

**E-appendix to**  
***The home learning environment in Ireland:  
Insights from TIMSS 2015***

**Aidan Clerkin**  
**Rachel Perkins**  
**Emma Chubb**

**ERC Research Series: Report 5**

**November 2020**

**[www.erc.ie/timss](http://www.erc.ie/timss)**

<b>Introduction</b> .....	1
<b>Chapter 3: Educational qualifications, occupation, and home language</b> .....	2
Table A3.1: Percentage of pupils, by parents' highest educational attainment level, parent report (Fourth grade) .....	2
Table 3.2: Parents' highest educational attainment, student report (Eighth grade) ...	2
Table A3.3: percentage of pupils, by parents' highest occupation level (Fourth grade) .....	3
Table A3.4: Percentage of Fourth grade pupils who speak the language of the test at home, pupil report .....	3
Table A3.5: Percentage of Fourth grade pupils who speak the language of the test at home, parent report .....	4
Table E3.1: Cross-tabulation of Fourth grade pupils who speak the language of the test at home (pupil by parent reports) .....	4
Figure 3.1 (tabulation): Percentage of pupils, who spoke various languages before beginning First Class, parent report (Fourth grade) .....	4
Figure 3.2 (tabulation): Percentage of pupils, by languages parents used in the home when speaking with their child, parent report (Fourth grade) .....	5
Table A3.6: Percentage of Eighth grade students who speak the language of the test at home .....	5
<b>Chapter 4: Parental attitudes to education</b> .....	6
Table A4.1: Percentage of pupils, by parents' expectations for child's education (Fourth grade) .....	6
Table A4.2: Percentage of pupils, by parental perceptions of their school, Fourth grade .....	6
Table A4.3: Percentage of pupils and mean mathematics and science achievement, by parents' perception of school performance .....	7
Table A4.4: Percentage of pupils, by parental attitudes towards mathematics and science, Fourth grade .....	7
Table A4.5: Percentage of pupils and mean mathematics and science achievement, by parents' attitudes towards mathematics and science .....	8
Table A4.6: Percentage of pupils, parental support for learning, teachers' reports (Fourth grade) .....	8
Table E4.1: Percentage of pupils, parental support for learning, principal report (Fourth grade) .....	8
Table A4.7: Percentage of students, parental support for learning, mathematics teachers' reports (Eighth grade) .....	9

Table E4.2: Percentage of students, parental support for learning, science teachers' reports (Eighth grade) .....	9
Table E4.3: Percentage of students, parental support for learning, principal reports (Eighth grade).....	9
<b>Chapter 5: Educational resources and use of technology</b> .....	10
Table A5.1: Percentage of pupils, by numbers of books in the home, parent report (Fourth grade) .....	10
Table A5.2: Percentage of pupils, by numbers of children's books in the home, parent report (Fourth grade).....	10
Table A5.3: Percentage of pupils, by numbers of books in the home, pupil report...	11
Table E5.1: Cross-tabulation of books in the home (pupil by parent reports) .....	11
Figure 5.1 (tabulation): percentage of Fourth Class pupils, by pupil-parent agreement on books in the home, Ireland .....	11
Table A5.5: Percentage of students, by numbers of books in the home (Eighth grade) .....	12
Figure 5.2 (tabulation): percentage of pupils with access to home study supports, Ireland and TIMSS average (G4).....	12
Table A5.6: Percentage of pupils, mean mathematics and science achievement, by parents' reports of home resources for learning (Fourth grade) .....	13
Figure 5.3 (tabulation): percentage of pupils with access to home study supports, Ireland and TIMSS average (Eighth grade).....	13
Table A5.8: Percentage of pupils, by number of number of digital information devices in the home, parent reports (Fourth grade) .....	14
Figure 5.4 (tabulation): Percentage of pupils who have various items in their home, pupil report (Fourth grade) .....	14
Figure 5.5 and Figure 5.6 (tabulation): Percentage of pupils who have a TV in their bedroom <i>and</i> who own a smartphone, by teachers' reports of the extent to which their teaching is <i>limited by pupils lacking sleep</i> (Eighth grade).....	15
Table A5.9: Percentage of pupils, by number of number of digital information devices in the home, student reports (Grade 8) .....	15
Figure 5.7 (tabulation): Percentage of students who have various items in their home, student report (Eighth grade) .....	16
Figure 5.8 and Figure 5.9 (tabulation): Percentage of students who have a TV in their bedroom, by teachers' reports of the extent to which their teaching is <i>limited by students lacking sleep</i> (Eighth grade) .....	16
<b>Chapter 6: Learning in early childhood</b> .....	17
Figure 6.1 (tabulation): Percentage of pupils, by parental reports of their child's engagement in various types of early numeracy activities before beginning primary school, Ireland.....	17

Figure 6.2 (tabulation): Percentage of pupils, by parental reports of their child's engagement in various types of early literacy activities before beginning primary school, Ireland.....	17
Table A6.1: Percentage of pupils, by parental reports of their child's engagement in various types of early numeracy activities by gender and family SES, Ireland .....	18
Table A6.2: Percentage of pupils, by parental reports of their child's engagement in various types of early literacy activities by gender and family SES, Ireland .....	18
Table A6.3: Percentage of pupils and mean mathematics and science achievement, by literacy and numeracy activities before beginning primary school .....	19
Figure 6.3 (tabulation): Percentage of Fourth Class pupils, by how well pupils could do various literacy tasks upon entering primary school, parents' reports .....	19
Figure 6.4 (tabulation): Percentage of Fourth Class pupils, by how well pupils could do various numeracy tasks before beginning First Class, parents' reports .....	19
Table 6.4: Percentage of pupils and mean mathematics and science achievement, by how well pupils could do literacy and numeracy tasks upon entering primary school, parents' reports .....	20
Figure 6.6 (tabulation): Percentage of pupils who attended formal educational programmes for children under 3, and children age 3 or older, parent reports.....	21
<b>Chapter 7: Nutrition and sleep</b> .....	22
Table A7.1: Percentage of pupils, by how often breakfast is consumed on school days (Fourth grade) .....	22
Figure 7.1 (tabulation): Percentage of pupils, how often breakfast is consumed on school days, by schools' DEIS status.....	22
Figure 7.2 (tabulation): Percentage of pupils, by teachers' reports of issues that limit their ability to teach their class (Fourth grade) .....	22
Table A7.2: Percentage of students, by how often breakfast is consumed on school days (Eighth grade) .....	23
Figure 7.4 (tabulation) Percentage of students, by mathematics teachers' reports of issues that limit their ability to teach their class (Eighth grade) .....	23
Table E7.1 Percentage of students, by science teachers' reports of issues that limit their ability to teach their class (Eighth grade) .....	23
<b>Chapter 8: Homework</b> .....	24
Table A8.1: Percentage of pupils, frequency of homework assigned during the week, parent report (Fourth grade) .....	24
Table A8.2: Percentage of students, frequency of mathematics homework assigned during the week (Eighth grade) .....	24
Table A8.3: Percentage of students and mean mathematics achievement, by weekly time students spend on assigned mathematics homework (Eighth grade) .....	25

Table A8.4: Percentage of students, frequency of science homework assigned during the week (Eighth grade).....	25
Table A8.5: Percentage of students and mean science achievement, by weekly time students spend on assigned science homework (Eighth grade) .....	26
<b>Chapter 9: Shadow education</b> .....	27
Table A9.1: Percentage of pupils attending extra lessons/tutoring in mathematics, Ireland and comparison countries, parent report (Fourth grade) .....	27
Table A9.2: Percentage of pupils attending extra lessons/tutoring in science, Ireland and comparison countries, parent report (Fourth grade) .....	27
Table A9.3: Percentage of students attending extra lessons/tutoring in mathematics, Ireland and comparison countries, student report (Eighth grade).....	28
Table A9.4: Percentage of students attending extra lessons/tutoring in science, Ireland and comparison countries, student report (Eighth grade).....	28

## Introduction

This e-appendix provides supplementary statistical information (e.g., standard errors) for data presented in Chapters 3-9 of *The home learning environment in Ireland: Insights from TIMSS 2015*.<sup>1</sup> This information has been excluded from the main report in order to facilitate a clear presentation of findings. The main report is available for download here: [www.erc.ie/timss](http://www.erc.ie/timss).

Tables in the e-appendix in which the title is preceded by an **A** are expansions of corresponding tables in the main report (e.g., Table A3.1 is an expansion of Table 3.1). The e-appendix document also contains additional tables that expand on information given only in text in the main report. In these cases, the table number is preceded by an **E** (e.g., Table E6.1). Finally, the e-appendix contains tabulated versions of figures from the main report (e.g., Figure 3.1 [tabulation]).

Tables and figures are presented in the order in which they appear, or are referenced, in the main report.

### Interpreting tables in this e-Appendix

#### **Statistical significance**

In the current report, tests of statistical significance are conducted to establish if differences between mean scale scores are large enough and reliable enough that we can be confident that the difference reported here is unlikely to have occurred by chance. For each comparison, a reference category was selected for each variable and comparisons were made between the mean score for this group and each remaining group. Statistical significance tests are reported at the 95% confidence level and measurement and sampling error are accounted for in the statistical comparisons. Tests of statistical significance are not performed between mean scores for Ireland and the TIMSS average as Irish mean scores form part of the TIMSS average and therefore they are not mutually exclusive groups.

#### **TIMSS average**

Reference is made to the *TIMSS average* or *international average* throughout this report. This refers to the average of all 49 countries at Fourth grade (including Jordan and South Africa which participated in the TIMSS Numeracy assessment) or all 39 countries at Eighth grade for which data were available.

<sup>1</sup> See Clerkin, Perkins & Chubb (2020): <http://www.erc.ie/studies/timss>

## Chapter 3: Educational qualifications, occupation, and home language

Table A3.1: Percentage of pupils, by parents' highest educational attainment level, parent report (Fourth grade)

	Undergraduate or postgraduate	Post-secondary but not university	Upper secondary	Lower secondary	Some primary or lower secondary
Australia	51 (2.0)	33 (1.5)	10 (0.8)	5 (0.6)	<1 (0.2)
Finland	50 (1.5)	22 (0.9)	26 (1.2)	2 (0.3)	<1 (0.1)
Hong Kong SAR	34 (1.7)	16 (0.8)	31 (1.0)	12 (0.8)	8 (0.7)
Ireland	42 (1.4)	36 (1.2)	13 (0.8)	6 (0.6)	3 (0.4)
New Zealand	49 (1.6)	28 (1.3)	9 (0.7)	10 (0.7)	2 (0.2)
Northern Ireland	42 (1.5)	16 (1.0)	31 (1.4)	6 (0.6)	5 (0.5)
Rep. of Korea	51 (1.8)	23 (0.9)	25 (1.3)	1 (0.2)	<1 (0.2)
Russian Fed.	52 (1.9)	31 (1.3)	10 (0.8)	5 (0.5)	1 (0.1)
Singapore	47 (1.1)	31 (0.8)	15 (0.6)	3 (0.2)	4 (0.3)
Slovenia	38 (1.5)	19 (0.9)	40 (1.4)	2 (0.3)	<1 (0.1)
TIMSS	38 (0.2)	21 (0.1)	25 (0.2)	8 (0.1)	7 (0.1)

TableA3.2: Parents' highest educational attainment, student report (Eighth grade)

	Undergraduate or postgraduate	Post-secondary but not university	Upper secondary	Lower secondary	Some primary or lower secondary	Don't know
Australia	26 (0.9)	19 (0.6)	13 (0.6)	4 (0.3)	1 (0.1)	37 (0.8)
England	24 (1.0)	13 (0.6)	8 (0.6)	3 (0.4)	1 (0.3)	51 (1.2)
Hong Kong SAR	20 (1.5)	11 (0.6)	33 (1.0)	11 (0.7)	4 (0.4)	22 (0.7)
Ireland	33 (1.1)	21 (0.7)	16 (0.7)	4 (0.5)	2 (0.3)	23 (0.9)
New Zealand	18 (0.8)	10 (0.4)	11 (0.5)	5 (0.4)	1 (0.2)	54 (0.8)
Rep. of Korea	43 (1.5)	8 (0.4)	26 (1.0)	1 (0.1)	<1 (0.1)	22 (0.7)
Russian Fed.	39 (1.4)	25 (1.0)	14 (0.8)	8 (0.6)	<1 (0.1)	13 (0.8)
Singapore	29 (0.7)	24 (0.6)	16 (0.5)	4 (0.3)	4 (0.3)	23 (0.6)
Slovenia	19 (1.0)	29 (0.9)	21 (0.9)	3 (0.3)	<1 (0.1)	29 (1.0)
United States	42 (1.0)	12 (0.4)	20 (0.6)	5 (0.3)	2 (0.2)	20 (0.5)
TIMSS	28 (0.2)	17 (0.1)	20 (0.1)	9 (0.1)	5 (0.1)	21 (0.1)

Table A3.3: Percentage of pupils, by parents' highest occupation level (Fourth grade)

	Professional	Small business owner	Clerical	Skilled worker	General worker	Never worked for pay	Not applicable
Australia	58 (1.7)	13 (0.8)	16 (0.9)	7 (0.7)	2 (0.4)	1 (0.2)	3 (0.4)
Finland	53 (1.3)	12 (0.7)	23 (0.9)	8 (0.7)	2 (0.3)	<1 (0.1)	2 (0.2)
Hong Kong SAR	42 (1.7)	11 (0.7)	27 (0.9)	7 (0.6)	7 (0.8)	2 (0.3)	5 (0.4)
Ireland	50 (1.4)	11 (0.7)	22 (0.9)	9 (0.7)	3 (0.4)	1 (0.2)	4 (0.4)
New Zealand	59 (1.4)	13 (0.8)	14 (0.9)	9 (0.7)	2 (0.4)	<1 (0.1)	2 (0.3)
Northern Ireland	54 (1.7)	8 (0.7)	21 (1.1)	8 (0.8)	3 (0.6)	1 (0.3)	5 (0.6)
Rep. of Korea	44 (1.3)	15 (0.6)	24 (0.8)	12 (0.9)	1 (0.2)	1 (0.2)	3 (0.3)
Russian Fed.	43 (1.4)	7 (0.5)	32 (1.1)	12 (0.6)	2 (0.3)	1 (0.2)	3 (0.4)
Singapore	65 (0.9)	9 (0.4)	16 (0.6)	3 (0.2)	1 (0.1)	1 (0.2)	4 (0.3)
Slovenia	45 (1.4)	10 (0.7)	28 (1.3)	11 (0.9)	2 (0.3)	<1 (0.1)	4 (0.5)
TIMSS	40 (0.2)	11 (0.1)	23 (0.1)	12 (0.1)	5 (0.1)	4 (0.1)	5 (0.1)

Table A3.4: Percentage of Fourth grade pupils who speak the language of the test at home, pupil report

	Always	Almost always	Sometimes	Never
Australia	73 (1.3)	12 (0.7)	14 (1.0)	1 (0.2)
England	72 (1.8)	11 (0.7)	16 (1.4)	2 (0.3)
Finland	72 (1.0)	17 (0.8)	10 (0.7)	1 (0.2)
Hong Kong SAR	58 (1.7)	13 (0.8)	28 (1.6)	1 (0.3)
Ireland	77 (0.9)	11 (0.7)	10 (0.7)	2 (0.3)
New Zealand	69 (1.0)	15 (0.6)	14 (0.8)	2 (0.2)
Northern Ireland	84 (1.1)	8 (0.6)	7 (0.9)	1 (0.2)
Rep. of Korea	80 (0.7)	12 (0.6)	8 (0.5)	<1 (0.03)
Russian Fed.	81 (1.5)	9 (0.7)	8 (1.0)	1 (0.3)
Singapore	28 (0.5)	20 (0.5)	48 (0.6)	4 (0.3)
Slovenia	72 (1.2)	14 (0.6)	11 (0.8)	3 (0.4)
United States	67 (1.1)	12 (0.4)	19 (0.9)	2 (0.2)
TIMSS	66 (0.2)	13 (0.1)	17 (0.1)	4 (0.1)



Table A3.5: Percentage of Fourth grade pupils who speak the language of the test at home, parent report

	<b>Always</b>	<b>Almost always</b>	<b>Sometimes</b>	<b>Never</b>
Australia	88 (1.5)	8 (1.2)	4 (0.6)	<1 (0.2)
Finland	90 (0.9)	6 (0.6)	3 (0.5)	<1 (0.1)
Hong Kong SAR	85 (1.8)	7 (0.8)	8 (1.5)	1 (0.2)
<b>Ireland</b>	<b>91 (0.8)</b>	<b>5 (0.6)</b>	<b>4 (0.5)</b>	<b>&lt;1 (0.1)</b>
New Zealand	88 (1.0)	7 (0.5)	5 (0.6)	<1 (0.1)
Northern Ireland	94 (1.2)	3 (0.5)	3 (0.8)	<1 (0.1)
Rep. of Korea	99 (0.2)	1 (0.1)	<1 (0.1)	<1 (0.03)
Russian Fed.	93 (1.4)	4 (0.7)	3 (0.8)	<1 (0.1)
Singapore	43 (0.6)	30 (0.6)	25 (0.6)	2 (0.1)
Slovenia	91 (0.9)	6 (0.6)	3 (0.4)	<1 (0.1)
<b>TIMSS</b>	<b>78 (0.2)</b>	<b>9 (0.1)</b>	<b>10 (0.1)</b>	<b>3 (0.1)</b>

Table E3.1: Cross-tabulation of Fourth grade pupils who speak the language of the test at home (pupil by parent reports)

<b>Pupils' reports</b>	<b>Parents' reports</b>				<b>Total %</b>
	<b>Always</b>	<b>Almost always</b>	<b>Sometimes</b>	<b>Never</b>	
<b>Always</b>	98 (0.5)	2 (0.5)	<1 (0.04)	<1 (0.03)	100
<b>Almost always</b>	91 (1.4)	6 (1.3)	3 (0.8)	0 (0.0)	100
<b>Sometimes</b>	51 (3.5)	22 (2.6)	26 (2.4)	1 (0.4)	100
<b>Never</b>	38 (7.2)	10 (4.4)	46 (8.8)	7 (2.7)	100

Figure 3.1 (tabulation): Percentage of pupils, who spoke various languages before beginning First Class, parent report (Fourth grade)

	<b>%</b>
English	93 (0.8)
Irish	12 (1.0)
Polish	3 (0.4)
French	1 (0.1)
Romanian	0.45 (0.2)
Other	6 (0.5)

Figure 3.2 (tabulation): Percentage of pupils, by languages parents used in the home when speaking with their child, parent report  
(Fourth grade)

	<b>Mother</b>	<b>Father</b>
English	91 (1.2)	91 (1.2)
Irish	10 (1.2)	7 (1.3)
Polish	3 (0.4)	2 (0.4)
French	1 (0.2)	1 (0.1)
Romanian	1 (0.2)	<.34 (0.1)
Other	7 (0.5)	6 (0.5)

Table A3.6: Percentage of Eighth grade students who speak the language of the test at home

	<b>Always</b>	<b>Almost always</b>	<b>Sometimes</b>	<b>Never</b>
Australia	82 (1.3)	11 (0.8)	6 (0.7)	1 (0.1)
England	85 (1.2)	9 (0.8)	4 (0.5)	1 (0.1)
Hong Kong SAR	75 (1.7)	9 (0.5)	13 (1.4)	3 (0.4)
<b>Ireland</b>	<b>82 (0.8)</b>	<b>7 (0.5)</b>	<b>7 (0.5)</b>	<b>4 (0.3)</b>
New Zealand	79 (1.4)	14 (0.9)	6 (0.6)	1 (0.1)
Rep. of Korea	89 (0.5)	11 (0.5)	<1 (0.1)	<1 (0.04)
Russian Fed.	83 (1.6)	12 (0.6)	5 (1.3)	1 (0.1)
Singapore	33 (0.7)	32 (0.7)	31 (0.6)	4 (0.2)
Slovenia	70 (1.3)	21 (1.0)	7 (0.6)	3 (0.4)
United States	74 (1.1)	17 (0.6)	8 (0.5)	1 (0.1)
<b>TIMSS</b>	<b>62 (0.2)</b>	<b>15 (0.1)</b>	<b>19 (0.1)</b>	<b>5 (0.1)</b>

## Chapter 4: Parental attitudes to education

Table A4.1: Percentage of pupils, by parents' expectations for child's education (Fourth grade)

	Finish postgraduate degree	Finish bachelor's or equivalent	Finish short-cycle tertiary	Finish post-secondary, non-tertiary	Finish upper secondary	Finish lower secondary
Australia	13 (1.1)	58 (1.5)	8 (0.7)	8 (0.7)	12 (1.0)	1 (0.3)
Finland	26 (1.3)	34 (1.1)	0 (0.0)	9 (0.6)	30 (1.3)	1 (0.3)
Hong Kong SAR	28 (1.2)	62 (1.2)	3 (0.3)	2 (0.3)	3 (0.6)	1 (0.2)
Ireland	34 (1.2)	46 (1.0)	12 (0.7)	3 (0.4)	5 (0.5)	<1 (0.1)
New Zealand	24 (1.1)	45 (1.3)	12 (0.8)	10 (0.7)	6 (0.5)	3 (0.4)
Northern Ireland	20 (0.9)	37 (1.4)	9 (0.9)	6 (0.8)	23 (1.2)	5 (0.5)
Rep. of Korea	34 (0.9)	58 (0.9)	6 (0.4)	0 (0.0)	1 (0.2)	<1 (0.1)
Russian Fed.	40 (1.5)	34 (0.8)	5 (0.4)	10 (0.7)	8 (0.7)	3 (0.3)
Singapore	26 (0.7)	55 (0.8)	15 (0.7)	2 (0.2)	1 (0.1)	1 (0.1)
Slovenia	22 (1.1)	26 (1.0)	13 (0.7)	26 (1.2)	14 (1.0)	<1 (0.1)
TIMSS	34 (0.2)	36 (0.2)	9 (0.1)	7 (0.1)	12 (0.1)	2 (0.1)

Table A4.2: Percentage of pupils, by parental perceptions of their school, Fourth grade

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
My child's school does a good job including me in my child's education	IRL	72 (1.3)	23 (1.0)	4 (0.4)	2 (0.3)
	TIMSS	53 (0.2)	37 (0.2)	7 (0.1)	2 (0.04)
My child's school provides a safe environment	IRL	90 (0.9)	9 (0.7)	1 (0.2)	1 (0.2)
	TIMSS	64 (0.2)	30 (0.2)	4 (0.1)	1 (0.03)
My child's school cares about my child's progress in school	IRL	84 (1.1)	14 (1.0)	2 (0.3)	<1 (0.1)
	TIMSS	62 (0.2)	32 (0.2)	5 (0.1)	1 (0.03)
My child's school does a good job informing me of his/her progress	IRL	69 (1.4)	24 (1.0)	5 (0.5)	1 (0.2)
	TIMSS	58 (0.2)	32 (0.2)	8 (0.1)	2 (0.04)
My child's school promotes high academic standards	IRL	69 (1.5)	26 (1.4)	4 (0.4)	1 (0.2)
	TIMSS	44 (0.2)	41 (0.2)	12 (0.1)	3 (0.1)
My child's school does a good job at helping him/her become better at maths	IRL	77 (1.2)	19 (1.0)	3 (0.4)	1 (0.2)
	TIMSS	56 (0.2)	35 (0.2)	8 (0.1)	2 (0.04)
My child's school does a good job at helping him/her become better at science	IRL	54 (1.5)	34 (1.1)	9 (0.7)	3 (0.4)
	TIMSS	51 (0.2)	38 (0.2)	9 (0.1)	2 (0.1)
My child's school does a good job at helping him/her become better at reading	IRL	82 (1.2)	15 (0.9)	2 (0.4)	<1 (0.1)
	TIMSS	58 (0.2)	33 (0.2)	7 (0.1)	2 (0.04)

Table A4.3: Percentage of pupils and mean mathematics and science achievement, by parents' perception of school performance

	Very satisfied			Satisfied			Less than satisfied		
	%	Maths	Science	%	Maths	Science	%	Maths	Science
Australia	–	–	–	–	–	–	–	–	–
Finland	54 (1.2)	537 (2.3)	556 (2.9)	42 (1.1)	538 (2.3)	555 (2.6)	4 (0.5)	536 (8.7)	553 (8.4)
Hong Kong SAR	55 (1.4)	622 (3.4)	562 (3.7)	40 (1.1)	611 (3.4)	554 (3.3)	5 (0.6)	592 (7.4)	529 (7.8)
Ireland	80 (1.2)	550 (2.4)	531 (2.6)	18 (1.0)	553 (3.2)	533 (3.2)	2 (0.4)	–	–
New Zealand	63 (1.2)	514 (3.0)	526 (3.1)	32 (1.1)	511 (3.6)	529 (3.9)	6 (0.5)	484 (9.7)	510 (8.1)
Northern Ireland	81 (1.4)	584 (4.1)	527 (3.1)	16 (1.3)	590 (5.9)	540 (6.1)	3 (0.6)	581 (15.5)	544 (15.9)
Rep. of Korea	17 (0.9)	616 (3.1)	593 (3.8)	67 (1.0)	609 (2.5)	590 (2.1)	16 (0.8)	603 (3.5)	587 (3.5)
Russian Fed.	54 (1.3)	564 (3.7)	564 (3.9)	41 (1.0)	566 (3.9)	573 (3.1)	5 (0.6)	559 (6.9)	565 (5.5)
Singapore	58 (0.8)	623 (4.0)	595 (3.9)	37 (0.7)	616 (3.7)	590 (3.6)	5 (0.3)	590 (7.4)	567 (7.3)
Slovenia	27 (1.3)	527 (4.3)	550 (3.8)	64 (1.2)	530 (2.4)	554 (3.0)	9 (0.5)	521 (6.6)	546 (6.0)
TIMSS	59 (0.2)	506 (0.5)	508 (0.6)	35 (0.2)	503 (0.6)	506 (0.7)	6 (0.1)	495 (1.2)	498 (1.3)

Table A4.4: Percentage of pupils, by parental attitudes towards mathematics and science, Fourth grade

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
Most occupations need skills in math, science, or technology	IRL	80 (0.8)	18 (0.7)	2 (0.3)	<1 (0.1)
	TIMSS	65 (0.2)	30 (0.1)	5 (0.1)	1 (0.02)
Science and technology can help solve the world's problems	IRL	55 (1.0)	36 (0.9)	7 (0.5)	2 (0.3)
	TIMSS	52 (0.2)	39 (0.2)	7 (0.1)	2 (0.04)
Science explains how things in the world work.	IRL	80 (1.4)	19 (0.8)	1 (0.2)	<1 (0.1)
	TIMSS	62 (0.2)	33 (0.2)	4 (0.1)	1 (0.02)
My child needs maths to get ahead in the world	IRL	74 (0.8)	23 (0.7)	2 (0.3)	1 (0.2)
	TIMSS	61 (0.2)	32 (0.1)	7 (0.1)	1 (0.03)
Learning science is for everyone	IRL	60 (1.1)	27 (0.9)	11 (0.6)	3 (0.2)
	TIMSS	56 (0.2)	34 (0.1)	9 (1.0)	2 (0.04)
Technology makes life easier	IRL	67 (1.2)	28 (1.1)	4 (0.4)	1 (0.1)
	TIMSS	64 (0.2)	32 (0.1)	4 (0.1)	1 (0.02)
Maths is applicable to real life	IRL	73 (0.9)	22 (0.7)	4 (0.4)	1 (0.2)
	TIMSS	69 (0.2)	27 (0.1)	3 (0.1)	1 (0.02)
Engineering is necessary to design things that are safe and useful	IRL	81 (1.0)	18 (0.9)	1 (0.3)	<1 (0.1)
	TIMSS	66 (0.2)	30 (0.1)	3 (0.1)	1 (0.03)

Table A4.5: Percentage of pupils and mean mathematics and science achievement, by parents' attitudes towards mathematics and science

	Very positive attitude			Positive attitude			Less than positive attitude		
	%	Maths	Science	%	Maths	Science	%	Maths	Science
Australia	–	–	–	–	–	–	–	–	–
Finland	60 (0.8)	545 (2.3)	563 (2.4)	38 (0.7)	527 (2.4)	545 (3.1)	2 (0.3)	–	–
Hong Kong SAR	60 (1.2)	623 (3.5)	566 (3.5)	38 (1.2)	606 (3.2)	545 (3.1)	2 (0.3)	–	–
Ireland	76 (1.0)	555 (2.3)	536 (2.5)	24 (1.0)	536 (3.1)	519 (3.2)	1 (0.1)	–	–
New Zealand	70 (1.3)	520 (3.0)	533 (3.0)	28 (1.3)	493 (3.2)	511 (3.1)	2 (0.2)	–	–
Northern Ireland	77 (1.1)	588 (3.7)	533 (2.9)	22 (1.1)	577 (5.3)	522 (3.9)	1 (0.3)	–	–
Rep. of Korea	34 (0.8)	625 (2.8)	604 (2.9)	62 (0.8)	602 (2.2)	584 (1.9)	5 (0.4)	583 (5.7)	572 (5.9)
Russian Fed.	68 (1.0)	564 (3.3)	567 (3.1)	31 (1.0)	565 (4.5)	569 (4.0)	1 (0.1)	–	–
Singapore	79 (0.6)	624 (3.7)	597 (3.5)	20 (0.5)	603 (4.7)	576 (4.9)	1 (0.1)	–	–
Slovenia	34 (1.2)	538 (2.9)	561 (2.8)	63 (1.1)	525 (2.6)	548 (3.3)	3 (0.4)	510 (9.2)	541 (10.2)
TIMSS	66 (0.1)	510 (0.5)	512 (0.5)	32 (0.1)	495 (0.6)	496 (0.8)	2 (0.0)	509 (2.9)	504 (3.0)

Table A4.6: Percentage of pupils, parental support for learning, **teachers' reports** (Fourth grade)

		Very high	High	Medium	Low	Very low
Parental involvement in school activities	IRL	15 (3.2)	35 (4.0)	35 (3.8)	14 (2.6)	2 (1.0)
	TIMSS	9 (0.3)	31 (0.5)	44 (0.5)	13 (0.3)	4 (0.2)
Parental commitment to ensure that pupils are ready to learn	IRL	13 (3.2)	43 (4.4)	37 (4.0)	6 (1.6)	2 (1.3)
	TIMSS	6 (0.3)	29 (0.5)	47 (0.5)	14 (0.4)	4 (0.2)
Parental expectations for pupil achievement	IRL	23 (4.0)	48 (4.2)	25 (3.2)	4 (1.5)	0 (0.0)
	TIMSS	16 (0.4)	47 (0.5)	31 (0.5)	5 (0.2)	1 (0.1)
Parental support for pupil achievement	IRL	15 (3.2)	44 (3.6)	36 (3.7)	5 (1.4)	0 (0.0)
	TIMSS	7 (0.3)	31 (0.5)	48 (0.5)	12 (0.3)	3 (0.2)
Parental pressure for school to maintain high academic standards	IRL	13 (3.2)	40 (3.0)	38 (3.6)	7 (1.5)	2 (1.0)
	TIMSS	10 (0.3)	33 (0.5)	42 (0.5)	12 (0.3)	3 (0.2)

Table E4.1: Percentage of pupils, parental support for learning, **principal report** (Fourth grade)

		Very high	High	Medium	Low	Very low
Parental involvement in school activities	IRL	14 (3.1)	47 (4.6)	32 (3.8)	7 (2.3)	0 (0.0)
	TIMSS	8 (0.3)	29 (0.5)	44 (0.6)	15 (0.4)	4 (0.2)
Parental commitment to ensure that pupils are ready to learn	IRL	15 (3.4)	48 (4.6)	30 (4.1)	7 (2.3)	0 (0.0)
	TIMSS	7 (0.3)	28 (0.5)	47 (0.6)	15 (0.4)	4 (0.2)
Parental expectations for pupil achievement	IRL	26 (3.7)	45 (4.0)	26 (3.6)	3 (1.5)	0 (0.0)
	TIMSS	19 (0.4)	47 (0.6)	28 (0.5)	5 (0.2)	1 (0.1)
Parental support for pupil achievement	IRL	20 (3.6)	49 (4.6)	29 (3.7)	3 (1.5)	0 (0.0)
	TIMSS	7 (0.3)	30 (0.5)	48 (0.6)	12 (0.4)	3 (0.2)
Parental pressure for school to maintain high academic standards	IRL	17 (3.4)	38 (4.1)	30 (3.9)	14 (2.9)	2 (1.2)
	TIMSS	11 (0.3)	33 (0.5)	38 (0.6)	14 (0.4)	3 (0.2)

Table A4.7: Percentage of students, parental support for learning, **mathematics** teachers' reports (Eighth grade)

		<b>Very high</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Very low</b>
Parental involvement in school activities	IRL	7 (1.5)	23 (2.5)	46 (2.9)	21 (2.3)	4 (1.0)
	TIMSS	5 (0.3)	23 (0.5)	43 (0.6)	21 (0.5)	8 (0.3)
Parental commitment to ensure that students are ready to learn	IRL	8 (1.8)	35 (2.8)	42 (3.1)	14 (1.9)	2 (0.9)
	TIMSS	4 (0.2)	22 (0.5)	45 (0.6)	21 (0.5)	7 (0.3)
Parental expectations for student achievement	IRL	24 (2.5)	43 (2.8)	25 (2.6)	8 (1.5)	<1 (0.1)
	TIMSS	14 (0.4)	39 (0.6)	35 (0.5)	10 (0.3)	3 (0.2)
Parental support for student achievement	IRL	9 (1.8)	45 (3.0)	37 (3.1)	9 (1.9)	0 (0.0)
	TIMSS	6 (0.3)	25 (0.5)	45 (0.6)	18 (0.4)	6 (0.3)
Parental pressure for school to maintain high academic standards	IRL	20 (2.2)	43 (2.4)	27 (2.3)	9 (1.3)	1 (0.8)
	TIMSS	9 (0.3)	28 (0.5)	40 (0.6)	16 (0.4)	6 (0.3)

Table E4.2: Percentage of students, parental support for learning, **science** teachers' reports (Eighth grade)

		<b>Very high</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Very low</b>
Parental involvement in school activities	IRL	10 (2.1)	26 (2.5)	39 (2.6)	18 (2.5)	6 (1.4)
	TIMSS	6 (0.3)	22 (0.5)	44 (0.5)	21 (0.4)	7 (0.3)
Parental commitment to ensure that students are ready to learn	IRL	10 (1.8)	30 (2.7)	45 (3.2)	11 (2.1)	4 (1.2)
	TIMSS	4 (0.2)	22 (0.4)	46 (0.5)	21 (0.5)	7 (0.3)
Parental expectations for student achievement	IRL	24 (2.8)	42 (3.1)	28 (2.8)	5 (1.4)	2 (1.0)
	TIMSS	14 (0.4)	40 (0.5)	35 (0.5)	9 (0.3)	2 (0.2)
Parental support for student achievement	IRL	14 (2.3)	40 (3.1)	38 (3.2)	8 (1.9)	1 (0.6)
	TIMSS	6 (0.2)	26 (0.5)	46 (0.5)	18 (0.4)	5 (0.2)
Parental pressure for school to maintain high academic standards	IRL	20 (2.7)	40 (3.2)	27 (2.9)	12 (1.9)	1 (0.9)
	TIMSS	9 (0.3)	30 (0.5)	40 (0.5)	16 (0.4)	6 (0.2)

Table E4.3: Percentage of students, parental support for learning, **principal** reports (Eighth grade)

		<b>Very high</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Very low</b>
Parental involvement in school activities	IRL	9 (2.3)	24 (3.5)	46 (4.1)	19 (3.2)	2 (1.0)
	TIMSS	6 (0.3)	21 (0.5)	43 (0.6)	23 (0.5)	8 (0.3)
Parental commitment to ensure that students are ready to learn	IRL	10 (2.5)	38 (4.1)	42 (4.4)	10 (2.3)	<1 (0.3)
	TIMSS	7 (0.3)	24 (0.5)	43 (0.6)	20 (0.5)	6 (0.3)
Parental expectations for student achievement	IRL	25 (3.3)	38 (4.1)	32 (4.1)	5 (1.7)	<1 (0.3)
	TIMSS	17 (0.4)	43 (0.6)	30 (0.5)	8 (0.3)	2 (0.2)
Parental support for student achievement	IRL	13 (2.7)	51 (4.2)	30 (4.2)	6 (1.8)	<1 (0.3)
	TIMSS	7 (0.3)	28 (0.5)	44 (0.6)	17 (0.4)	5 (0.2)
Parental pressure for school to maintain high academic standards	IRL	19 (2.9)	42 (4.1)	29 (3.7)	8 (2.3)	2 (1.1)
	TIMSS	12 (0.4)	31 (0.6)	36 (0.6)	16 (0.4)	5 (0.3)

## Chapter 5: Educational resources and use of technology

Table A5.1: Percentage of pupils, by numbers of books in the home, parent report (Fourth grade)

	0-10	11-25	26-100	101-200	200+
Australia	6 (0.7)	11 (0.8)	33 (1.2)	21 (1.2)	29 (1.1)
Finland	8 (0.6)	13 (0.7)	37 (0.9)	19 (0.7)	23 (1.0)
Hong Kong SAR	24 (1.2)	22 (0.8)	31 (1.2)	11 (1.0)	12 (0.9)
<b>Ireland</b>	<b>13 (0.8)</b>	<b>15 (0.7)</b>	<b>34 (0.9)</b>	<b>17 (0.9)</b>	<b>20 (1.0)</b>
New Zealand	9 (0.7)	12 (0.7)	33 (1.0)	19 (0.8)	27 (1.1)
Northern Ireland	13 (1.1)	18 (1.2)	33 (1.3)	16 (1.0)	20 (1.2)
Rep. of Korea	11 (0.7)	13 (0.6)	32 (0.8)	15 (0.6)	30 (0.9)
Russian Fed.	11 (0.7)	21 (0.8)	38 (0.8)	14 (0.6)	16 (1.2)
Singapore	20 (0.5)	21 (0.5)	36 (0.6)	11 (0.5)	12 (0.4)
Slovenia	8 (0.6)	18 (1.0)	41 (1.1)	17 (0.8)	16 (0.9)
<b>TIMSS</b>	<b>21 (0.2)</b>	<b>20 (0.1)</b>	<b>30 (0.1)</b>	<b>13 (0.1)</b>	<b>16 (0.1)</b>

Table A5.2: Percentage of pupils, by numbers of **children's** books in the home, parent report (Fourth grade)

	0-10	11-25	26-50	51-100	100+
Australia	5 (0.7)	8 (0.9)	21 (0.9)	31 (1.2)	36 (1.4)
Finland	4 (0.5)	12 (0.6)	30 (0.9)	33 (0.9)	22 (1.0)
Hong Kong SAR	19 (1.3)	20 (0.8)	23 (0.9)	18 (1.0)	19 (1.1)
<b>Ireland</b>	<b>7 (0.6)</b>	<b>14 (0.7)</b>	<b>26 (0.9)</b>	<b>26 (1.0)</b>	<b>27 (1.1)</b>
New Zealand	5 (0.5)	11 (0.8)	22 (0.8)	27 (0.9)	34 (1.3)
Northern Ireland	6 (0.7)	13 (0.8)	24 (1.1)	29 (1.1)	29 (1.3)
Rep. of Korea	4 (0.5)	4 (0.4)	9 (0.6)	17 (0.7)	65 (1.2)
Russian Fed.	12 (0.7)	26 (1.0)	32 (0.8)	18 (0.6)	11 (0.7)
Singapore	12 (0.6)	19 (0.6)	28 (0.6)	22 (0.6)	20 (0.7)
Slovenia	5 (0.5)	19 (1.0)	35 (1.1)	29 (1.1)	12 (0.8)
<b>TIMSS</b>	<b>22 (0.2)</b>	<b>21 (0.1)</b>	<b>25 (0.1)</b>	<b>18 (0.1)</b>	<b>14 (0.1)</b>

Table A5.3: Percentage of pupils, by numbers of books in the home, pupil report

	0-10	11-25	26-100	101-200	200+
Australia	8 (0.5)	19 (1.0)	36 (1.0)	21 (0.7)	16 (0.8)
England	11 (0.6)	22 (0.8)	35 (1.0)	18 (0.7)	14 (0.8)
Finland	5 (0.4)	16 (0.7)	42 (0.9)	24 (0.8)	14 (0.7)
Hong Kong SAR	14 (0.9)	20 (1.0)	32 (1.0)	18 (0.9)	16 (0.8)
Ireland	9 (0.7)	20 (1.0)	33 (1.0)	21 (1.0)	16 (0.8)
New Zealand	11 (0.8)	19 (0.7)	33 (0.8)	20 (0.7)	17 (0.8)
Northern Ireland	10 (0.7)	23 (1.0)	33 (1.2)	20 (0.9)	15 (0.8)
Rep. of Korea	4 (0.5)	4 (0.4)	18 (0.8)	29 (0.7)	44 (1.2)
Russian Fed.	9 (0.6)	33 (0.8)	37 (0.9)	12 (0.5)	9 (0.9)
Singapore	10 (0.5)	21 (0.7)	38 (0.8)	18 (0.6)	13 (0.5)
Slovenia	8 (0.5)	25 (1.1)	41 (0.8)	15 (0.8)	11 (0.8)
United States	14 (0.5)	24 (0.6)	34 (0.7)	15 (0.4)	13 (0.6)
TIMSS	16 (0.1)	26 (0.1)	31 (0.1)	14 (0.1)	12 (0.1)

Table E5.1: Cross-tabulation of books in the home (pupil by parent reports)

Pupils' reports	Parents' reports					Total %
	0-10	11-25	26-100	101-200	More than 200	
0-10	40 (3.3)	26 (2.7)	28 (3.0)	4 (1.2)	2 (0.7)	100
11-25	23 (2.0)	26 (2.0)	34 (2.0)	11 (0.9)	5 (1.1)	100
26-100	11 (1.2)	15 (1.2)	43 (1.6)	17 (1.3)	14 (1.6)	100
101-200	4 (0.8)	10 (1.1)	34 (2.4)	24 (1.8)	28 (2.2)	100
More than 200	3 (0.9)	3 (0.7)	20 (1.9)	23 (2.4)	51 (2.5)	100

Figure 5.1 (tabulation): percentage of Fourth Class pupils, by pupil-parent agreement on books in the home, Ireland

	Pupils report more books	Agreement	Parents report more books
Overall	32 (1.0)	37 (0.9)	32 (1.0)
Girls	34 (1.4)	38 (1.2)	28 (1.4)
Boys	29 (1.4)	36 (1.2)	35 (1.1)



Table A5.4: Frequencies of categories of books in the home: Pupil and parent reports

Overall (%)	0-10		11-25		26-100		101-200		200+	
Books in the home (pupil)	9 (0.7)		20 (1.0)		33 (1.0)		21 (1.0)		16 (0.8)	
Books in the home (parent)	13 (0.8)		15 (0.7)		34 (0.9)		17 (0.9)		20 (1.0)	
By gender (%)	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
Books in the home (pupil)	8 (0.8)	11 (1.1)	21 (1.3)	20 (1.4)	33 (1.6)	33 (1.2)	22 (1.2)	19 (1.2)	17 (1.3)	16 (1.1)
Books in the home (parent)	14 (1.2)	13 (1.0)	16 (1.1)	15 (0.9)	34 (1.5)	34 (1.2)	17 (1.4)	17 (1.1)	19 (1.2)	21 (1.4)

Table A5.5: Percentage of students, by numbers of books in the home (Eighth grade)

	0-10	11-25	26-100	101-200	200+
Australia	12 (0.7)	19 (0.7)	27 (0.6)	21 (0.6)	21 (0.8)
England	17 (1.0)	23 (1.0)	28 (0.7)	17 (0.7)	15 (0.9)
Hong Kong SAR	18 (1.1)	26 (0.8)	31 (1.0)	13 (0.7)	13 (0.8)
<b>Ireland</b>	<b>15 (0.9)</b>	<b>22 (0.8)</b>	<b>29 (0.8)</b>	<b>19 (0.8)</b>	<b>15 (0.7)</b>
New Zealand	14 (0.8)	19 (0.6)	30 (0.6)	19 (0.6)	18 (0.6)
Rep. of Korea	7 (0.4)	7 (0.4)	22 (0.7)	25 (0.7)	39 (1.0)
Russian Fed.	7 (0.7)	30 (1.1)	39 (0.9)	15 (0.7)	9 (0.5)
Singapore	18 (0.6)	27 (0.6)	31 (0.7)	14 (0.5)	11 (0.4)
Slovenia	11 (0.7)	26 (0.9)	36 (0.8)	16 (0.7)	12 (0.6)
United States	17 (0.6)	21 (0.6)	29 (0.6)	17 (0.5)	16 (0.7)
<b>TIMSS</b>	<b>20 (0.1)</b>	<b>28 (0.1)</b>	<b>26 (0.1)</b>	<b>13 (0.1)</b>	<b>12 (0.1)</b>

Figure 5.2 (tabulation): percentage of pupils with access to home study supports, Ireland and TIMSS average (Fourth grade)

		%
Internet Connection	IRL	92 (0.5)
	TIMSS	81 (0.1)
Your own bedroom	IRL	76 (0.9)
	TIMSS	65 (0.2)

Table A5.6: Percentage of pupils, mean mathematics and science achievement, by parents' reports of home resources for learning (Fourth grade)

	Many resources			Some resources			Few resources		
	%	Maths	Science	%	Maths	Science	%	Maths	Science
Australia	–	–	–	–	–	–	–	–	–
Finland	34 (1.4)	563 (2.0)	581 (2.2)	66 (1.4)	525 (2.1)	543 (2.4)	0 (0.1)	–	–
Hong Kong SAR	24 (1.5)	655 (4.7)	599 (4.3)	69 (1.4)	607 (2.8)	548 (2.9)	7 (1.0)	581 (5.5)	521 (6.0)
Ireland	33 (1.5)	587 (2.4)	567 (2.9)	65 (1.4)	534 (2.2)	516 (2.5)	2 (0.3)	–	–
New Zealand	41 (1.4)	547 (2.9)	563 (2.8)	58 (1.4)	490 (3.1)	503 (3.4)	1 (0.2)	–	–
Northern Ireland	35 (1.4)	632 (3.2)	570 (3.1)	64 (1.4)	564 (3.9)	511 (3.1)	1 (0.3)	–	–
Rep. of Korea	50 (1.8)	635 (2.5)	613 (1.9)	49 (1.8)	584 (2.0)	567 (2.2)	1 (0.2)	–	–
Russian Fed.	16 (1.0)	599 (5.0)	606 (4.1)	83 (1.0)	559 (3.2)	562 (3.1)	2 (0.3)	–	–
Singapore	27 (0.9)	669 (4.1)	647 (3.8)	71 (0.9)	605 (3.9)	576 (3.6)	2 (0.2)	–	–
Slovenia	21 (1.3)	569 (3.4)	589 (3.1)	78 (1.3)	519 (2.6)	544 (3.1)	1 (0.2)	–	–
TIMSS	17 (0.2)	569 (0.9)	567 (0.9)	74 (0.2)	501 (0.4)	503 (0.5)	9 (0.1)	427 (1.5)	426 (1.9)

A dash (–) indicates that data was not available.

Figure 5.3 (tabulation): percentage of pupils with access to home study supports, Ireland and TIMSS average (Eighth grade)

		%
Internet Connection	IRL	98 (0.2)
	TIMSS	84 (0.1)
Your own bedroom	IRL	84 (0.8)
	TIMSS	69 (0.2)

Table A5.7: Percentage of students, mean mathematics and science achievement, by students' reports of home educational resources (Eighth grade)

	Many resources			Some resources			Few resources		
	%	Maths	Science	%	Maths	Science	%	Maths	Science
Australia	23 (0.9)	548 (3.1)	562 (2.8)	73 (0.9)	497 (3.1)	503 (2.5)	4 (0.4)	439 (10.6)	429 (8.4)
England	19 (1.0)	584 (4.7)	606 (4.6)	76 (1.0)	507 (4.2)	525 (3.6)	5 (0.4)	462 (7.1)	470 (7.1)
Hong Kong SAR	12 (1.0)	634 (5.6)	584 (4.9)	74 (1.0)	595 (4.4)	546 (3.7)	15 (0.9)	560 (6.5)	513 (5.7)
Ireland	20 (0.9)	567 (3.6)	580 (3.1)	74 (0.8)	518 (2.5)	523 (2.6)	6 (0.6)	450 (10.4)	445 (12.8)
New Zealand	19 (0.7)	550 (3.3)	575 (3.1)	75 (0.6)	486 (3.2)	505 (3.0)	6 (0.5)	416 (6.6)	430 (5.9)
Rep. of Korea	37 (1.3)	638 (3.3)	584 (3.2)	60 (1.2)	589 (2.4)	541 (2.1)	3 (0.2)	524 (8.1)	483 (9.1)
Russian Fed.	12 (0.6)	567 (5.3)	576 (4.9)	83 (0.6)	535 (4.8)	541 (4.3)	5 (0.4)	512 (10.4)	509 (9.7)
Singapore	12 (0.4)	668 (2.7)	654 (3.0)	77 (0.6)	622 (3.2)	598 (3.2)	11 (0.5)	565 (5.4)	532 (5.5)
Slovenia	14 (0.7)	553 (3.6)	595 (3.4)	83 (0.7)	513 (2.0)	547 (2.3)	3 (0.4)	455 (8.0)	469 (10.6)
United States	22 (0.9)	567 (3.7)	579 (3.2)	71 (0.9)	509 (2.9)	521 (2.6)	7 (0.5)	469 (4.7)	476 (4.6)
TIMSS	13 (0.1)	540 (1.3)	547 (1.2)	72 (0.2)	481 (0.6)	486 (0.6)	15 (0.1)	431 (1.1)	432 (1.1)

A dash (–) indicates that data was not available.

Table A5.8: Percentage of pupils, by number of digital information devices in the home, parent reports (Fourth grade)

	More than 10 devices	7-10 devices	4-6 devices	1-3 devices	None
Australia	12 (0.9)	30 (1.2)	42 (1.4)	16 (0.8)	<1 (0.2)
Finland	17 (0.7)	40 (0.8)	36 (0.9)	7 (0.6)	<1 (0.1)
Hong Kong SAR	9 (0.5)	20 (1.1)	42 (0.8)	29 (1.2)	1 (0.2)
Ireland	10 (0.6)	29 (1.0)	41 (1.0)	18 (0.8)	<1 (0.1)
New Zealand	8 (0.5)	24 (0.9)	43 (0.9)	24 (1.1)	1 (0.1)
Northern Ireland	11 (0.8)	32 (1.3)	42 (1.3)	15 (0.9)	<1 (0.1)
Rep. of Korea	2 (0.2)	17 (0.6)	49 (0.8)	31 (0.8)	<1 (0.2)
Russian Fed.	4 (0.4)	13 (0.8)	38 (1.1)	41 (1.5)	3 (0.3)
Singapore	12 (0.4)	26 (0.5)	37 (0.7)	24 (0.7)	1 (0.2)
Slovenia	5 (0.5)	22 (1.1)	48 (1.0)	24 (1.2)	<1 (0.1)
TIMSS	9 (0.1)	21 (0.1)	36 (0.1)	29 (0.2)	4 (0.1)

Figure 5.4 (tabulation): Percentage of pupils who have various items in their home, pupil report (Fourth grade)

		%
Your own computer (including tablets, laptops, etc.)	IRL	80 (1.0)
	TIMSS	66 (0.2)
A computer or tablet that is shared with other people at home	IRL	68 (0.8)
	TIMSS	71 (0.1)
Internet connection	IRL	92 (0.5)
	TIMSS	81 (0.1)
Your own mobile phone	IRL	49 (1.3)
	TIMSS	63 (0.2)
A gaming system (e.g., Playstation®, Wii®, XBox®)	IRL	85 (0.8)
	TIMSS	63 (0.1)
Your own smartphone (a phone on which you can get the Internet)	IRL	46 (1.1)
	TIMSS	--
Premium ("pay extra") TV channels, such as BT Sport or Sky Movies	IRL	54 (1.2)
	TIMSS	--
A TV in your bedroom	IRL	42 (1.5)
	TIMSS	--

Figure 5.5 and Figure 5.6 (tabulation): Percentage of pupils who have a TV in their bedroom and who own a smartphone, by teachers' reports of the extent to which their teaching is *limited by pupils lacking sleep* (Fourth grade)

		Teaching limited by lack of sleep		
		Not at all limited	Limited somewhat	Limited a lot
A TV in your bedroom	Yes	31 (3.7)	64 (3.9)	5 (1.6)
	No	43 (4.2)	55 (4.1)	2 (0.7)
Your own smartphone	Yes	38 (3.8)	58 (3.8)	4 (1.3)
	No	38 (4.1)	59 (4.2)	3 (0.8)

Table A5.9: Percentage of pupils, by number of number of digital information devices in the home, student reports (Eighth grade)

	More than 10 devices	7-10 devices	4-6 devices	1-3 devices	None
Australia	44 (0.9)	34 (0.7)	18 (0.6)	4 (0.3)	<1 (0.1)
England	52 (0.9)	31 (0.7)	15 (0.7)	2 (0.2)	<1 (0.03)
Hong Kong SAR	20 (0.8)	32 (1.0)	35 (1.0)	13 (0.7)	<1 (0.1)
Ireland	41 (0.9)	36 (0.8)	19 (0.8)	3 (0.3)	<1 (0.1)
New Zealand	33 (0.8)	33 (0.6)	27 (0.8)	7 (0.4)	<1 (0.1)
Rep. of Korea	8 (0.5)	37 (0.8)	43 (0.8)	11 (0.6)	<1 (0.1)
Russian Fed.	21 (0.7)	31 (1.0)	35 (0.9)	13 (0.9)	<1 (0.1)
Singapore	28 (0.7)	37 (0.7)	27 (0.6)	7 (0.4)	<1 (0.1)
Slovenia	32 (1.0)	39 (0.8)	25 (0.9)	4 (0.4)	<1 (0.1)
United States	42 (0.6)	31 (0.5)	21 (0.5)	5 (0.3)	<1 (0.1)
TIMSS	28 (0.1)	27 (0.1)	26 (0.1)	17 (0.1)	3 (0.1)

Figure 5.7 (tabulation): Percentage of students who have various items in their home, student report (Eighth grade)

		%
Your own computer (including tablets, laptops, etc.)	IRL	79 (0.8)
	TIMSS	69 (0.2)
A computer or tablet that is shared with other people at home	IRL	76 (0.9)
	TIMSS	71 (0.1)
Internet connection	IRL	98 (0.2)
	TIMSS	84 (0.1)
Your own mobile phone	IRL	97 (0.4)
	TIMSS	84 (0.1)
A gaming system (e.g., Playstation®, Wii®, Xbox®)	IRL	90 (0.5)
	TIMSS	59 (0.1)
Your own smartphone (a phone on which you can get the Internet)*	IRL	90 (0.5)
	TIMSS	
Premium ("pay extra") TV channels, such as BT Sport or Sky Movies*	IRL	55 (1.0)
	TIMSS	
A TV in your bedroom*	IRL	50 (1.3)
	TIMSS	

Figure 5.8 and Figure 5.9 (tabulation): Percentage of students who have a TV in their bedroom, by teachers' reports of the extent to which their teaching is *limited by students lacking sleep* (Eighth grade)

		Teaching limited by lack of sleep		
		Not at all limited	Limited somewhat	Limited a lot
A TV in your bedroom	Yes	29 (2.8)	62 (3.0)	9 (1.5)
	No	40 (3.7)	56 (3.7)	4 (1.1)
Your own smartphone	Yes	35 (3.1)	59 (3.2)	7 (1.2)
	No	30 (3.5)	61 (3.6)	9 (2.0)

## Chapter 6: Learning in early childhood

Figure 6.1 (tabulation): Percentage of pupils, by parental reports of their child's engagement in various types of early **numeracy** activities before beginning primary school, Ireland and TIMSS average

		Often	Sometimes	Never or almost never
Count different things	IRL	69 (1.1)	29 (1.1)	2 (0.2)
	TIMSS	58 (0.2)	36 (0.2)	5 (0.1)
Play with building blocks or construction toys	IRL	68 (1.0)	27 (0.9)	5 (0.4)
	TIMSS	60 (0.2)	32 (0.1)	8 (0.1)
Play games involving shapes (e.g., shape sorting toys, puzzles)	IRL	64 (1.0)	33 (1.1)	3 (0.4)
	TIMSS	56 (0.2)	36 (0.1)	8 (0.1)
Saying counting rhymes or sing counting songs	IRL	61 (0.9)	32 (0.8)	7 (0.6)
	TIMSS	40 (0.2)	44 (0.1)	17 (0.1)
Play with number toys (e.g., blocks with numbers)	IRL	51 (1.1)	40 (1.1)	9 (0.7)
	TIMSS	40 (0.2)	45 (0.1)	15 (0.1)
Play board or card games	IRL	50 (1.1)	44 (1.1)	6 (0.5)
	TIMSS	41 (0.1)	46 (0.2)	13 (0.1)

Figure 6.2 (tabulation): Percentage of pupils, by parental reports of their child's engagement in various types of early **literacy** activities before beginning primary school, Ireland

		Often	Sometimes	Never or almost never
Talk about things you had done	IRL	78 (0.8)	21 (0.8)	1 (0.1)
	TIMSS	62 (0.2)	33 (0.1)	4 (0.1)
Read books	IRL	71 (1.0)	28 (0.9)	1 (0.2)
	TIMSS	52 (0.2)	42 (0.2)	6 (0.1)
Tell stories	IRL	62 (1.2)	34 (1.2)	3 (0.3)
	TIMSS	48 (0.2)	44 (0.2)	7 (0.1)
Sing songs	IRL	58 (1.3)	35 (1.1)	7 (0.6)
	TIMSS	49 (0.2)	40 (0.2)	12 (0.1)
Play with alphabet toys (e.g., blocks with letters of the alphabet)	IRL	57 (1.1)	36 (1.2)	7 (0.6)
	TIMSS	43 (0.2)	43 (0.2)	13 (0.1)
Write letters or words	IRL	54 (1.4)	41 (1.2)	5 (0.4)
	TIMSS	46 (0.2)	43 (0.1)	10 (0.1)
Read aloud signs and labels	IRL	53 (1.1)	38 (1.1)	9 (0.6)
	TIMSS	45 (0.2)	42 (0.1)	13 (0.1)
Talks about things you had read	IRL	44 (1.0)	48 (0.9)	7 (0.5)
	TIMSS	37 (0.2)	51 (0.2)	12 (0.1)
Play word games	IRL	43 (1.1)	48 (1.2)	9 (0.6)
	TIMSS	36 (0.1)	49 (0.1)	15 (0.1)

Table A6.1: Percentage of pupils, by parental reports of their child's engagement in various types of early **numeracy** activities by gender and family SES, Ireland

	Frequency of play	Gender		Home resources for learning		
		Girls	Boys	Few	Some	Many
Saying counting rhymes or sing counting songs	(Almost) never	6 (0.7)	8 (0.7)	17 (4.8)	8 (0.7)	5 (0.8)
	Often	65 (1.4)	58 (1.4)	48 (7.6)	57 (1.1)	70 (1.6)
Play with number toys (e.g., blocks with numbers)	(Almost) never	9 (0.9)	9 (1.0)	17 (4.5)	10 (0.9)	6 (0.9)
	Often	53 (1.6)	50 (1.4)	31 (9.0)	48 (1.2)	58 (2.1)
Count different things	(Almost) never	2 (0.3)	2 (0.4)	13 (4.7)	2 (0.3)	1 (0.2)
	Often	70 (1.4)	68 (1.4)	51 (7.2)	64 (1.3)	80 (1.4)
Play games involving shapes (e.g., shape sorting toys, puzzles)	(Almost) never	2 (0.4)	4 (0.6)	12 (5.5)	3 (0.4)	1 (0.5)
	Often	65 (1.4)	62 (1.4)	37 (7.0)	59 (1.3)	74 (1.7)
Play with building blocks or construction toys	(Almost) never	8 (0.7)	3 (0.5)	13 (4.0)	6 (0.6)	3 (0.6)
	Often	60 (1.5)	75 (1.0)	50 (8.3)	63 (1.3)	77 (1.6)
Play board or card games	(Almost) never	6 (0.8)	6 (0.7)	6 (2.5)	7 (0.7)	3 (0.6)
	Often	51 (1.4)	49 (1.4)	27 (6.5)	47 (1.4)	57 (1.9)

Table A6.2: Percentage of pupils, by parental reports of their child's engagement in various types of early **literacy** activities by gender and family SES, Ireland

	Frequency of play	Gender		Home resources for learning		
		Girls	Boys	Few	Some	Many
Read books	(Almost) never	1 (0.2)	1 (0.3)	10 (4.0)	1 (0.2)	<1 (0.1)
	Often	74 (1.4)	68 (1.4)	26 (6.1)	62 (1.2)	91 (1.1)
Tell stories	(Almost) never	2 (0.4)	4 (0.5)	11 (3.6)	4 (0.5)	2 (0.5)
	Often	65 (1.6)	60 (1.2)	32 (7.0)	56 (1.4)	76 (1.6)
Sing songs	(Almost) never	5 (0.7)	8 (0.8)	9 (3.5)	8 (0.8)	4 (0.7)
	Often	65 (1.3)	53 (1.7)	45 (8.2)	55 (1.5)	66 (2.0)
Play with alphabet toys (e.g., blocks with letters of the alphabet)	(Almost) never	7 (0.7)	7 (0.8)	16 (4.5)	8 (0.8)	5 (0.8)
	Often	57 (1.7)	56 (1.4)	33 (8.5)	54 (1.3)	63 (2.1)
Talk about things you had done	(Almost) never	1 (0.2)	1 (0.2)	6 (2.5)	1 (0.2)	<1 (0.1)
	Often	80 (1.0)	77 (1.2)	60 (5.8)	75 (1.0)	87 (1.1)
Talk about things you had read	(Almost) never	7 (0.6)	8 (0.6)	15 (4.2)	9 (0.6)	4 (0.7)
	Often	47 (1.5)	42 (1.2)	22 (6.2)	39 (1.3)	55 (1.6)
Play word games	(Almost) never	8 (0.9)	10 (0.6)	12 (4.2)	10 (0.8)	6 (0.8)
	Often	43 (1.4)	42 (1.3)	26 (5.5)	38 (1.2)	54 (1.8)

Table A6.3: Percentage of pupils and mean mathematics and science achievement, by **literacy and numeracy activities** before beginning primary school

	Often			Sometimes			Never or almost never		
	%	Maths	Science	%	Maths	Science	%	Maths	Science
Australia	–	–	–	–	–	–	–	–	–
Finland	29 (0.8)	547 (2.8)	567 (3.4)	69 (0.9)	533 (1.9)	551 (2.2)	1 (0.2)	–	–
Hong Kong SAR	21 (0.8)	638 (4.1)	582 (4.1)	75 (1.0)	612 (2.9)	552 (3.1)	5 (0.5)	587 (5.7)	533 (7.3)
Ireland	62 (1.0)	560 (2.2)	541 (2.5)	38 (1.0)	535 (3.1)	516 (3.2)	1 (0.2)	–	–
New Zealand	61 (1.0)	525 (2.7)	539 (2.7)	38 (1.0)	492 (3.7)	507 (3.7)	1 (0.1)	–	–
Northern Ireland	68 (1.3)	592 (3.5)	537 (2.5)	31 (1.2)	571 (5.5)	514 (4.5)	0 (0.1)	–	–
Rep. of Korea	48 (0.9)	625 (2.6)	603 (2.5)	50 (0.9)	596 (2.4)	579 (2.2)	2 (0.3)	–	–
Russian Fed.	70 (0.8)	568 (3.7)	572 (3.2)	30 (0.8)	558 (3.6)	558 (3.9)	1 (0.2)	–	–
Singapore	35 (0.7)	636 (3.7)	611 (3.6)	61 (0.7)	611 (4.0)	583 (3.9)	4 (0.3)	581 (7.8)	547 (7.0)
Slovenia	56 (1.0)	533 (2.9)	557 (2.7)	43 (1.0)	524 (2.7)	547 (3.5)	1 (0.2)	–	–
TIMSS	43 (0.1)	518 (0.5)	521 (0.6)	54 (0.2)	497 (0.5)	499 (0.6)	3 (0.1)	435 (2.6)	427 (3.3)

Figure 6.3 (tabulation): Percentage of Fourth grade pupils, by how well pupils could do various **literacy** tasks upon entering primary school, parents' reports, Ireland and TIMSS average

		Very well	Moderately well	Not very well	Not at all
Recognise most of the letters of the alphabet	IRL	80 (0.8)	17 (0.7)	3 (0.3)	<1 (0.2)
	TIMSS	51 (0.2)	33 (0.1)	13 (0.1)	3 (0.1)
Read some words	IRL	66 (1.2)	27 (1.0)	6 (0.5)	1 (0.2)
	TIMSS	33 (0.1)	36 (0.1)	21 (0.1)	10 (0.1)
Read sentences	IRL	52 (1.0)	33 (0.9)	12 (0.6)	3 (0.4)
	TIMSS	21 (0.1)	29 (0.1)	26 (0.1)	23 (0.2)
Read a story	IRL	43 (1.0)	37 (1.0)	16 (0.7)	5 (0.4)
	TIMSS	16 (0.1)	26 (0.1)	26 (0.1)	32 (0.2)
Write letters of the alphabet	IRL	67 (0.9)	28 (1.0)	5 (0.5)	1 (0.2)
	TIMSS	41 (0.2)	36 (0.1)	17 (0.1)	5 (0.1)
Write some words	IRL	58 (1.0)	33 (1.0)	7 (0.5)	2 (0.3)
	TIMSS	30 (0.1)	37 (0.1)	23 (0.1)	11 (0.1)

Figure 6.4 (tabulation): Percentage of Fourth Class pupils, by how well pupils could do various **numeracy** tasks before beginning First Class, parents' reports

		Not at all	Up to 10	Up to 20	Up to 100 or higher
Count by himself/herself	IRL	5 (0.5)	10 (0.7)	31 (1.1)	53 (1.1)
	TIMSS	4 (0.1)	23 (0.1)	38 (0.2)	35 (0.2)
Recognise written numbers	IRL	6 (0.5)	13 (0.6)	33 (1.2)	48 (1.1)
	TIMSS	7 (0.1)	31 (0.1)	33 (0.1)	28 (0.1)
Write numbers	IRL	7 (0.5)	15 (0.7)	34 (1.0)	45 (1.1)
	TIMSS	10 (0.1)	34 (0.1)	30 (0.1)	26 (0.1)



Figure 6.5 (tabulation): Percentage of Fourth grade pupils, by whether pupils were able to do various **numeracy** tasks before beginning First grade, parents' reports

		Yes	No
Do simple addition	IRL	92 (0.5)	8 (0.5)
	TIMSS	78 (0.1)	22 (0.1)
Do simple subtraction	IRL	78 (0.9)	22 (0.9)
	TIMSS	64 (0.2)	36 (0.2)
Count money	IRL	67 (1.0)	33 (1.0)
	TIMSS	50 (0.2)	50 (0.2)
Measure lengths or heights	IRL	27 (1.0)	73 (1.0)
	TIMSS	22 (0.1)	78 (0.1)

Table A6.4: Percentage of pupils and mean mathematics and science achievement, by how well pupils could do literacy and numeracy tasks upon entering primary school, parents' reports

	Very well			Moderately well			Not well		
	%	Maths	Science	%	Maths	Science	%	Maths	Science
Australia	–	–	–	–	–	–	–	–	–
Finland	22 (0.7)	581 (2.4)	589 (2.9)	49 (0.8)	539 (2.2)	555 (2.6)	29 (0.8)	501 (2.8)	530 (3.4)
Hong Kong SAR	33 (1.2)	639 (3.4)	582 (3.6)	62 (1.1)	607 (2.8)	548 (3.1)	5 (0.4)	571 (7.8)	505 (8.1)
Ireland	51 (1.0)	575 (2.5)	552 (2.7)	43 (1.1)	530 (2.7)	515 (2.9)	6 (0.5)	489 (6.3)	477 (5.8)
New Zealand	9 (0.6)	557 (6.8)	556 (5.8)	50 (0.9)	521 (2.5)	532 (2.8)	41 (1.1)	490 (4.2)	512 (3.8)
Northern Ireland	–	–	–	–	–	–	–	–	–
Rep. of Korea	53 (0.9)	627 (2.4)	606 (1.8)	43 (0.8)	591 (2.5)	574 (2.6)	3 (0.3)	539 (7.7)	532 (6.9)
Russian Fed.	17 (0.9)	601 (4.3)	598 (3.8)	59 (1.0)	568 (3.8)	572 (3.4)	24 (1.0)	531 (4.4)	535 (4.4)
Singapore	43 (1.1)	655 (3.4)	626 (3.3)	51 (1.0)	599 (3.9)	572 (3.7)	5 (0.4)	521 (7.7)	495 (7.2)
Slovenia	7 (0.6)	574 (7.4)	587 (6.6)	41 (1.0)	540 (2.6)	560 (3.1)	52 (0.9)	514 (2.8)	541 (3.2)
TIMSS	21 (0.1)	537 (0.7)	535 (0.8)	53 (0.2)	501 (0.5)	504 (0.5)	25 (0.2)	470 (0.8)	476 (0.9)

A dash (–) indicates that data was not available

Figure 6.6 (tabulation): Percentage of pupils who attended formal educational programmes for children under 3, and children age 3 or older, parent reports

	Formal educational programme for children under 3	Formal educational programme for children age 3 or older
Australia	50 (1.3)	88 (0.8)
Finland	46 (1.1)	92 (0.5)
Hong Kong SAR	55 (1.3)	87 (0.9)
Ireland	28 (0.8)	92 (0.6)
New Zealand	66 (1.1)	86 (0.8)
Northern Ireland	37 (1.4)	90 (0.8)
Rep. of Korea	23 (0.8)	95 (0.4)
Russian Fed.	35 (1.2)	81 (1.1)
Singapore	21 (0.6)	96 (0.3)
Slovenia	58 (1.5)	87 (0.8)
TIMSS	36 (0.2)	83 (0.1)

## Chapter 7: Nutrition and sleep

Table A7.1: Percentage of pupils, by how often breakfast is consumed on school days (Fourth grade)

	Every day	Most days	Sometimes	Never or almost never
Australia	70 (1.0)	16 (0.7)	10 (0.8)	4 (0.4)
England	75 (1.0)	12 (0.7)	9 (0.5)	4 (0.4)
Finland	73 (1.0)	17 (0.7)	8 (0.5)	3 (0.3)
Hong Kong SAR	73 (1.0)	11 (0.8)	9 (0.5)	8 (0.5)
Ireland	83 (0.7)	9 (0.4)	5 (0.4)	3 (0.3)
New Zealand	71 (0.9)	14 (0.6)	11 (0.6)	4 (0.3)
Northern Ireland	72 (1.1)	13 (0.8)	10 (0.7)	5 (0.5)
Rep. of Korea	62 (0.9)	18 (0.6)	12 (0.6)	8 (0.5)
Russian Fed.	69 (1.1)	15 (0.7)	12 (0.6)	5 (0.4)
Singapore	54 (0.8)	12 (0.4)	19 (0.6)	16 (0.6)
Slovenia	48 (1.4)	12 (0.6)	21 (0.9)	19 (0.9)
United States	53 (0.9)	17 (0.5)	18 (0.6)	13 (0.5)
TIMSS	67 (0.2)	11 (0.1)	14 (0.1)	8 (0.1)

Figure 7.1 (tabulation): Percentage of pupils, how often breakfast is consumed on school days, by schools' DEIS status

		Every day	Most days	Sometimes	Never or almost never
DEIS	Urban Band 1	73 (2.9)	11 (1.1)	10 (2.1)	5 (1.3)
	Urban Band 2	81 (2.2)	9 (1.1)	5 (1.5)	5 (1.2)
	DEIS Rural	83 (1.3)	6 (1.2)	7 (1.9)	4 (1.3)
	Non-DEIS	84 (0.8)	9 (0.5)	5 (0.4)	2 (0.3)

Figure 7.2 (tabulation): Percentage of pupils, by teachers' reports of issues that limit their ability to teach their class (Fourth grade), Ireland and TIMSS

		Limited a lot	Limited to some extent	Not at all limited
Pupils suffering from not enough sleep	IRL	3 (1.0)	59 (3.8)	38 (3.7)
	TIMSS	9 (0.3)	50 (0.5)	42 (0.5)
Pupils suffering from lack of basic nutrition	IRL	2 (0.7)	23 (3.3)	75 (3.3)
	TIMSS	5 (0.2)	28 (0.5)	67 (0.5)

Table A7.2: Percentage of students, by how often breakfast is consumed on school days (Eighth grade)

	Every day	Most days	Sometimes	Never or almost never
Australia	54 (0.8)	19 (0.5)	15 (0.6)	12 (0.4)
England	48 (1.1)	17 (0.7)	17 (0.7)	18 (0.8)
Hong Kong SAR	53 (1.0)	18 (0.7)	18 (0.8)	11 (0.6)
Ireland	62 (1.1)	15 (0.6)	12 (0.7)	11 (0.6)
New Zealand	53 (1.2)	20 (0.6)	16 (0.6)	11 (0.7)
Rep. of Korea	52 (1.0)	18 (0.6)	16 (0.6)	15 (0.7)
Russian Fed.	54 (1.1)	20 (0.6)	17 (0.8)	9 (0.5)
Singapore	39 (0.7)	16 (0.5)	22 (0.6)	23 (0.5)
Slovenia	35 (1.2)	15 (0.6)	23 (0.7)	27 (1.0)
United States	39 (0.9)	19 (0.4)	22 (0.5)	21 (0.7)
TIMSS	49 (0.2)	17 (0.1)	22 (0.1)	13 (0.1)

Figure 7.3 (tabulation): Percentage of students, how often breakfast is consumed on school days, by schools' DEIS status (Eighth grade)

	Every day	Most days	Sometimes	Never or almost never
DEIS	49 (3.0)	18 (1.7)	18 (2.1)	16 (1.7)
Non-DEIS	66 (1.1)	15 (0.6)	10 (0.6)	9 (0.6)

Figure 7.4 (tabulation) Percentage of students, by mathematics teachers' reports of issues that limit their ability to teach their class (Eighth grade), Ireland and TIMSS average

		Limited a lot	Limited to some extent	Not at all limited
Students suffering from not enough sleep	IRL	7 (1.2)	59 (3.1)	34 (3.0)
	TIMSS	13 (0.4)	56 (0.6)	31 (0.5)
Students suffering from lack of basic nutrition	IRL	4 (1.3)	17 (2.3)	79 (2.5)
	TIMSS	8 (0.3)	35 (0.5)	57 (0.5)

Table E7.1 Percentage of students, by science teachers' reports of issues that limit their ability to teach their class (Eighth grade)

		Limited a lot	Limited to some extent	Not at all limited
Students suffering from not enough sleep	IRL	6 (1.6)	61 (3.5)	33 (3.2)
	TIMSS	13 (0.4)	57 (0.5)	30 (0.5)
Students suffering from lack of basic nutrition	IRL	1 (0.5)	22 (2.7)	77 (2.7)
	TIMSS	7 (0.3)	35 (0.5)	58 (0.5)

## Chapter 8: Homework

Table A8.1: Percentage of pupils, frequency of homework assigned during the week, parent report (Fourth grade)

	Every day	3 or 4 times a week	1 or 2 times a week	Less than once a week	No homework
Australia	25 (1.5)	42 (1.4)	24 (1.4)	5 (0.7)	4 (0.8)
Finland	59 (1.5)	37 (1.3)	3 (0.6)	<1 (0.1)	<1 (0.1)
Hong Kong SAR	79 (1.0)	9 (0.8)	6 (0.5)	2 (0.3)	3 (0.3)
Ireland	52 (1.4)	47 (1.4)	<1 (0.1)	<1 (0.1)	<1 (0.1)
New Zealand	22 (1.0)	40 (1.5)	25 (1.3)	6 (0.6)	7 (1.4)
Northern Ireland	66 (1.6)	33 (1.5)	1 (0.3)	<1 (0.03)	<1 (0.2)
Rep. of Korea	41 (1.3)	31 (1.0)	22 (0.9)	4 (0.3)	2 (0.3)
Russian Fed.	93 (0.6)	4 (0.6)	1 (0.2)	<1 (0.1)	2 (0.2)
Singapore	39 (0.7)	38 (0.6)	18 (0.6)	2 (0.2)	3 (0.2)
Slovenia	71 (1.3)	26 (1.2)	2 (0.4)	1 (0.3)	<1 (0.1)
United States	–	–	–	–	–
TIMSS	58 (0.2)	24 (0.2)	11 (0.1)	3 (0.1)	4 (0.1)

Table A8.2: Percentage of students, frequency of mathematics homework assigned during the week (Eighth grade)

	Every day	3 or 4 times a week	1 or 2 times a week	Less than once a week	Never
Australia	17 (1.3)	28 (1.0)	33 (1.3)	16 (1.0)	5 (0.7)
England	2 (0.6)	12 (1.0)	61 (1.9)	21 (1.5)	4 (0.6)
Hong Kong SAR	38 (2.5)	35 (1.9)	19 (1.5)	6 (1.3)	2 (0.3)
Ireland	75 (1.5)	21 (1.3)	3 (0.5)	1 (0.2)	1 (0.1)
New Zealand	10 (1.0)	25 (1.5)	32 (1.3)	25 (1.3)	8 (0.7)
Rep. of Korea	5 (0.9)	13 (0.8)	27 (1.3)	35 (1.3)	20 (1.5)
Russian Fed.	80 (1.1)	18 (1.0)	2 (0.3)	<1 (0.1)	<1 (0.1)
Singapore	22 (0.8)	52 (0.9)	22 (0.8)	4 (0.4)	1 (0.2)
Slovenia	71 (1.6)	23 (1.2)	4 (0.6)	2 (0.4)	1 (0.2)
United States	46 (1.8)	29 (1.3)	14 (0.9)	7 (0.9)	3 (0.6)
TIMSS	40 (0.2)	28 (0.2)	19 (0.2)	8 (0.1)	4 (0.1)

Table A8.3: Percentage of students and mean mathematics achievement, by weekly time students spend on assigned mathematics homework (Eighth grade)

	3 hours or more		More than 45 minutes but less than 3 hours		45 minutes or less	
	%	Maths	%	Maths	%	Maths
Australia	9 (0.8)	530 (5.6)	35 (1.2)	527 (3.4)	56 (1.6)	491 (3.7)
England	1 (0.2)	–	26 (1.1)	539 (5.0)	73 (1.2)	514 (4.3)
Hong Kong SAR	21 (1.4)	596 (4.7)	45 (1.6)	604 (4.6)	34 (1.8)	582 (7.0)
Ireland	19 (1.0)	531 (4.2)	49 (1.0)	533 (2.6)	32 (1.2)	507 (4.5)
New Zealand	4 (0.4)	500 (8.8)	28 (1.3)	517 (3.9)	68 (1.5)	485 (3.3)
Rep. of Korea	3 (0.3)	604 (11.3)	16 (0.9)	600 (4.3)	81 (1.0)	607 (2.8)
Russian Fed.	43 (1.3)	532 (4.7)	43 (1.1)	543 (4.7)	14 (0.9)	543 (7.4)
Singapore	22 (0.8)	633 (3.1)	55 (0.9)	631 (3.0)	23 (0.9)	586 (5.7)
Slovenia	21 (1.2)	505 (4.0)	44 (1.1)	518 (2.6)	35 (1.5)	524 (2.9)
United States	18 (1.0)	547 (5.0)	36 (0.9)	530 (3.2)	46 (1.5)	502 (3.2)
TIMSS	15 (0.1)	481 (1.1)	36 (0.2)	491 (0.7)	49 (0.2)	474 (0.7)

A dash (–) indicates that data was not available.

Table A8.4: Percentage of students, frequency of science homework assigned during the week (Eighth grade)

	Every day	3 or 4 times a week	1 or 2 times a week	Less than once a week	Never
Australia	5 (0.6)	17 (0.9)	36 (1.2)	30 (1.2)	12 (1.0)
England	2 (0.2)	13 (1.1)	47 (1.6)	31 (1.5)	9 (0.8)
Hong Kong SAR	5 (0.5)	24 (1.3)	50 (1.7)	18 (1.7)	3 (0.5)
Ireland	21 (1.5)	34 (1.3)	33 (1.6)	8 (0.9)	4 (0.8)
New Zealand	5 (0.8)	19 (1.6)	31 (1.1)	33 (1.8)	13 (1.0)
Rep. of Korea	1 (0.3)	4 (0.6)	16 (1.1)	38 (1.4)	41 (2.0)
Russian Fed.	–	–	–	–	–
Singapore	6 (0.4)	38 (0.9)	44 (0.7)	10 (0.8)	2 (0.3)
Slovenia	–	–	–	–	–
United States	11 (0.8)	23 (1.1)	30 (1.1)	24 (1.0)	13 (0.9)
TIMSS	13 (0.2)	25 (0.2)	34 (0.2)	19 (0.2)	9 (0.2)

Table A8.5: Percentage of students and mean science achievement, by weekly time students spend on assigned science homework (Eighth grade)

	3 hours or more		More than 45 minutes but less than 3 hours		45 minutes or less	
	%	Science	%	Science	%	Science
Australia	3 (0.4)	518 (7.3)	24 (0.9)	529 (3.9)	73 (1.0)	510 (2.7)
England	1 (0.2)	–	26 (1.3)	568 (5.0)	72 (1.4)	529 (4.1)
Hong Kong SAR	4 (0.4)	533 (7.4)	34 (1.3)	549 (3.4)	62 (1.4)	546 (4.6)
Ireland	5 (0.5)	510 (6.1)	33 (1.2)	539 (3.0)	61 (1.5)	535 (3.1)
New Zealand	3 (0.4)	515 (10.5)	23 (1.3)	534 (4.5)	74 (1.6)	510 (3.0)
Rep. of Korea	1 (0.2)	–	8 (0.7)	546 (5.4)	91 (0.8)	557 (2.3)
Russian Fed.	–	–	–	–	–	–
Singapore	9 (0.5)	606 (3.8)	52 (0.9)	609 (2.6)	39 (1.2)	579 (4.9)
Slovenia	–	–	–	–	–	–
United States	4 (0.4)	525 (6.6)	22 (1.1)	540 (3.9)	74 (1.3)	531 (2.8)
TIMSS	5 (0.1)	466 (1.5)	28 (0.2)	491 (0.9)	67 (0.2)	485 (0.7)

A dash (–) indicates that data was not available.

## Chapter 9: Shadow education

Table A9.1: Percentage of pupils attending extra lessons/tutoring in mathematics, Ireland and comparison countries, parent report (Fourth grade)

	No	Yes, to excel in class	Yes, to keep up in class	Did not attend	Less than 4 months	4-8 months	More than 8 months
Australia	85 (1.2)	6 (0.8)	9 (0.8)	84 (1.3)	4 (0.6)	5 (0.8)	7 (0.7)
Finland	88 (0.8)	5 (0.4)	7 (0.7)	82 (0.9)	11 (0.7)	4 (0.4)	3 (0.3)
Hong Kong	56 (1.1)	15 (0.8)	29 (0.9)	57 (1.0)	10 (0.6)	9 (0.5)	24 (0.9)
<b>Ireland</b>	<b>92 (0.4)</b>	<b>3 (0.3)</b>	<b>5 (0.4)</b>	<b>90 (0.5)</b>	<b>3 (0.4)</b>	<b>3 (0.3)</b>	<b>4 (0.4)</b>
New Zealand	86 (0.9)	5 (0.5)	8 (0.6)	85 (1.0)	5 (0.5)	4 (0.3)	6 (0.6)
N. Ireland	75 (1.5)	14 (1.2)	10 (0.8)	72 (1.8)	15 (1.2)	8 (0.9)	6 (0.6)
Rep. of Korea	34 (0.9)	28 (0.9)	38 (0.9)	34 (1.0)	8 (0.5)	11 (0.5)	47 (0.9)
Russian Fed.	85 (0.9)	8 (0.6)	8 (0.4)	84 (1.0)	6 (0.4)	6 (0.5)	4 (0.5)
Singapore	42 (0.9)	26 (0.6)	32 (1.1)	38 (1.0)	10 (0.4)	13 (0.5)	40 (0.8)
Slovenia	87 (1.0)	9 (0.8)	4 (0.4)	83 (1.1)	9 (0.8)	5 (0.7)	3 (0.4)
<b>TIMSS</b>	<b>79 (0.2)</b>	<b>11 (0.1)</b>	<b>10 (0.1)</b>	<b>78 (0.2)</b>	<b>9 (0.1)</b>	<b>5 (0.1)</b>	<b>8 (0.1)</b>

Table A9.2: Percentage of pupils attending extra lessons/tutoring in science, Ireland and comparison countries, parent report (Fourth grade)

	No	Yes, to excel in class	Yes, to keep up in class	Did not attend	Less than 4 months	4-8 months	More than 8 months
Australia	97 (0.4)	1 (0.3)	2 (0.3)	97 (0.4)	1 (0.2)	1 (0.2)	1 (0.3)
Finland	98 (0.3)	1 (0.1)	1 (0.2)	97 (0.3)	1 (0.2)	1 (0.2)	1 (0.1)
Hong Kong	89 (0.6)	4 (0.4)	7 (0.5)	87 (0.6)	4 (0.3)	3 (0.3)	6 (0.5)
<b>Ireland</b>	<b>98 (0.3)</b>	<b>1 (0.2)</b>	<b>1 (0.2)</b>	<b>97 (0.3)</b>	<b>1 (0.2)</b>	<b>1 (0.2)</b>	<b>1 (0.2)</b>
New Zealand	97 (0.4)	1 (0.3)	1 (0.3)	97 (0.4)	1 (0.2)	1 (0.2)	1 (0.2)
N. Ireland	97 (0.6)	2 (0.4)	1 (0.5)	97 (0.5)	2 (0.4)	1 (0.3)	1 (0.2)
Rep. of Korea	66 (1.0)	12 (0.6)	22 (0.7)	66 (1.0)	6 (0.4)	7 (0.4)	21 (0.8)
Russian Fed.	94 (0.6)	3 (0.4)	3 (0.4)	94 (0.7)	2 (0.4)	2 (0.3)	2 (0.3)
Singapore	57 (0.8)	19 (0.6)	24 (0.8)	52 (0.7)	9 (0.4)	11 (0.4)	29 (0.7)
Slovenia	96 (0.5)	3 (0.4)	1 (0.2)	95 (0.5)	2 (0.4)	2 (0.3)	1 (0.3)
<b>TIMSS</b>	<b>89 (0.1)</b>	<b>6 (0.1)</b>	<b>6 (0.1)</b>	<b>89 (0.1)</b>	<b>4 (0.1)</b>	<b>3 (0.1)</b>	<b>4 (0.1)</b>



Table A9.3: Percentage of students attending extra lessons/tutoring in mathematics, Ireland and comparison countries, student report (Eighth grade)

	No	Yes, to excel in class	Yes, to keep up in class	Did not attend	Less than 4 months	4-8 months	More than 8 months
Australia	76 (0.8)	11 (0.9)	12 (0.6)	76 (1.1)	10 (0.5)	6 (0.4)	8 (0.7)
England	81 (1.0)	10 (0.6)	9 (0.6)	80 (1.1)	10 (0.8)	4 (0.4)	5 (0.4)
Hong Kong	52 (0.9)	15 (0.8)	34 (0.9)	52 (1.0)	19 (0.8)	11 (0.5)	19 (0.8)
<b>Ireland</b>	<b>84 (0.8)</b>	<b>7 (0.6)</b>	<b>9 (0.6)</b>	<b>85 (0.9)</b>	<b>8 (0.7)</b>	<b>4 (0.4)</b>	<b>4 (0.4)</b>
New Zealand	77 (1.2)	9 (0.7)	13 (0.7)	79 (1.3)	11 (0.7)	4 (0.5)	5 (0.4)
Rep. of Korea	29 (1.1)	42 (1.1)	28 (0.8)	30 (1.1)	12 (0.5)	12 (0.6)	46 (1.1)
Russian Fed.	60 (1.4)	24 (1.0)	16 (0.8)	62 (1.2)	21 (1.0)	8 (0.6)	9 (0.6)
Singapore	45 (0.8)	28 (0.7)	27 (0.6)	40 (0.8)	22 (0.6)	13 (0.4)	25 (0.7)
Slovenia	62 (1.4)	25 (1.1)	13 (0.7)	61 (1.6)	23 (1.1)	10 (0.9)	7 (0.6)
United States	75 (0.7)	12 (0.5)	13 (0.6)	75 (0.8)	16 (0.6)	4 (0.3)	5 (0.3)
<b>TIMSS</b>	<b>56 (0.2)</b>	<b>27 (0.2)</b>	<b>17 (0.1)</b>	<b>59 (0.2)</b>	<b>20 (0.1)</b>	<b>9 (0.1)</b>	<b>12 (0.1)</b>

Table A9.4: Percentage of students attending extra lessons/tutoring in science, Ireland and comparison countries, student report (Eighth grade)

	No	Yes, to excel in class	Yes, to keep up in class	Did not attend	Less than 4 months	4-8 months	More than 8 months
Australia	79 (1.9)	14 (1.8)	7 (0.4)	89 (0.6)	4 (0.3)	2 (0.2)	4 (0.3)
England	89 (0.7)	5 (0.4)	7 (0.5)	89 (0.7)	6 (0.5)	2 (0.3)	3 (0.3)
Hong Kong	78 (1.1)	7 (0.6)	15 (0.8)	79 (0.9)	10 (0.6)	5 (0.5)	6 (0.4)
<b>Ireland</b>	<b>95 (0.5)</b>	<b>3 (0.3)</b>	<b>3 (0.3)</b>	<b>95 (0.4)</b>	<b>2 (0.3)</b>	<b>1 (0.2)</b>	<b>2 (0.3)</b>
New Zealand	87 (0.8)	5 (0.3)	9 (0.6)	89 (0.7)	6 (0.4)	3 (0.3)	3 (0.3)
Rep. of Korea	67 (1.1)	15 (0.7)	18 (0.8)	68 (1.1)	11 (0.5)	6 (0.5)	15 (0.7)
Russian Fed.	75 (1.1)	13 (0.7)	11 (0.6)	75 (1.2)	15 (0.8)	4 (0.4)	6 (0.4)
Singapore	65 (0.8)	16 (0.5)	19 (0.6)	61 (0.8)	18 (0.6)	9 (0.4)	12 (0.5)
Slovenia	70 (1.2)	21 (1.0)	9 (0.6)	70 (1.2)	20 (1.0)	6 (0.5)	4 (0.4)
United States	86 (0.6)	7 (0.4)	8 (0.4)	86 (0.6)	8 (0.4)	2 (0.2)	4 (0.2)
<b>TIMSS</b>	<b>67 (0.2)</b>	<b>19 (0.1)</b>	<b>14 (0.1)</b>	<b>71 (0.2)</b>	<b>15 (0.1)</b>	<b>7 (0.1)</b>	<b>8 (0.1)</b>