need student and who is not. That is why a formal identification is stressed above.
- 3. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 4. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 5. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Classroom composition – Students with behavioural problems, across ISCED levels Table 6.10 Percentage of teachers reporting the following students' characteristics in their class'

							Stude	ents w	th beh	aviour	al prob	lems						
			No	ne					1% to	10%					11% t	o 30%		
	Prin	nary	Lov		Up secor		Prin	nary	Lov		Up secor		Prin	nary	Lov		secor	per ndary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			13.5	(1.3)	37.5	(1.6)			50.7	(1.9)	41.1	(1.6)			26.0	(2.1)	16.3	(1.3)
Denmark	19.1	(1.2)	36.1	(1.7)	46.3	(1.9)	55.7	(1.4)	46.2	(1.3)	41.5	(1.8)	18.2	(1.3)	12.1	(1.0)	9.7	(1.1)
Finland	14.1	(1.2)	16.2	(0.8)	36.3	(2.4)	47.7	(1.5)	48.4	(1.0)	42.6	(1.5)	25.7	(1.2)	24.4	(0.9)	16.3	(2.1)
Iceland			14.6	(1.0)	27.6	(1.5)			51.9	(1.4)	51.9	(1.6)			24.9	(1.2)	13.9	(1.1)
Italy			23.6	(1.0)	40.0	(1.1)			54.5	(1.0)	42.4	(1.0)			16.7	(0.8)	13.0	(0.7)
Mexico	11.8	(1.3)	4.3	(0.5)	10.0	(0.9)	55.6	(1.8)	47.3	(1.1)	52.2	(1.5)	22.8	(1.4)	31.6	(1.1)	24.7	(1.2)
Norway	22.4	(2.0)	28.5	(1.7)	46.4	(1.6)	58.2	(1.2)	57.3	(1.8)	37.1	(1.5)	16.4	(1.7)	11.8	(1.0)	11.0	(1.0)
Poland	15.6	(0.9)	15.2	(0.8)	21.9	(1.5)	59.1	(1.3)	55.5	(1.3)	50.2	(1.3)	19.7	(1.0)	22.2	(1.2)	19.8	(1.1)
Singapore			8.5	(0.5)	13.7	(0.7)			53.9	(0.9)	51.9	(1.0)			26.7	(0.7)	24.4	(8.0)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			13.4	(1.0)	20.4	(1.3)			56.6	(1.6)	53.4	(1.3)			21.3	(1.4)	16.9	(1.1)
Flanders (Belgium)	20.8	(1.0)	21.2	(1.2)			58.8	(1.2)	49.9	(1.4)			16.5	(1.0)	19.5	(1.1)		
Average 1 ²	17.3	(0.5)	20.3	(0.5)			55.8	(0.6)	50.8	(0.6)			19.9	(0.5)	20.2	(0.4)		
Average 2 ³			17.4	(0.3)	30.0	(0.5)			52.2	(0.4)	46.4	(0.5)			21.8	(0.4)	16.6	(0.4)
Average 3 ⁴	16.6	(0.6)	20.1	(0.5)	32.2	(0.8)	55.2	(0.6)	50.9	(0.6)	44.7	(0.7)	20.5	(0.6)	20.4	(0.5)	16.3	(0.6)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

[Part 2/2] Classroom composition - Students with behavioural problems, across ISCED levels Percentage of teachers reporting the following students' characteristics in their class¹

Students with behavioural problems 31% to 60% More than 60% Lower Upper Lower Upper Primary secondary secondary Primary secondary secondary (S.E.) Australia 8.2 (0.7)3.8 (0.5)1.6 (0.3)1.3 (0.3)Denmark 42 (0.7)3 2 (0.5)2.0 (0.4)2.8 (0.5)2 4 (0.6)0.5 (0.3)Finland 9.4 (0.7)7.9 (0.6)4.7 (1.6)3.1 (0.4)(0.4)0.1 (0.0)3.1 Iceland 6.1 (0.8)4.3 (0.6)2.4 (0.5)2.3 (0.4)Italy 4.2 (0.4)3.8 (0.4)1.0 (0.3)0.8 (0.2)Mexico 7.4 (0.9)12.5 (0.7)10.5 (0.7)2.4 (0.5)4.3 (0.5)2.6 (0.4)2.0 1.5 (0.3)3.7 1.0 (0.3)1.0 (0.2)1.9 (0.3)Norway (0.4)(0.4)Poland 4.7 5.3 (0.5)6.6 0.8 1.7 (0.4)1.5 (0.5)(0.8)(0.3)(0.3)Singapore 9.4 (0.5)7.9 (0.5)1.5 (0.2)2.0 (0.3)Sub-national entities Abu Dhabi (United Arab Emirates) 6.6 (0.6)7.3 (0.7)2.1 (0.4)2.0 (0.4)Flanders (Belgium) 3.2 (0.4)7.4 (0.8)0.6 (0.3)2.1 (0.3)Average 12 5.2 (0.3)6.3 (0.2)1.8 (0.2)2.4 (0.2)Average 23 (0.2)5.5 (0.2)6.5 2.1 (0.1)1.5 (0.1)Average 34 5.5 (0.3)6.1 (0.2)5.5 (0.4)2.0 (0.2)2.5 (0.2)1.3 (0.1)

Source: OECD, TALIS 2013 Database.

Table 6.10



^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/2]

Classroom composition - Low academic achievers, across ISCED levels

Table 6.11 Percentage of teachers reporting the following students' characteristics in their class¹

								Low a	cadem	ic ach	ievers							
			No	ne					1% to	10%					11% to	o 30%		
	Prin	nary	Lov		Up secor	per idary	Prin	nary	Lov		Up secor		Prin	nary	Lov		Up secor	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			4.5	(0.6)	11.0	(1.2)			35.6	(2.6)	37.1	(2.2)			34.5	(1.4)	33.0	(1.7)
Denmark	3.3	(0.6)	4.1	(0.6)	5.2	(0.8)	50.5	(1.7)	45.2	(1.9)	40.2	(2.3)	34.8	(1.3)	35.5	(1.4)	34.8	(1.6)
Finland	6.3	(0.7)	4.9	(0.5)	14.0	(0.9)	41.9	(1.5)	36.6	(1.1)	32.9	(1.5)	31.4	(1.3)	37.7	(1.1)	31.0	(1.0)
Iceland			7.0	(0.7)	11.2	(1.1)			45.8	(1.3)	45.5	(1.8)			33.6	(1.2)	27.9	(1.4)
Italy			2.3	(0.3)	3.3	(0.3)			47.1	(1.2)	42.3	(1.2)			38.3	(1.0)	38.3	(0.9)
Mexico	2.1	(0.5)	1.9	(0.4)	2.6	(0.4)	48.9	(1.9)	42.9	(1.4)	38.6	(1.3)	35.0	(1.6)	35.0	(1.2)	34.1	(1.1)
Norway	2.2	(0.6)	1.9	(0.6)	3.8	(0.7)	47.4	(1.9)	41.0	(1.4)	38.6	(1.7)	39.9	(1.2)	46.2	(1.1)	34.8	(1.3)
Poland	2.9	(0.4)	3.4	(0.5)	2.9	(0.5)	52.3	(1.6)	34.9	(1.5)	32.3	(1.2)	34.9	(1.4)	38.8	(1.3)	34.1	(1.4)
Singapore			4.5	(0.4)	5.1	(0.4)			30.1	(0.8)	26.3	(0.8)			32.4	(0.8)	29.9	(0.9)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			2.8	(0.5)	5.0	(0.6)			49.1	(1.7)	44.4	(1.3)			33.1	(1.2)	33.3	(1.3)
Flanders (Belgium)	1.6	(0.3)	3.8	(0.4)			38.9	(1.5)	35.0	(1.5)			42.4	(1.3)	37.2	(1.1)		
4.2	2.0	(0.0)	2.2	(0.0)			46.6	(0.7)	20.2	(0,0)			26.4	(0, 6)	20.4	(O. F.)		
Average 1 ²	3.0	(0.2)	3.3	(0.2)			46.6	(0.7)	39.3	(0.6)			36.4	(0.6)	38.4	(0.5)		
Average 2 ³			3.7	(0.2)	6.4	(0.2)			40.8	(0.5)	37.8	(0.5)			36.5	(0.4)	33.1	(0.4)
Average 3 ⁴	3.3	(0.3)	3.2	(0.2)	5.7	(0.3)	48.2	(0.8)	40.1	(0.7)	36.5	(0.7)	35.2	(0.6)	38.6	(0.6)	33.8	(0.6)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/2]

Classroom composition - Low academic achievers, across ISCED levels

 Table 6.11
 Percentage of teachers reporting the following students' characteristics in their class¹

					Lo	w acaden	nic achieve	ers				
			31% to	o 60%					More th	an 60%		
	Prin	nary	Lov secor		Up _l secor		Prin	nary	Lov		Up _l secor	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			17.1	(1.6)	13.3	(1.5)			8.2	(1.0)	5.6	(0.9)
Denmark	6.7	(1.0)	7.1	(0.8)	15.3	(1.5)	4.8	(0.9)	8.1	(1.3)	4.5	(1.1)
Finland	10.2	(1.0)	12.2	(0.9)	15.0	(1.3)	10.3	(0.8)	8.6	(0.5)	7.0	(1.2)
Iceland			8.1	(0.7)	10.2	(1.0)			5.4	(0.6)	5.2	(0.6)
Italy			10.3	(0.8)	13.2	(0.8)			1.9	(0.3)	2.9	(0.4)
Mexico	11.2	(1.2)	15.7	(0.8)	20.0	(1.0)	2.9	(0.4)	4.6	(0.4)	4.7	(0.5)
Norway	7.4	(1.2)	7.2	(0.9)	13.6	(0.9)	3.2	(0.6)	3.7	(0.4)	9.1	(1.1)
Poland	8.0	(0.7)	17.1	(0.9)	22.0	(1.0)	1.9	(0.4)	5.8	(0.6)	8.7	(0.8)
Singapore			20.5	(0.8)	24.1	(0.8)			12.6	(0.6)	14.6	(0.5)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			11.9	(0.9)	13.2	(0.9)			3.1	(0.4)	4.1	(0.4)
Flanders (Belgium)	12.4	(1.0)	16.6	(1.1)			4.6	(0.6)	7.3	(0.8)		
Average 1 ²	9.3	(0.4)	12.6	(0.4)			4.6	(0.3)	6.4	(0.3)		
Average 2 ³			12.7	(0.3)	16.0	(0.3)			6.2	(0.2)	6.6	(0.3)
Average 3 ⁴	8.7	(0.5)	11.9	(0.4)	17.2	(0.5)	4.6	(0.3)	6.2	(0.3)	6.8	(0.4)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/2]

Classroom composition – Students from socio-economically disadvantaged homes, across ISCED levels

Table 6.12 Percentage of teachers reporting the following students' characteristics in their class¹

					St	udents	from s	ocio-e	conom	ically	disadva	ıntageo	l home	es ²				
			No	ne					1% to	10%					11% t	o 30%		
	Prin	nary	Lov		Up secoi		Prin	nary	Lov		Up secor		Prin	nary	Lov		Up secoi	per ndary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			18.5	(1.3)	27.1	(2.1)			41.0	(2.4)	38.1	(2.3)			20.9	(1.1)	20.4	(1.8)
Denmark	32.7	(2.1)	31.1	(2.0)	30.8	(1.9)	46.4	(1.7)	46.4	(1.5)	45.5	(1.8)	13.4	(1.2)	15.3	(1.1)	18.3	(1.2)
Finland	23.7	(1.3)	19.4	(0.9)	23.3	(1.7)	49.7	(1.4)	51.3	(1.3)	49.2	(2.8)	18.8	(1.1)	22.4	(1.0)	22.5	(1.0)
Iceland			20.7	(1.2)	21.2	(1.4)			54.6	(1.4)	50.7	(1.6)			18.8	(1.1)	22.0	(1.4)
Italy			23.9	(1.2)	36.0	(1.2)			51.2	(1.1)	43.4	(0.9)			17.4	(0.7)	14.3	(0.7)
Mexico	10.5	(1.7)	10.3	(0.8)	13.5	(1.2)	21.9	(1.6)	25.0	(1.1)	27.9	(1.4)	21.5	(1.6)	25.9	(1.0)	25.0	(1.0)
Norway	30.3	(1.7)	18.6	(1.3)	31.7	(1.4)	52.9	(1.6)	60.1	(1.5)	46.5	(1.5)	13.3	(1.5)	17.9	(0.9)	15.1	(0.9)
Poland	13.8	(0.9)	13.3	(1.2)	10.1	(0.8)	53.4	(1.1)	47.9	(1.0)	43.9	(1.1)	24.0	(1.1)	27.7	(1.0)	31.1	(1.1)
Singapore			8.0	(0.4)	10.1	(0.5)			47.8	(0.9)	44.0	(0.8)			28.5	(0.8)	29.7	(0.9)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			51.3	(1.9)	57.1	(2.0)			34.2	(1.7)	32.0	(1.6)			10.0	(1.4)	6.8	(0.7)
Flanders (Belgium)	19.7	(1.4)	19.5	(1.4)			53.9	(1.5)	46.4	(1.8)			17.7	(1.2)	19.6	(1.2)		
Average 1 ³	21.8	(0.6)	18.7	(0.5)			46.4	(0.6)	46.2	(0.6)			18.1	(0.5)	21.5	(0.4)		
J																		
Average 2 ⁴			21.5	(0.4)	26.1	(0.5)			45.9	(0.5)	42.1	(0.5)			20.5	(0.3)	20.5	(0.4)
Average 3 ⁵	22.2	(0.7)	18.6	(0.6)	21.9	(0.7)	44.9	(0.7)	46.1	(0.6)	42.6	(0.8)	18.2	(0.6)	21.9	(0.5)	22.4	(0.5)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2. &}quot;Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.

^{3.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{4.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{5.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



Classroom composition - Students from socio-economically disadvantaged homes, across ISCED levels

Table 6.12 Percentage of teachers reporting the following students' characteristics in their class¹

				Students	from soci	o-econom	ically disa	dvantaged	l homes ²			
			31% to	o 60%					More th	an 60%		
	Prin	nary	Lov secor		Up _l secon		Prin	nary	Lov secor		Up _l secon	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			12.0	(1.5)	10.1	(1.3)			7.6	(1.4)	4.3	(1.0)
Denmark	4.6	(0.9)	4.9	(0.7)	4.9	(1.0)	2.9	(0.8)	2.3	(0.5)	0.5	(0.3)
Finland	5.9	(0.6)	5.3	(0.6)	4.3	(1.3)	1.8	(0.3)	1.6	(0.3)	0.6	(0.2)
Iceland			4.7	(0.7)	5.0	(0.7)			1.1	(0.3)	1.1	(0.3)
Italy			5.6	(0.6)	4.8	(0.5)			1.9	(0.4)	1.5	(0.3)
Mexico	24.6	(1.8)	23.3	(0.9)	20.9	(1.1)	21.6	(2.1)	15.5	(1.1)	12.7	(1.1)
Norway	3.0	(0.7)	2.6	(0.4)	5.1	(0.7)	0.5	(0.2)	0.8	(0.2)	1.5	(0.4)
Poland	7.3	(0.8)	9.4	(0.6)	12.6	(1.0)	1.5	(0.4)	1.7	(0.3)	2.2	(0.3)
Singapore			12.8	(0.7)	13.1	(0.7)			2.9	(0.3)	3.2	(0.3)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			3.9	(0.7)	2.7	(0.4)			0.6	(0.2)	1.3	(0.3)
Flanders (Belgium)	5.6	(0.7)	10.0	(1.2)			3.1	(8.0)	4.5	(0.6)		
Average 1 ³	8.5	(0.4)	9.2	(0.3)			5.2	(0.4)	4.4	(0.2)		
Average 2 ⁴			8.4	(0.3)	8.4	(0.3)			3.6	(0.2)	2.9	(0.2)
Average 3 ⁵	9.1	(0.5)	9.1	(0.3)	9.6	(0.5)	5.6	(0.5)	4.4	(0.3)	3.5	(0.3)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care. They are those that receive or are eligible to receive subsidies or other welfare benefits. The type of benefits accorded to disadvantaged homes may vary among the countries. The disadvantaged homes may in some countries correspond to those that are eligible for free school meals, in others to those that get housing allowance, or other social assistance.
- 3. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and
- 4. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 5. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

Source: OECD, TALIS 2013 Database.



Participation in mentoring programmes, across ISCED levels

Table 6.13 Percentage of teachers who report being involved in mentoring activities¹

		-	CT skills fo	or teachin	g		Stud	dent beha	viour and	classroom	managem	ent
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			16.7	(1.4)	14.2	(1.1)			28.0	(1.1)	30.4	(1.2)
Denmark	3.4	(0.5)	4.2	(0.7)	10.6	(1.1)	9.1	(0.7)	12.7	(0.9)	25.2	(1.5)
Finland	3.6	(0.5)	2.8	(0.5)	3.9	(1.3)	3.3	(0.4)	3.8	(0.5)	4.7	(0.7)
Iceland			5.8	(0.7)	7.0	(0.8)			12.3	(0.8)	12.9	(1.1)
Italy			4.5	(0.4)	2.6	(0.4)			5.1	(0.4)	4.0	(0.4)
Mexico	21.7	(2.1)	17.0	(1.0)	13.1	(1.1)	7.8	(1.2)	10.9	(0.8)	11.7	(1.0)
Norway	3.6	(0.5)	6.9	(2.8)	6.8	(0.6)	7.6	(0.6)	7.7	(0.7)	12.3	(0.9)
Poland	10.8	(0.8)	11.6	(0.6)	11.6	(0.8)	16.2	(1.0)	14.9	(0.7)	16.2	(1.0)
Singapore			39.6	(0.9)	34.5	(1.0)			39.4	(0.9)	44.1	(0.8)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			51.9	(1.8)	48.9	(1.9)			29.2	(1.1)	30.1	(1.0)
Flanders (Belgium)	6.3	(0.6)	10.2	(0.8)			9.5	(0.6)	10.2	(1.0)		
Average 1 ²	8.2	(0.4)	8.8	(0.5)			8.9	(0.3)	10.0	(0.3)		
Average 2 ³			16.1	(0.4)	15.3	(0.3)			16.4	(0.3)	19.2	(0.3)
Average 3 ⁴	8.6	(0.5)	8.5	(0.6)	9.2	(0.5)	8.8	(0.4)	10.0	(0.3)	14.0	(0.5)

^{1.} Refers to mentoring by or for teachers at the school. Does not refer to students within the teacher education who are practising as teachers at the school

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland)



Access to formal induction programmes, across ISCED levels

Percentage of teachers whose school principal reports the existence of formal induction Table 6.14 processes for new teachers in their school

	For	all nev	teach	ers to	the sch	ool¹	Only	y for te	achers	new t	o teach	ning²			duction r new			
	Prin	nary	Lov secor		Up secoi	per ıdary	Prin	nary	Lov secor		Up secor		Prin	nary	Lov		Up	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			91.5	(2.6)	92.9	(3.1)			3.7	(1.9)	6.1	(2.9)			4.9	(1.6)	1.0	(1.0)
Denmark	53.5	(4.9)	55.7	(5.7)	90.8	(3.6)	9.2	(2.7)	6.4	(2.4)	4.8	(3.3)	37.3	(4.7)	37.9	(5.7)	4.4	(1.8)
Finland	43.4	(3.5)	52.6	(4.6)	71.4	(4.4)	2.3	(1.2)	1.0	(1.0)	0.2	(0.2)	54.3	(3.6)	46.5	(4.4)	28.4	(4.4)
Iceland			26.9	(0.2)	50.2	(0.2)			26.8	(0.1)	6.6	(0.1)			46.2	(0.1)	43.2	(0.2)
Italy			11.4	(2.5)	21.5	(2.9)			74.7	(3.1)	55.8	(3.6)			14.0	(2.2)	22.7	(2.6)
Mexico	12.5	(2.6)	24.2	(3.1)	46.1	(4.0)	1.3	(1.1)	3.8	(1.6)	3.4	(1.6)	86.2	(2.8)	72.0	(3.1)	50.5	(3.9)
Norway	19.1	(3.8)	28.9	(7.1)	69.5	(6.2)	39.9	(5.0)	26.5	(5.0)	11.4	(4.6)	41.0	(5.0)	44.6	(7.8)	19.2	(4.9)
Poland	18.7	(3.4)	16.2	(3.0)	20.4	(5.2)	7.0	(2.0)	7.3	(2.9)	5.2	(2.2)	74.3	(3.6)	76.5	(3.9)	74.5	(5.6)
Singapore			99.3	(0.0)	99.3	(0.0)			0.7	(0.0)	0.7	(0.0)			0.0	(0.0)	0.0	(0.0)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			73.6	(4.4)	77.2	(4.2)			4.5	(1.8)	1.6	(1.2)			21.9	(4.0)	21.3	(4.1)
Flanders (Belgium)	74.1	(3.6)	93.3	(2.0)			7.4	(2.3)	1.5	(1.1)			18.5	(3.2)	5.2	(1.7)		
Average 1 ⁴	36.9	(1.5)	45.1	(1.9)			11.2	(1.1)	7.8	(1.1)			52.0	(1.6)	47.1	(2.0)		
Average 2 ⁵			48.0	(1.2)	63.9	(1.2)			15.5	(0.8)	9.6	(8.0)			36.4	(1.3)	26.5	(1.1)
Average 3 ⁶	29.4	(1.7)	35.5	(2.2)	59.6	(2.1)	11.9	(1.3)	9.0	(1.3)	5.0	(1.3)	58.6	(1.8)	55.5	(2.3)	35.4	(1.9)

- 1. The data derived from questions 33A and 34 of the principal questionnaire (PQ). It presents the percentage of teachers working in schools where the principal reports that there is an induction programme for new teachers (PQ33A) and who reports that all teachers who are new to the school are offered an induction programme (PQ34).
- 2. The data derived from questions 33A and 34 of the principal questionnaire (PQ). It presents the percentage of teachers working in schools where the principal reports that there is an induction programme for new teachers (PQ33A) and who reports that only teachers who are new to teaching are offered an induction programme (PQ34).
- 3. The data presented in the column entitled "No induction programme for new teachers" are derived from question PQ33A and represent the percentage of teachers working in schools where the principal reports that there is no induction programme for new teachers. The percentages presented in these three columns add up to 100%.
- 4. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 5. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 6. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland)

Source: OECD, TALIS 2013 Database.



Teachers' access to informal induction activities or introduction to the schools, across ISCED levels

Percentage of teachers whose school principal reports the existence of informal induction Table 6.15 activities or introduction to the school

		5 0										
	of		induction ion progra			ers	G		d/or admii e school fo		ntroduction chers	on
	Prin	nary	Lower se	condary	Upper se	econdary	Prin	nary	Lower se	econdary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			90.3	(3.1)	89.4	(3.2)			97.2	(1.3)	89.4	(3.2)
Denmark	80.0	(3.6)	78.3	(4.3)	78.8	(4.9)	82.0	(4.0)	85.1	(3.5)	78.8	(4.9)
Finland	91.8	(1.7)	92.7	(2.5)	87.9	(4.8)	93.4	(1.9)	89.7	(2.2)	87.9	(4.8)
Iceland			95.1	(0.1)	93.4	(0.1)			97.1	(0.1)	93.4	(0.1)
Italy			68.5	(3.3)	73.7	(2.9)			63.0	(3.6)	73.7	(2.9)
Mexico	28.7	(4.2)	38.8	(3.3)	60.0	(4.4)	33.4	(4.4)	49.1	(3.7)	60.0	(4.4)
Norway	86.7	(3.1)	83.5	(4.1)	75.4	(6.6)	44.3	(4.5)	55.0	(6.5)	75.4	(6.6)
Poland	84.3	(3.1)	88.9	(2.2)	90.1	(3.4)	75.9	(4.1)	79.3	(3.3)	90.1	(3.4)
Singapore			98.6	(0.0)	98.6	(0.0)			100.0	(0.0)	98.6	(0.0)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			85.1	(3.0)	89.5	(2.8)			96.4	(1.0)	89.5	(2.8)
Flanders (Belgium)	78.3	(3.6)	90.7	(2.6)			83.3	(3.1)	99.2	(0.6)		
. 41	75.0	(1.2)	70.0	(1.2)			60.7	(4.5)	76.0	(4.5)		
Average 1 ¹	75.0	(1.3)	78.8	(1.3)			68.7	(1.5)	76.2	(1.5)		
Average 2 ²			82.0	(0.9)	83.7	(1.2)			81.2	(1.0)	83.7	(1.2)
Average 3 ³	74.3	(1.5)	76.4	(1.5)	78.4	(2.2)	65.8	(1.7)	71.6	(1.8)	78.4	(2.2)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/3]

Teachers' feedback by source, across ISCED levels

Percentage of teachers who report receiving feedback from various sources and teachers who report never having received feedback in their school1

					Have	received	feedback 1	from ²				
		Exte	rnal indivi	duals or b	odies				School p	rincipal		
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			14.8	(1.0)	19.0	(1.0)			27.20	(1.6)	26.7	(1.9)
Denmark	20.2	(1.1)	19.2	(1.3)	14.8	(1.3)	47.2	(1.9)	43.7	(2.5)	40.4	(2.3)
Finland	24.8	(1.1)	18.5	(0.9)	15.7	(1.5)	55.1	(1.4)	42.4	(1.4)	31.2	(2.2)
Iceland			11.8	(1.0)	4.7	(0.8)			21.0	(1.3)	41.7	(1.5)
Italy			21.9	(0.8)	14.4	(0.7)			27.8	(1.0)	25.3	(1.3)
Mexico	41.9	(2.1)	38.9	(1.1)	26.7	(1.2)	72.1	(2.2)	56.3	(1.8)	40.8	(2.1)
Norway	13.8	(1.0)	9.8	(1.2)	9.8	(0.8)	52.4	(3.9)	45.3	(1.7)	15.9	(1.0)
Poland	35.5	(1.5)	32.3	(1.2)	25.9	(1.2)	95.4	(0.5)	93.0	(0.8)	87.0	(1.2)
Singapore			10.8	(0.6)	11.6	(0.6)			50.4	(0.9)	53.9	(0.9)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			25.0	(1.6)	25.1	(1.4)			75.6	(2.9)	77.3	(1.9)
Flanders (Belgium)	31.8	(1.2)	33.8	(2.0)			81.0	(1.4)	69.8	(1.7)		
Average 1 ⁴	28.0	(0.6)	25.4	(0.5)			67.2	(0.9)	58.4	(0.7)		
<u> </u>												
Average 2 ⁵			20.3	(0.3)	16.8	(0.4)			48.3	(0.5)	44.0	(0.5)
Average 36	27.2	(0.6)	23.7	(0.5)	18.6	(0.6)	64.4	(1.0)	56.1	(0.8)	43.1	(0.8)

- 1. 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.
- 2. Referring to the percentage of teachers receiving feedback from respective bodies for at least one item from question 28 of the teacher questionnaire. The same teacher can receive feedback from different bodies via different methods.
- 3. 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 teacher questionnaire.
- 4. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and
- 5. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 6. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway

Source: OECD, TALIS 2013 Database.



[Part 2/3]

Teachers' feedback by source, across ISCED levels

Percentage of teachers who report receiving feedback from various sources and teachers who Table 6.16 report never having received feedback in their school

					Have	received	feedback f	rom ²				
		Members	of school	managen	nent team				Assigned	mentors		
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			57.0	(2.0)	58.5	(1.6)			24.1	(1.5)	19.8	(1.3)
Denmark	15.5	(1.4)	14.9	(1.1)	19.3	(1.7)	5.5	(0.6)	5.6	(0.9)	13.0	(1.4)
Finland	7.5	(0.8)	6.6	(0.7)	18.4	(2.1)	1.3	(0.2)	0.7	(0.2)	3.5	(0.8)
Iceland			31.8	(1.3)	44.6	(1.7)			4.6	(0.6)	5.4	(0.8)
Italy			15.2	(0.8)	17.6	(0.9)			2.4	(0.3)	2.1	(0.3)
Mexico	43.3	(2.0)	60.1	(1.4)	64.0	(1.6)	20.6	(1.6)	24.0	(1.2)	20.8	(1.0)
Norway	40.2	(3.1)	43.9	(2.8)	71.4	(2.1)	2.4	(0.4)	3.2	(0.8)	4.5	(0.7)
Poland	30.5	(1.5)	38.2	(1.8)	52.4	(2.4)	24.1	(1.2)	26.2	(1.1)	23.1	(1.3)
Singapore			82.6	(0.8)	81.6	(0.8)			38.3	(0.9)	36.2	(0.9)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			67.9	(1.5)	66.7	(1.5)			54.4	(1.9)	51.5	(1.8)
Flanders (Belgium)	36.9	(1.1)	19.6	(1.3)			6.7	(0.7)	18.2	(1.3)		
	20.0	/O. E.	00.5	(O. T)			404	(0. t)	40.0	(O. 1)		
Average 1 ⁴	29.0	(0.7)	30.5	(0.7)			10.1	(0.4)	13.0	(0.4)		
Average 2 ⁵			41.8	(0.5)	49.5	(0.5)			18.3	(0.3)	18.0	(0.4)
Average 36	27.4	(0.9)	32.7	(0.8)	45.1	(0.9)	10.8	(0.4)	11.9	(0.4)	13.0	(0.5)

- 1. 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.
- 2. Referring to the percentage of teachers receiving feedback from respective bodies for at least one item from question 28 of the teacher questionnaire. The same teacher can receive feedback from different bodies via different methods.
- 3. 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 teacher questionnaire.
- 4. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 5. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 6. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland)

Source: OECD, TALIS 2013 Database.



[Part 3/3]

Teachers' feedback by source, across ISCED levels

Percentage of teachers who report receiving feedback from various sources and teachers who Table 6.16 report never having received feedback in their school¹

		Have	received	feedback	from ²							
			Other t	eachers			Have n	ever recei	ved feedba	ack in the	ir current	school ³
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			50.6	(2.0)	53.8	(1.9)			14.1	(1.5)	12.8	(1.0)
Denmark	64.8	(1.5)	58.2	(1.6)	44.7	(1.9)	17.1	(1.0)	22.3	(1.3)	25.6	(1.9)
Finland	57.1	(1.4)	43.0	(1.1)	48.2	(2.0)	24.1	(1.4)	36.9	(1.2)	28.2	(1.4)
Iceland			23.8	(1.2)	19.4	(1.3)			45.4	(1.6)	21.2	(1.2)
Italy			39.2	(1.0)	35.9	(1.2)			42.8	(0.9)	45.0	(1.3)
Mexico	31.6	(1.7)	34.7	(1.0)	32.9	(1.3)	11.3	(1.4)	9.5	(0.8)	10.8	(0.9)
Norway	62.7	(2.0)	57.4	(2.1)	46.9	(1.5)	10.7	(1.4)	16.2	(1.2)	10.7	(1.3)
Poland	45.2	(1.5)	50.7	(1.2)	44.2	(1.3)	1.2	(0.3)	1.7	(0.3)	3.2	(0.6)
Singapore			42.6	(1.0)	43.7	(1.0)			1.2	(0.2)	1.0	(0.2)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			19.9	(1.3)	19.8	(1.0)			2.6	(0.6)	3.4	(0.6)
Flanders (Belgium)	19.2	(1.1)	19.7	(1.0)			9.6	(0.9)	14.3	(1.1)		
Average 1 ⁴	46.7	(0.6)	44.0	(0.6)			12.3	(0.5)	16.8	(0.4)		
Average 1*	40./	(0.6)	44.0	(0.6)			12.3	(0.5)	10.8	(0.4)		
Average 2 ⁵			42.0	(0.4)	39.0	(0.5)			19.3	(0.3)	16.2	(0.4)
Average 36	52.3	(0.7)	48.8	(0.6)	43.4	(0.7)	12.9	(0.5)	17.3	(0.5)	15.7	(0.6)

- 1. 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.
- 2. Referring to the percentage of teachers receiving feedback from respective bodies for at least one item from question 28 of the teacher questionnaire. The same teacher can receive feedback from different bodies via different methods.
- 3. 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 teacher questionnaire.
- 4. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 5. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 6. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland)

Source: OECD, TALIS 2013 Database.



[Part 1/2]

Teachers' feedback by method, across ISCED levels

Percentage of primary education teachers who report receiving feedback via the following Table 6.17 methods¹

	F	eedback f	ollowing c	lassroom	observatio	n		Feedl	oack from	student su	irveys	
	Prin	nary	Lower se	condary	Upper se	econdary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			69.6	(2.0)	68.3	(1.8)			39.8	(2.3)	37.2	(2.0)
Denmark	63.8	(1.7)	57.7	(1.9)	57.9	(2.2)	42.6	(1.4)	41.3	(1.3)	47.7	(2.2)
Finland	59.6	(1.5)	46.2	(1.4)	52.0	(2.3)	31.4	(1.1)	26.2	(1.1)	49.3	(2.4)
Iceland			35.9	(1.6)	34.2	(1.7)			17.3	(1.1)	74.3	(1.4)
Italy			40.5	(1.0)	36.9	(1.1)			35.2	(0.9)	34.6	(1.1)
Mexico	81.7	(1.9)	82.1	(1.1)	75.1	(1.4)	65.9	(2.2)	63.2	(1.1)	76.6	(1.7)
Norway	79.3	(1.5)	73.2	(1.6)	69.7	(2.2)	47.1	(1.2)	53.7	(1.8)	77.9	(1.5)
Poland	97.8	(0.4)	97.3	(0.3)	95.8	(0.6)	62.2	(1.5)	64.9	(1.1)	61.9	(1.6)
Singapore			96.8	(0.4)	96.4	(0.4)			61.8	(0.8)	63.8	(0.9)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			95.0	(0.7)	94.6	(0.8)			72.8	(1.9)	69.5	(1.9)
Flanders (Belgium)	83.5	(1.2)	81.4	(1.4)			28.9	(1.3)	34.9	(1.6)		
Average 1 ²	77.6	(0.6)	73.0	(0.6)			46.4	(0.6)	47.4	(0.6)		
Average 2 ³			69.4	(0.4)	68.1	(0.5)			47.6	(0.4)	59.3	(0.5)
Average 3 ⁴	76.4	(0.7)	71.3	(0.6)	70.1	(0.8)	49.9	(0.7)	49.9	(0.6)	62.7	(0.9)

			back follov ichers' con				Feed	back follo	wing analy	sis of stu	dent test so	cores
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			33.0	(1.6)	34.1	(1.3)			56.0	(1.9)	63.0	(1.3)
Denmark	33.5	(1.2)	33.5	(1.3)	28.5	(1.7)	56.2	(1.3)	49.2	(1.6)	24.6	(1.9)
Finland	35.0	(1.4)	25.9	(1.3)	39.3	(1.6)	38.2	(1.5)	27.6	(1.1)	27.9	(1.1)
Iceland			18.1	(1.2)	20.1	(1.4)			26.6	(1.3)	28.4	(1.6)
Italy			26.0	(0.9)	25.2	(1.1)			44.2	(1.0)	40.6	(1.3)
Mexico	76.9	(2.0)	68.5	(1.1)	66.0	(1.4)	80.0	(1.7)	80.6	(1.0)	74.8	(1.3)
Norway	45.2	(1.8)	40.8	(1.6)	44.0	(1.7)	67.3	(2.2)	52.9	(1.4)	57.4	(1.8)
Poland	75.9	(1.2)	72.1	(1.1)	69.8	(1.5)	83.6	(0.9)	83.7	(0.8)	75.4	(1.1)
Singapore			70.5	(0.9)	68.3	(0.8)			81.3	(0.7)	82.7	(0.7)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			81.9	(1.3)	79.1	(1.3)			85.5	(1.1)	83.5	(1.5)
Flanders (Belgium)	36.8	(1.2)	42.6	(1.4)			63.7	(1.1)	41.9	(1.3)		
	=0 =	(0.6)	450	(O. E)				(0.6)	# C O	(O. E)		
Average 1 ²	50.5	(0.6)	47.2	(0.5)			64.8	(0.6)	56.0	(0.5)		
Average 2 ³			47.0	(0.4)	47.4	(0.4)			58.8	(0.4)	55.8	(0.4)
Average 3 ⁴	53.3	(0.7)	48.2	(0.6)	49.5	(0.7)	65.1	(0.7)	58.8	(0.5)	52.0	(0.7)

^{1.} Percentage of teachers reporting receiving feedback via the following methods by at least one body, including: "External individuals or bodies", "Principal", "Member(s) of school management team", "Assigned mentors" or "Other teachers".

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/2]

Teachers' feedback by method, across ISCED levels

Percentage of primary education teachers who report receiving feedback via the following **Table 6.17** methods

	Feedba	ck follow	ing self-ass	sessment o	of teachers	' work	Feed	back from	surveys o	r discussio	on with pa	rents
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			44.6	(2.2)	48.1	(1.7)			39.8	(1.3)	40.1	(1.3)
Denmark	42.6	(1.2)	37.2	(1.4)	32.9	(2.1)	39.3	(1.2)	37.4	(1.4)	7.7	(1.0)
Finland	28.9	(1.3)	20.8	(1.1)	23.6	(2.1)	52.4	(1.6)	37.4	(1.1)	23.6	(1.5)
Iceland			15.3	(1.0)	16.2	(1.3)			31.3	(1.4)	18.0	(1.3)
Italy			25.2	(1.0)	21.1	(1.0)			41.3	(1.0)	37.5	(1.3)
Mexico	75.8	(1.9)	69.8	(1.2)	68.2	(1.4)	73.8	(2.1)	67.7	(1.3)	59.5	(1.6)
Norway	55.8	(1.7)	47.5	(1.8)	50.3	(1.6)	56.5	(1.2)	48.4	(2.0)	34.1	(1.6)
Poland	66.2	(1.4)	62.3	(1.3)	57.2	(1.8)	76.3	(1.2)	73.1	(1.0)	65.8	(1.1)
Singapore			87.2	(0.6)	87.2	(0.7)			51.7	(0.9)	52.1	(1.0)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			83.0	(1.5)	82.0	(1.6)			78.5	(1.3)	74.1	(1.6)
Flanders (Belgium)	43.4	(1.5)	35.4	(1.5)			50.2	(1.5)	34.1	(1.2)		
	E0.4	(0.6)		(0.0)			=0.4	(0.6)	40 5	(0.6)		
Average 1 ²	52.1	(0.6)	45.5	(0.6)			58.1	(0.6)	49.7	(0.6)		
Average 2 ³			49.3	(0.4)	48.7	(0.5)			50.7	(0.4)	41.2	(0.4)
Average 3 ⁴	53.9	(0.7)	47.5	(0.6)	46.5	(0.8)	59.6	(0.7)	52.8	(0.6)	38.1	(0.6)

^{1.} Percentage of teachers reporting receiving feedback via the following methods by at least one body, including: "External individuals or bodies", "Principal", "Member(s) of school management team", "Assigned mentors" or "Other teachers".

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/3]

Outcomes of teacher feedback, across ISCED levels

Percentage of teachers who report a "moderate" or "large" positive change in the following

Table 6.18 issues after they received feedback on their work at their school

			blic re			ccub		n scho	ol deve	lonmo	nt initi	ativos	Like	lihood	of car	00r 2d	ancen	nont
	Prin			ver		per ndary	Prin		Lov	ver	Up secor	per	Prin		Lov	ver	Up secor	per
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			39.9	(1.3)	40.4	(1.7)			38.6	(1.5)	40.0	(1.5)			30.8	(1.3)	30.6	(1.4)
Denmark	60.1	(1.3)	56.2	(1.7)	50.5	(2.4)	42.0	(1.3)	44.4	(1.7)	34.4	(2.5)	20.3	(1.1)	22.7	(1.5)	26.7	(2.2)
Finland	59.0	(1.8)	55.9	(1.5)	50.7	(1.6)	36.2	(1.3)	33.0	(1.4)	38.4	(3.7)	14.6	(1.2)	14.5	(1.3)	19.1	(2.4)
Iceland			42.9	(2.3)	30.4	(2.0)			40.9	(2.3)	29.8	(2.0)			13.0	(1.4)	11.1	(1.4)
Italy			54.3	(1.3)	51.0	(1.4)			45.3	(1.2)	40.9	(1.4)			a	a	a	a
Mexico	68.6	(2.1)	62.0	(1.4)	60.3	(1.4)	72.0	(1.8)	62.6	(1.3)	57.6	(1.3)	60.9	(2.1)	51.3	(1.2)	51.3	(1.6)
Norway	65.3	(1.2)	58.9	(1.8)	48.8	(1.1)	37.7	(1.7)	34.9	(2.1)	30.0	(1.2)	16.1	(1.1)	15.2	(1.3)	15.8	(1.3)
Poland	72.2	(1.2)	72.1	(1.0)	66.3	(1.4)	64.7	(1.3)	64.4	(1.0)	62.5	(1.2)	51.5	(1.5)	51.0	(1.1)	49.7	(1.3)
Singapore			49.1	(0.9)	50.8	(0.9)			49.1	(0.9)	51.0	(0.9)			44.3	(0.9)	46.3	(0.8)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			74.8	(1.8)	71.0	(1.7)			72.7	(1.6)	68.4	(1.4)			49.8	(1.8)	44.6	(1.6)
Flanders (Belgium)	54.2	(1.4)	52.4	(1.4)			38.2	(1.4)	34.5	(1.2)			16.2	(0.9)	17.5	(0.8)		
Average 1 ¹	63.2	(0.6)	59.6	(0.6)			48.5	(0.6)	45.6	(0.6)			29.9	(0.6)	28.7	(0.5)		
Average 2 ²			56.6	(0.5)	52.0	(0.5)			48.6	(0.5)	45.3	(0.6)			32.5	(0.4)	32.8	(0.5)
Average 3 ³	65.0	(0.7)	61.0	(0.7)	55.3	(0.7)	50.5	(0.7)	47.9	(0.7)	44.6	(1.0)	32.7	(0.7)	31.0	(0.6)	32.5	(0.8)

	Amount of professional development							Job	respo	nsibilit	ies			Tea	chers' o	onfide	ence	
	Prin	nary	Lov secor		Up secor		Prin	nary	Lov secor		Up		Prin	nary	Lov secor		Up secor	
		(S.E.)	%	(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)		(S.E.)	%	(S.E.)
Australia			31.2	(1.2)	31.4	(1.4)			39.5	(1.3)	39.1	(1.6)			56.5	(1.7)	52.6	(1.6)
Denmark	47.3	(1.3)	47.9	(1.8)	46.8	(1.6)	45.0	(1.4)	47.7	(1.8)	39.6	(2.0)	64.3	(1.3)	64.7	(1.5)	58.0	(2.0)
Finland	28.0	(1.4)	26.9	(1.1)	35.1	(2.0)	40.8	(1.8)	34.4	(1.4)	37.8	(1.5)	69.0	(1.5)	63.5	(1.4)	60.9	(1.7)
Iceland			31.8	(1.9)	21.4	(1.5)			34.4	(2.1)	21.4	(1.8)			58.9	(2.0)	51.9	(2.3)
Italy			46.2	(1.2)	43.8	(1.6)			a	a	a	a			71.9	(1.1)	71.6	(1.2)
Mexico	77.3	(1.7)	67.8	(1.2)	64.2	(1.4)	89.1	(1.2)	82.0	(1.0)	76.4	(1.1)	92.7	(1.1)	89.0	(0.8)	88.1	(0.9)
Norway	25.2	(1.9)	25.4	(1.4)	26.6	(1.5)	31.0	(1.6)	32.0	(1.8)	24.6	(1.2)	71.2	(1.4)	68.0	(1.3)	61.7	(1.4)
Poland	56.4	(1.7)	53.1	(1.1)	53.4	(1.2)	55.9	(1.5)	53.3	(1.1)	52.2	(1.5)	72.1	(1.2)	69.2	(0.8)	66.8	(1.6)
Singapore			47.0	(0.9)	49.8	(0.8)			57.9	(1.0)	59.1	(0.9)			69.2	(0.9)	69.1	(0.8)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			67.7	(1.8)	63.5	(1.7)			73.2	(1.6)	66.9	(1.6)			81.3	(1.4)	76.3	(1.4)
Flanders (Belgium)	39.5	(1.3)	34.0	(1.0)			45.7	(1.2)	43.1	(1.0)			61.3	(1.3)	63.0	(1.1)		
Average 1 ¹	45.6	(0.6)	42.5	(0.5)			51.3	(0.6)	48.8	(0.6)			71.8	(0.5)	69.6	(0.5)		
Average 2 ²			44.5	(0.4)	43.6	(0.5)			50.5	(0.5)	46.3	(0.5)			69.2	(0.4)	65.7	(0.5)
Average 3 ³	46.8	(0.7)	44.2	(0.6)	45.2	(0.7)	52.4	(0.7)	49.9	(0.6)	46.1	(0.7)	73.9	(0.6)	70.9	(0.5)	67.1	(0.7)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/3]

Outcomes of teacher feedback, across ISCED levels

Percentage of teachers who report a "moderate" or "large" positive change in the following **Table 6.18** issues after they received feedback on their work at their school

	Salary and/or financial bonus						Cla	ssroom	mana	gemen	t practi	ices	Kı			l under oject fie		ıg
	Prin	nary	Lov			per ıdary	Prin	nary	Lov		Up secor	per ndary	Prin	nary		wer ndary		per ndary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			11.9	(1.0)	11.9	(1.0)			39.5	(1.7)	34.8	(1.7)			33.5	(1.5)	32.9	(1.4)
Denmark	8.8	(0.7)	11.2	(0.9)	17.7	(1.7)	48.4	(1.3)	41.5	(1.4)	40.3	(2.2)	44.8	(1.4)	43.4	(1.5)	38.4	(2.3)
Finland	12.8	(1.0)	13.1	(1.1)	19.2	(1.8)	39.0	(1.4)	32.8	(1.2)	28.7	(1.7)	36.3	(1.5)	32.8	(1.1)	42.3	(2.6)
Iceland			16.5	(1.7)	12.1	(1.3)			39.7	(1.9)	32.5	(1.7)			37.4	(2.2)	27.2	(1.8)
Italy			a	a	a	a			67.4	(1.2)	61.8	(1.4)			61.8	(1.2)	55.9	(1.6)
Mexico	29.4	(2.2)	30.9	(1.3)	32.7	(1.2)	86.1	(1.2)	82.9	(0.9)	80.9	(1.1)	89.0	(1.3)	83.4	(0.9)	80.8	(1.1)
Norway	19.2	(1.2)	19.9	(1.5)	22.7	(1.1)	54.7	(1.3)	47.1	(2.0)	40.1	(1.6)	47.6	(1.1)	39.7	(1.4)	36.1	(1.7)
Poland	32.1	(1.3)	32.6	(1.0)	30.0	(1.3)	63.2	(1.3)	58.6	(1.0)	56.7	(1.5)	55.9	(1.4)	52.4	(1.0)	51.4	(1.5)
Singapore			38.0	(1.0)	40.2	(0.8)			61.6	(0.9)	59.4	(0.9)			61.5	(1.0)	60.3	(0.8)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			31.3	(1.4)	29.0	(1.4)			76.2	(1.6)	69.5	(1.6)			70.7	(1.8)	60.7	(1.5)
Flanders (Belgium)	4.7	(0.5)	7.0	(0.6)			40.7	(1.2)	37.7	(1.2)			33.9	(1.2)	32.6	(0.9)		
Average 1 ¹	17.8	(0.5)	19.1	(0.4)			55.3	(0.5)	50.1	(0.5)			51.3	(0.6)	47.4	(0.5)		
Average 2 ²			22.8	(0.4)	23.9	(0.4)			54.7	(0.5)	50.5	(0.5)			51.7	(0.4)	48.6	(0.5)
Average 3 ³	20.4	(0.6)	21.5	(0.5)	24.4	(0.6)	58.3	(0.6)	52.6	(0.6)	49.3	(0.7)	54.7	(0.6)	50.3	(0.5)	49.8	(0.8)
		Tea	aching	practio	ces		N		s for te th spec			nt	1			ssessme		
	Prin	nary	Lov			per ıdary	Prin	nary	Lov		Up secor	per ıdary	Prin	nary		wer ndary	Up secor	per ndary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			45.0	(1.7)	42.2	(1.9)			29.0	(1.4)	22.4	(1.5)			42.9	(1.2)	43.2	(1.7)
Denmark	55.5	(1.6)	49.9	(1.7)	52.8	(2.3)	46.9	(1.3)	36.0	(1.7)	24.7	(1.6)	43.0	(1.4)	40.4	(1.5)	42.1	(1.8)
Finland	42.2	(1.6)	37.7	(1.2)	47.4	(1.7)	41.1	(1.6)	30.3	(1.2)	27.6	(1.8)	34.5	(1.2)	31.8	(1.2)	40.7	(2.7)
Iceland			44.7	(2.1)	43.5	(2.1)			36.7	(2.1)	19.2	(1.5)			49.5	(2.1)	37.9	(1.9)
Italy			67.9	(1.1)	65.2	(1.4)			65.9	(1.2)	52.9	(1.5)			69.0	(1.1)	64.7	(1.5)
Mexico	91.0	(1.0)	86.3	(0.9)	85.9	(1.0)	63.5	(2.2)	49.3	(1.1)	43.8	(1.3)	87.1	(1.4)	81.6	(0.9)	81.5	(1.0)
Norway	60.4	(1.3)	52.2	(1.5)	45.9	(1.4)	47.2	(1.3)	33.5	(2.4)	25.4	(1.5)	55.7	(1.4)	47.9	(2.3)	44.3	(1.4)
Poland	64.2	(1.4)	63.5	(1.0)	60.4	(1.4)	67.5	(1.1)	61.6	(0.9)	52.0	(1.4)	70.5	(1.0)	67.3	(1.0)	63.2	(1.9)

45.4 (1.2)

52.0 (0.6)

39.7 (0.9)

52.6 (1.7)

32.8 (1.3)

40.6 (0.6)

43.5 (0.5)

36.7 (0.8)

44.9 (1.6)

35.0 (0.5)

44.7 (1.4)

55.9 (0.5)

Source: OECD, TALIS 2013 Database.

Singapore

Average 11

Average 22

Average 33

Sub-national entities Abu Dhabi (United Arab Emirates)

Flanders (Belgium)

StatLink http://dx.doi.org/10.1787/888933167610

46.3 (1.3)

59.9 (0.6)

69.1 (0.8)

79.1 (1.6)

55.6 (0.5)

59.5 (0.4)

44.1 (1.1) 67.3 (0.8)

72.4 (1.4)

58.3 (0.5)

62.6 (0.6) 57.9 (0.6) 58.5 (0.7) 53.3 (0.7) 42.1 (0.7) 34.7 (0.7)

63.4 (0.9)

77.4 (1.5)

51.5 (0.6)

58.2 (0.6) 53.8 (0.7) 54.4 (0.8)

57.1 (0.5) 55.4 (0.5)

39.9 (1.2) 62.2 (0.8)

73.7 (1.4)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 3/3]

Outcomes of teacher feedback, across ISCED levels

Percentage of teachers who report a "moderate" or "large" positive change in the following

Table 6.18 issues after they received feedback on their work at their school

			Job satis	sfaction					Motiv	ation		
	Prin	nary	Lower se	condary	Upper se	econdary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			46.9	(1.5)	43.4	(1.6)			50.0	(1.5)	47.1	(1.5)
Denmark	59.4	(1.4)	58.6	(1.9)	51.7	(1.9)	61.5	(1.2)	61.7	(1.7)	54.8	(1.9)
Finland	65.9	(1.6)	59.6	(1.3)	57.7	(2.1)	67.7	(1.6)	61.0	(1.7)	58.4	(1.7)
Iceland			58.3	(2.2)	46.9	(2.1)			57.2	(2.1)	46.7	(2.1)
Italy			75.3	(1.1)	72.4	(1.1)			75.0	(1.1)	73.7	(1.1)
Mexico	92.2	(1.0)	89.3	(0.7)	87.8	(0.8)	89.0	(1.2)	86.6	(0.8)	85.5	(1.0)
Norway	61.2	(1.1)	54.6	(1.2)	49.7	(1.4)	60.9	(1.2)	52.9	(1.5)	47.9	(1.4)
Poland	69.8	(1.2)	67.8	(0.9)	64.0	(1.3)	71.4	(1.1)	69.1	(0.8)	65.0	(1.2)
Singapore			61.2	(0.9)	61.6	(0.9)			63.2	(1.0)	63.2	(0.9)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			68.0	(1.5)	64.1	(1.6)			74.6	(1.5)	70.8	(1.6)
Flanders (Belgium)	51.4	(1.4)	52.3	(1.2)			54.8	(1.3)	55.6	(1.2)		
A 11	66.7	(0.5)	62.7	(O.F.)			67.6	(O.F)	645	(O F)		
Average 1 ¹	66.7	(0.5)	63.7	(0.5)			67.6	(0.5)	64.5	(0.5)		
Average 2 ²			64.0	(0.4)	59.9	(0.5)			65.1	(0.5)	61.3	(0.5)
Average 3 ³	69.7	(0.6)	66.0	(0.6)	62.2	(0.7)	70.1	(0.6)	66.3	(0.6)	62.3	(0.7)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/4]

Teachers' working hours, across ISCED levels

Average number of 60-minute hours spent on the following activities during the most recent Table 6.19 complete calendar week¹

		Tota	al work	ing ho	urs²			Hour	s spent	on tea	ching		or	prepa	nt on in ration o	of lesso	ns eith	
	Prin	nary	Lov secon		Up _j secor		Prin	nary	Lov secor		Up secor		Prim	nary	Lov secor		Upp	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia			42.7	(0.5)	43.6	(0.4)			18.6	(0.3)	18.3	(0.2)			7.1	(0.1)	7.5	(0.2)
Denmark	39.2	(0.2)	40.0	(0.4)	41.9	(0.3)	20.3	(0.1)	18.9	(0.1)	16.6	(0.3)	7.6	(0.1)	7.9	(0.1)	11.6	(0.2)
Finland	31.2	(0.4)	31.6	(0.2)	31.3	(0.5)	23.2	(0.2)	20.6	(0.2)	17.1	(0.3)	4.1	(0.1)	4.8	(0.1)	5.4	(0.1)
Iceland			35.0	(0.4)	38.3	(0.6)			19.0	(0.2)	17.4	(0.3)			7.3	(0.2)	8.7	(0.2)
Italy			29.4	(0.3)	31.7	(0.3)			17.3	(0.1)	17.0	(0.1)			5.0	(0.1)	6.3	(0.1)
Mexico	34.5	(0.8)	33.6	(0.6)	33.6	(0.6)	23.7	(0.4)	22.7	(0.4)	20.4	(0.5)	5.7	(0.2)	6.2	(0.1)	7.0	(0.2)
Norway	38.0	(0.2)	38.3	(0.5)	37.9	(0.2)	17.2	(0.2)	15.0	(0.2)	14.4	(0.2)	7.2	(0.1)	6.5	(0.1)	7.9	(0.1)
Poland	36.9	(0.3)	36.8	(0.5)	37.8	(0.3)	18.9	(0.2)	18.6	(0.2)	19.3	(0.2)	5.6	(0.1)	5.5	(0.1)	5.6	(0.1)
Singapore			47.6	(0.4)	47.8	(0.3)			17.1	(0.1)	17.0	(0.1)			8.4	(0.1)	8.2	(0.1)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			36.2	(0.5)	37.7	(0.5)			21.2	(0.3)	21.0	(0.2)			7.6	(0.3)	7.6	(0.2)
Flanders (Belgium)	41.0	(0.3)	37.0	(0.3)			22.8	(0.1)	19.1	(0.2)			6.0	(0.1)	6.3	(0.1)		
	0.0	(0.0)	0.0	(0.0)			04.0	(0.4)	400	(0.4)				(0.4)		(0.0)		
Average 1 ³	36.8	(0.2)	36.2	(0.2)			21.0	(0.1)	19.2	(0.1)			6.0	(0.1)	6.2	(0.0)		
Average 2 ⁴			37.1	(0.1)	38.2	(0.1)			18.9	(0.1)	17.9	(0.1)			6.6	(0.1)	7.6	(0.1)
Average 3 ⁵	35.9	(0.2)	36.1	(0.2)	36.5	(0.2)	20.7	(0.1)	19.2	(0.1)	17.6	(0.1)	6.0	(0.1)	6.2	(0.1)	7.5	(0.1)

- 1. 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.
- 2. 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.
- 3. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 4. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 5. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

Source: OECD, TALIS 2013 Database.



[Part 2/4]

Teachers' working hours, across ISCED levels

Average number of 60-minute hours spent on the following activities during the most recent Table 6.19 complete calendar week¹

		nd dia	spent o logue w	ith co	lleague		Ho		ent mai		correcti k	ng	(in virtu	cludir al cou	ng stude nselling	ent sup g, care	counse pervisio er guid idance)	n, ance
	Prin	nary	Lov		Up secor		Prin	nary	Lov secor		Upp		Prin	ary	Lov		Up _j secor	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia			3.5	(0.1)	3.6	(0.1)			5.1	(0.2)	5.8	(0.2)			2.3	(0.2)	2.3	(0.1)
Denmark	3.6	(0.1)	3.3	(0.1)	2.9	(0.1)	2.5	(0.1)	3.5	(0.1)	5.8	(0.2)	1.2	(0.0)	1.5	(0.1)	2.7	(0.2)
Finland	2.1	(0.1)	1.9	(0.1)	2.7	(0.1)	2.0	(0.1)	3.1	(0.1)	3.7	(0.2)	0.8	(0.0)	1.0	(0.1)	2.3	(0.3)
Iceland			3.3	(0.2)	2.6	(0.1)			3.2	(0.1)	7.5	(0.2)			1.4	(0.1)	1.2	(0.1)
Italy			3.1	(0.1)	3.1	(0.1)			4.2	(0.1)	5.2	(0.1)			1.0	(0.0)	1.1	(0.0)
Mexico	2.7	(0.2)	2.4	(0.1)	2.4	(0.1)	4.0	(0.1)	4.3	(0.1)	5.2	(0.2)	2.4	(0.2)	2.8	(0.1)	3.0	(0.1)
Norway	3.8	(0.1)	3.1	(0.1)	3.2	(0.1)	2.5	(0.1)	5.2	(0.2)	5.8	(0.2)	1.7	(0.0)	2.1	(0.1)	2.3	(0.1)
Poland	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	4.0	(0.1)	4.6	(0.1)	5.1	(0.1)	1.9	(0.1)	2.1	(0.1)	2.4	(0.1)
Singapore			3.6	(0.1)	3.7	(0.1)			8.7	(0.1)	9.1	(0.1)			2.6	(0.0)	2.6	(0.1)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			3.8	(0.2)	4.0	(0.2)			5.4	(0.2)	5.3	(0.1)			3.3	(0.1)	3.3	(0.1)
Flanders (Belgium)	2.1	(0.1)	2.1	(0.0)			4.5	(0.1)	4.5	(0.1)			1.3	(0.1)	1.3	(0.1)		
Average 1 ³	2.8	(0.0)	2.5	(0.0)			3.2	(0.0)	4.2	(0.1)			1.5	(0.0)	1.8	(0.0)		
Average 2 ⁴			3.0	(0.0)	3.0	(0.0)			4.7	(0.0)	5.8	(0.1)			2.0	(0.0)	2.3	(0.0)
Average 35	2.9	(0.0)	2.6	(0.0)	2.7	(0.0)	3.0	(0.0)	4.1	(0.1)	5.1	(0.1)	1.6	(0.0)	1.9	(0.0)	2.5	(0.1)

^{1.} 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.

Source: OECD, TALIS 2013 Database.

^{2.} 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.

^{3.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{4.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{5.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 3/4]

Teachers' working hours, across ISCED levels

Average number of 60-minute hours spent on the following activities during the most recent Table 6.19 complete calendar week¹

lable 6.19	comp	nete	Carerio	Jai vv	CCK													
	ŀ		spent in hool m		cipatior ment	1	wo pa	rk (inc perwo ies you	on gen luding ork, and u under as a tea	comm I othei take ii	unicati clerica your j	on, al			ent on operation or gua	n with		
	Prin	nary	Lov secor		Up _l secor		Prin	nary	Lov secon		Up secor		Prim	ary	Lov secor		Up _l secon	
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia			3.1	(0.2)	2.9	(0.2)			4.3	(0.1)	4.5	(0.1)			1.3	(0.1)	1.3	(0.1)
Denmark	0.7	(0.1)	0.9	(0.1)	0.9	(0.1)	1.9	(0.1)	2.0	(0.1)	2.6	(0.1)	1.9	(0.1)	1.8	(0.1)	0.1	(0.0)
Finland	0.4	(0.0)	0.4	(0.0)	0.6	(0.1)	1.1	(0.0)	1.3	(0.1)	2.6	(0.2)	1.4	(0.0)	1.2	(0.0)	0.6	(0.1)
Iceland			1.2	(0.1)	0.7	(0.1)			2.0	(0.1)	2.0	(0.1)			1.4	(0.1)	0.5	(0.0)
Italy			1.0	(0.0)	1.1	(0.0)			1.8	(0.0)	1.8	(0.1)			1.4	(0.0)	1.4	(0.0)
Mexico	1.8	(0.1)	1.7	(0.1)	2.3	(0.2)	2.6	(0.1)	2.3	(0.1)	3.0	(0.1)	2.4	(0.1)	2.3	(0.1)	1.5	(0.1)
Norway	1.1	(0.1)	1.3	(0.1)	1.5	(0.1)	2.6	(0.1)	2.8	(0.1)	3.0	(0.1)	1.6	(0.1)	1.4	(0.1)	0.6	(0.0)
Poland	0.9	(0.1)	0.9	(0.1)	1.3	(0.1)	2.6	(0.1)	2.5	(0.1)	2.8	(0.1)	1.6	(0.1)	1.3	(0.0)	1.4	(0.0)
Singapore			1.9	(0.1)	2.4	(0.1)			5.3	(0.1)	5.4	(0.1)			1.6	(0.0)	1.5	(0.0)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			2.7	(0.2)	2.8	(0.1)			3.3	(0.2)	3.5	(0.2)			2.6	(0.2)	2.3	(0.1)
Flanders (Belgium)	1.2	(0.0)	0.9	(0.0)			2.6	(0.1)	2.4	(0.1)			1.2	(0.1)	0.7	(0.0)		
Average 1 ³	1.0	(0.0)	1.0	(0.0)			2.2	(0.0)	2.2	(0.0)			1.7	(0.0)	1.4	(0.0)		
Average 2 ⁴			1.5	(0.0)	1.7	(0.0)			2.8	(0.0)	3.1	(0.0)			1.6	(0.0)	1.1	(0.0)
Average 3 ⁵	1.0	(0.0)	1.1	(0.0)	1.3	(0.1)	2.2	(0.0)	2.2	(0.0)	2.8	(0.1)	1.8	(0.0)	1.6	(0.0)	0.8	(0.0)

^{1.} 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.

Source: OECD, TALIS 2013 Database.

^{2.} 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.

^{3.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{4.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{5.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 4/4]

Teachers' working hours, across ISCED levels

Average number of 60-minute hours spent on the following activities during the most recent Table 6.19 complete calendar week¹

			ngaging in o					Hou	rs spent on	all other	tasks	
	Prim	ary	Lower see	condary	Upper se	condary	Prim	ary	Lower se	condary	Upper se	condary
	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)	Average	(S.E.)
Australia			2.3	(0.2)	1.9	(0.1)			2.2	(0.1)	2.3	(0.1)
Denmark	0.7	(0.1)	0.9	(0.1)	0.8	(0.1)	1.7	(0.1)	2.3	(0.1)	2.2	(0.2)
Finland	0.4	(0.0)	0.6	(0.1)	0.5	(0.1)	0.6	(0.0)	1.0	(0.1)	1.9	(0.2)
Iceland			1.1	(0.1)	0.6	(0.1)			2.3	(0.1)	2.4	(0.2)
Italy			0.8	(0.1)	1.0	(0.1)			0.7	(0.1)	0.8	(0.1)
Mexico	2.4	(0.1)	2.3	(0.1)	1.8	(0.1)	2.2	(0.2)	2.0	(0.1)	2.1	(0.1)
Norway	0.6	(0.0)	0.8	(0.1)	1.0	(0.1)	1.1	(0.1)	1.4	(0.2)	1.6	(0.1)
Poland	2.2	(0.1)	2.4	(0.1)	2.1	(0.1)	1.8	(0.1)	1.9	(0.1)	1.9	(0.1)
Singapore			3.4	(0.1)	3.2	(0.1)			2.7	(0.1)	2.5	(0.1)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			2.5	(0.1)	2.4	(0.1)			2.1	(0.1)	2.3	(0.1)
Flanders (Belgium)	1.0	(0.1)	1.3	(0.1)			1.4	(0.1)	1.4	(0.1)		
Average 1 ³	1.2	(0.0)	1.4	(0.0)			1.5	(0.0)	1.7	(0.0)		
Average 2 ⁴			1.7	(0.0)	1.5	(0.0)			1.9	(0.0)	2.0	(0.0)
Average 35	1.3	(0.0)	1.4	(0.0)	1.2	(0.0)	1.5	(0.1)	1.7	(0.1)	1.9	(0.1)

^{1.} 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.

Source: OECD, TALIS 2013 Database.

^{2.} 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.

^{3.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{4.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{5.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



Distribution of time spent in the classroom during an average lesson, across ISCED levels

Average proportion of time teachers report spending for each of these activities in an average Table 6.20 | lesson^{1, 2}

		ministr	asks		Ke	eping	order i	n the c	lassroc	m	A	ctual t	eachin	g and l	learnin	g		
	Prin	nary	Lov			per ıdary	Prin	nary	Lov		Up secor		Prin	nary	Lov		Up	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			7.0	(0.3)	6.7	(0.2)			14.5	(0.4)	9.2	(0.5)			78.1	(0.6)	83.8	(0.6)
Denmark	6.1	(0.2)	6.0	(0.2)	6.3	(0.2)	14.4	(0.3)	9.8	(0.3)	6.8	(0.2)	79.4	(0.4)	84.1	(0.4)	86.7	(0.3)
Finland	6.2	(0.1)	6.0	(0.1)	7.1	(0.4)	14.4	(0.4)	13.1	(0.3)	7.1	(0.4)	78.9	(0.4)	80.6	(0.3)	85.4	(0.7)
Iceland			8.5	(0.3)	7.1	(0.2)			15.7	(0.4)	8.8	(0.4)			75.5	(0.6)	83.8	(0.5)
Italy			7.5	(0.2)	7.9	(0.1)			13.0	(0.3)	11.7	(0.3)			78.5	(0.3)	79.5	(0.4)
Mexico	11.6	(0.3)	11.6	(0.2)	11.2	(0.2)	13.1	(0.3)	12.3	(0.3)	10.8	(0.2)	75.3	(0.5)	75.4	(0.4)	77.5	(0.3)
Norway	7.0	(0.2)	7.6	(0.2)	7.2	(0.2)	11.8	(0.5)	8.9	(0.3)	6.8	(0.2)	80.8	(0.6)	83.0	(0.4)	85.5	(0.4)
Poland	7.4	(0.1)	8.0	(0.1)	8.3	(0.2)	8.7	(0.3)	8.5	(0.3)	7.3	(0.3)	83.2	(0.3)	82.2	(0.4)	83.6	(0.4)
Singapore			11.1	(0.2)	10.6	(0.2)			17.7	(0.2)	14.2	(0.2)			70.9	(0.3)	75.0	(0.3)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			8.3	(0.3)	7.8	(0.2)			12.6	(0.6)	11.8	(0.5)			76.7	(0.8)	78.2	(0.7)
Flanders (Belgium)	8.2	(0.2)	9.3	(0.2)			12.7	(0.3)	13.4	(0.5)			79.0	(0.4)	77.0	(0.6)		
Average 1 ³	7.7	(0.1)	8.1	(0.1)			12.5	(0.2)	11.0	(0.1)			79.4	(0.2)	80.4	(0.2)		
Average 2 ⁴			8.2	(0.1)	8.0	(0.1)			12.6	(0.1)	9.5	(0.1)			78.5	(0.2)	81.9	(0.1)
Average 35	7.7	(0.1)	7.8	(0.1)	8.0	(0.1)	12.5	(0.2)	10.5	(0.1)	7.8	(0.1)	79.5	(0.2)	81.1	(0.2)	83.7	(0.2)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. The sum of time spent in an average lesson may not add up to 100% because some answers that did not add up to 100% were accepted.
- 3. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 4. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 5. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

Source: OECD, TALIS 2013 Database.



[Part 1/3]

Teaching practices, across ISCED levels

Percentage of upper secondary education teachers who use the following teaching practices

Table 6.21 "frequently" or "in all or nearly all lessons"¹

		Present a summary of recently learned content						have d	ent wo ifficulti vho ca	es lear	ning a	nd/or		or w	roblem ork to o v know	lemon	strate	,
	Prin	nary	Lov secor		Up secor		Prin	nary	Lov secor		Up secor		Prin	nary	Lov		Up _j secor	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			72.3	(1.8)	76.0	(1.2)			45.5	(1.8)	33.7	(1.3)			68.6	(1.9)	72.6	(1.3)
Denmark	79.0	(0.9)	79.5	(1.3)	75.5	(1.4)	62.5	(1.4)	44.2	(1.6)	22.3	(1.3)	61.1	(1.4)	68.7	(1.3)	68.3	(1.8)
Finland	72.7	(1.3)	62.0	(1.1)	65.7	(1.3)	59.6	(1.3)	36.6	(1.2)	28.8	(2.0)	70.0	(1.1)	63.7	(1.1)	74.4	(2.6)
Iceland			38.0	(1.6)	44.8	(1.8)			49.0	(1.6)	12.2	(1.1)			39.6	(1.7)	36.7	(1.8)
Italy			63.8	(1.0)	63.9	(0.9)			58.2	(1.2)	31.8	(1.1)			81.0	(0.9)	78.3	(0.9)
Mexico	61.2	(1.9)	62.8	(1.1)	70.5	(1.1)	52.1	(2.0)	31.9	(1.2)	30.9	(1.3)	88.2	(1.2)	84.8	(0.8)	88.7	(0.8)
Norway	92.8	(1.4)	89.2	(0.9)	86.3	(0.7)	82.5	(1.1)	67.4	(1.9)	46.3	(1.7)	54.2	(1.6)	53.6	(1.4)	59.1	(1.1)
Poland	76.5	(1.0)	78.1	(1.0)	75.6	(1.2)	68.0	(1.2)	55.5	(1.5)	51.7	(1.4)	80.8	(1.0)	75.5	(1.2)	75.3	(1.2)
Singapore			67.2	(1.0)	71.2	(0.8)			21.0	(0.8)	25.4	(0.9)			60.6	(0.9)	59.0	(1.0)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			83.3	(1.3)	82.4	(1.1)			66.6	(2.3)	64.6	(1.6)			71.7	(1.4)	71.2	(1.1)
Flanders (Belgium)	67.6	(1.2)	60.4	(1.1)			74.2	(1.2)	27.9	(1.3)			77.8	(0.9)	72.0	(1.0)		
Average 1 ²	75.0	(0.5)	72.0	(0.5)			66.5	(0.6)	43.9	(0.6)			72.0	(0.5)	69.7	(0.5)		
	,,,,	()		, ,			. ,	,,		()				()		()		
Average 2 ³			69.6	(0.4)	71.2	(0.4)			47.6	(0.5)	34.8	(0.4)			66.8	(0.4)	68.4	(0.5)
Average 3 ⁴	76.4	(0.6)	74.3	(0.5)	74.7	(0.5)	64.9	(0.6)	47.1	(0.7)	36.0	(0.7)	70.8	(0.6)	69.2	(0.5)	73.1	(0.7)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/3]

Teaching practices, across ISCED levels

Percentage of upper secondary education teachers who use the following teaching practices

Table 6.21 "frequently" or "in all or nearly all lessons"

1

14510 5121		100110			0		<i>a</i> 10											
	until t	Let students practice similar tasks intil teacher knows that every studen has understood the subject matter							udents or hon		ise boo	lks		come ı	work up with probl	a join	t soluti	
	Prin	nary	Lov secor			per ıdary	Prin	nary	Lov	ver ndary	Up secor		Prin	nary	Lov		Up secor	per ndary
		(S.E.)		(S.E.)	%	(S.E.)		(S.E.)		(S.E.)	%	(S.E.)		(S.E.)	%	(S.E.)		(S.E.)
Australia			62.9	(1.7)	66.8	(1.1)			65.2	(1.5)	66.5	(1.5)			43.7	(2.1)	45.9	(1.7)
Denmark	62.9	(1.3)	57.3	(1.4)	53.9	(1.7)	62.9	(1.3)	60.4	(1.4)	45.3	(1.8)	58.9	(1.3)	79.7	(1.2)	80.5	(1.2)
Finland	70.0	(1.5)	50.7	(1.0)	51.1	(2.1)	70.0	(1.5)	62.4	(0.8)	36.8	(2.6)	31.6	(1.5)	36.7	(1.2)	54.7	(2.2)
Iceland			47.8	(1.7)	53.2	(1.8)			47.3	(1.7)	62.9	(1.6)			43.9	(1.4)	47.5	(1.8)
Italy			78.4	(1.0)	65.6	(1.1)			84.6	(0.8)	58.2	(0.9)			31.9	(1.2)	34.4	(1.1)
Mexico	89.9	(1.0)	79.8	(1.0)	83.4	(0.9)	97.7	(0.5)	93.7	(0.5)	90.5	(0.9)	84.7	(1.6)	73.4	(1.2)	78.1	(1.1)
Norway	83.2	(1.8)	66.4	(1.2)	62.9	(1.5)	92.8	(0.8)	71.9	(1.4)	50.4	(1.3)	64.9	(1.5)	72.7	(1.7)	78.1	(1.5)
Poland	85.9	(0.8)	78.7	(0.9)	76.4	(1.2)	72.5	(1.1)	63.5	(1.1)	53.3	(1.5)	46.5	(1.5)	42.4	(1.3)	49.0	(1.4)
Singapore			67.5	(0.9)	68.0	(0.9)			83.6	(0.7)	82.7	(0.7)			33.0	(0.9)	32.5	(0.9)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			81.6	(1.3)	79.8	(1.2)			85.0	(0.9)	84.7	(1.2)			76.1	(2.0)	77.3	(1.4)
Flanders (Belgium)	75.8	(1.1)	59.3	(1.2)			89.5	(0.7)	52.9	(1.5)			58.7	(1.3)	33.8	(1.0)		
	= 0.0	(O =)		(O E)			00.0	/O. 40		(O. E)				(0.6)		(O E)		
Average 1 ²	78.0	(0.5)	65.4	(0.5)			80.9	(0.4)	67.5	(0.5)			57.5	(0.6)	56.5	(0.5)		
Average 2 ³			67.1	(0.4)	66.1	(0.4)			71.8	(0.4)	63.1	(0.5)			53.3	(0.5)	57.8	(0.5)
Average 3 ⁴	78.4	(0.6)	66.6	(0.5)	65.5	(0.7)	79.2	(0.5)	70.4	(0.5)	55.3	(0.8)	57.3	(0.7)	61.0	(0.6)	68.1	(0.7)

- 1. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
- 2. Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).
- 3. Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).
- 4. Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).

Source: OECD, TALIS 2013 Database.



[Part 3/3]

Teaching practices, across ISCED levels

Percentage of upper secondary education teachers who use the following teaching practices

Table 6.21 "frequently" or "in all or nearly all lessons"¹

			work on p ast one we				Si	tudents us	e ICT for	projects o	r class wor	·k
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			51.8	(1.5)	50.9	(1.4)			66.8	(1.9)	68.8	(1.8)
Denmark	21.9	(1.0)	23.1	(1.2)	21.9	(1.6)	44.3	(1.7)	73.9	(1.9)	82.2	(1.4)
Finland	11.9	(0.9)	14.1	(0.8)	18.0	(1.9)	20.7	(1.3)	18.2	(0.9)	44.2	(2.5)
Iceland			24.7	(1.5)	30.1	(1.4)			31.8	(1.4)	52.3	(1.4)
Italy			27.5	(1.1)	20.0	(1.0)			30.9	(1.4)	28.7	(1.1)
Mexico	83.9	(1.3)	57.1	(1.0)	48.8	(1.5)	39.7	(2.2)	56.2	(1.2)	71.0	(1.3)
Norway	23.5	(1.3)	33.7	(1.4)	34.3	(1.2)	57.2	(1.8)	73.8	(1.7)	89.8	(0.7)
Poland	15.1	(1.0)	15.8	(0.7)	15.2	(0.9)	29.4	(1.3)	36.4	(1.5)	32.6	(1.1)
Singapore			26.6	(0.8)	21.1	(0.8)			30.0	(0.8)	26.6	(0.9)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			53.0	(2.0)	53.9	(1.5)			72.1	(1.7)	74.0	(1.1)
Flanders (Belgium)	32.4	(1.4)	20.6	(1.0)			40.4	(1.3)	27.0	(1.1)		
Average 1 ²	31.4	(0.5)	27.4	(0.4)			38.6	(0.7)	47.6	(0.6)		
Average 2 ³			32.7	(0.4)	31.4	(0.4)			49.0	(0.5)	57.0	(0.4)
Average 3 ⁴	31.2	(0.5)	28.7	(0.5)	27.6	(0.7)	38.3	(0.8)	51.7	(0.7)	63.9	(0.7)

^{1.} These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

^{3.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{4.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 1/4]

Teacher self-efficacy, across ISCED levels

Table 6.22 Percentage of teachers who feel they can do the following "quite a bit" or "a lot"

		Self-efficacy in student engagement																
	Get		ts to bo		hey ca ork	n do	He	lp my	studen	ts value	e learn	ing	Mo		studen est in s			ow
	Prin	nary	Lov			Upper condary		nary	Lov			per ndary	Prin	nary	Lov		Up	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			86.9	(1.1)	87.7	(1.0)			81.3	(1.4)	82.9	(1.2)			65.8	(1.3)	68.8	(1.4)
Denmark	98.8	(0.3)	99.0	(0.2)	98.1	(0.4)	97.3	(0.4)	96.6	(0.6)	96.7	(0.5)	85.1	(0.9)	82.5	(0.9)	76.2	(1.7)
Finland	89.7	(0.9)	83.9	(0.8)	86.7	(1.1)	89.1	(0.8)	77.3	(0.8)	82.7	(1.5)	72.8	(1.3)	60.4	(1.1)	62.5	(2.0)
Iceland			88.6	(1.0)	82.5	(1.2)			82.5	(1.1)	76.7	(1.5)			72.1	(1.3)	66.3	(1.4)
Italy			98.0	(0.3)	96.3	(0.4)			95.6	(0.3)	93.2	(0.5)			87.3	(0.7)	82.6	(0.7)
Mexico	87.7	(1.1)	87.8	(0.6)	90.2	(0.7)	94.3	(0.7)	91.0	(0.6)	92.7	(0.6)	86.2	(1.1)	79.1	(0.9)	80.4	(1.0)
Norway	90.9	(1.0)	79.9	(1.0)	74.4	(1.3)	75.8	(1.5)	60.9	(1.9)	53.3	(1.4)	59.0	(2.0)	38.8	(1.0)	38.9	(1.3)
Poland	88.3	(0.7)	80.7	(0.8)	80.8	(1.0)	78.5	(1.0)	67.7	(1.0)	68.8	(1.2)	71.6	(1.4)	59.8	(1.1)	62.9	(1.4)
Singapore			83.9	(0.7)	85.0	(0.7)			81.5	(0.8)	83.2	(0.7)			72.1	(0.9)	74.0	(0.8)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			96.3	(0.5)	95.9	(0.5)			95.4	(0.6)	93.8	(0.6)			94.9	(0.5)	92.9	(0.6)
Flanders (Belgium)	96.6	(0.4)	93.1	(0.5)			92.5	(0.5)	81.6	(0.8)			87.5	(0.7)	77.7	(0.9)		
Average 1 ¹	92.0	(0.3)	87.4	(0.3)			87.9	(0.4)	79.2	(0.4)			77.1	(0.5)	66.4	(0.4)		
Average 2 ²			88.5	(0.2)	87.8	(0.3)			83.0	(0.3)	82.4	(0.3)			71.3	(0.3)	70.6	(0.4)
Average 3 ³	91.1	(0.4)	86.3	(0.3)	86.0	(0.4)	87.0	(0.4)	78.7	(0.5)	78.8	(0.5)	75.0	(0.6)	64.1	(0.5)	64.2	(0.7)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 2/4]

Teacher self-efficacy, across ISCED levels

Table 6.22 Percentage of teachers who feel they can do the following "quite a bit" or "a lot"

	Self-efficacy in student engagement								Self-ei	ficacy	in clas	sroom	manag	ement				
	ŀ	lelp stu	ıdents	think o	riticall	y	C		disrup the cl			r	al	Mak bout st	e my e: udent l			ar
	Prin	nary	Lov			Jpper condary P		nary	Lov		Up secor		Prin	nary	Lov		Up secoi	per ıdary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			78.4	(1.3)	84.0	(1.1)			86.7	(0.7)	87.3	(1.0)			93.4	(0.8)	94.8	(0.6)
Denmark	88.9	(0.7)	92.8	(0.7)	93.3	(0.7)	95.8	(0.5)	96.3	(0.6)	95.0	(0.7)	98.5	(0.3)	98.8	(0.3)	95.3	(0.6)
Finland	75.5	(1.1)	72.8	(1.0)	76.2	(1.1)	90.0	(0.8)	86.3	(0.8)	78.8	(1.8)	95.5	(0.6)	92.7	(0.5)	85.8	(1.7)
Iceland			74.6	(1.2)	73.6	(1.6)			89.9	(0.9)	87.8	(1.1)			91.2	(0.9)	88.2	(1.1)
Italy			94.9	(0.4)	95.0	(0.4)			93.5	(0.5)	90.5	(0.6)			93.4	(0.5)	91.8	(0.5)
Mexico	89.5	(1.0)	88.8	(0.7)	89.6	(0.6)	86.1	(1.1)	86.0	(0.7)	87.8	(0.8)	85.9	(1.2)	87.4	(0.8)	90.0	(0.6)
Norway	59.9	(3.1)	66.6	(1.8)	65.3	(1.0)	84.5	(2.2)	83.8	(0.7)	81.6	(1.0)	91.6	(1.9)	89.7	(0.7)	85.6	(0.9)
Poland	80.5	(1.0)	77.5	(0.8)	74.8	(1.0)	90.5	(0.7)	88.3	(0.9)	88.3	(0.8)	95.5	(0.6)	94.6	(0.6)	94.3	(0.6)
Singapore			74.9	(0.7)	76.4	(0.8)			79.5	(0.7)	78.5	(0.7)			89.0	(0.6)	89.2	(0.6)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			93.1	(0.7)	94.7	(0.6)			94.4	(0.7)	94.0	(0.7)			96.7	(0.4)	96.3	(0.4)
Flanders (Belgium)	89.2	(0.8)	87.4	(0.7)			96.4	(0.4)	96.4	(0.4)			97.7	(0.4)	97.2	(0.3)		
Average 1 ¹	80.6	(0.6)	81.0	(0.4)			90.5	(0.5)	89.5	(0.3)			94.1	(0.4)	93.4	(0.2)		
Average 2 ²			81.4	(0.3)	82.3	(0.3)			88.5	(0.2)	87.0	(0.3)			92.7	(0.2)	91.1	(0.3)
Average 3 ³	78.9	(0.7)	79.7	(0.5)	79.9	(0.4)	89.4	(0.5)	88.1	(0.3)	86.3	(0.5)	93.4	(0.5)	92.6	(0.3)	90.2	(0.4)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 3/4]

Teacher self-efficacy, across ISCED levels

Table 6.22 Percentage of teachers who feel they can do the following "quite a bit" or "a lot"

		Self-efficacy in student engagement											Self-ef	ficacy i	in instr	uction		
	Get st	udents	to foll	ow cla	ssroon	rules	Cal	m a st	udent v or n		disrupt	tive	Craft	good	questio	ns for	my stu	dents
	Prin	nary	Lov		Up secon	per idary	Prin	nary	Lov		Up secor		Prin	nary	Lov		Up secor	
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			89.4	(0.9)	92.6	(0.7)			83.6	(1.1)	82.3	(1.1)			86.0	(0.8)	87.8	(0.9)
Denmark	96.1	(0.4)	94.9	(0.7)	89.2	(0.9)	93.2	(0.6)	94.3	(0.6)	94.5	(0.7)	96.1	(0.5)	96.3	(0.5)	97.6	(0.4)
Finland	92.0	(0.8)	86.6	(0.8)	81.7	(1.7)	85.4	(1.0)	77.1	(0.9)	69.9	(1.6)	93.6	(0.6)	90.1	(0.5)	89.4	(0.8)
Iceland			92.1	(0.8)	86.5	(1.2)			88.2	(1.0)	80.9	(1.3)			96.1	(0.5)	94.7	(0.7)
Italy			96.7	(0.3)	92.5	(0.5)			89.7	(0.6)	86.7	(0.7)			93.8	(0.5)	93.4	(0.5)
Mexico	85.9	(1.3)	85.0	(0.7)	87.0	(0.8)	77.3	(1.3)	78.0	(1.0)	82.8	(1.0)	83.9	(1.4)	85.2	(0.8)	88.6	(0.7)
Norway	89.1	(1.4)	85.6	(0.9)	79.4	(0.9)	86.0	(2.2)	84.3	(0.8)	82.6	(1.1)	78.4	(2.7)	79.0	(1.4)	78.0	(1.1)
Poland	94.4	(0.5)	91.3	(0.7)	91.1	(1.0)	89.2	(1.1)	87.2	(0.8)	88.6	(1.0)	85.3	(1.1)	79.4	(0.8)	79.3	(1.1)
Singapore			83.5	(0.6)	83.6	(0.7)			75.3	(0.7)	73.3	(0.8)			81.2	(0.7)	83.3	(0.7)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			96.5	(0.5)	94.3	(0.6)			93.4	(0.8)	93.8	(0.7)			94.8	(0.5)	95.5	(0.7)
Flanders (Belgium)	97.2	(0.4)	96.6	(0.4)			96.3	(0.4)	95.4	(0.5)			94.9	(0.5)	95.1	(0.4)		
Average 1 ¹	92.4	(0.4)	90.0	(0.3)			87.9	(0.5)	86.1	(0.3)			88.7	(0.6)	87.5	(0.3)		
Average 2 ²			90.2	(0.2)	87.8	(0.3)			85.1	(0.3)	83.5	(0.3)			88.2	(0.2)	88.7	(0.3)
Average 3 ³	91.5	(0.4)	88.7	(0.3)	85.7	(0.5)	86.2	(0.6)	84.2	(0.4)	83.7	(0.5)	87.5	(0.7)	86.0	(0.4)	86.6	(0.4)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



[Part 4/4]

Teacher self-efficacy, across ISCED levels

Table 6.22 Percentage of teachers who feel they can do the following "quite a bit" or "a lot"

	Self-efficacy in instruction																	
	Use a	variet	y of as	sessme	nt stra	tegies	Provid	de an a	Iternat en stu	ive exp	olanatio	on for		lement strateg				
	Prin	nary		wer ndary		pper ondary P		nary	Lov		Up secor		Prin	nary	Lov		Up secoi	per ndary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			86.3	(1.1)	88.3	(1.0)			94.0	(0.7)	95.7	(0.5)			82.7	(1.0)	83.2	(1.0)
Denmark	77.5	(1.3)	79.5	(1.1)	79.9	(1.2)	98.1	(0.3)	98.0	(0.4)	97.9	(0.5)	89.0	(0.8)	86.6	(1.1)	91.4	(0.8)
Finland	68.2	(1.3)	64.2	(1.1)	62.6	(2.6)	81.6	(1.0)	76.9	(0.9)	73.1	(2.2)	76.3	(1.2)	68.2	(1.1)	70.2	(2.8)
Iceland			85.7	(1.0)	85.1	(1.3)			91.8	(0.8)	92.5	(0.9)			77.4	(1.2)	75.9	(1.3)
Italy			90.9	(0.6)	87.7	(0.6)			98.3	(0.2)	97.5	(0.3)			91.3	(0.5)	84.9	(0.7)
Mexico	83.4	(1.5)	83.9	(0.8)	86.8	(0.8)	93.4	(0.8)	93.7	(0.4)	95.0	(0.5)	90.2	(1.0)	87.5	(0.8)	88.9	(0.9)
Norway	60.7	(2.7)	73.4	(1.6)	73.6	(0.9)	86.6	(1.5)	87.8	(1.1)	88.7	(0.9)	72.4	(1.7)	66.0	(1.5)	72.4	(0.9)
Poland	88.3	(0.9)	86.7	(0.6)	88.1	(0.7)	88.0	(1.1)	87.4	(0.6)	86.7	(1.1)	70.8	(1.4)	66.0	(1.0)	66.1	(1.2)
Singapore			71.6	(0.9)	72.4	(0.8)			88.5	(0.6)	89.9	(0.6)			72.8	(0.8)	74.5	(0.9)
Sub-national entities																		
Abu Dhabi (United Arab Emirates)			93.2	(0.6)	93.6	(0.6)			96.6	(0.4)	97.6	(0.4)			95.1	(0.6)	95.4	(0.5)
Flanders (Belgium)	76.7	(1.0)	80.7	(1.1)			97.6	(0.3)	97.7	(0.3)			75.2	(0.9)	73.2	(1.1)		
Average 1 ¹	75.8	(0.6)	78.1	(0.4)			90.9	(0.4)	90.3	(0.3)			79.0	(0.5)	74.6	(0.5)		
Average 2 ²			81.5	(0.3)	81.8	(0.4)			91.3	(0.2)	91.5	(0.3)			79.4	(0.3)	80.3	(0.4)
Average 3 ³	75.6	(0.8)	77.5	(0.5)	78.2	(0.6)	89.5	(0.5)	88.8	(0.3)	88.3	(0.5)	79.7	(0.6)	74.9	(0.5)	77.8	(0.7)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



Teacher job satisfaction, across ISCED levels

Table 6.23 Percentage of teachers who "agree" or "strongly agree" with the following statements

	I think	that the te	aching pro	ofession is	valued in	society		All in al	l, I am sati	isfied with	my job	
	Prin	nary	Lower se	condary	Upper se	condary	Prin	nary	Lower se	condary	Upper se	condary
	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)	%	(S.E.)
Australia			38.5	(1.3)	36.2	(1.4)			90.0	(1.0)	93.0	(8.0)
Denmark	16.9	(1.1)	18.4	(1.0)	34.1	(1.5)	93.2	(0.7)	92.9	(0.9)	94.7	(0.6)
Finland	57.0	(1.5)	58.6	(1.2)	69.3	(1.4)	92.9	(0.6)	91.0	(0.6)	91.9	(0.7)
Iceland			17.5	(1.1)	18.8	(1.4)			94.5	(0.8)	94.7	(0.8)
Italy			12.5	(0.7)	9.8	(0.5)			94.4	(0.5)	91.9	(0.5)
Mexico	42.4	(1.8)	49.5	(1.3)	65.3	(1.3)	98.1	(0.4)	97.8	(0.3)	98.1	(0.3)
Norway	29.2	(1.7)	30.6	(1.5)	36.6	(1.0)	96.1	(0.7)	94.9	(0.7)	94.9	(0.5)
Poland	21.6	(1.4)	17.9	(0.8)	20.9	(1.2)	95.5	(0.6)	92.7	(0.6)	93.5	(0.7)
Singapore			67.6	(0.9)	69.4	(0.9)			88.4	(0.6)	89.1	(0.5)
Sub-national entities												
Abu Dhabi (United Arab Emirates)			66.5	(1.7)	61.9	(1.4)			88.9	(0.9)	90.5	(0.7)
Flanders (Belgium)	45.0	(1.4)	45.9	(1.1)			94.8	(0.4)	95.3	(0.5)		
Average 1 ¹	35.4	(0.6)	36.8	(0.5)			95.1	(0.2)	94.1	(0.3)		
Average 2 ²			37.8	(0.4)	42.2	(0.4)			92.6	(0.2)	93.2	(0.2)
Average 3 ³	33.4	(0.7)	35.0	(0.5)	45.2	(0.6)	95.2	(0.3)	93.9	(0.3)	94.6	(0.2)

^{1.} Average for countries participating in the primary and lower secondary education survey (Denmark, Finland, Mexico, Norway, Poland and Flanders [Belgium]).

Source: OECD, TALIS 2013 Database.

StatLink http://dx.doi.org/10.1787/10.1787/888933168340

^{2.} Average for countries participating in the lower secondary and upper secondary education survey (Australia, Denmark, Finland, Iceland, Italy, Mexico, Norway, Poland, Singapore and Abu Dhabi [United Arab Emirates]).

^{3.} Average for countries participating in the primary, lower secondary and upper secondary education survey (Denmark, Finland, Mexico, Norway and Poland).



LIST OF TABLES ONLY AVAILABLE ON LINE

The following tables are available in electronic form only.

Chapter 2 Primary teachers and their schools

Table 2.9.Web	School resources in primary education, detailed results
	http://dx.doi.org/10.1787/888933166393
Table 2.18.Web	Principals' leadership in primary education, detailed results
	http://dx.doi.org/10.1787/888933166490

Chapter 3 The work of primary education teachers

Table 3.4.Web	Outcomes of teacher feedback in primary education, detailed results
	http://dx.doi.org/10.1787/888933166556
Table 3.8.Web	Teachers' needs for professional development in primary education, detailed results
	http://dx.doi.org/10.1787/888933166607
Table 3.12.Web	Teaching practices in primary education, detailed results
	http://dx.doi.org/10.1787/888933166650
Table 3.15.Web	Teacher co-operation in primary education, detailed results
	http://dx.doi.org/10.1787/888933166694
Table 3.16.Web	Teachers' self-efficacy in primary education, detailed results
	http://dx.doi.org/10.1787/888933166714
Table 3.17.Web	Teachers' job satisfaction in primary education, detailed results
	http://dx.doi.org/10.1787/888933166739
Table 3.18.Web	Relationship between teacher and school characteristics and societal value of teaching in primary
	education, detailed results
	http://dx.doi.org/10.1787/888933166757
Table 3.19.Web	Relationship between teachers' characteristics and their self-efficacy in primary education, detailed results
	http://dx.doi.org/10.1787/888933166771
Table 3.20.Web	Relationship between teachers' characteristics and their job satisfaction in primary education,
Table 3.20. Web	detailed results
	http://dx.doi.org/10.1787/888933166794
Table 3.21.Web	Relationship between classroom and school environment and teachers' self-efficacy in primary
	education, detailed results
	http://dx.doi.org/10.1787/888933166816
Table 3.22.Web	Relationship between classroom and school environment and teachers' job satisfaction in primary education, detailed results
	http://dx.doi.org/10.1787/888933166834
Table 3.23.Web	Standard deviation related to teachers' job satisfaction and self-efficacy in primary education
	http://dx.doi.org/10.1787/888933166846

Chapter 4 Upper secondary teachers and their schools

Table 4.9.Web	School resources in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933166945
Table 4.18.Web	Principals' leadership in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167046



Chapter 5 The work of upper secondary teachers

Table 5.4.Web	Outcomes of teacher feedback in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167100
Table 5.10.Web	Teachers' needs for professional development in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167174
Table 5.14.Web	Teaching practices in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167221
Table 5.17.Web	Teacher co-operation in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167267
Table 5.18.Web	Teachers' self-efficacy in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167280
Table 5.19.Web	Teachers' job satisfaction in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167304
Table 5.20.Web	Relationship between teacher and school characteristics and societal value of teaching in upper secondary education, detailed results
	http://dx.doi.org/10.1787/888933167326
Table 5.21.Web	Relationship between teachers' characteristics and their self-efficacy in upper secondary education detailed results
	http://dx.doi.org/10.1787/888933167346
Table 5.22.Web	Relationship between teachers' characteristics and their job satisfaction in upper secondary education detailed results
	http://dx.doi.org/10.1787/888933167365
Table 5.23.Web	Relationship between classroom and school environment and teachers' self-efficacy in uppe secondary education, detailed results
	http://dx.doi.org/10.1787/888933167383
Table 5.24.Web	Relationship between classroom and school environment and teachers' job satisfaction in uppe secondary education, detailed results
	http://dx.doi.org/10.1787/888933167408
Table 5.25.Web	Standard deviation related to teachers' job satisfaction and self-efficacy in upper secondary education
	http://dx.doi.org/10.1787/888933167417
Table 5.26.Web	Sources for upper secondary education teachers' feedback
	http://dx.doi.org/10.1787/888933167429
Table 5.27.Web	Methods for upper secondary education teachers' feedback
	http://dx.doi.org/10.1787/888933167437



Annex C



ANNEX C

LIST OF CONTRIBUTORS

TALIS is a collaborative effort, bringing together expertise from participating countries that share an interest in developing a survey programme to inform their policies about teachers, teaching and learning. This report is the product of collaboration and co-operation among the member countries of the OECD and the partner countries participating in the second round of TALIS. Engagement with bodies representing teachers and regular briefings and exchanges with the Trade Union Advisory Council at the OECD have been very important in the development and implementation of TALIS. In particular, the co-operation of the teachers and principals in the participating schools has been crucial in ensuring the success of TALIS.

The TALIS Board of Participating Countries has, in the context of OECD objectives, driven the development of TALIS and has determined its policy objectives. This includes the objectives of the analysis and reports produced, the conceptual framework and the development of the TALIS questionnaires. The Board has also overseen the implementation of the survey.

Participating countries implemented TALIS at the national level at National Project Centres through, among others, National Project Managers (NPMs), National Data Managers (NDMs) and National Sampling Managers (NSMs) who were subject to rigorous technical and operational procedures. The NPMs played a crucial role in helping to secure the co-operation of schools, to validate the questionnaires, to manage the national data collection and processing and to verify the results from TALIS. The NDMs co-ordinated data processing at the national level and liaised in the cleaning of the data. The NSMs were responsible for implementing TALIS, respecting sampling procedures and other rigorous technical and operational procedures.

An Instrument Development Expert Group (IDEG) was established to translate the policy priorities into questionnaires to address the policy and analytical questions that had been agreed to by the participating countries. A Technical Advisory Group (TAG) was assembled to advise during the decision-making process for technical or analytical issues. A group of subject-matter experts and analysts were also critical in the analytical phase and drafting of the initial reports.

The co-ordination and management of implementation at the international level was the responsibility of the appointed contractor, the Data Processing and Research Centre of the International Association for the Evaluation of Educational Achievement (IEA DPC). The IEA DPC Secretariat was responsible for overseeing the verification of the translation and for quality control in general. Statistics Canada, as a sub-contractor of the IEA DPC, developed the sampling plan, advised countries on its application, calculated the sampling weights and advised on the calculation of sampling errors.

The OECD Secretariat had overall responsibility for managing the programme, monitoring its implementation on a day-to-day basis and serving as the Secretariat of the Board of Participating Countries.

Members of the TALIS Board of Participating Countries for TALIS 2013

Chair: Anne-Berit Kavli

Australia: Paul Hunt; Margaret Pearce; Mark Unwin

Abu Dhabi (United Arab Emirates): Masood Badri;

Rabih Abouchakra; Tarek El Mourad;

Hussein Al-Hindawi

Alberta (Canada): Marie-France Chouinard;

Greg Rudolf; Janusz Zieminski

Brazil: Daniel Jaime Capistrano de Olivera;

Ana Carolina Silva Cirotto; Juliana Marquez Da Silva

Bulgaria: Neda Oscar Kristanova; Marina Mavrodieva

Chile: Violeta Aranciba Clavel; Carolina Velasco Ortúzar Croatia: Michelle Bras Roth

Czech Republic: Jana Palečková; Lubomír Martinec

Denmark: Elsebeth Aller

England (United Kingdom): Lorna Bertrand

Estonia: Priit Laanoja

Finland: Kimmo Hämäläinen Flanders (Belgium): Isabelle Erauw

France: Jean-François Chesné; Catherine Moisan;

Florence Lefresne; Caroline Simonis-Sueur

Iceland: Julius Björnsson

Israel: Hany Shilton; Hagit Glickman

Italy: Maria Gemma de Sanctis; Antonella Tozza

Japan: Tsutomu Takaguchi; Akiko Ono;

Kenichi Fujioka

Korea: Miran Jang; Doki Kim; Kapsung Kim

Latvia: Ennata Kivrina

Malaysia: Norlida Ab Wahab; Faizulizami Osmin

Mexico: Ana Maria Aceves Estrada; Marina Jazmin Santos Insua Netherlands: Hans Ruesink Norway: Anne-Berit Kavli

Poland: Lidia Olak; Magdalena Krawczyk-Radwan;

Kamila Hernik

Portugal: Nuno Rodrigues Romania: Silviu Cristian Mirescu

Serbia: Danijela Petrovic Singapore: Siew Hoong Wong Slovak Republic: Romana Kanovska

Spain: Carmen Tovar Sanchez; Javier Munoz Sanchez-

Brunete; José Antonio Blanco Fernandez

Sweden: Katalin Bellaagh United States: Patrick Gonzales

TALIS National Project Managers

Australia: Frances Eveleigh; Christopher Freeman

Abu Dhabi (United Arab Emirates): Tarek El Mourad

Alberta (Canada): Janusz Zieminski Brazil: Ana Carolina Silva Cirotto; Juliana Marques da Silva (Deputy) Bulgaria: Marina Mavrodieva Chile: Carla Guazzini Galdames Croatia: Michelle Braš Roth

Czech Republic: Vendula Kašparová;

Lubomír Martinec

Denmark: Flsebeth Aller

England (United Kingdom): Katharine Brooks;

Dawn Pollard **Estonia**: Ülle Übius

Finland: Matti Taajamo; Eija Puhakka (Deputy) Flanders (Belgium): Alexia Deneire; Jan Vanhoof

France: Jean-François Chesné Iceland: Ragnar Ólafsson Israel: Lisa Amdur; Hani Shilton Italy: Maria Gemma De Sanctis

Japan: Akiko Ono; Hiroki Kato; Takashi Fuchigami

Korea: Kapsung Kim **Latvia**: Andrejs Geske

Malaysia: Wan Ilias Wan Salleh; Norlida Ab Wahab Mexico: Ana Maria Aceves Estrada; Marina Jazmin

Santos Insua (Deputy)

Netherlands: Mirjam Stuivenberg; Eva van der Boom

Norway: Per Olaf Aamodt

Poland: Kamila Hernik; Rafal Piwowarski

Portugal: Nuno Rodrigues Romania: Silviu Cristian Mirescu

Serbia: Danijela Petrović; Ivan Anić (Deputy) Singapore: Siew Yee Lim (2012-2013); Susan Wee;

Ivan Lim; Puay Huat Chua (2011-2012)

Slovak Republic: Barbora Mihalikova; Ervin Stava

Spain: Carmen Tovar Sanchez Sweden: Katalin Bellaagh

United States: Greg Strizek; Erin Roth

TALIS National Data Managers

Australia: Late O'Malley

Abu Dhabi (United Arab Emirates): Tarek El Mourad;

Hussein Al-Hindawi (Deputy) **Alberta (Canada)**: Marilyn Huber





Brazil: Daniel Oliveira; Margarete Souza

Bulgaria: Marina Mavrodieva

Chile: Cristian Pablo Yáñez Navarro;

Roberto Schurch Santana Croatia: Michelle Braš Roth

Czech Republic: Martina Ševců; Jan Hučín

Denmark: Thomas Larsen

England (United Kingdom): Mark Johannesen

Estonia: Lauri Veski Finland: Eija Puhakka

Flanders (Belgium): Alexia Deneire

France: Sandrine Prost Iceland: Ragnar Ólafsson Israel: Lisa Amdur Italy: Antonio Panaggio

Japan: Kenji Matsubara Korea: Kapsung Kim Latvia: Linda Mihno

Malaysia: Norlida Ab Wahab; Faizulizami Osmin

Mexico: Roberto Peña

Netherlands: Mirjam Stuivenberg

Norway: Nils Vibe

Poland: Mikolaj Hnatiuk; Andrzej Wichrowski

Portugal: Joaquim Santos Romania: Silviu Cristian Mirescu

Serbia: Oliver Toskovic; Smiljana Josic (Deputy)

Singapore: Ching Ling Ang; Sophie Lu; Soon Hock Teo

Slovak Republic: Barbora Mihalikova Spain: Francisco Javier García Crespo

Sweden: Cecilia Stenman United States: Greg Strizek

TALIS National Sampling Managers

Australia: Late O'Malley

Denmark: Jesper Lund

Abu Dhabi (United Arab Emirates): Tarek El Mourad

Alberta (Canada): Marilyn Huber

Brazil: Daniel Oliveira Bulgaria: Marina Mavrodieva Chile: Diego Núñez San Martín Croatia: Michelle Braš Roth

England (United Kingdom): David Thomson

Estonia: Lauri Veski Finland: Eija Puhakka

Flanders (Belgium): Alexia Deneire

France: Pierrette Briant **Iceland**: Ragnar Ólafsson

Israel: Lisa Amdur

Italy: Maria Teresa Morana Japan: Kenji Matsubara Korea: Kapsung Kim

Malaysia: Norlida Ab Wahab

Mexico: Moacyr Noe

Latvia: Linda Mihno

Netherlands: Mirjam Stuivenberg

Norway: Joakim Caspersen Poland: Mikolaj Hnatiuk Portugal: Joaquim Santos

Romania: Silviu Cristian Mirescu

Serbia: Oliver Toskovic Singapore: Siew Yee Lim Slovak Republic: Ervin Stava Spain: Araceli Sánchez Sweden: Christian Tallberg United States: Greg Strizek

OECD Secretariat

Core TALIS Team

Julie Bélanger Michael Davidson Katarzyna Kubacka Sophie Limoges Tadakazu Miki Simon Normandeau Mathilde Overduin

Mathilde Overduin Delphine Versini

Kristen Weatherby

Other Secretariat Support

Brigitte Beyeler Louise Binns Cassandra Davis Elisa Larrakoetxea



Field Trial Analysis Expert Group

Chair: Leslie Rutkowski (Indiana University, United States)

Ralph Carstens (IEA DPC)

Eugenio Gonzales (IEA DPC)

Miyako Ikeda (OECD Secretariat)

Heather Price (Basis Policy Research, United States)

Fons van de Vijver (University of Tilburg,

the Netherlands)

Instrument Development Expert Group

Chair: Paulina Korsnakova (IEA Secretariat)

Mara Westling Allodie (Stockholm University, Sweden)

Giovanna Barzanò (Ministry of Education, Italy)

Julie Bélanger (OECD Secretariat)

Ralph Carstens (IEA DPC)

Jean Dumais (Statistics Canada)

Ben Jensen (Grattan Institute, Australia)

Eckhard Klieme (German Institute for International

Educational Research (DIPF), Germany)

Peter Kloosterman (Indiana University, United States)

Steffen Knoll (IEA DPC)

Sang Wang Park (Pusan National University, Korea)

Susan Seeber (University of Gottingen, Germany)

Svenja Vieluf (German Institute for International

Educational Research (DIPF), Germany)

Kristen Weatherby (OECD Secretariat)

Eva Wiren (Swedish National Agency of Education, Stockholm, Sweden)

Technical Advisory Group

Chair: Fons van de Vijver (University of Tilburg,

the Netherlands)

Eduardo Backhoff (National Institute for Educational

Evaluation (INEE), Mexico)

Jesper Lund (UNI-C, Denmark)

Dennis Mcinerney (Institute of Education, Hong Kong)

Heather Price (Basis Policy Research, United States)

TALIS Consortium

IEA Data Processing Centre (Hamburg, Germany)

Dirk Hastedt (IEA DPC Co-Director)

Steffen Knoll (International Study Director)

Ralph Carstens (International Deputy Study Director)

Friederike Westphal (International Project Manager)

Alena Becker (International Data Manager)

Mark Cockle (International Deputy Project and Data

Manager)

IEA Secretariat (Amsterdam, Netherlands)

Paulina Korsnakova (IDEG Chair, Translation

Verification and International Quality Control)

Control)

Isabelle Braun-Gémin (Assistant Financial Control)

Juriaan Hartenberg; Roel Burgers (Manager Financial

Statistics Canada (Ottawa, Canada)

Jean Dumais (Sampling Referee)

Sylvie LaRoche (Coordinator Sampling and Weighting)

Lori Stratychuk (Sampling and Weighting)

Asma Alavi (Weighting)

Consultants (Indiana University, United States)

Leslie A. Rutkowski (Consultant Scaling, Framework Development)

David J. Rutkowski (Consultant, Framework

Development)

Ellen Prusinski (Consultant, Framework Development)

IEA Data Processing and Research Center (Hamburg, Germany)

Andres Sandoval Hernandez (Head of the Research

and Analysis Unit)

Deana Desa (Scaling, Data Analysis - Team Leader)

Plamen Mirazchiyski (Scaling, Data Analysis and

Quality Control)

Jusuf Karameta (Scaling, Data Analysis)

Agnes Stancel-Piatak (Scaling, Data Analysis)

Christine Busch (Data Processing)

Hannah Köhler (Data Processing)

Sebastian Meyer (Data Processing, National

Adaptation Verification)

Pia Möbus (Data Processing)

Dirk Oehler (Data Processing)

Daniel Radtke (Data Processing, National Adaptation

Verification)

Bettina Wietzorek (Meeting Organisation)

Anke Sielemann (Meeting Organisation)

Bianca Brandes (Meeting Organisation)

Malte Bahrenfuss (ICT Services)

Matthias Jenßen (ICT Services)

Frank Müller (ICT Services)



ANNEX C: LIST OF CONTRIBUTORS

Limiao Duan (Programming)



Meng Xue (Unithead Software Development) Harpreet Singh Choudry (Unithead Software Development) Tim Daniel (Software Development) Michael Jung (Software Development)

Christian Harries (Programming)
Vallimeena Chinnamadasamy (Programming)
Maike Junod (Programming)
Deepti Kalamadi (Programming)
Poornima Mamadapur (Programming)
Devi Potham Rajendra Prasath (Programming)

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

New Insights from TALIS 2013

TEACHING AND LEARNING IN PRIMARY AND UPPER SECONDARY EDUCATION

How can countries prepare teachers to face the diverse challenges in today's schools? Are primary and upper secondary teachers different from lower secondary teachers? The OECD Teaching and Learning International Survey (TALIS) asked teachers and principals in lower secondary education in 34 countries who they are, where they teach and how they feel about their work. A few countries chose to also conduct the survey in primary and/or upper secondary education. The report presents the results for these additional levels of education and therefore offers a broader view of teachers and school principals across all levels of compulsory education, as well as the similarities and differences in the issues they are facing.

Contents

Chapter 1. Overview of talis in primary and upper secondary education

Chapter 2. Primary teachers and their schools

Chapter 3. The work of primary education teachers

Chapter 4. Upper secondary teachers and their schools

Chapter 5. The work of upper secondary teachers

Chapter 6. Cross-level comparisons

Chapter 7. Key findings and policy implications

Consult this publication on line at: http://dx.doi.org/10.1787/9789264226319-en

This work is published on the *OECD iLibrary*, which gathers all OECD books, periodicals and statistical databases.

Visit www.oecd-ilibrary.org and do not hesitate to contact us for more information.

2014

