Reference Data for

School Wellbeing Discussion

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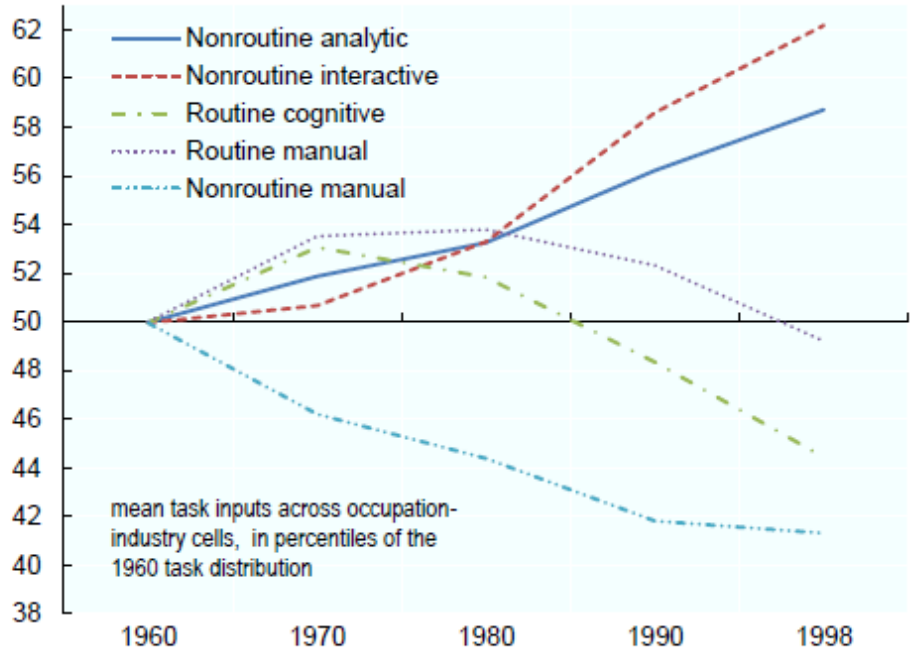
Jobs 仕事

Skills supply and demand

Routine work, which is a typical repetitive work, has already transitioned from human work to computer work. This tendency will continue to get stronger.

Accompanying the technological revolution, skills demanded from the labor market has been changing in the OECD countries. The graph below shows the transition in the demand of work form with the United States in the 1960s as the standard. Over several decades, especially after 1990, demand for “non-repetitive work without patterns / analytical tasks” and “non-repetitive work without patterns / interactive work form” is increasing remarkably, and “repetitive work with patterns / handwork” is decreasing.

Figure 4.1. Trends in the demand for skills: United States



Source: OECD (2014a), *PISA 2012 Results: Skills for Life (Volume V): Student Performance in Problem Solving*.

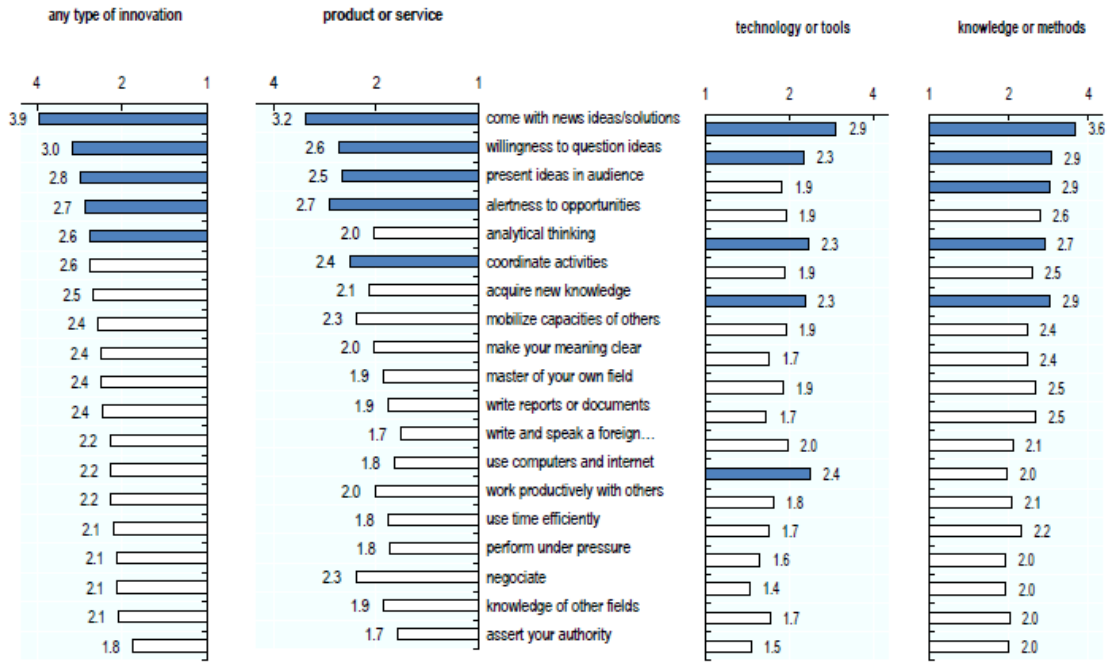
In times when “non-repetitive work without patterns / analytical tasks and interactive work form” are important, acquiring skills is becoming more important. People without sufficient skills are driven out to the outskirts of society and if people with these skills don’t exist, the country will not be able to survive in a knowledge based economy or in a global competition. For these reasons, many countries are actively working on “improving skills”,

but many continue to face problems caused by mismatch of skills, skills shortage and unemployment.

At the same time, skills to create innovation are required in any field. According to a research comparing and analyzing university graduate students in Europe, more students who work at an organization which creates innovations five years after graduation and is involved in at least one process that introduces innovation responded that creativity, critical thinking, communication, entrepreneurship and adjustments in work are important compared to students who do not have that background. The graph on the next page indicates that students who introduce innovations considered the followings important, “finding new ideas / solutions”, “eagerness to present questions for ideas”, “presenting ideas to others” and “being sensitive about chances and opportunities”.

Figure 4.3. Critical skills for the most innovative jobs, by type of innovation

Tertiary-educated workers who contribute to their organisation's innovation activities face higher skill requirements than non-innovative graduates



Note: Odds ratios correspond to the likelihood of mentioning the skill as required for workers in innovative jobs, compared to workers in non-innovative jobs. Generalised odds ratio are computed from logistic regressions controlling for country and sector of activity. The five most critical skills are highlighted for each type of innovation.

Source: Avvisati, F., G. Jacotin and S. Vincent-Lancrin (2013), “Educating Higher Education Students for Innovative Economies: What International Data Tell Us”, *Tuning Journal for Higher Education*, No. 1, November 2013, pp. 223-240.

Prediction and Suggestion for Education in 2030

The Future of Work: Jobs and skills in 2030 has predicted the following about the changes in work and skills in Britain in 2030.

- Aging in the workplace
- Increasing diversity in gender, race and ethnic groups in the working environment.
- Income becomes unstable. Regional gap of personal income will broaden.
- Voices demanding for work-life-balance (having a balance between work and private life) will increase.
- Practical use of Information Communication Technology (ICT) and out sourcing (to external organizations), globalization and more flexible correspondence will be demanded in the working environment.
- Skills to assemble technology and correspond to different fields will become required. For example, the ability to combine biotechnology, ICT, nanotechnology and cognitive science will become required.
- ICT will continue to develop and digital device invented for utilizing massive amount of data will gain attention.
- Economic growth and globally influential power will shift to Asia.
- New pioneer activities taken action by companies that give considerations to the environment and ecosystem friendly system will become important.

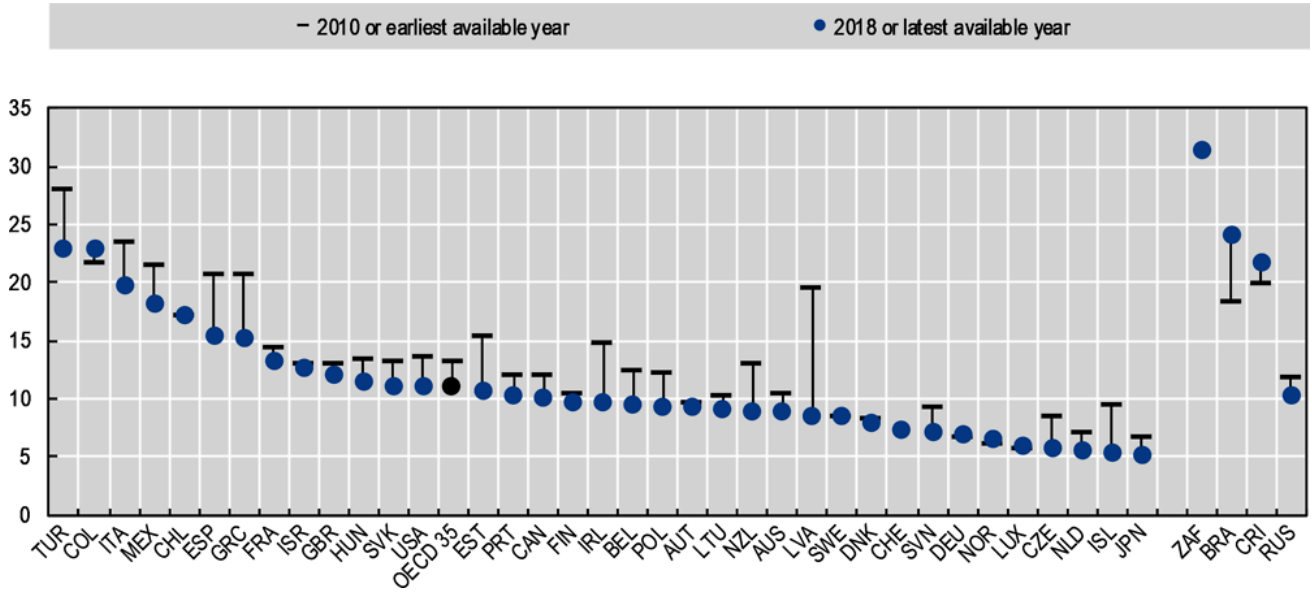
Shortage of resources and destruction of ecosystems will exhaust natural resources and the costs of resources will increase.

Youth not in employment, education or training (ages 15-24)

Across OECD countries on average, one youth in every 10 is not in employment, education or training (NEET) (Figure 4.3).

Figure 4.3. **One youth in ten is not in employment, education or training across OECD countries**

Share of youth (aged 15-24) not in employment, education or training, percentage



Note: The OECD average excludes Korea and Switzerland, due to incomplete time series.

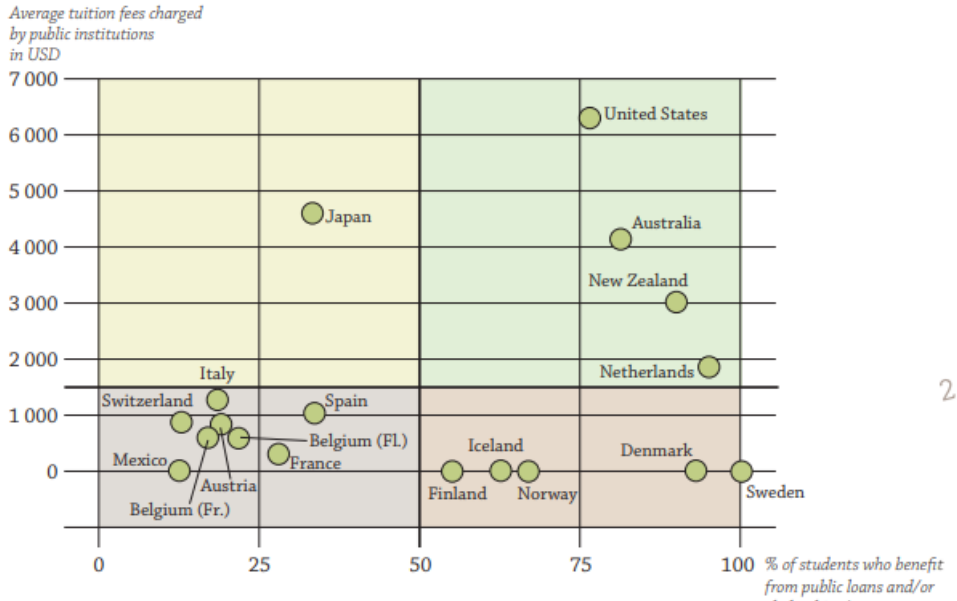
Source: *OECD Transition from school to work* (database), https://stats.oecd.org/Index.aspx?DataSetCode=EAG_TRANS.

Income 收入

Average tuition fees

When it comes to higher (tertiary) education, many countries have similar goals, such as strengthening the knowledge economy, increasing access for students, encouraging high completion rates, and assuring the financial stability of their higher education systems. Yet OECD countries differ dramatically in how the cost of higher education is structured – and in the financial support they provide to students.

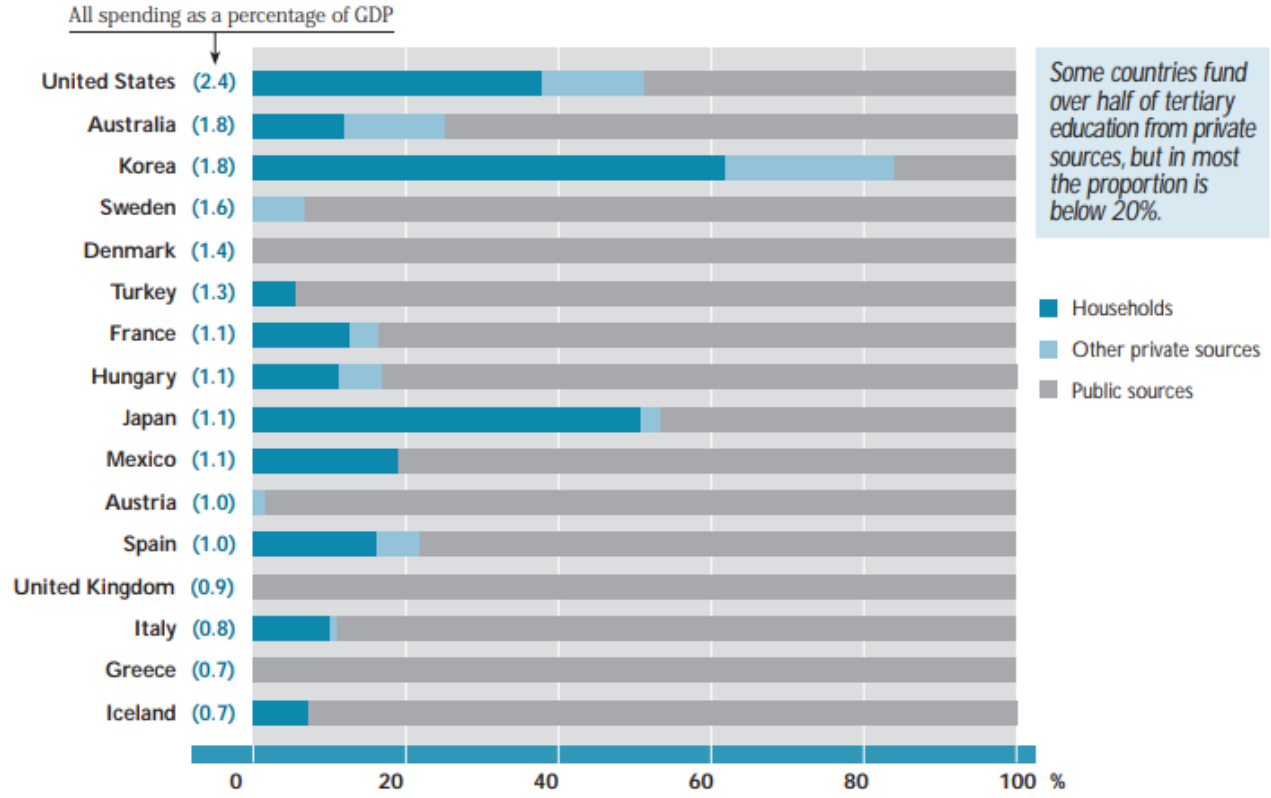
Average tuition fees vs. the percentage of students receiving public subsidies for higher education, 2008-09



Note: Chart excludes OECD countries for which specific data on public subsidies is not available.
Source: *Education at a Glance 2011: OECD Indicators*, Indicator B5 (*www.oecd.org/edu/eag2011*).

As shown in Figure 4.2, the share of educational expenditures of tertiary institutions covered by individuals, businesses and other private sources together, net of public financial aid to students and subsidies to other private entities, ranges widely in OECD countries, from a negligible amount in Denmark, Greece and the United Kingdom to over half in the United States, Korea and Japan, with five other countries (Australia, France, Hungary, Mexico and Spain) obtaining 15-25 per cent of funding from private sources.2 Figure 4.2 also puts the total tertiary education spending on institutions in context, by expressing it as a percentage of GDP

Figure 4.2
The private contribution to tertiary education
Spending on educational institutions, by source

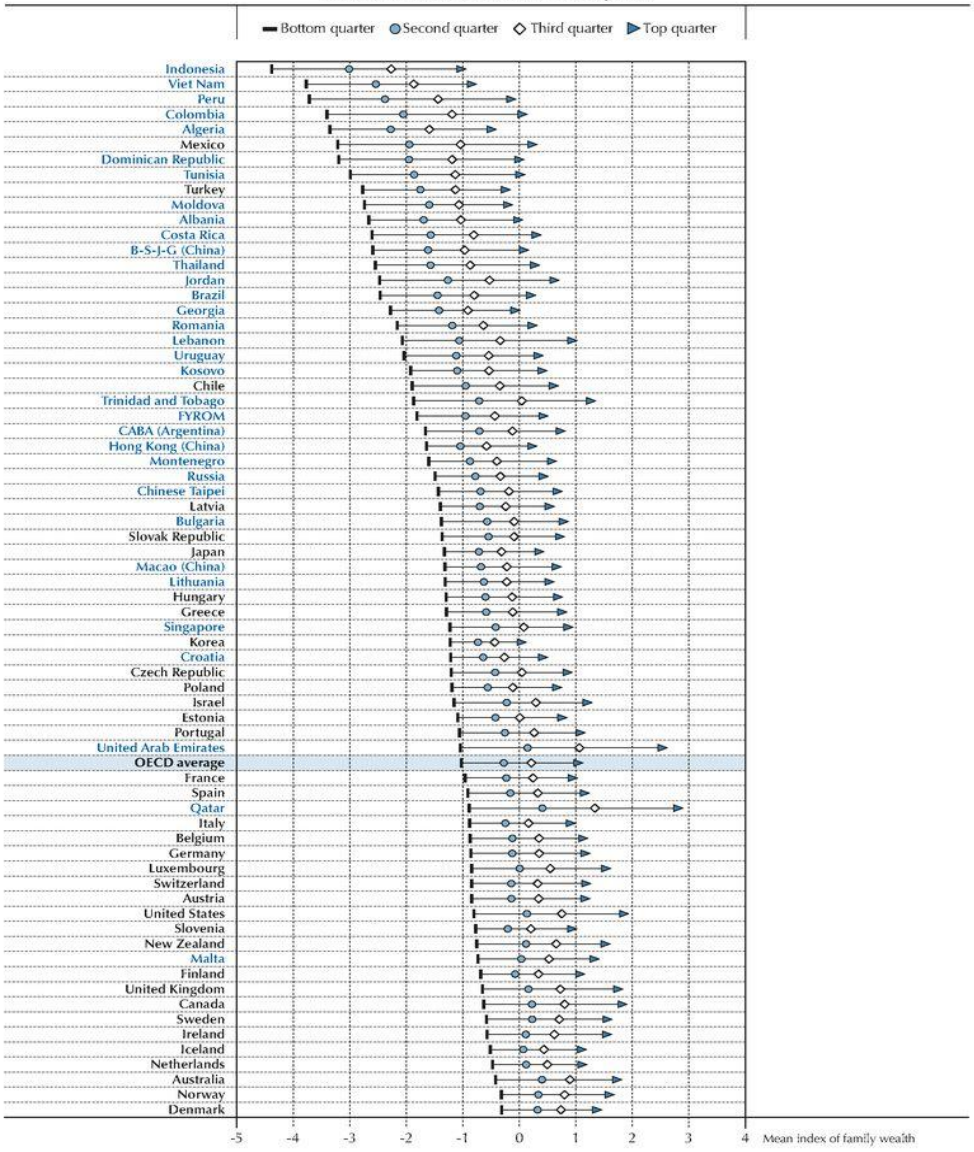


Source: OECD Education Database.
Data for Figure 4.2: page 81.

Family Wealth

Figure III.10.1 ▪ **Index of family wealth, by quarters of this index**

Results based on students' self-reports



Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower reported by the student.

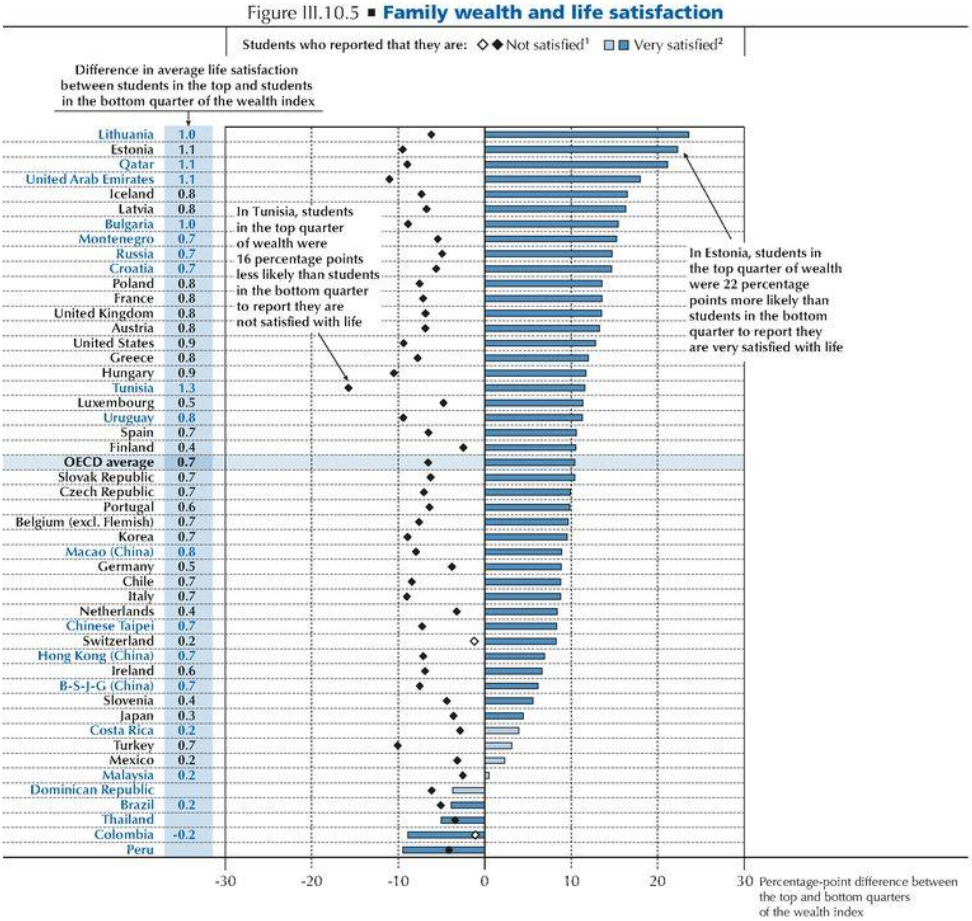
Countries and economies are ranked in ascending order of the mean index of family wealth for students in the bottom quarter of this index.

Source: OECD, PISA 2015 Database, Table III.10.6.

StatLink http://dx.doi.org/10.1787/888933472442

Students' life satisfaction according to their family's wealth

Figure III.10.5 ▪ **Family wealth and life satisfaction**



1. A student is classified as "not satisfied" with life if he or she reported between 0 and 4 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

2. A student is classified as "very satisfied" with life if he or she reported between 9 to 10 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower, as reported by the student.

Statistically significant values are marked in a darker tone (see Annex A3).

Countries and economies are ranked in descending order of the difference in the percentage of students who reported feeling very satisfied with their life, between students in the top quarter and students in the bottom quarter of the index of wealth.

Source: OECD, PISA 2015 Database, Tables III.10.8 and III.10.9.

StatLink http://dx.doi.org/10.1787/888933472483

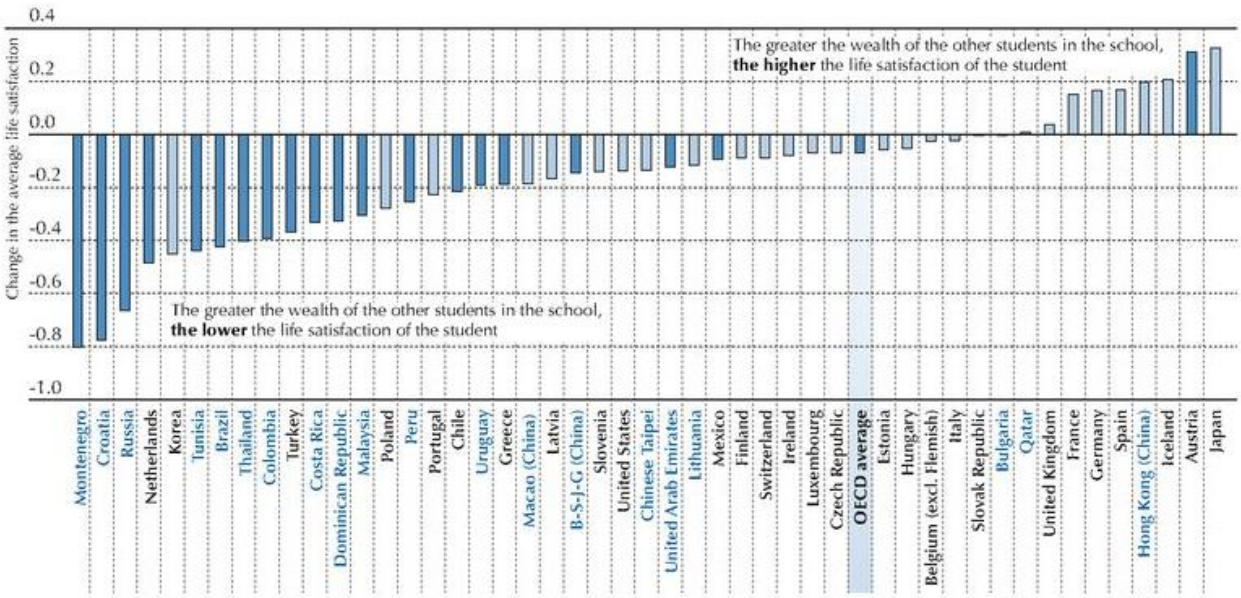
Adolescents form opinions about themselves based on comparisons with their schoolmates. Disadvantaged students who attend advantaged schools may suffer from social isolation or even feelings of discrimination if they are not prepared to be a member of a disadvantaged minority in the school. For example, many disadvantaged students in the United States dropped out of integration programmes (Carter, 2007; Davis, 2014). Poor students in Chile have also had problems integrating socially in prestigious schools (Montt, 2012).

Does this mean that disadvantaged students are better off when they attend disadvantaged schools? On the one hand, comparing oneself with advantaged peers can undermine the self-belief and life satisfaction of a disadvantaged student.

Students' life satisfaction and the wealth of his or her classmates

Figure III.10.6 ▪ **Relative wealth at school and life satisfaction**

Change in a student's life satisfaction associated with a one-unit increase in the average wealth of the other students in the school



Notes: The index of family wealth is based on the number and type of home possessions, such as cell phones, computers, cars and rooms with a bath or shower, as reported by the student. The life-satisfaction scale ranges from 0 to 10.

Statistically significant values are marked in a darker tone (see Annex A3).

Countries and economies are ranked in ascending order of the change in life satisfaction associated with a one-unit change in the average index of family wealth of the other students of the school.

Source: OECD, PISA 2015 Database, Table III.10.9.

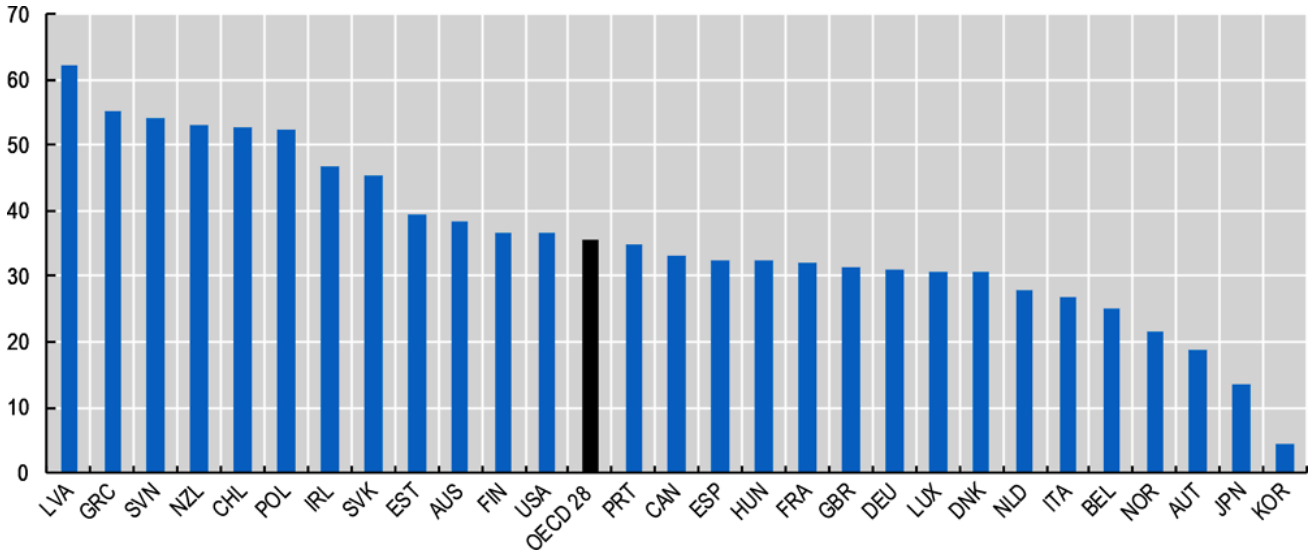
StatLink http://dx.doi.org/10.1787/888933472499

Financial insecurity

Across the 28 OECD countries with available data, 36% of people are financially insecure (Figure 2.8) – i.e. while not currently income poor, they risk falling into this condition in the event of a sudden loss of income, e.g. through unemployment, family breakdown or disability. In other words, if their income were to suddenly stop, such people would not have enough liquid assets to keep living above the poverty line for more than 3 months (see Box 2.1 and the figure note below for further details). More than half of the population meets this definition of financial insecurity in Latvia, Greece, Slovenia, New Zealand, Chile and Poland. By contrast, only 4% of people in Korea, and fewer than 15% in Japan, are financially insecure.

Figure 2.8. **More than one-third of people in the OECD are at risk of falling into poverty**

Share of individuals who are financially insecure, percentage, 2016 or latest available year



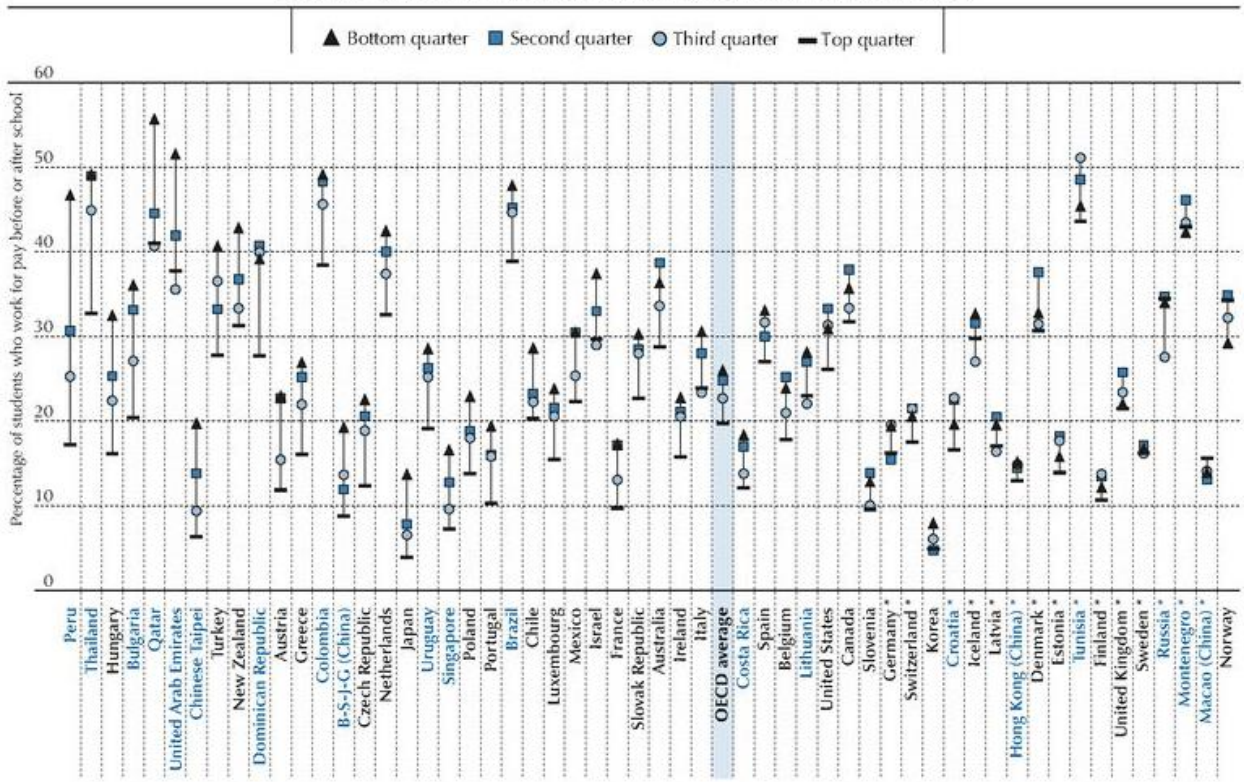
Note: The latest available year is 2016 for Canada and the United States, 2015 for Denmark, Korea, the Netherlands, Norway and the United Kingdom, 2014 for Australia, Austria, Belgium, Chile, France, Germany, Greece, Hungary, Italy, Japan, Latvia, Luxembourg, Poland, the Slovak Republic and Slovenia, 2013 for Estonia, Finland, Ireland and Portugal, and 2012 for Spain. Financially insecure people are those who are not income poor, but have insufficient liquid financial wealth to support them at the level of the income poverty line for more than three months – i.e. they have equivalised liquid financial assets below 25% of the national median income. Liquid financial wealth is defined as cash, quoted shares, mutual funds and bonds net of liabilities of own unincorporated enterprises. The income definition used follows as much as possible that used for reporting income poverty, i.e. household disposable income. However, in most cases, information on household disposable income is not available in the data sources used for computing wealth statistics; in these cases, (i.e. Austria, Belgium, Estonia, France, Germany, Greece, Hungary, Ireland, Latvia, Luxembourg, Poland, Portugal, the Slovak Republic, Slovenia and Spain) the income concept used is that of gross income (i.e. the total sum of wages and salaries, self-employment income, property income and current transfers received, all recorded before payment of taxes). Data for the United Kingdom are limited to Great Britain. The OECD average excludes Colombia, the Czech Republic, Iceland, Israel, Lithuania, Mexico, Sweden, Switzerland and Turkey, as comparable data are not available.

Source: *OECD Wealth Distribution* (database), https://stats.oecd.org/Index.aspx?DataSetCode=WEALTH.

Students who work for pay

Figure III.12.2 ■ **Students who work for pay, by socio-economic status**

Quarters of the PISA index of economic, social and cultural status



Note: Differences between the top and bottom quarters of the PISA index of economic, social and cultural status that are not statistically significant are shown with an asterisk next to the country/economy name (see Annex A3).

Countries and economies are ranked in ascending order of the difference in the percentage of students who work for pay between the top and bottom quarters of the PISA index of economic, social and cultural status.

Source: OECD, PISA 2015 Database, Table III.12.7.

StatLink http://dx.doi.org/10.1787/888933473000

Housing 居住

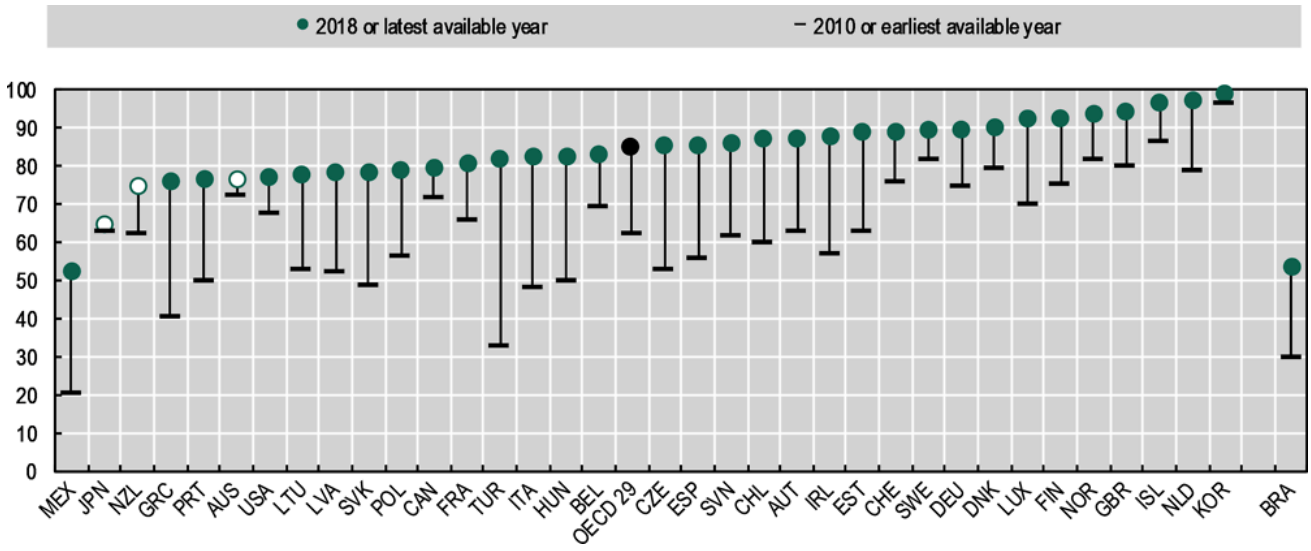
Since 2010, the share of households with high-speed internet access has risen markedly, from 63% to 85%.

Households with high-speed internet access

In 2018, more than 80% of households in 29 OECD countries had access to broadband internet services, on average (Figure 3.6).

Figure 3.6. **More than 80% of households in OECD countries have access to high-speed internet**

Share of households with broadband internet access at home, percentage



Note: The latest available year is 2017 for Chile, Switzerland and the United States, 2013 for Canada, 2012 for Australia and New Zealand, and 2011 for Japan. The earliest available year is 2012 for Chile, 2011 for the United Kingdom, and 2009 for Canada and New Zealand. The OECD average excludes Colombia and Israel, due to a lack of data; Australia, Japan and New Zealand, due to a difference in methodology and inconsistencies compared to other countries (marked in white on the figure); and Luxembourg, Switzerland and the United States, due to a break in the series.

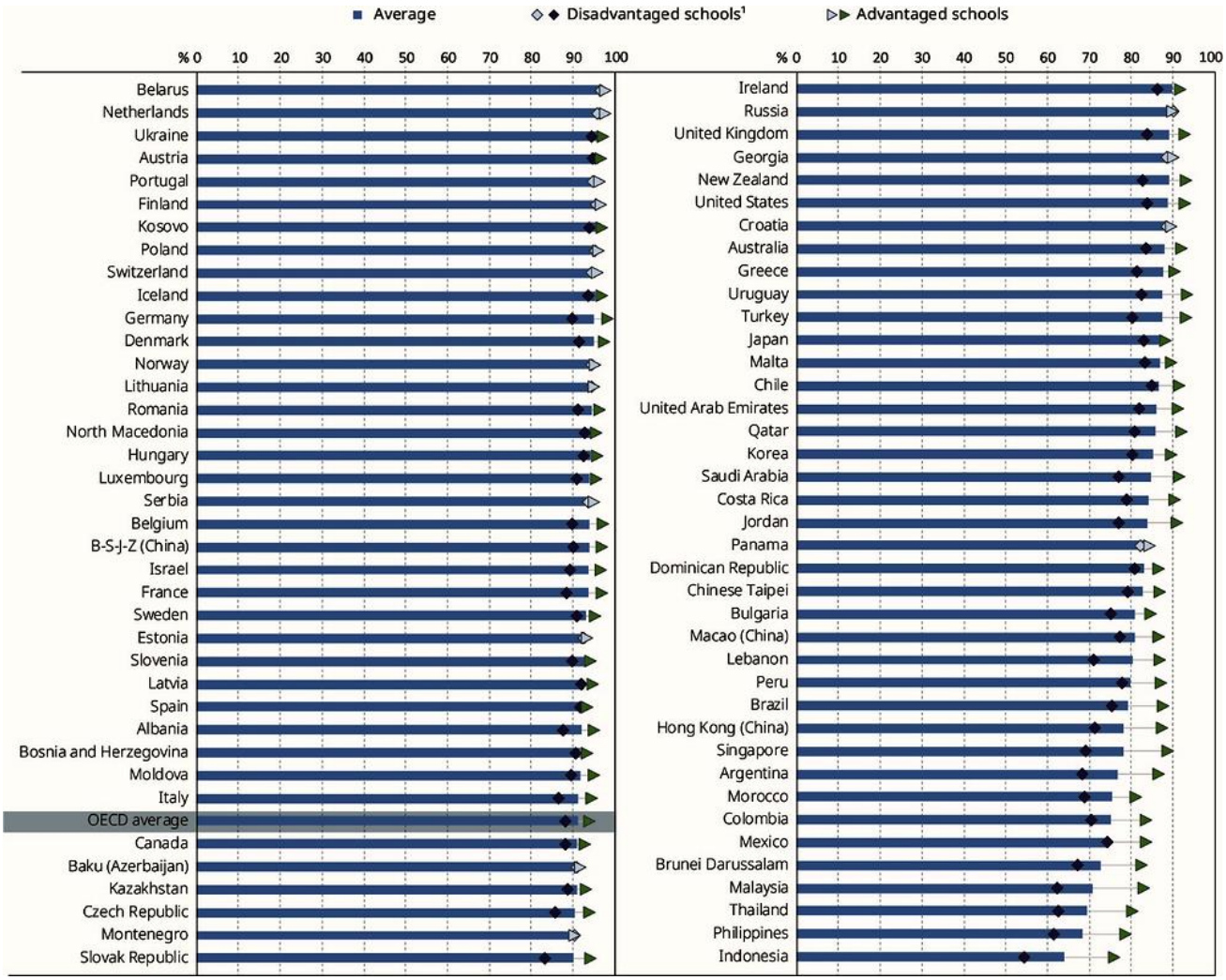
Source: *OECD ICT Access and Usage by Households and Individuals* (database), http://stats.oecd.org/Index.aspx?DataSetCode=ICT_HH2.

Access to a quiet place to study

On average across OECD countries, 9% of 15-year-old students do not even have a quiet place to study in their homes, and in Indonesia, the Philippines and Thailand it is over 30% (Figure 1).

Figure 1. **Access to a quiet place to study**

Percentage of students that have access to a quiet place to study, PISA 2018



Note: Statistically significant values are shown in darker tones.

1. A socio-economically disadvantaged (advantaged) school is a school whose socio-economic profile (i.e. the average socio-economic status of the students in the school) is in the bottom (top) quarter of the PISA index of economic, social and cultural status amongst all schools in the relevant country/economy.

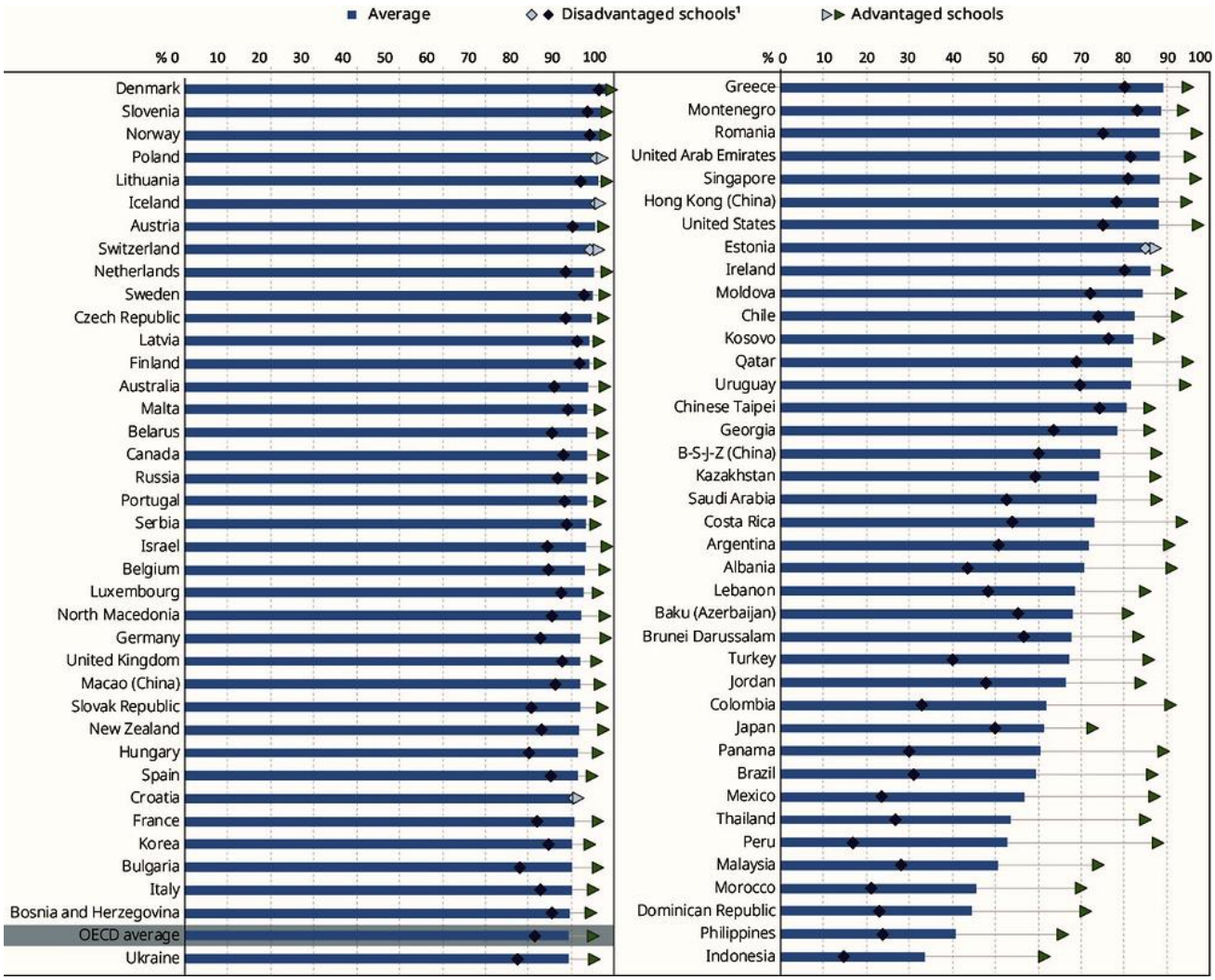
Countries and economies are ranked in descending order of the average percentage of students that have access to a quiet place to study.

Source: OECD, PISA 2018 Database

Access to a computer for schoolwork

Figure 2. **Access to a computer for schoolwork**

Percentage of students that have access to a computer they can use for schoolwork, PISA 2018



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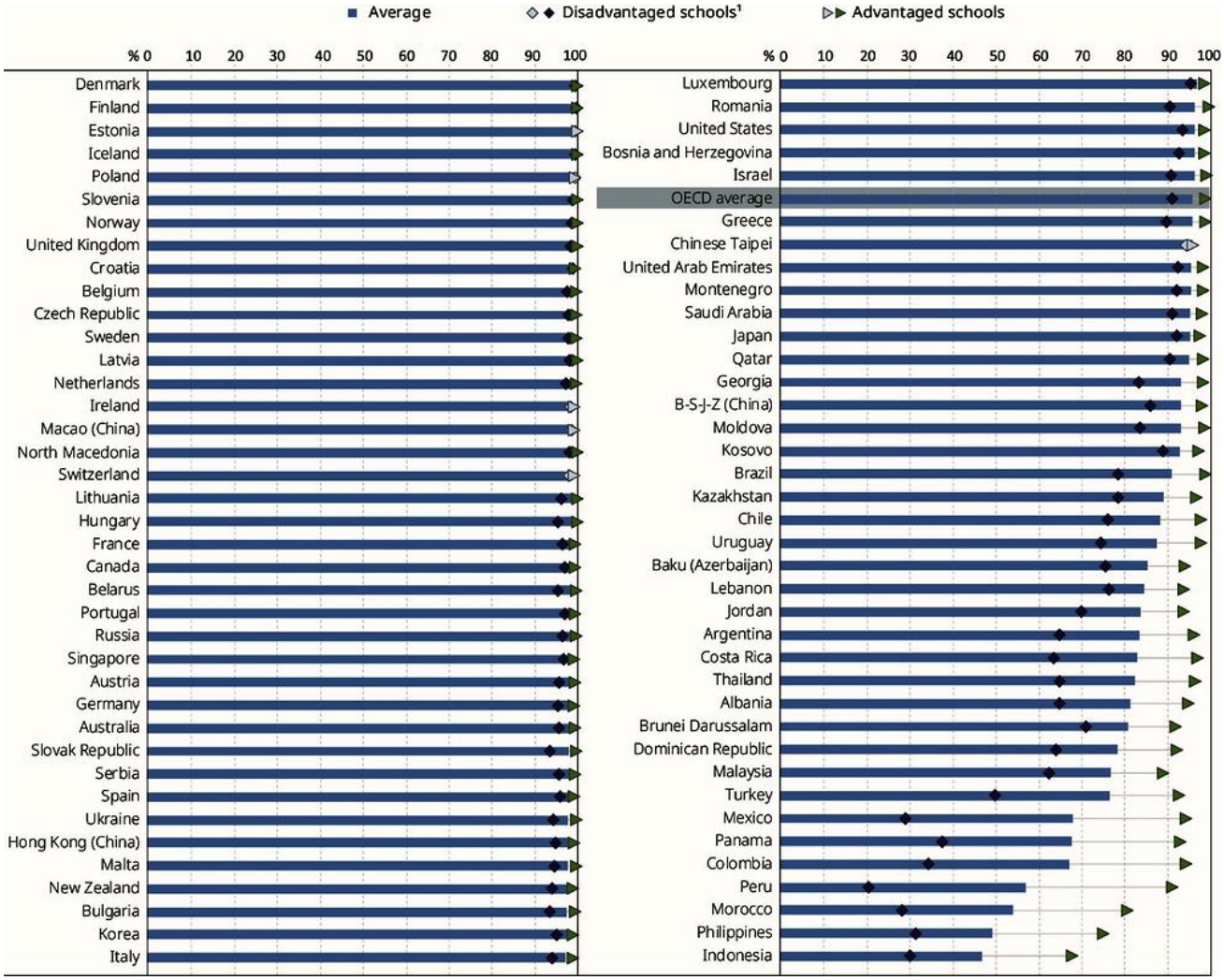
Countries and economies are ranked in descending order of the average percentage of students that have access to a computer they can use for schoolwork.

Source: OECD, PISA 2018 Database

Access to link to the Internet

Figure 3. **Access to a link to the Internet**

Percentage of students that have access to a link to the internet, PISA 2018



Note: Statistically significant values are shown in darker tones.

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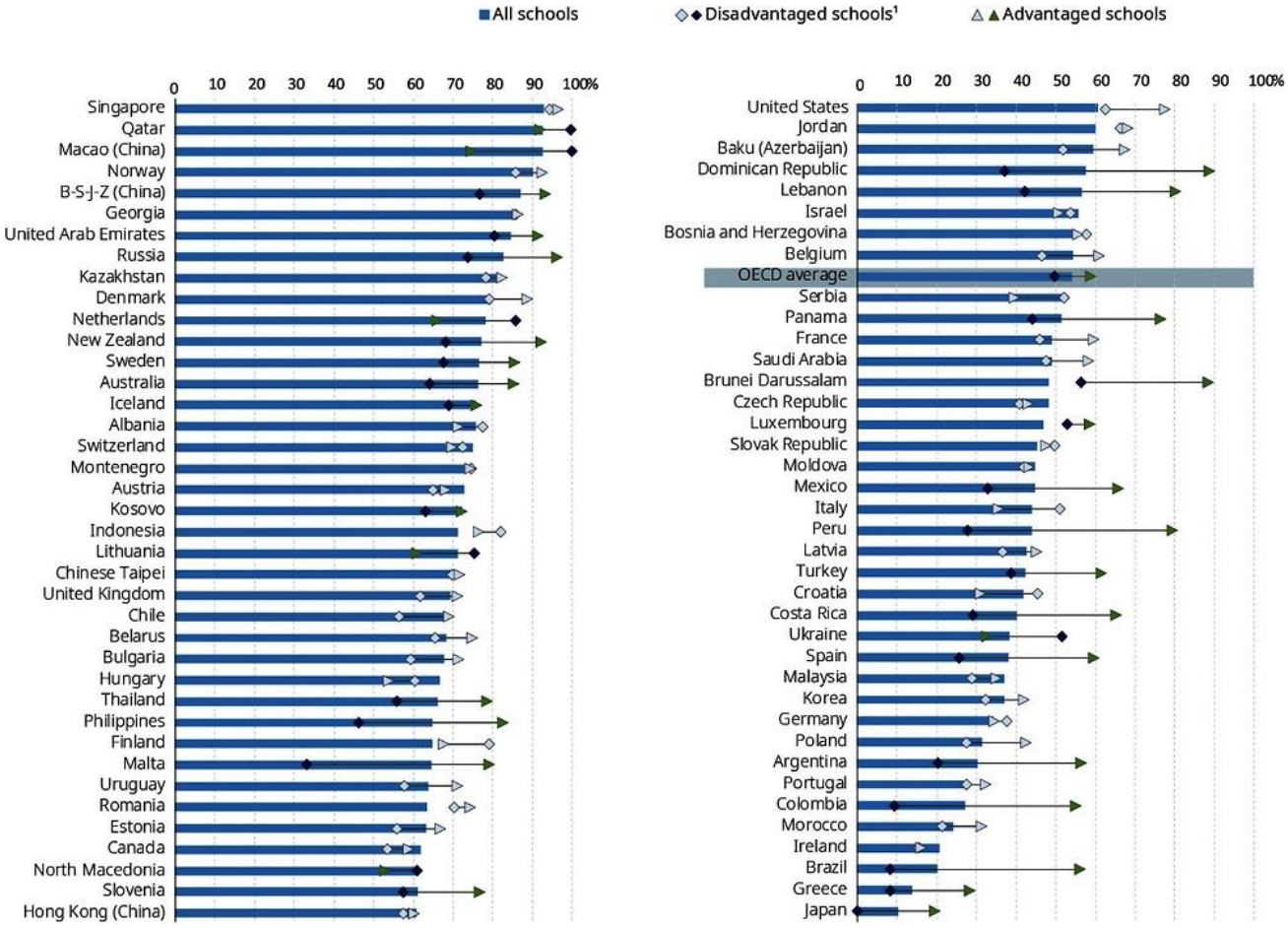
Countries and economies are ranked in descending order of the average percentage of students that have access to a link to the internet.

Source: OECD, PISA 2018 Database

Technical assistance at school

Figure 8. **The school has sufficient qualified technical assistant staff**

Percentage of students in schools whose principal agreed or strongly agreed that the school has sufficient qualified technical assistant staff, PISA 2018



Note: Statistically significant values are shown in darker tones.

1. A socio-economically disadvantaged (advantaged) school is a school whose socio-economic profile (i.e. the average socio-economic status of the students in the school) is in the bottom (top) quarter of the PISA index of economic, social and cultural status amongst all schools in the relevant country/economy.

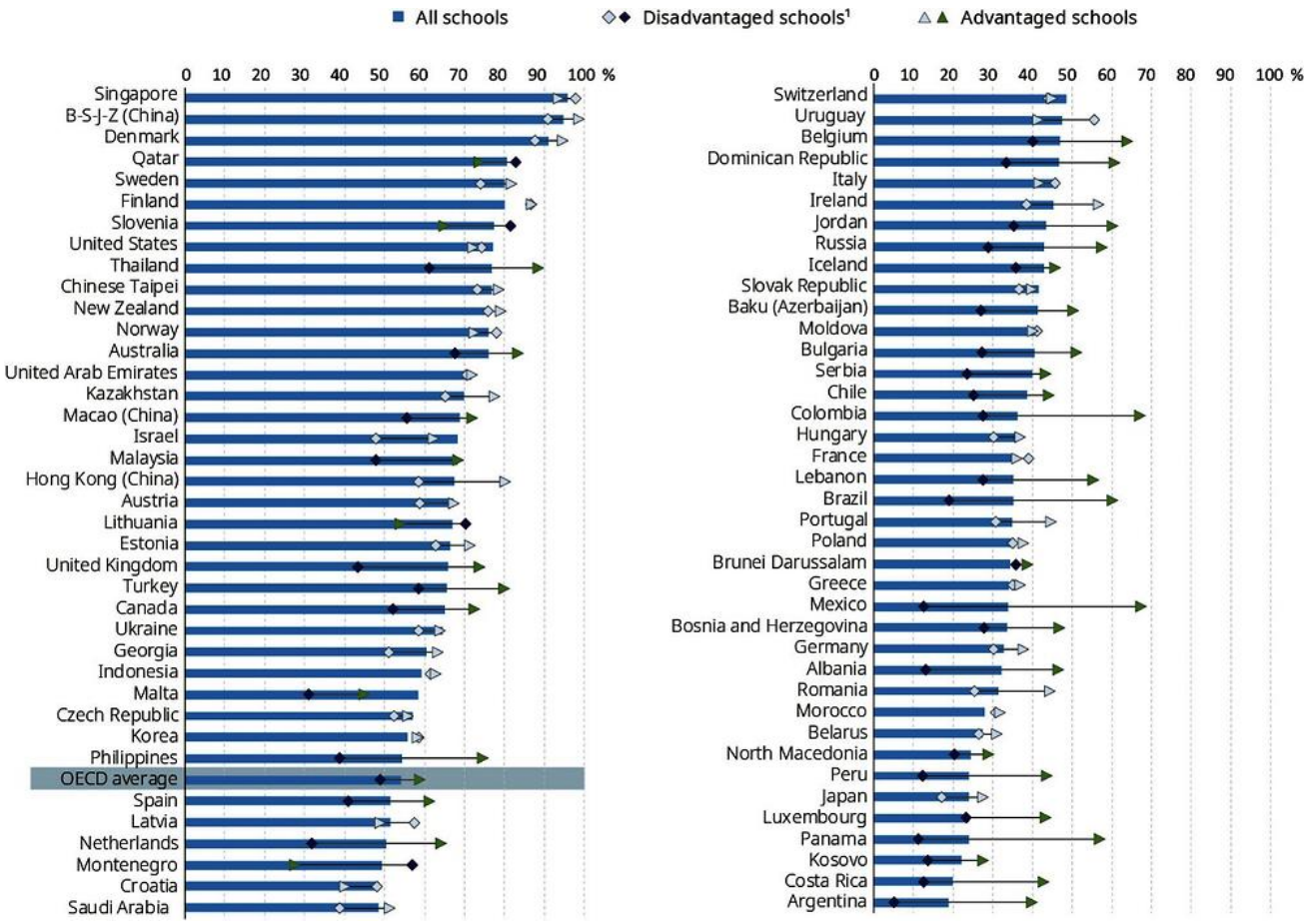
Countries and economies are ranked in descending order of the percentage of schools that have sufficient qualified technical assistant staff

Source: OECD, PISA 2018 Database

Effective online learning support platform

Figure 9. **An effective online learning support platform is available**

Percentage of students in schools whose principal agreed or strongly agreed that an effective online learning support platform is available, PISA 2018



Note: Statistically significant values are shown in darker tones.

1. A socio-economically disadvantaged (advantaged) school is a school whose socio-economic profile (i.e. the average socio-economic status of the students in the school) is in the bottom (top) quarter of the PISA index of economic, social and cultural status amongst all schools in the relevant country/economy.

Countries and economies are ranked in descending order of the percentage of schools where an effective online learning support platform is available

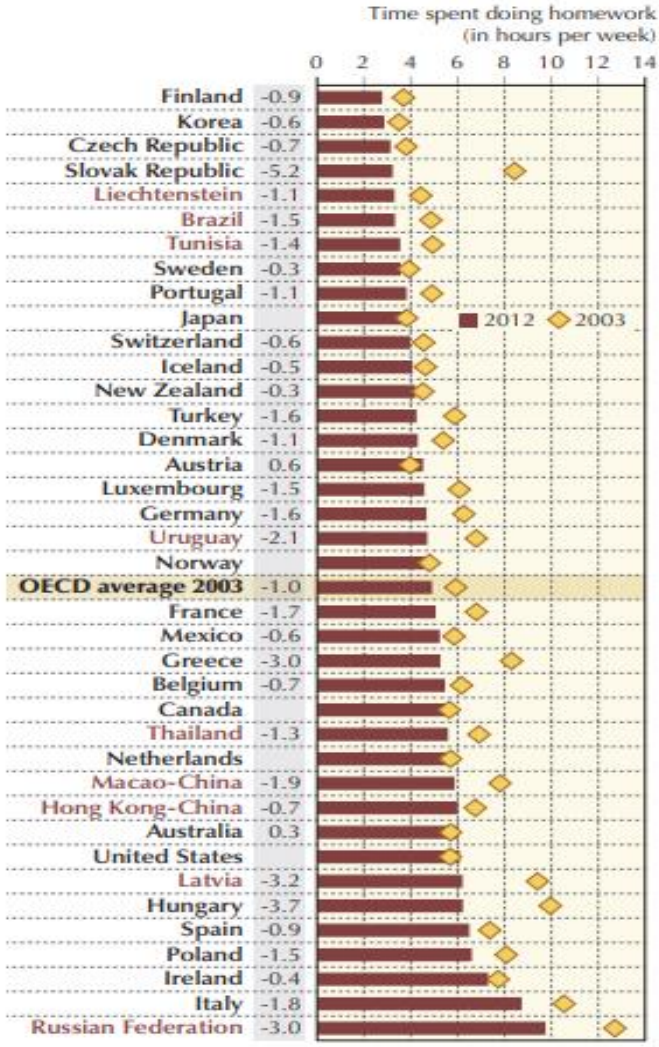
Source: OECD, PISA 2018 Database

Work-life Balance ワークライフバランス

Student time spent on homework

The amount of time students spend doing homework shrank between 2003 and 2012 in 31 out of 38 countries and economies with comparable data.

The amount of time students spend doing homework is substantial, but less than it was in 2003



Notes: Only countries and economies with comparable data from PISA 2003 and PISA 2012 are shown.

The change in time spent doing homework (2012 - 2003) is shown next to the country/economy name. Only statistically significant differences are shown.

OECD average 2003 compares only OECD countries with comparable results in 2012 and 2003.

Countries and economies are ranked in ascending order of the average time students spent doing homework in PISA 2012.

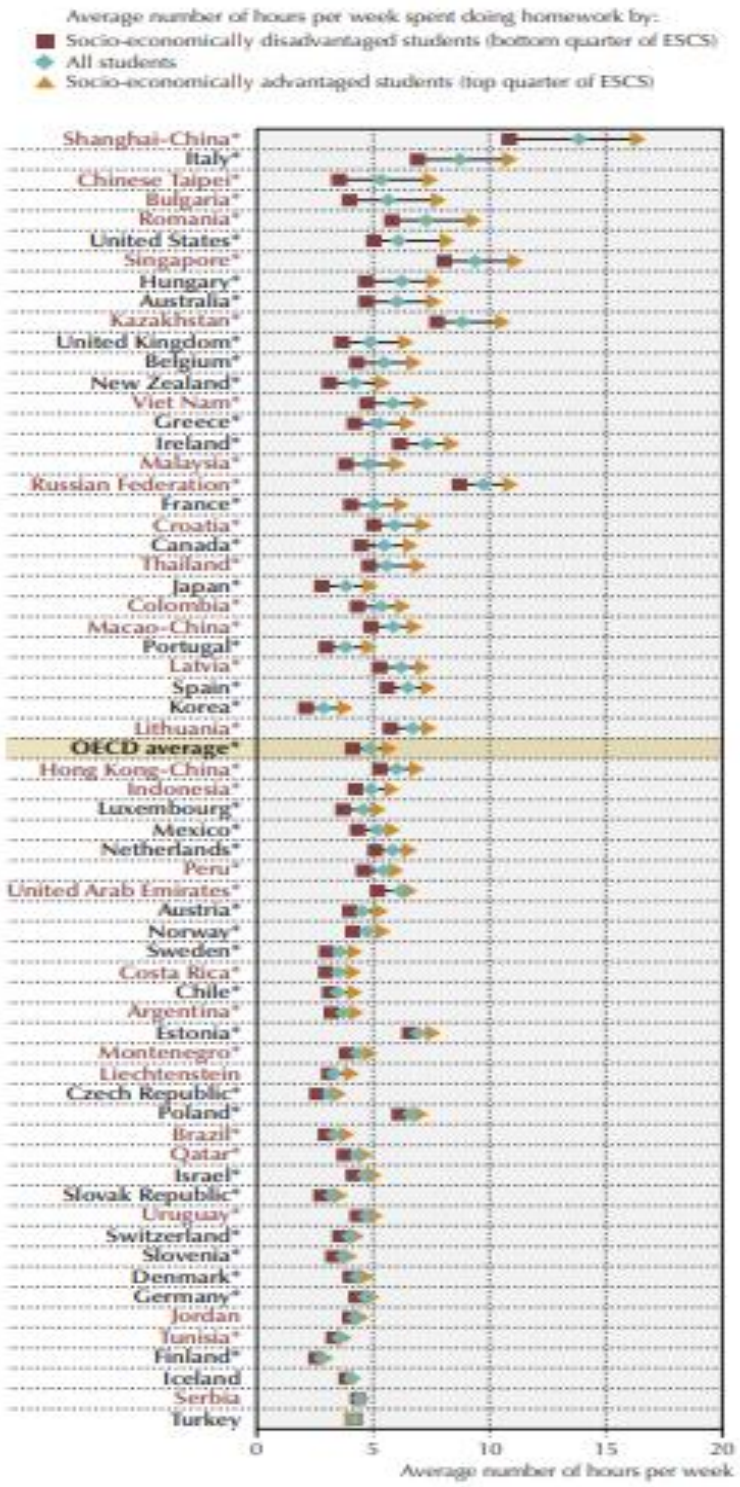
Source: OECD, PISA 2012 Database, Table IV.3.48.

StatLink http://dx.doi.org/10.1787/888932957479

Advantaged students spend more time doing homework

In every country and economy that participated in PISA 2012, socio-economically advantaged students spend more time doing homework or other study required by their teachers than disadvantaged students. In OECD countries, an advantaged student typically spends 1.6 more hours a week doing homework than a disadvantaged student: advantaged students spend an average of 5.7 hours per week, while disadvantaged students spend an average of 4.1 hours per week.

Advantaged students spend more time doing homework



Notes: ESCS refers to the *PISA index of economic, social and cultural status.*

Countries and economies are ranked in descending order of the difference in the average time spent doing homework between students who are in the top quarter of ESCS and those who are in the bottom quarter (top - bottom quarter).

Countries and economies where the difference is statistically significant are marked with an asterix (*).

Source: OECD, PISA 2012 Database, Tables IV.3.27 and IV.3.28 (web).

StatLink http://dx.doi.org/10.1787/888932957460

Parent employment

Table 4.3, containing Secretariat calculations based on the survey micro-data, shows current and preferred employment patterns for couple families with a child under 6. While there are considerable differences between countries, in every case, if preferences were to be realised, there would be a move away from the single earner family, towards the dual earner type.

Table 4.3. **Actual and preferred employment patterns by full-time and part-time working**[a]

Couple families with child under 6
Percentages

	Man full-time/ woman full-time	Man full-time/ woman part-time	Man full-time/ woman not employed	Other	Total
Finland					
Actual	49.3	6.4	32.8	11.5	100.0
Preferred	*80.3*	*8.6*	*10.2*	*0.8*	*100.0*
Sweden					
Actual	51.1	13.3	24.9	10.7	100.0
Preferred	*66.8*	*22.2*	*6.6*	*4.4*	*100.0*
Greece					
Actual	42.2	7.9	36.1	13.8	100.0
Preferred	*65.6*	*10.6*	*9.4*	*14.4*	*100.0*
Italy					
Actual	34.9	11.8	43.3	10.0	100.0
Preferred	*50.4*	*27.7*	*10.7*	*11.2*	*100.0*
Portugal					
Actual	74.5	4.7	18.7	2.2	100.0
Preferred	*84.4*	*8.0*	*4.0*	*3.6*	*100.0*
Spain					
Actual	25.6	6.3	56.9	11.2	100.0
Preferred	*59.7*	*11.6*	*19.7*	*9.0*	*100.0*
Ireland					
Actual	30.8	18.7	37.0	13.5	100.0
Preferred	*31.1*	*42.3*	*8.1*	*18.5*	*100.0*
United Kingdom					
Actual	24.9	31.9	32.8	10.4	100.0
Preferred	*21.3*	*41.8*	*13.3*	*23.6*	*100.0*
Austria					
Actual	19.1	28.2	48.1	4.5	100.0
Preferred	*35.6*	*39.9*	*3.9*	*20.7*	*100.0*
Germany					
Actual	15.7	23.1	52.3	8.9	100.0
Preferred	*32.0*	*42.9*	*5.7*	*19.4*	*100.0*
Netherlands					
Actual	4.8	54.8	33.7	6.7	100.0
Preferred	*5.6*	*69.9*	*10.7*	*13.8*	*100.0*
Belgium					
Actual	46.0	19.4	27.3	7.3	100.0
Preferred	*54.8*	*28.8*	*13.4*	*3.0*	*100.0*
France					
Actual	38.8	14.4	38.3	8.4	100.0
Preferred	*52.4*	*21.9*	*14.1*	*11.7*	*100.0*
Luxembourg					
Actual	23.5	27.0	49.1	0.4	100.0
Preferred	*27.5*	*29.9*	*12.4*	*30.2*	*100.0*
Unweighted average					
Actual	34.4	19.1	37.9	8.5	100.0
Preferred	*47.7*	*29.0*	*10.2*	*13.2*	*100.0*

a) EU and Norway, 1998.
Sources: Secretariat calculations on the basis of microdata from the *Employment Options of the Future* survey. See Annex 4.B for details.

The EOF also suggests that many couples with children under 6 would prefer shorter working hours (Table 4.4). They were asked to give an appreciation of the financial state of their household, by selecting one of three categories: “welloff”, “just managing” and “having difficulties”. 6 The number responding that they were having difficulties was only 6%, on average, for the countries shown. Hours of work for “well-off” couples tend to be longer than those of couples saying that they are “just managing”. However, both would like to reduce their hours and their preferred hours tend to be similar: well-off couples would prefer to reduce their hours more than those who are just-managing.

Table 4.4. **Average hours worked and preferred hours, according to perceived financial situation of household,[a] EU and Norway, 1998**

Total hours in couple families aged 20-50 years[b] with a child under 6

Perceived financial situation	Hours worked at present time	Hours worked (preferences)	Change in hours needed to meet preferences	*Percentage of families in this situation*[c]
Denmark				
Well off	73	62	–11	*80*
Just manage	60	51	–9	*18*
Finland				
Well off	72	56	–16	*64*
Just manage	60	41	–19	*34*
Norway				
Well off	68	60	–9	*70*
Just manage	58	51	–7	*28*
Sweden				
Well off	70	58	–12	*69*
Just manage	59	45	–14	*27*
Greece				
Well off	65	50	–16	*30*
Just manage	64	47	–17	*37*
Italy				
Well off	62	50	–12	*32*
Just manage	55	45	–10	*58*
Portugal				
Well off	78	57	–21	*21*
Just manage	68	61	–7	*62*
Spain				
Well off	61	48	–13	*20*
Just manage	46	38	–8	*68*
Ireland				
Well off	66	53	–13	*28*
Just manage	55	37	–18	*67*
United Kingdom				
Well off	66	50	–16	*29*
Just manage	60	45	–15	*63*
Austria				
Well off	67	58	–9	*64*
Just manage	59	48	–11	*33*
Germany				
Well off	62	49	–13	*52*
Just manage	55	45	–10	*42*
Netherlands				
Well off	58	47	–11	*82*
Just manage	47	37	–10	*16*
Belgium				
Well off	67	55	–12	*64*
Just manage	58	52	–7	*34*
France				
Well off	61	49	–12	*32*
Just manage	60	49	–11	*55*
Luxembourg				
Well off	56	48	–8	*73*
Just manage	58	49	–9	*26*
Unweighted average				
Well off	66	53	–13	*51*
Just manage	58	46	–11	*42*

a) The information about preferred hours is derived from questions about a "free choice" of hours by the respondent and his/her partner, "taking into account the need to earn your living". The financial perceptions are responses to the question, "Taking into account the income that the members of your household receive from different sources, would you say that your household is financially well off, that you just manage or that you have difficulties?"

b) More precisely, the respondent to the survey was aged between 20 and 50.

c) The proportion of respondents indicating "difficulties" is not shown. It was under 10% in all countries except France, Greece, Portugal and Spain.

Source: Secretariat calculations on the basis of microdata from the *Employment Options of the Future* survey. See Annex 4.B for details.

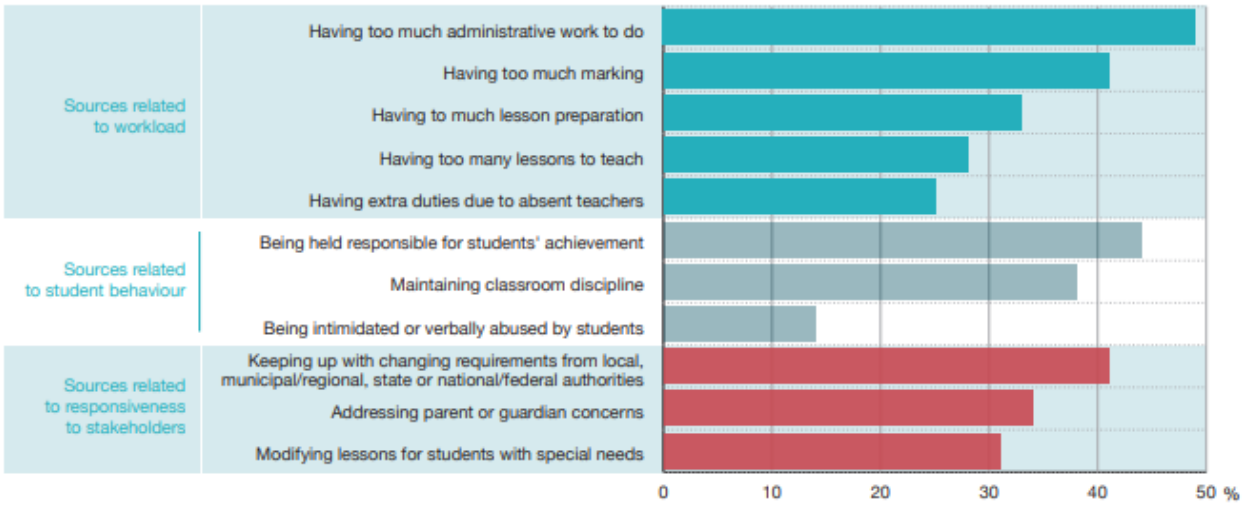
Teachers' workload

TALIS 2018 shows us that around one in five teachers across OECD countries reports experiencing a high level of stress from their work. Teachers cite among their biggest

sources of stress having too much administrative work, being held responsible for the achievement of their students and keeping up with changing requirements from the governments in their countries.

Figure 14. Teachers' sources of stress

Percentage of lower secondary teachers for whom the following are sources of stress "quite a bit" or "a lot" (OECD average-31)



Values are grouped by type of source and, within each group, ranked in descending order of the proportion of teachers reporting that the corresponding activities are a source of stress "quite a bit" or "a lot".

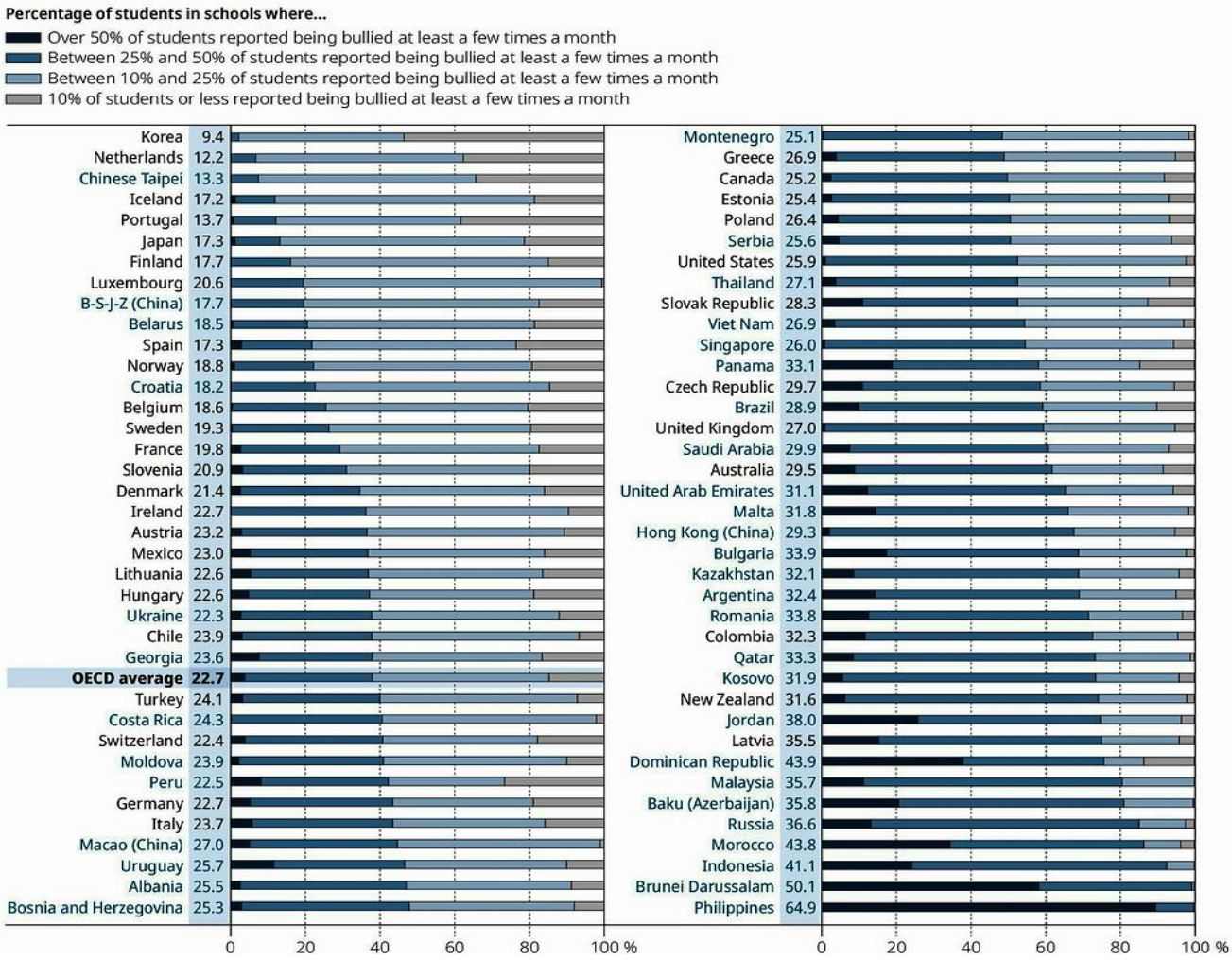
Source: OECD, TALIS 2018 Database, Table II.2.43.

A critical precondition for the use of quality teaching practices is to make the most of classroom time to implement them. On average across the OECD, teachers report spending 78% of classroom time on actual teaching and learning (the equivalent of 47 minutes of a 60-minute lesson), with the rest of classroom time spent on keeping order (13%, or 8 minutes) and administrative tasks (8%, or 5 minutes) (Figure 17).

Safety 安全

In all education systems, 15-year-old students' exposure to bullying varied across schools (Figure III.2.2 and Table III.B1.2.3). However, in some systems, victims of bullying seemed to be concentrated in certain schools, while in other systems these students were distributed more evenly across all schools.

Figure III.2.2. **Prevalence of exposure to bullying at school**

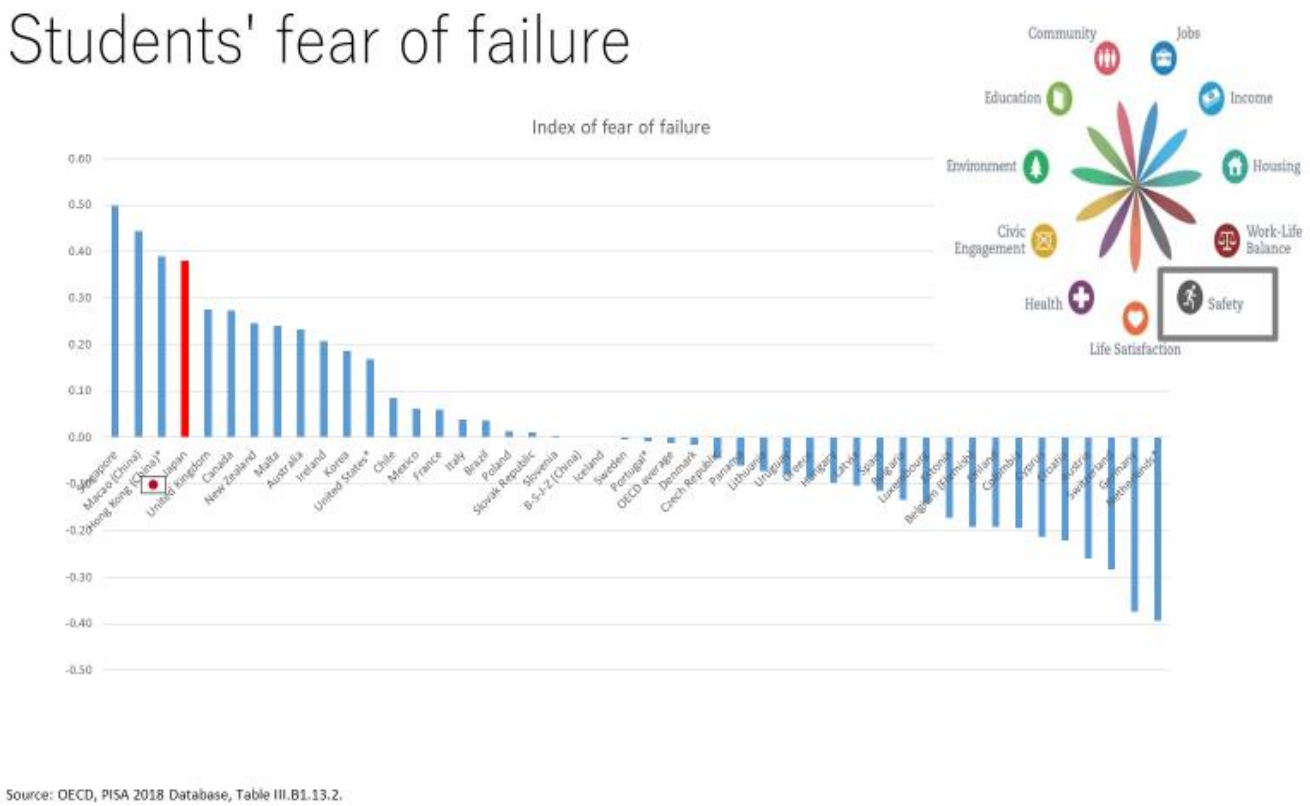


Note: The percentage of students who reported being bullied at least a few times a month is found next to the country/economy name. *Countries and economies are ranked in descending order of the percentage of students in schools where less than 25 % of students were bullied at least a few times a month.*

Source: OECD, PISA 2018 Database, Table III.B1.2.3.

Students' self-efficacy and fear of failure

- On average across OECD countries, 84 % of students agreed or strongly agreed that they can usually find a way out of difficult situations, and 56 % agreed or strongly agreed that, when they fail, they worry about what others think about them.
- Students in many Asian countries and economies expressed the greatest fear of failure, while students in many European countries expressed the least fear.
- In every school system except Italy and the Netherlands, socio-economically advantaged students reported more self-confidence in their abilities than their disadvantaged peers.
- In almost every education system, girls expressed greater fear of failure than boys, and this gender gap was considerably wider amongst top-performing students.
- In a majority of school systems, students who expressed a greater fear of failure scored higher in reading and reported less satisfaction with life than students expressing less concern about failing, after accounting for the socio-economic profile of students and schools.



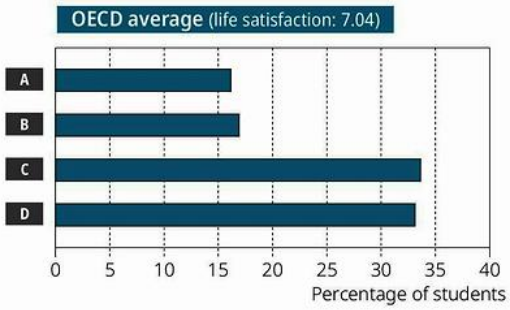
Source: OECD, PISA 2018 Database, Table III.B1.13.2.

Life Satisfaction 人生の幸福

Students' satisfaction with life across countries

Figure III.11.1 shows that, on average across OECD countries, students reported 7.04 on the life-satisfaction scale. Some 67 % of students reported that they are satisfied with their lives (students who reported between 7 and 10 on the life-satisfaction scale).

Figure III.11.1. **Students' life satisfaction**
Based on students' self-reports



Percentage of students who reported the following levels of life satisfaction

- **A** Not satisfied (Students who reported 0 to 4 on the life-satisfaction scale)
- **B** Somewhat satisfied (Students who reported 5 or 6 on the life-satisfaction scale)
- **C** Moderately satisfied (Students who reported 7 or 8 on the life-satisfaction scale)
- **D** Very satisfied (Students who reported 9 or 10 on the life-satisfaction scale)

OECD	Average life satisfaction	Percentage of students, by level of life satisfaction:			
		A	B	C	D
Austria	7.14	17	13	32	37
Chile	7.03	18	18	27	37
Colombia	7.62	14	14	25	48
Czech Republic	6.91	18	17	32	33
Estonia	7.19	14	16	35	35
Finland	7.61	10	12	35	43
France	7.19	12	19	39	31
Germany	7.02	17	17	33	34
Greece	6.99	15	19	35	31
Hungary	7.12	16	16	34	34
Iceland	7.34	13	14	36	37
Ireland	6.74	18	20	35	26
Italy	6.91	15	18	41	27
Japan	6.18	25	25	30	20
Korea	6.52	23	20	31	26
Latvia	7.16	13	18	35	33
Lithuania	7.61	12	13	30	46
Luxembourg	7.04	16	16	36	32
Mexico	8.11	8	9	27	56
Netherlands	7.50	6	15	53	27
Poland	6.74	19	19	32	29
Portugal	7.13	12	19	40	29
Slovak Republic	7.22	15	15	32	38
Slovenia	6.86	20	16	30	34
Spain	7.35	12	15	38	35
Sweden	7.01	17	17	34	33
Switzerland	7.38	12	15	37	37
Turkey	5.62	34	23	23	21
United Kingdom	6.16	26	21	32	20
United States	6.75	19	20	32	29

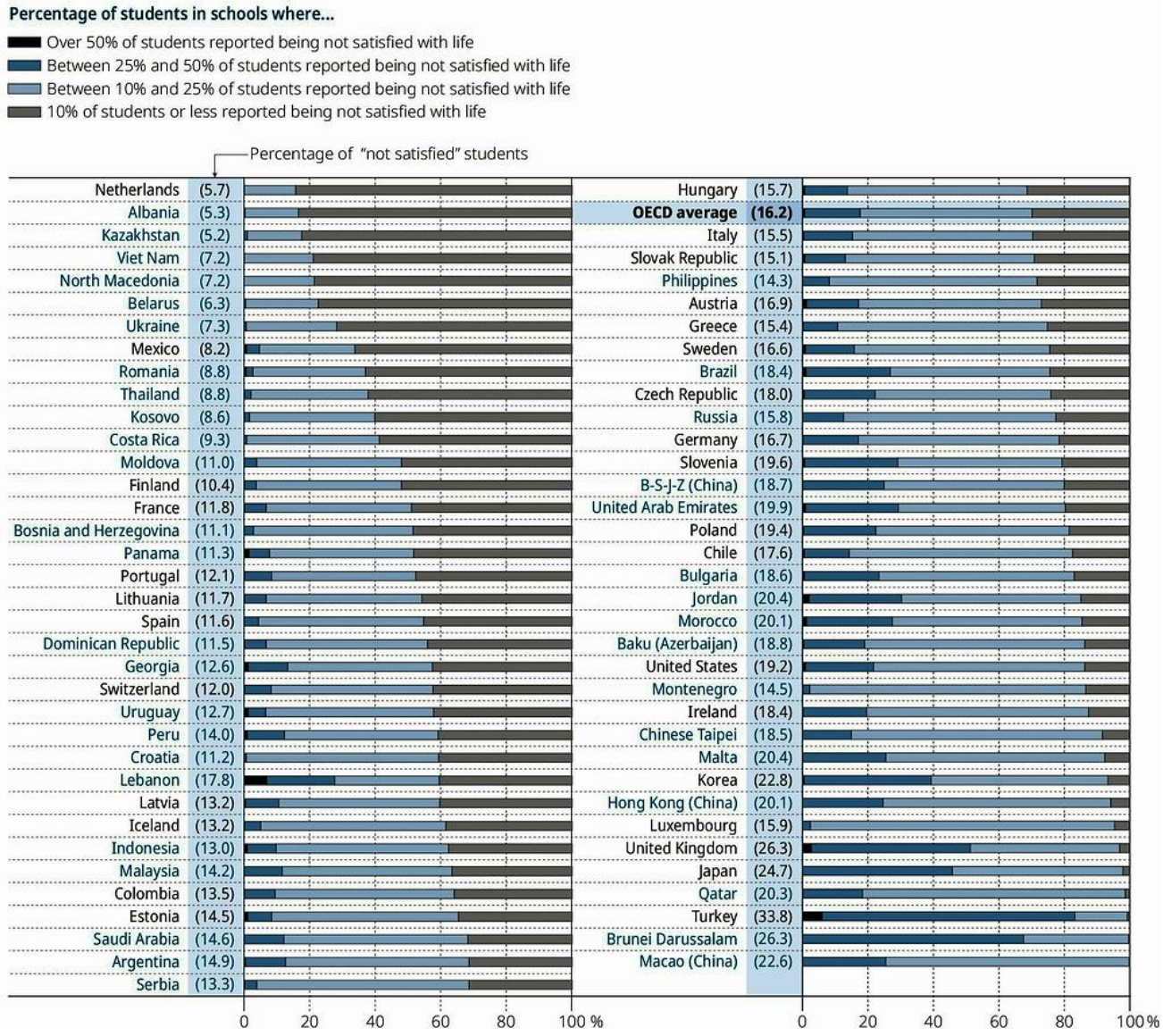
Partners	Average life satisfaction	Percentage of students, by level of life satisfaction:			
		A	B	C	D
Albania	8.61	5	8	18	68
Argentina	7.26	15	15	29	40
Baku (Azerbaijan)	7.24	19	14	19	48
Belarus	8.10	6	10	32	52
Bosnia and Herzegovina	7.84	11	12	24	53
Brazil	7.05	18	17	25	40
Brunei Darussalam	5.80	26	32	29	13
B-S-J-Z (China)	6.64	19	22	34	25
Bulgaria	7.15	19	16	22	43
Costa Rica	7.96	9	12	26	53
Croatia	7.69	11	12	29	48
Dominican Republic	8.09	11	10	16	62
Georgia	7.60	13	14	25	49
Hong Kong (China)	6.27	20	28	38	14
Indonesia	7.47	13	17	28	42
Jordan	6.88	20	18	20	42
Kazakhstan	8.76	5	8	16	71
Kosovo	8.30	9	10	18	63
Lebanon	6.67	18	24	30	29
Macao (China)	6.07	23	27	37	13
Malaysia	7.04	14	23	30	33
Malta	6.56	20	20	35	25
Moldova	7.68	11	12	29	47
Montenegro	7.69	14	11	21	53
Morocco	6.95	20	18	20	42
North Macedonia	8.16	7	12	25	57
Panama	7.92	11	12	22	54
Peru	7.31	14	18	29	39
Philippines	7.21	14	20	27	39
Qatar	6.84	20	18	25	36
Romania	7.87	9	12	30	49
Russia	7.32	16	15	27	42
Saudi Arabia	7.95	15	14	13	59
Serbia	7.61	13	12	26	49
Chinese Taipei	6.52	19	26	35	21
Thailand	7.64	9	18	31	42
Ukraine	8.03	7	11	31	50
United Arab Emirates	6.88	20	19	26	35
Uruguay	7.54	13	14	29	44
Viet Nam	7.47	7	20	40	34

Source: OECD, PISA 2018 Database, Table III.B1.11.1.

Differences in students' life satisfaction across schools

Are students who reported lower levels of life satisfaction concentrated in certain schools? As shown in Figure III.11.4, on average across OECD countries, 30 % of students attended schools where one in ten students or fewer reported that they are not satisfied with their lives.

Figure III.11.4. **Prevalence of students who are not satisfied with life**



Note: A student is classified as "not satisfied" with life if he or she reported between 0 and 4 on the life-satisfaction scale. The life-satisfaction scale ranges from 0 to 10.

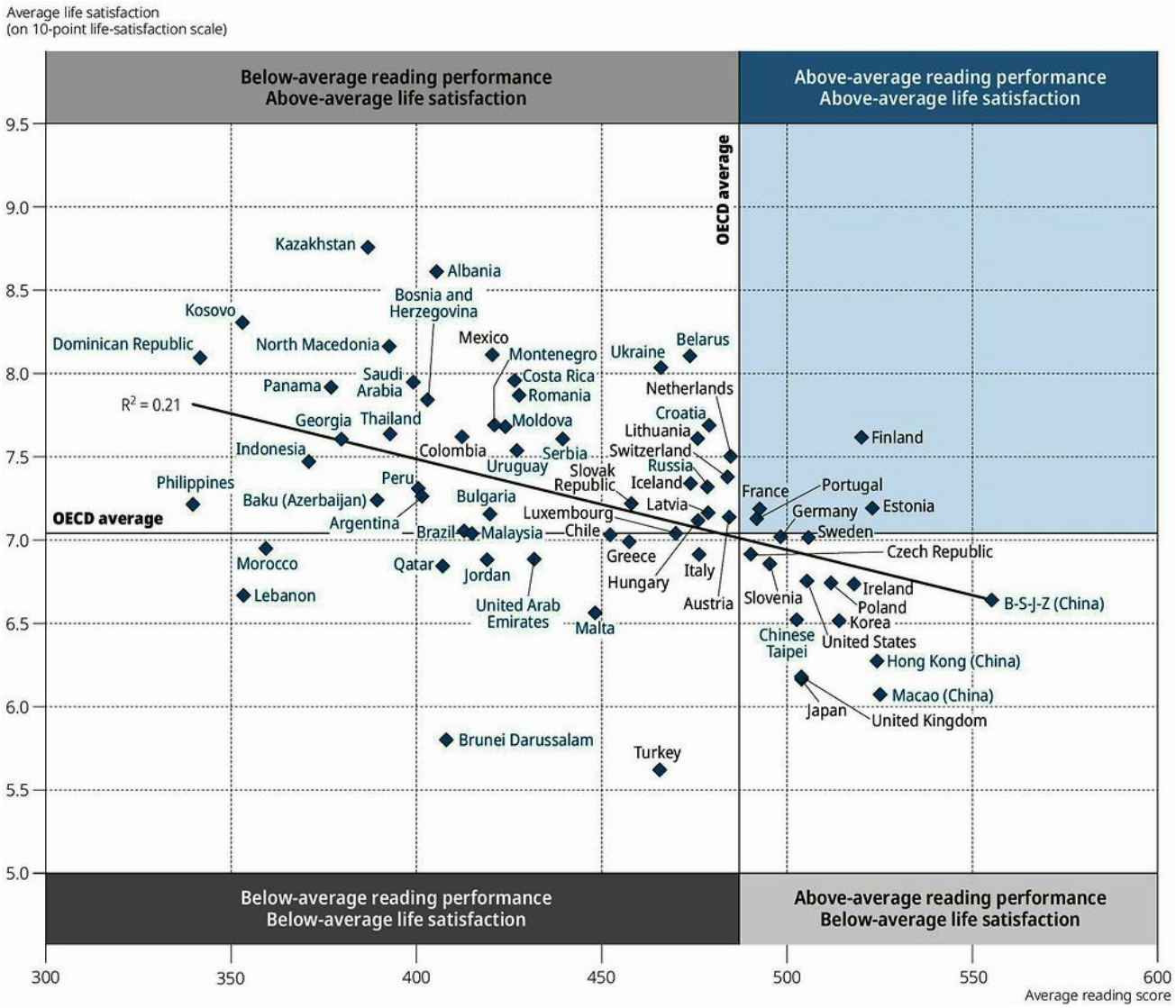
Countries and economies are ranked in descending order of the percentage of students in schools where 10 % of students or less reported being not satisfied with life.

Source: OECD, PISA 2018 Database, Table III.B1.11.3.

How students' life satisfaction is related to reading performance

As shown in Figure III.11.5, students in low-achieving countries tended to report higher levels of life satisfaction than students in high-achieving countries.

Figure III.11.5. **Life satisfaction and reading performance across education systems**



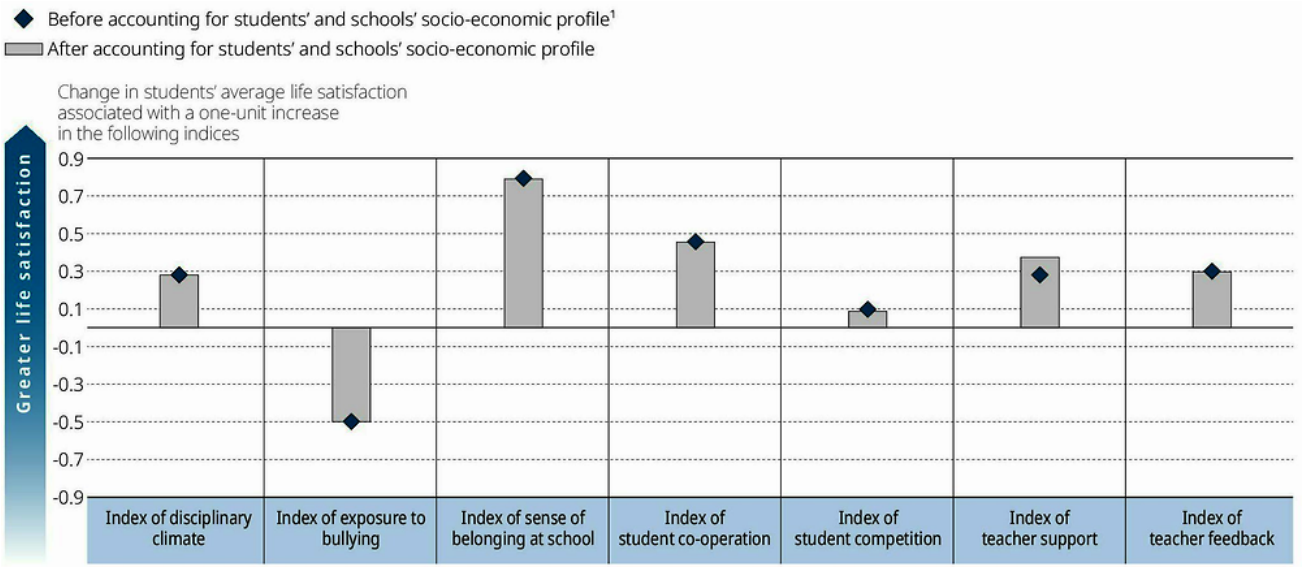
Source: OECD, PISA 2018 Database, Tables III.B1.11.1 and I.B1.4.

How students' life satisfaction is associated with school climate

Figure III.11.7 shows the relationship between seven school-climate indicators and students' satisfaction with their lives. These indicators measure three distinct characteristics

of school climate: student misbehaviour at school; perceived student-teacher relations; and perceived school community.

Figure III.11.7. **Students' life satisfaction and school climate**
Based on students' reports; OECD average



1. Student and school characteristics include the PISA index of economic, social and cultural status (ESCS) at the student and school levels and gender.

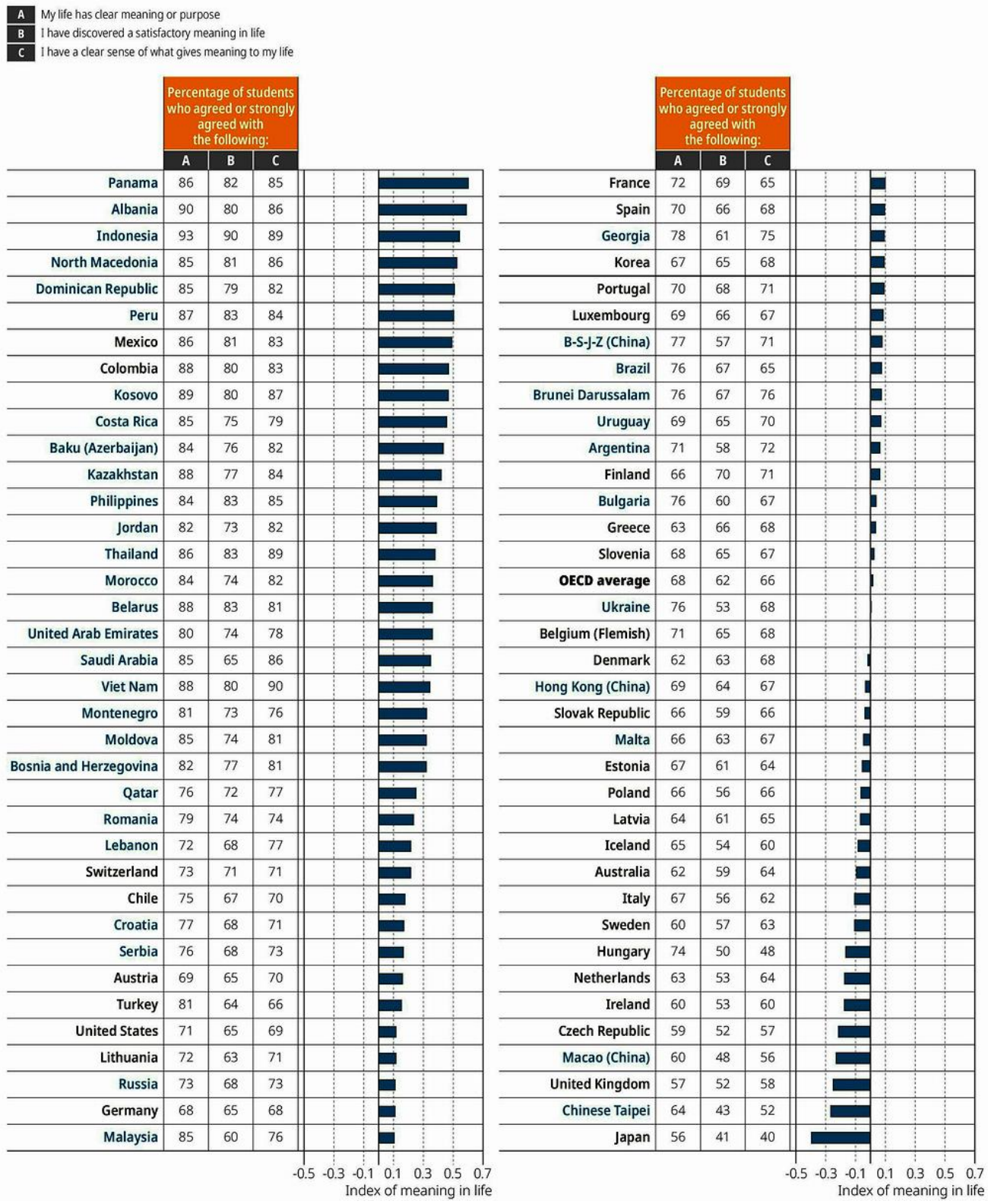
Note: All values are statistically significant (see Annex A3).

Source: OECD, PISA 2018 Database, Table III.B1.11.10.

How students' sense of meaning in life varies across countries, schools and students

Figure III.11.9 shows the percentage of students who reported their agreement or disagreement with statements related to meaning in life. On average across OECD countries, 68 % of students agreed or strongly agreed that their life has clear meaning or purpose; 66 % of students agreed or strongly agreed that they have a clear sense of what gives meaning to [their] lives; and 62 % of students agreed or strongly agreed that they have discovered a satisfactory meaning in life.

Figure III.11.9. **Students' sense of meaning in life**
Based on students' reports



Countries and economies are ranked in descending order of the index of meaning in life.

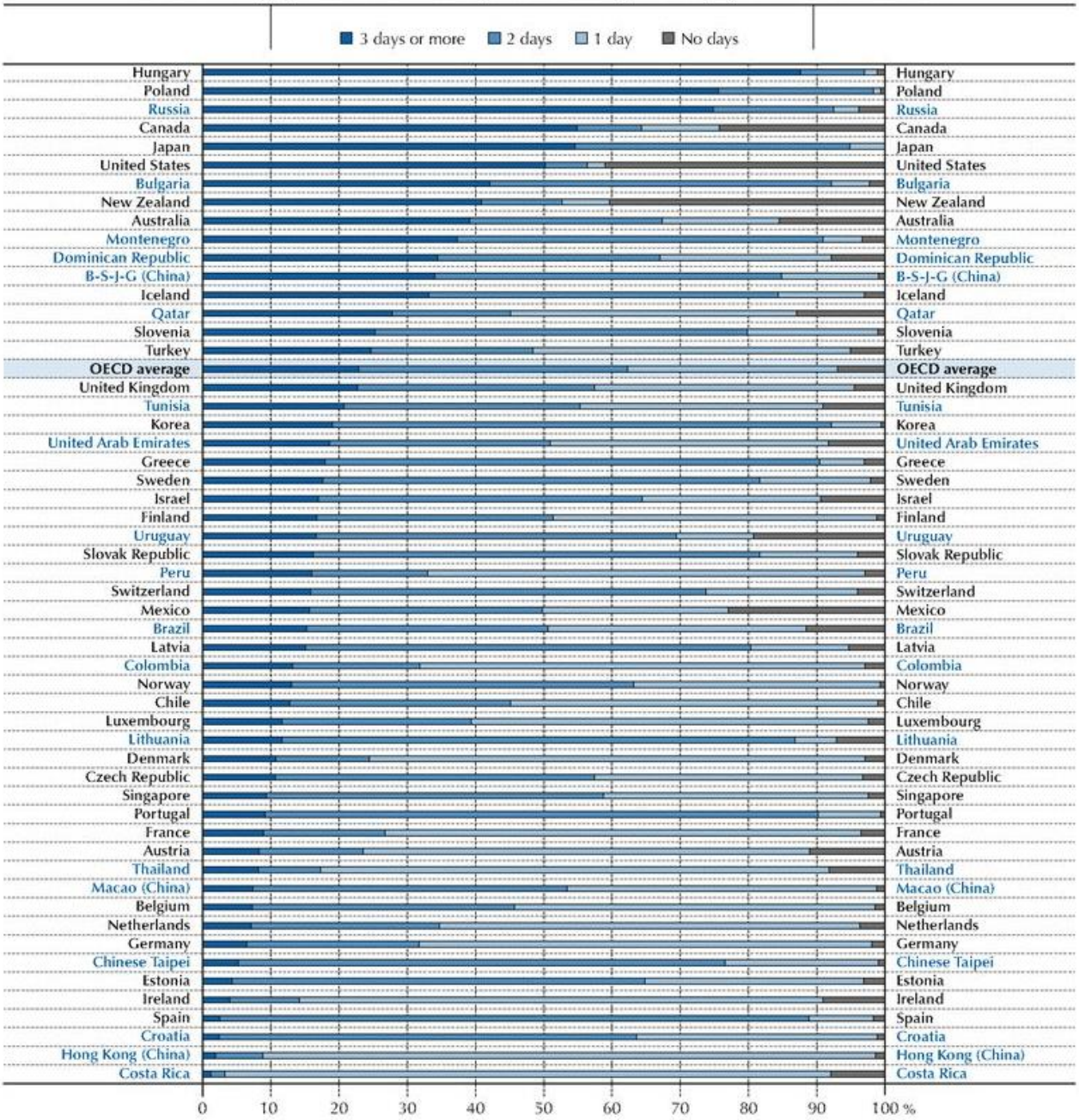
Source: OECD, PISA 2018 Database, Table III.B1.11.14.

Health 健康

Physical education at school

Figure III.11.1 ■ **Physical education at school**

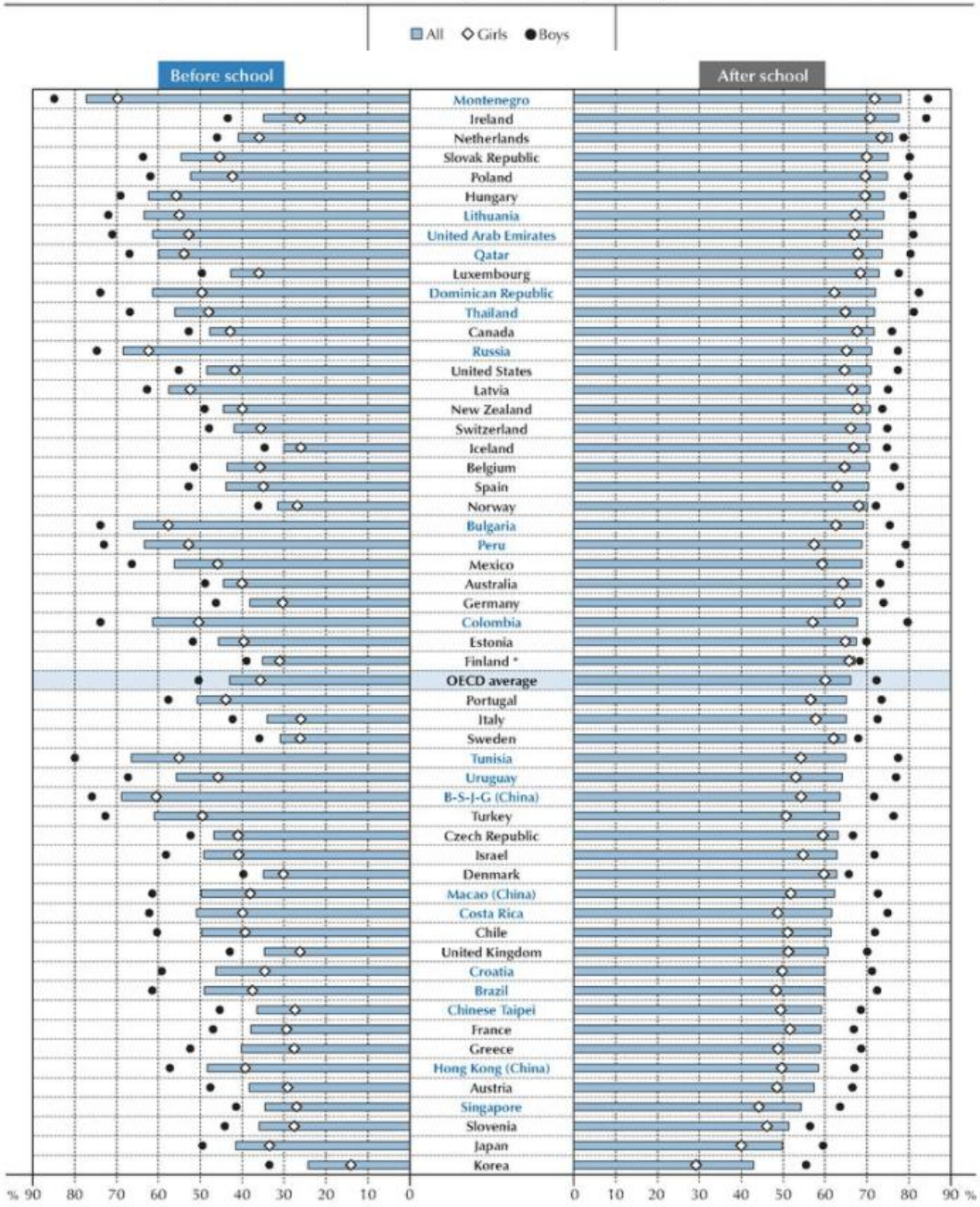
Number of days per week students reported that they attend physical education classes



Exercise before or after school

Figure III.11.2 ▪ **Exercise before or after school**

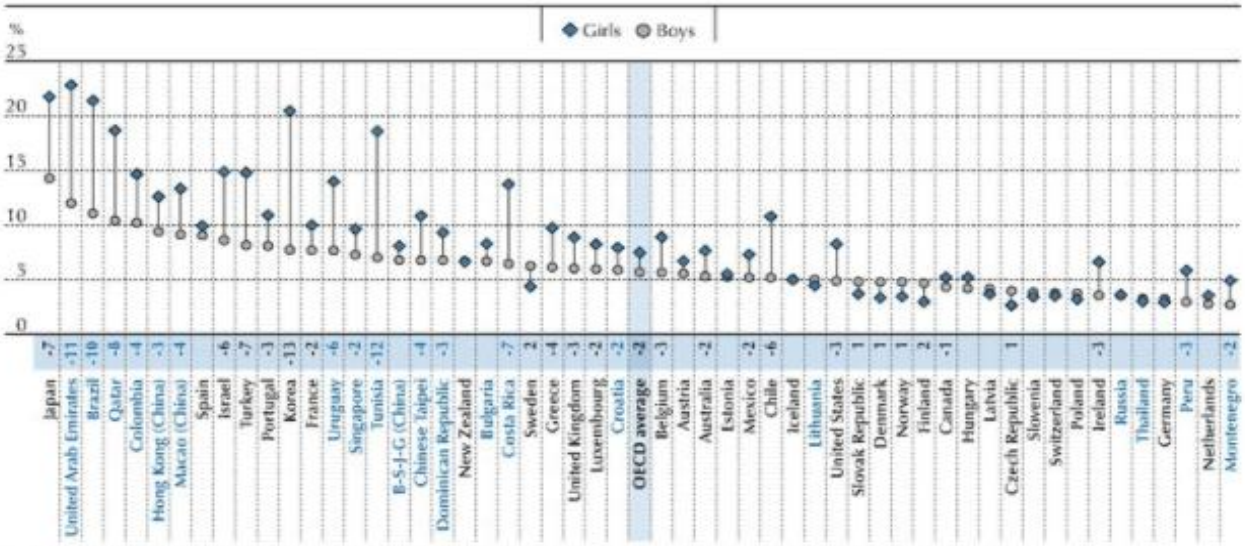
Percentage of students who reported that they exercise or practice sports before or after school



Physical activities outside of school

Figure III.11.3 ▪ **Physical activities outside of school**

Percentage of students who reported that they do not practice any vigorous or moderate physical activity outside of school



Note: Statistically significant differences between boys and girls are shown next to the country/economy name (see Annex A3).

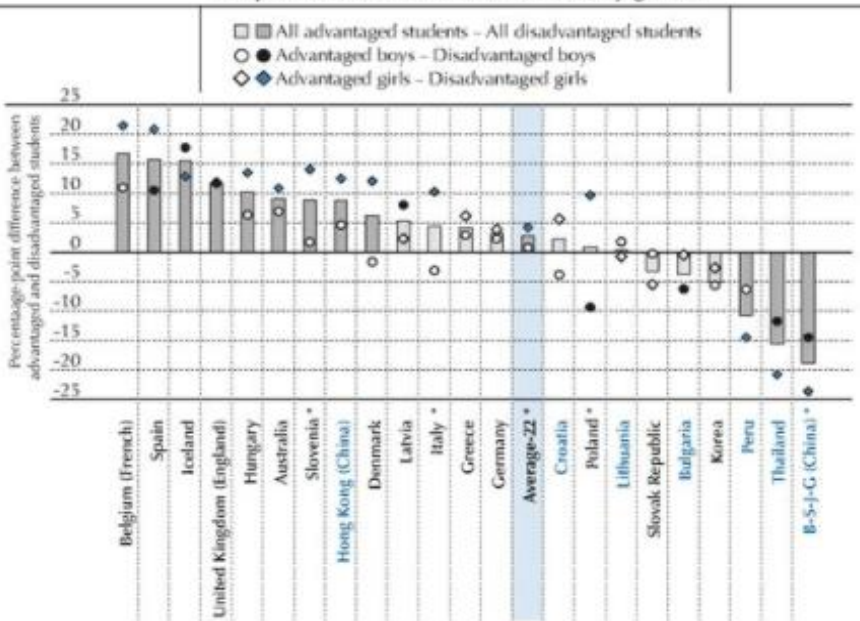
Countries and economies are ranked in descending order of the percentage of boys who reported that they do not practice any physical activity outside of school.

Source: OECD, PISA 2015 Database, Table III.11.10.

StatLink http://dx.doi.org/10.1787/888933472869

Figure III.11.4 ▪ **Extra sports lessons**

Percentage-point difference between advantaged and disadvantaged students in attendance of sports lessons outside of school, by gender



Notes: Statistically significant differences between advantaged and disadvantaged students are marked in a darker tone. Statistically significant differences in the socio-economic disparity between boys and girls are marked with an asterisk next to the country/economy name (see Annex A3).

A socio-economically advantaged (disadvantaged) student is a student in the top (bottom) quarter of the PISA index of economic, social and cultural status (ESCS) within his or her country/economy.

Countries and economies are ranked in descending order of the percentage-point difference between advantaged and disadvantaged students who take additional sports lessons, among all students.

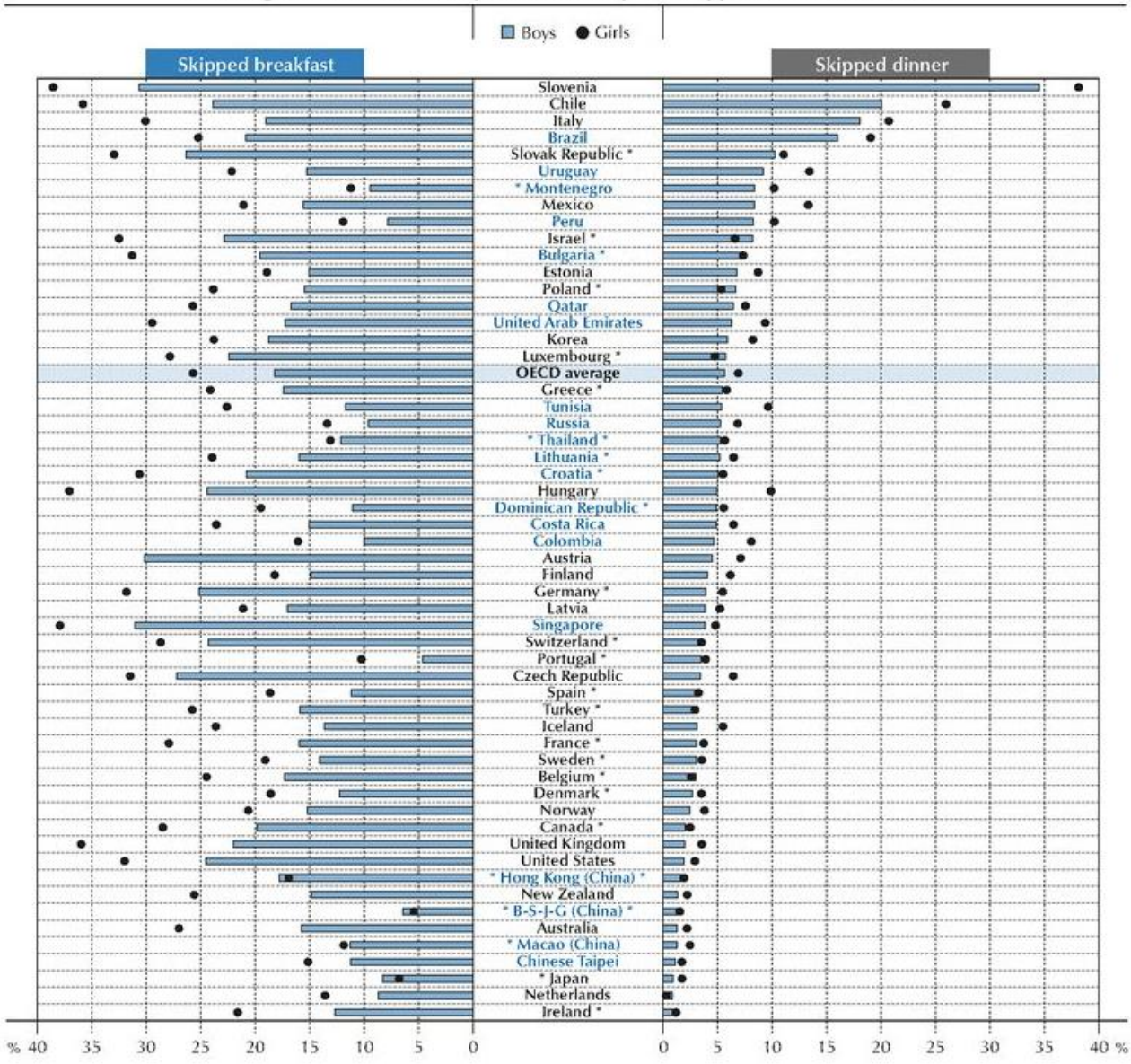
Source: OECD, PISA 2015 Database, Table III.11.19.

StatLink http://dx.doi.org/10.1787/888933472890

Skipping Meals

Figure III.11.11 ▪ **Skipping meals**

Percentage of students who reported that they had skipped breakfast or dinner



Note: Differences that are not statistically significant are shown with an asterisk before (for skipping breakfast) and after (for skipping dinner) the country/economy name (see Annex A3).

Countries and economies are ranked in descending order of the percentage of boys who skipped dinner.

Source: OECD, PISA 2015 Database, Table III.11.22.

StatLink http://dx.doi.org/10.1787/888933472960

Civic Engagement 市民参加

Is it necessary to create an opportunity to think about global issues at school? If so, in what class would this be held? Would it be during contemporary history, world history, English, or intercultural communications classes? If class time is limited to subjects related to exams due to shortage in time, how can these issues be taught?

 Many countries have faith that education can solve disputes around the world. What role can education play to prevent crimes? If it is possible, what can schools and classrooms do?

 When you officially become an adult, will you vote? Is there anything the school can do to make every adult vote? Is there something that can be done outside of school?

 Is there an opportunity where students can express their ideas in school besides activities related to student council? What kind of activities could allow teachers and students to work co-operatively side by side?

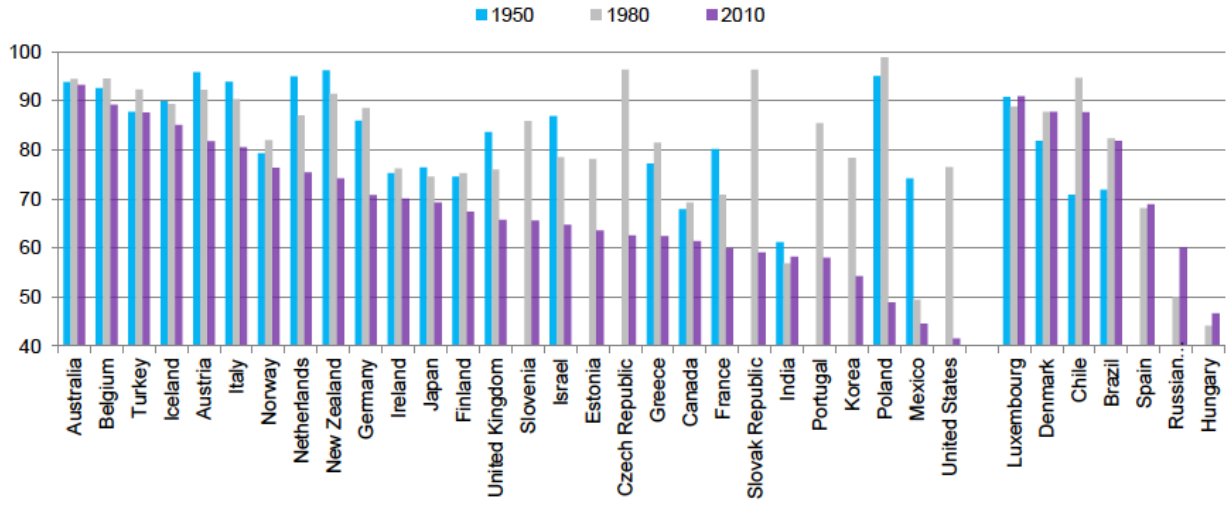
 What kind of opportunities are there outside of school that cultivate students` understanding towards democracy? (E.g., student council, Youth Parliament, Model United Nations)

 If there is a “Model OECD”, would you be interested in participating?

Fewer people engaged in democracies

Figure 3.1. Fewer people engaged in their democracies

Parliamentary voter turnout, in 1950, 1980 and 2010

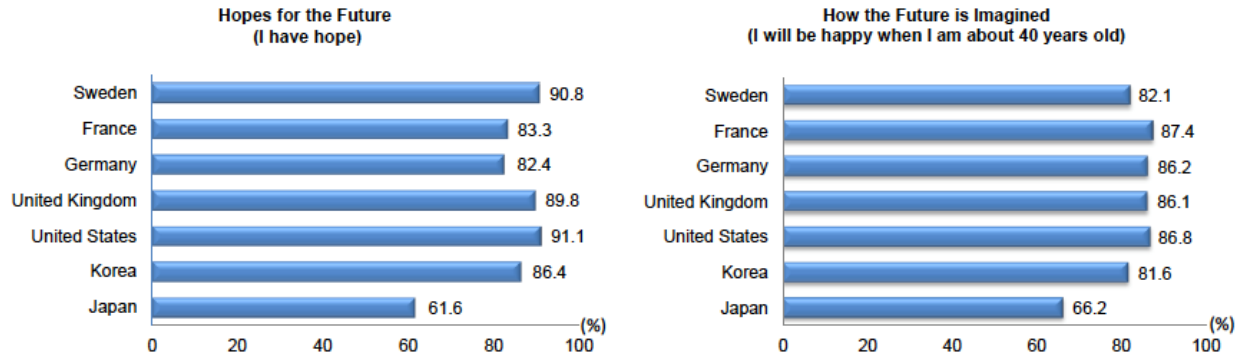


Note: Voter turnout is the total number of votes cast (valid or invalid) divided by the number of people registered to vote, expressed as a percentage. Where the data for countries were not consistently available in the same years, figures from the closest year are used.

Source: OECD (2013), *Trends Shaping Education 2013*.

Will you be happy at age 40?

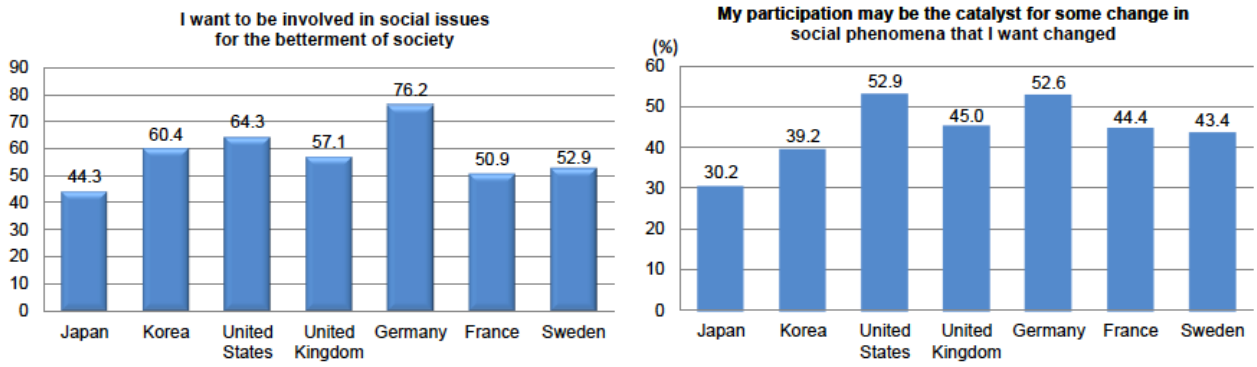
Figure3.2. Self-reporting



Source: Japan Cabinet Office (2014a), *International Survey of Youth Attitude 2013*.

Public policy decision making involvement

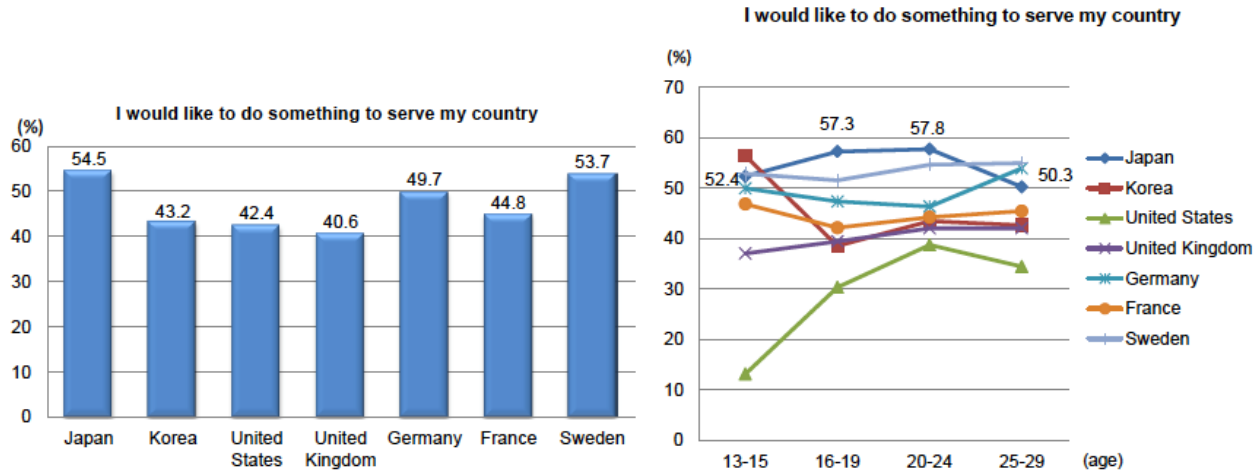
Figure 3.3. Involvement in the public policy decision-making process



Source: Japan Cabinet Office (2014b), "White Paper on Children and Young People 2014".

Service to country

Figure 3.4. Service to your country



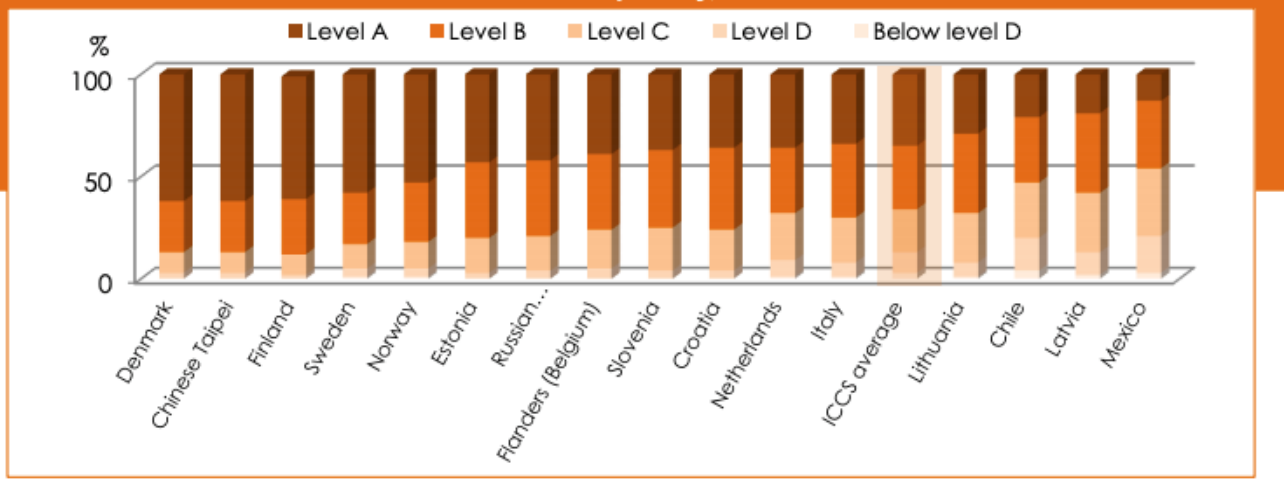
Source: Japan Cabinet Office (2014b), "White Paper on Children and Young People 2014".

Lower interest in politics

On average, one in five people report not being at all interested in politics across OECD countries (OECD, 2016a). Interest is lower among the young, for whom the average is one in four. While interest is relatively high in Denmark, Germany and Japan, the share of the population that claims to have no interest in politics is around 40% in Chile and Portugal. Those aged 15 to 29 show lower interest than older populations in all OECD countries except for Portugal, Spain and Turkey.

The 2016 IEA's ICCS assessment looked at students' knowledge, and reasoning and analysis capacity over the domains of society and systems, principles, participation and identities to provide international comparative data on civic knowledge and attitudes (see Figure 2).

Figure 2: Percentage of students at each level of civic knowledge proficiency, International Civics and Citizenship Study, 2016



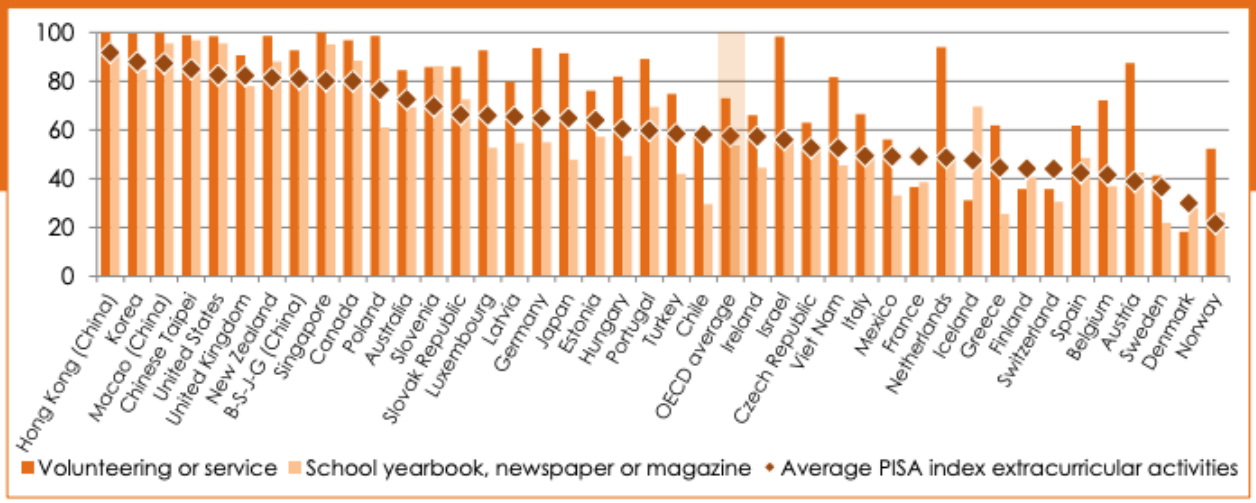
Note: At level D, students demonstrate familiarity with concrete content and examples relating to the basic features of democracy. At level C, they engage with the fundamental principles and broad concepts that underpin civics and citizenship. At level B, students demonstrate some specific knowledge and understanding of the most pervasive civic and citizenship institutions, systems, and concepts. At level A, they demonstrate a holistic knowledge and understanding of civic and citizenship concepts and demonstrate some critical perspective.

Source: Schulz et al. (2016).

Civic-related extracurricular activities

Figure 3 shows that instrumental activities such as volunteering or service are available for 70% of students across OECD countries on average.

Figure 3. Civic-related extracurricular activities offered at school
Percentage of students in schools where the following extracurricular activities are offered



Source: PISA 2015 database.

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Environment　環境

 If a students' understanding about the environment is not substantial, they have the tendency to think optimistically and feel that environmental issues can be solved easily. What is the most effective way to study about the environment?

 Is it important to increase the number of academic classes? (e.g., geoscience, biology, environmental science, etc.)

 Or is it important to increase extra-curricular activities?

 Are there any other ideas?

 What kinds of skills are necessary to raise awareness of people and to educate citizens who can take responsible actions that are environmentally friendly and sustainable (e.g., residential values, critical thinking skills, etc.)? Can those skills be acquired in school?

 Compare "Environmentally friendly economy" and "Environmentally damaging economy" by giving examples. What skills and specialties are necessary to create an environmentally friendly economy?

 Environmental issues are global issues.

 What kind of skills, knowledge and attitude are required to approach these issues globally?

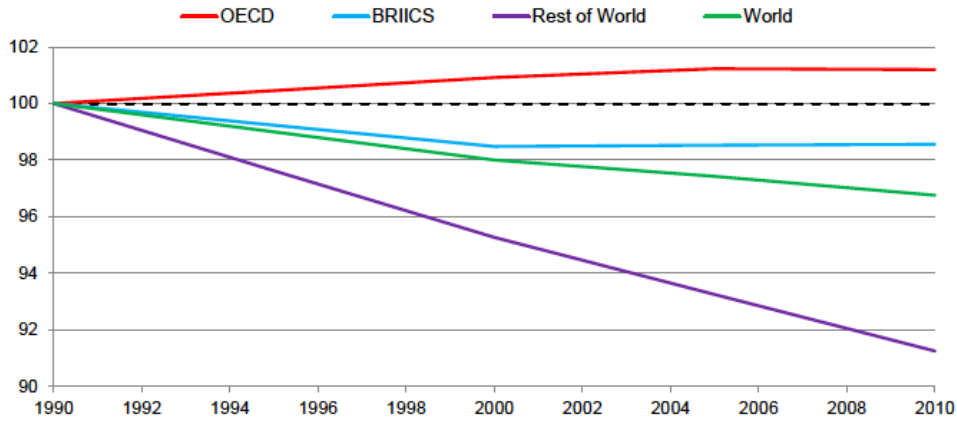
 Today, natural disasters are occurring all over the world. Are there any actions Japan could initiate to lead the world after experiencing the disastrous Great East Japan Earthquake? If so, what are they?

 Environmental issues are issues that are accumulating at a daily pace. How can we become more aware of the connection between our daily actions and long-term results? What can the schools do to motivate people to take actions not only independently, but with the society as a whole?

Decreasing biodiversity

Figure 2.1. Biodiversity decreasing through ongoing deforestation worldwide

Change in forest cover (Index 1990 = 100), 1990-2010



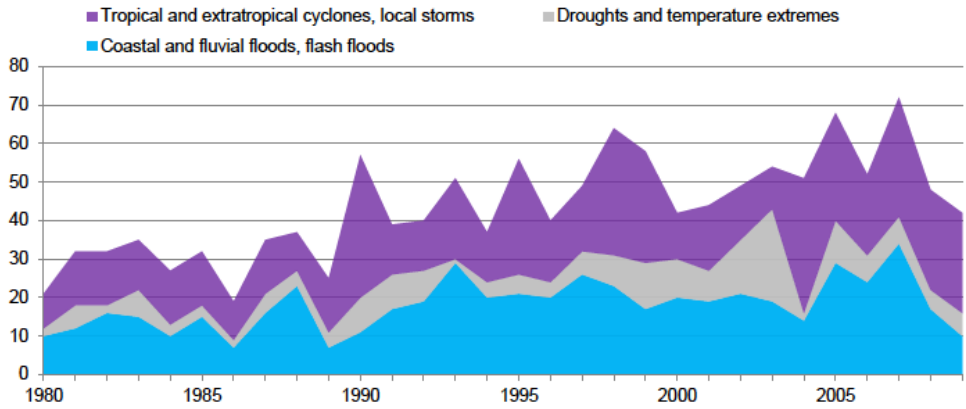
Note: The BRIICS countries are the emerging economies of Brazil, the Russian Federation, India, Indonesia, China and South Africa.

Source: OECD (2013), *Trends Shaping Education 2013*.

Natural disasters becoming more commonplace

Figure 2.2. Natural disasters becoming more commonplace

Number of natural disasters by type, 1980-2009



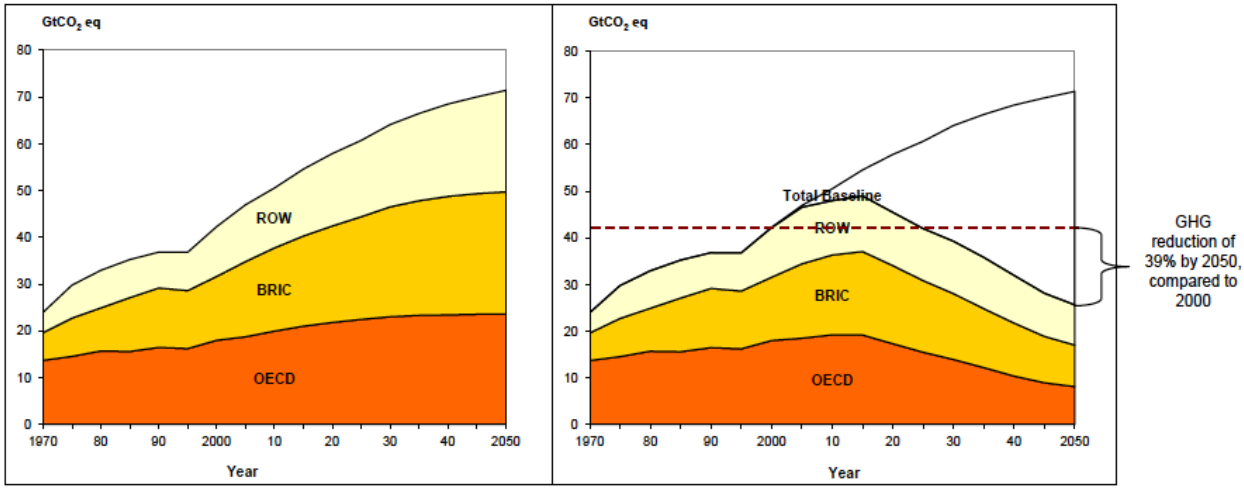
Note: Trends in weather-related disasters are compiled using information from the Emergency Events database of the Centre for Research on the Epidemiology of Disasters. This database also monitors direct economic losses and the number of victims.

Source: OECD (2013), Trends Shaping Education 2013.

Total greenhouse emissions by region

Figure 2.3. Total greenhouse emissions (by region) 1970-2050

a) OECD Environmental outlook Baseline b) 450 ppm stabilisation policy simulation

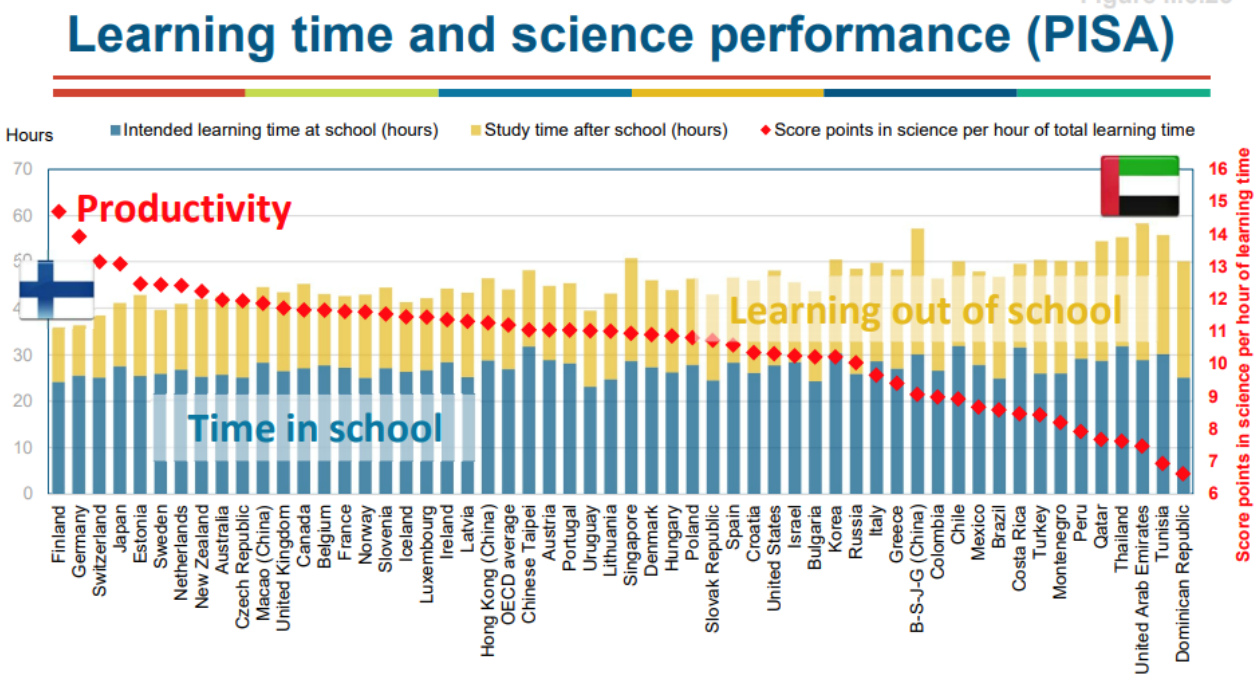


Source: OECD (2008), *OECD Environmental Outlook to 2030*.

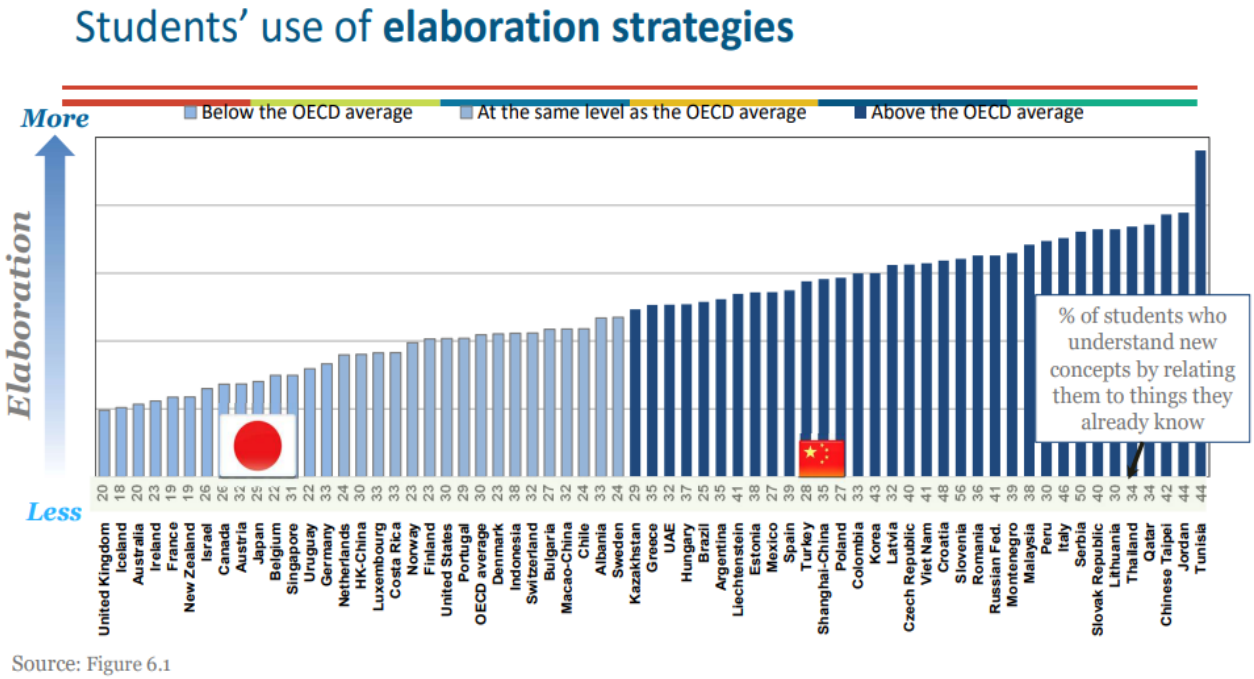
Education 教育

Learning time and science performance

Figure II.6.23



Students' use of elaboration strategies



Source: Figure 6.1

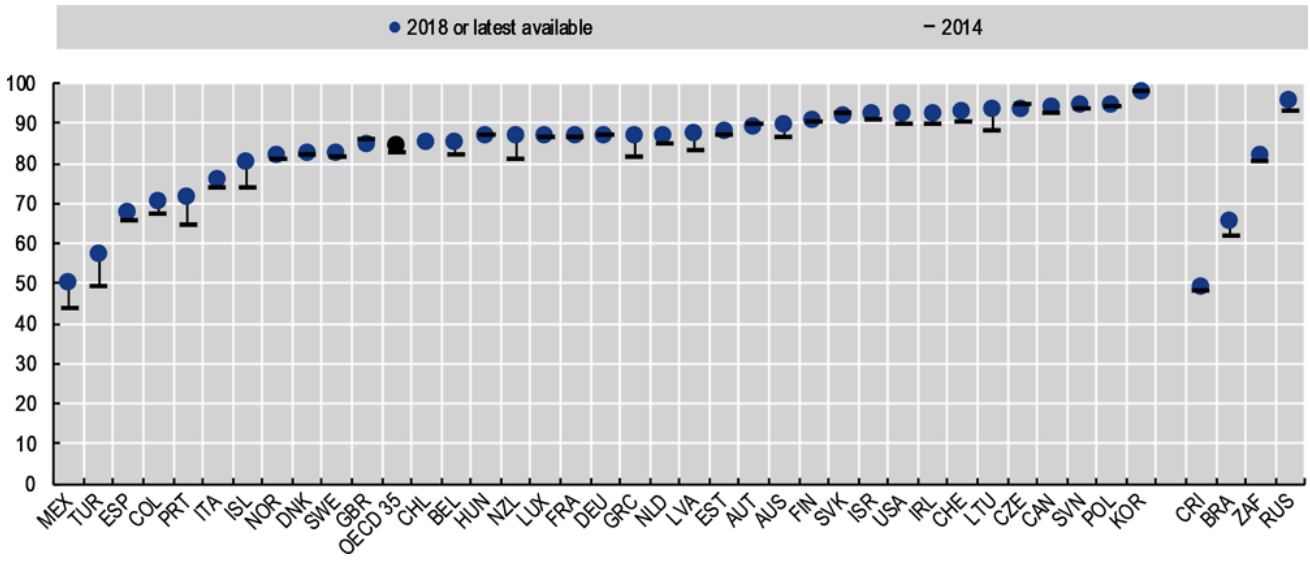
Educational attainment among young adults

Educational attainment among young adults reflects the stock of knowledge and skills likely to be available to future generations. The share of young adults (aged 25 to 34) with at least an upper secondary education has been rising for the majority of OECD countries over the past four years (Figure 15.2). The OECD average rate was 84.9% in 2018, ranging from over 95% in Korea and the Russian Federation to less than 70% in Turkey, Spain and Colombia, and 50% in Mexico.

Since 2014, the OECD average upper secondary attainment rate for young adults has increased by 2 percentage points. Some of the largest improvements occurred in countries furthest behind the OECD average in 2014, thus narrowing the attainment gap between countries. For example, Turkey gained 7.7 percentage points, Portugal 6.9 and Iceland 6.8. By contrast, the largest falls occurred in the United Kingdom (by around 1.3 percentage points), followed by Austria (1.1).

Figure 15.2. **The educational attainment of young adults is rising in most OECD countries**

Share of people aged 25-34 with at least an upper secondary education, percentage



Note: The latest available data is 2018 for all countries, except for Brazil, Chile, Israel and the Russian Federation (2017). The OECD average does not include Chile or Japan, giving missing data and/or incomplete time series for these countries. 2014 is used as the base year, as opposed to 2010, due to changes in education classification in 2014 for 19 OECD countries.

Source: *OECD Educational attainment and labour-force status* (database), http://stats.oecd.org/Index.aspx?DataSetCode=EAG_NEAC and Russian Federal State Statistics Service (Rosstat).

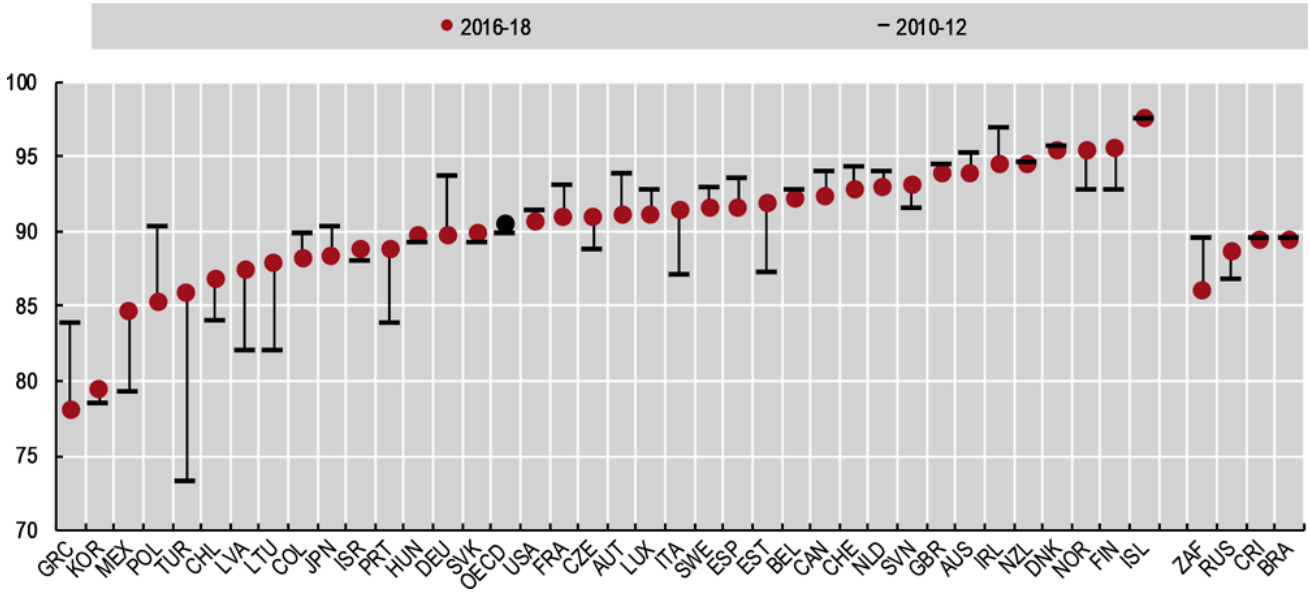
Community コミュニティ

Social support

Around 9 out of 10 individuals in OECD countries report having relatives or friends who can help them in times of need, ranging from 78% in Greece, to 98% in Iceland (Figure 11.2). The OECD average level in 2016-18 is almost unchanged from 2010-12. However, the share of the population who feel supported fell in Greece (by nearly 6 percentage points), Poland (-5) and Germany (-4), while over the same time period it rose by more than 4 percentage points in Italy and Estonia, and by 5 points or more in Portugal, Mexico, Latvia, Lithuania and Turkey.

Figure 11.2. **90% of people in OECD countries, on average, have someone they can count on**

Share of people reporting that they have relatives or friends they can count on to help them in times of need, percentage



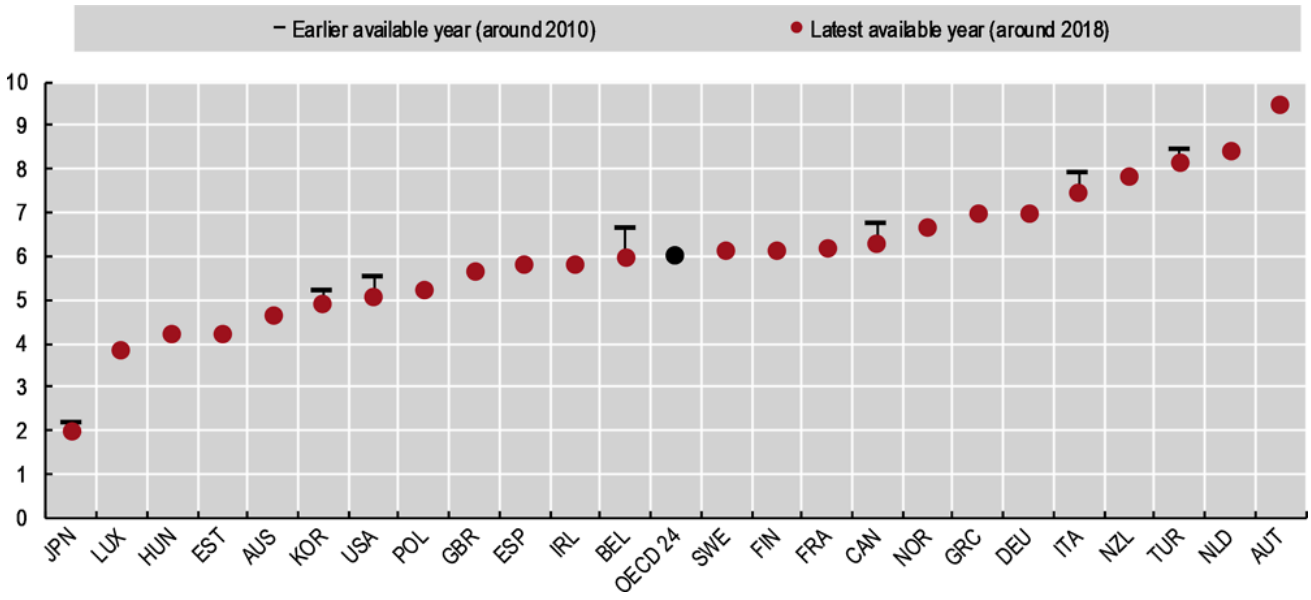
Source: *Gallup World Poll* (database), https://gallup.com/analytics/232838/world-poll.aspx.

Time spent in social interactions

Time spent in social interactions considers the number of hours per week spent interacting with family and friends as a primary activity (i.e. it excludes interactions that occur alongside other focal activities such as paid work, caring or studying). Across the OECD, people aged 15 or more spend, on average, 6 hours per week interacting with family and friends (Figure 11.3). This ranges from 2 hours per week in Japan, and around 4 hours in Luxembourg, Hungary and Estonia, to above 7 hours in Italy, New Zealand Turkey and the Netherlands, and more than 9 hours in Austria. Changes in time use since 2005 can be assessed for just seven OECD countries: Belgium, Canada, Italy, Japan, Korea, Turkey and the United States. Over time, average weekly time spent in social interactions has fallen by around half an hour in Canada, Italy and the United States, and by little more than 40 minutes in Belgium.

Figure 11.3. **Time spent socialising in OECD countries ranges from 2 to 9+ hours per week**

Average time allocated to social interactions, hours per week



Note: Only the time spent interacting with family and friends as a main or primary activity is considered. Time spent in social interactions as a secondary activity is therefore excluded. Due to methodological differences in data collection, data for Colombia and Mexico are not presented. The OECD average also excludes Chile, the Czech Republic, Denmark, Iceland, Israel, Latvia, Lithuania, Portugal, the Slovak Republic, Slovenia and Switzerland due to a lack of recent data (2005 or after). Latest available year refers to 2018 for the United States; 2016 for Japan and the Netherlands; 2015 for Canada; 2014-15 for Luxembourg, Turkey and the United Kingdom; 2014 for Korea; 2013-14 for Greece and Italy; 2012-13 for Belgium, Germany and Poland; 2010-11 for Norway; 2010 for Sweden; 2009-10 for Estonia, Finland, France, Hungary, New Zealand and Spain; 2008-09 for Austria; 2006 for Australia; and 2005 for Ireland. When available, data for the earlier period refer to 2011 for Japan; 2010 for Canada and the United States; 2009 for Korea; 2008-09 for Italy; 2006 for Turkey; and 2005-06 for Belgium. Data refer to people aged 15 or more except for Korea (2014) and Sweden, where data refer to people aged 15-64, while data refer to people aged 12 or more for New Zealand. Data have been normalised to 1 440 minutes per day: in other words, for those countries for which daily time use did not sum up to 1 440 minutes, the missing or extra minutes (around 30-40 minutes usually) were equally distributed across all activities.

Source: OECD calculations based, when available, on *Eurostat's Harmonised European Time Use Surveys* (database), https://ec.europa.eu/eurostat/web/time-use-surveys and tabulations from National Statistical Offices.

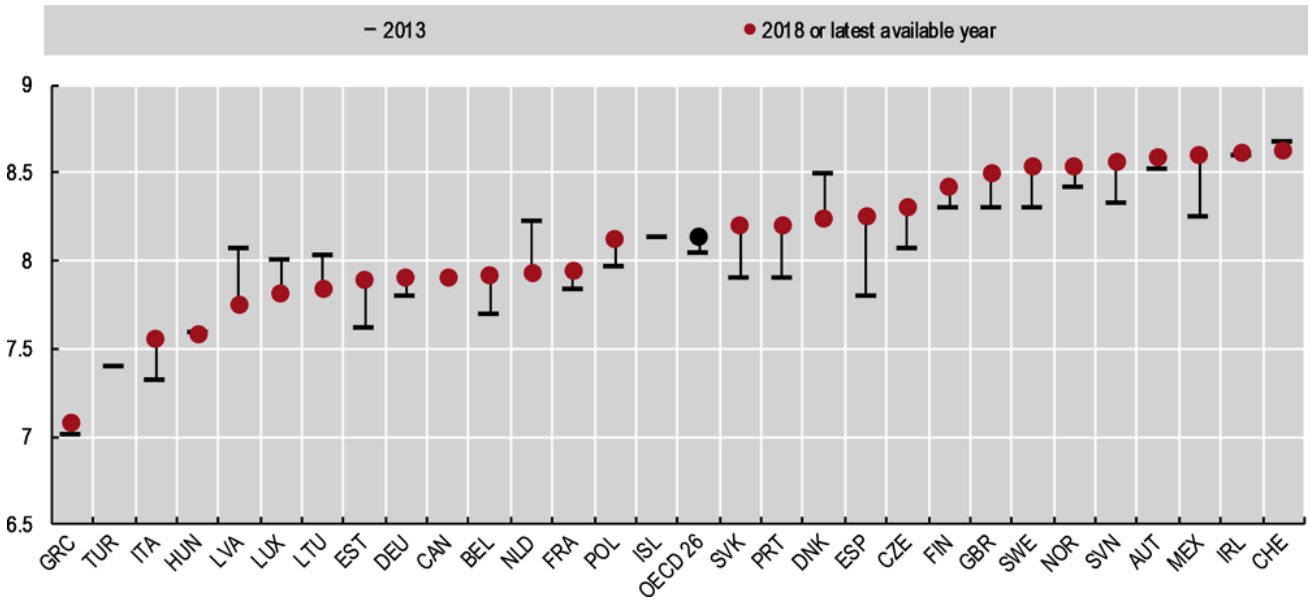
Satisfaction with personal relationships

Satisfaction with personal relationships provides a measure of the perceived quality of social

connections. Across the OECD countries with available data, people are generally satisfied with the quality of their personal relations, reporting an average rating (on a 0-10 scale) of 8.1. Cross-country variation spans a fairly limited range, with national averages ranging from just above 7 in Greece to 8.6 in Switzerland, Ireland, Mexico, Austria and Slovenia (Figure 11.4).

Figure 11.4. **Satisfaction with personal relationships spans a narrow range in OECD countries**

Mean values for satisfaction with personal relationships, 0-10 scale



Note: Data refer to individuals aged 16 or more, except for Canada (15 or more) and Mexico (18 or more). The latest available year is 2016 for Canada, and 2013 for Iceland and Turkey. The OECD average excludes Australia, Chile, Colombia, Israel, Japan, Korea, New Zealand and the United States, due to the lack of available data; and Canada, Iceland and Turkey as only one observation is available. 2018 data for Ireland and the United Kingdom are provisional.

Source: *European Union Statistics on Income and Living Conditions (EU-SILC)* (database), https://ec.europa.eu/eurostat/web/income-and-living-conditions; *Eurostat database* (ilc_pw01) for Germany (2018), Ireland (2018), the Slovak Republic (2018), Turkey (2013) and the United Kingdom (2018); Statistics Canada, General Social Survey 2016, https://doi.org/10.25318/1310010601-eng; and INEGI, Subjective well-being in Mexico, https://sinegi.page.link/p1SS.

Sense of belonging at school

This chapter examines differences between countries and economies in students' sense of belonging at school, and how the sense of belonging is associated with student and school characteristics, and reading performance. It also examines whether students feel a greater sense of belonging in co-operative or competitive schools, and how sense of belonging is related to expectations of further education and grade repetition.

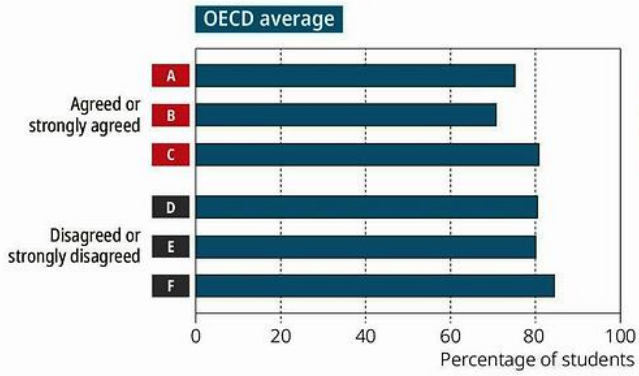
How students' sense of belonging varies across countries, schools and students

Figure III.9.1 shows the percentage of students who reported their agreement or disagreement with statements related to sense of belonging. Most students across OECD countries reported that they feel socially connected at school. For instance:

- 84 % of students disagreed or strongly disagreed that they feel lonely at school
- 80 % of students disagreed or strongly disagreed that they feel like an outsider or feel left out of things
- 75 % of students agreed or strongly agreed that they can make friends easily at school
- 71 % of students agreed or strongly agreed that they feel they belong at school.

Figure III.9.1. **Sense of belonging at school**

Based on students' reports



Percentage of students who agreed or strongly agreed with the following statements

- A I make friends easily at school
- B I feel like I belong at school
- C Other students seem to like me

Percentage of students who disagreed or strongly disagreed with the following statements

- D I feel like an outsider (or left out of things) at school
- E I feel awkward and out of place in my school
- F I feel lonely at school

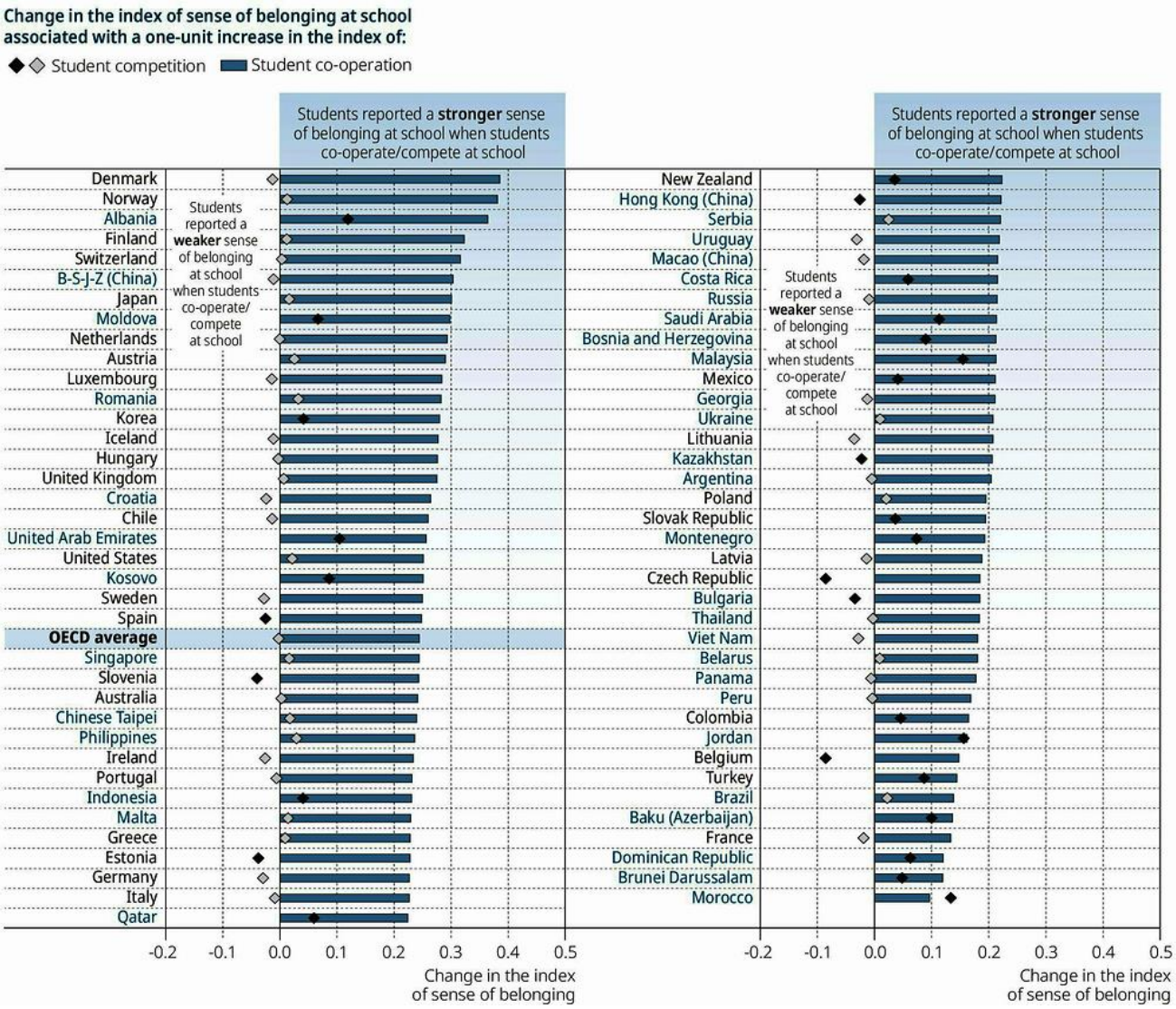
	Percentage of students who agreed or strongly agreed with the following statements:			Percentage of students who disagreed or strongly disagreed with the following statements:		
OECD	**A**	**B**	**C**	**D**	**E**	**F**
Australia	76	68	85	73	75	81
Austria	77	74	85	85	82	86
Belgium	79	58	87	85	83	90
Canada	74	67	86	74	74	80
Chile	68	75	75	77	80	78
Colombia	74	81	75	77	78	80
Czech Republic	73	69	80	76	81	81
Denmark	79	72	84	89	87	89
Estonia	71	74	71	84	81	84
Finland	75	75	78	85	78	86
France	81	38	88	70	81	88
Germany	72	75	86	84	84	88
Greece	75	81	84	80	83	86
Hungary	79	73	83	80	83	85
Iceland	70	75	80	80	78	83
Ireland	76	67	89	78	78	86
Italy	79	66	76	86	85	88
Japan	69	80	74	87	80	88
Korea	77	78	81	89	87	90
Latvia	71	74	65	81	72	82
Lithuania	71	56	69	74	72	76
Luxembourg	75	64	81	82	80	85
Mexico	74	79	77	79	80	83
Netherlands	81	76	92	91	89	92
New Zealand	74	68	85	74	76	82
Norway	82	77	82	88	82	86
Poland	70	60	73	79	77	81
Portugal	76	80	89	87	79	90
Slovak Republic	72	69	74	72	76	79
Slovenia	79	74	78	79	82	87
Spain	81	87	87	88	86	90
Sweden	77	67	79	80	83	84
Switzerland	79	69	88	84	83	89
Turkey	72	71	73	76	75	76
United Kingdom	73	62	85	75	76	84
United States	72	67	85	69	72	76

	Percentage of students who agreed or strongly agreed with the following statements:			Percentage of students who disagreed or strongly disagreed with the following statements:		
Partners	**A**	**B**	**C**	**D**	**E**	**F**
Albania	83	87	80	89	82	90
Argentina	73	76	81	72	80	82
Baku (Azerbaijan)	72	73	76	69	72	72
Belarus	75	58	70	89	84	85
Bosnia and Herzegovina	82	80	77	79	81	84
Brazil	70	74	78	72	77	77
Brunei Darussalam	75	60	67	63	61	77
B-S-J-Z (China)	79	65	66	81	83	80
Bulgaria	74	65	68	68	70	73
Costa Rica	74	80	79	79	81	84
Croatia	82	80	81	85	84	87
Dominican Republic	74	77	74	65	67	72
Georgia	79	56	64	82	82	83
Hong Kong (China)	76	66	72	71	77	78
Indonesia	87	82	77	80	84	83
Jordan	78	75	80	66	69	78
Kazakhstan	76	69	71	79	78	80
Kosovo	80	84	77	83	74	87
Macao (China)	70	56	62	77	75	77
Malaysia	84	73	71	79	79	82
Malta	71	64	83	68	74	82
Moldova	81	78	80	85	83	78
Montenegro	81	54	77	80	78	84
Morocco	75	76	72	71	73	75
Panama	71	73	76	70	71	77
Peru	77	67	80	83	80	85
Philippines	83	85	75	73	69	74
Qatar	74	68	81	70	72	77
Romania	83	55	85	83	82	85
Russia	68	71	62	74	68	73
Saudi Arabia	74	74	85	77	80	82
Serbia	79	76	82	79	82	83
Singapore	78	73	82	77	76	83
Chinese Taipei	78	85	63	86	80	85
Thailand	80	76	61	73	63	76
Ukraine	75	78	71	81	79	78
United Arab Emirates	76	71	78	73	74	79
Uruguay	70	81	88	78	81	81
Viet Nam	80	74	37	72	77	87

Do 15-year-olds in co-operative or competitive schools report a greater sense of belonging?

Previous research indicates that students tend to report better relationships with peers and stronger attachments to school in co-operative academic environments than in competitive ones (Johnson et al., 1981[24]; Roseth, Johnson and Johnson, 2008[25]).

Figure III.9.4. **Student co-operation and competition, and students' sense of belonging**



Notes: Statistically significant values are shown in darker tones. All values associated with the index of student co-operation are statistically significant (see Annex A3).

Results based on linear regression analysis, after accounting for students' and schools' socio-economic profile. The socio-economic profile is measured by the PISA index of economic, social and cultural status (ESCS).

The indices of student co-operation and student competition are included in the same linear regression model.

Countries and economies are ranked in descending order of the change in the index of sense of belonging at school associated with a one-unit increase in the index of student co-operation.

Source: OECD, PISA 2018 Database, Table III.B1.9.8.