Programme for International Student Assessment

PISA 2025

Insights and Interpretations

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OECD
BETTER POLICIES FOR BETTER LIVES

What is PISA?

Every few years, hundreds of thousands of 15-year-olds from now over 90 countries sit down to answer questions in the global PISA test. They do not revise for it, nor do the results affect their grades. Yet ministers scrutinise the outcomes, newspapers splash them across their front pages, and education systems are praised or questioned accordingly.

That is what makes the OECD's Programme for International Student Assessment (PISA) the world's most influential measure of educational performance. First administered in 2000, it assesses whether young people can use what they know to solve real-world problems.

In a world increasingly shaped by technology, artificial intelligence and automation, success depends less on recalling facts and more on interpreting information, analysing evidence and adapting to new challenges. PISA seeks to capture these capabilities.

The 2025 assessment focuses on science and also measures how effectively 15-year-olds can apply their knowledge of reading, maths and - for the first time - computational problem solving. It examines a plethora of other outcomes that are important in today's workplaces and communities, including students' agency, their ability to organise their learning independently and their engagement in learning, including levels of curiosity and perseverance. These kinds of skills are fundamental to developing the future-readiness of students and their capacity to adapt and engage in lifelong learning.

This edition of PISA also analyses the role that schools and families play in student development, student attitudes towards school and student readiness to tackle environmental challenges.

The result is a rich dataset - the biggest PISA ever - that helps governments identify strengths, challenges and potential areas for reform. More than 760 000 students took part in the test from 91 countries and economies, representing around 33 million 15-year-olds across the globe.

The unique scale of PISA allows policymakers to make detailed international comparisons. Education systems differ enormously in structure, curriculum and culture, but PISA provides an internationally agreed yardstick, allowing countries to see how their students perform relative to their peers around the world.

When countries perform well, they can become global reference points, prompting policymakers elsewhere to study their approaches. If results are disappointing, the findings often trigger intense national debate and substantial policy changes.

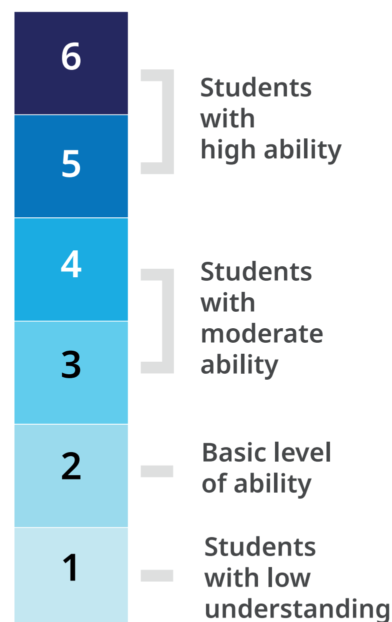
Yet the significance of PISA is not simply about rankings. Some of the most important insights for policy and practice arise from how academic and non-academic outcomes relate to the different contexts and environments in which students learn and schools operate. PISA therefore collects extensive contextual data from students, teachers, school principals and parents. Valuable insights also emerge from trends over time and from comparisons within countries. PISA reveals whether gaps between advantaged and disadvantaged students are widening or narrowing, whether excellence is improving or declining, and whether education systems are becoming more equitable. In an era where economic competitiveness and social cohesion increasingly depend on human capital, these questions matter profoundly.

Together, these findings provide governments, educators, researchers and the public with evidence about how effectively education systems are preparing young people for the future. The findings do not prescribe specific solutions. Rather, they offer insights that can help inform policy and practice, and ensure countries learn from and with the world's best performing and most rapidly improving education systems. In a world where talent is increasingly a country's most valuable resource, understanding what PISA measures, and why it matters, has become essential.

PISA Levels

Level 2 is considered the minimum level of proficiency that all students should acquire by the end of secondary education. For example, level 2 students in science can, in practical terms, read evidence, judge simple claims and sources, and make evidence-informed decisions. Students who attain Level 5 or Level 6 are top performers. For example, they can critique methods and evidence, handle complex information, and justify decisions in uncertain or unfamiliar contexts.

Top performers



Lowest performers

Try a PISA question

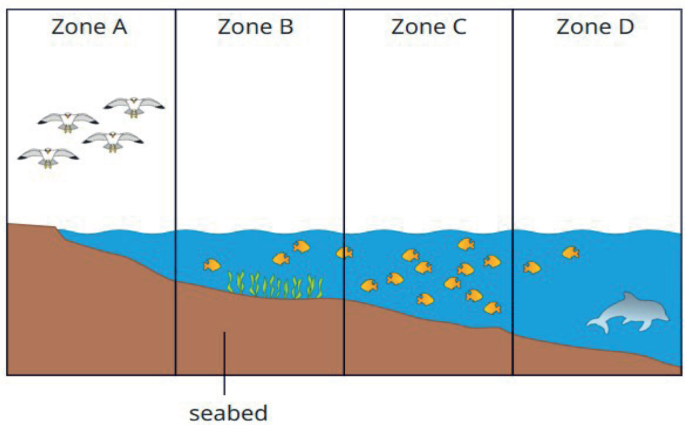
This is an example of the kind of problem-solving and critical thinking skills that PISA aims to measure on a global scale.

Offshore Wind Turbine Farm

The town decides to go ahead with constructing the offshore wind turbine farm.

Wind turbines have to be anchored to the seabed. The deeper the seabed the more expensive it is to install the turbines.

The wind farm will be built in one of the zones shown in the diagram.



Consider this information about the zones:

- Zone A is visited by large numbers of seabirds every day.
- Zone B supports green algae, a critical source of food for many marine organisms.
- Zones B and C support shoals of common fish species.
- Zone D is deep enough to allow large marine animals to swim through it.

In which zone should the wind turbines be installed as the best compromise between the financial cost and environmental impact?

- ◯ Zone A
- ◯ Zone B
- ◯ Zone C
- ◯ Zone D

Notes: This item forms part of a larger unit. The full unit can be found in *PISA 2025 Results Volume I* Annex C.
See the answer to the question on the disclaimer page (page 78).
Additional released units and fully interactive versions are available on the PISA website: https://www.oecd.org/en/about/programmes/pisa/pisa-test.html

Comparing performance in science and other areas of learning [1/2]

	Academic performance				Drive to learn[1]		Agency and adaptability[1]				Attitudes towards school[1]	
	Science score	Score change from 2022	Science ranking	Ranking change since 2022	Curiosity	Perse-verance	Adapt-ability	Help seeking	Goal setting	Growth mindset	Sense of belong-ing	Value of school[2]
B-S-J-Z (China)	597	..	1	..	6	8	6	10	4	2	5	7
Singapore	560	-2	2	▼ -1	9	7	5	10	7	6	3	8
Macao (China)	541	-2	3	0	3	3	1	9	1	1	1	1
Chinese Taipei	540	2	4	0	3	6	1	9	1	1	6	3
Japan	538	-9	5	▼ -3	2	7	1	5	1	10	10	4
Estonia	527	1	6	0	6	4	8	6	2	10	5	7
Korea	526	-2	7	▼ -2	6	5	1	9	1	10	9	4
United Kingdom	511	**12**	8	▲ +7	7	4	4	3	5	9	3	3
Canada*	510	-5	9	▼ -1	8	8	7	7	7	10	3	5
New Zealand*	509	5	10	▲ +1	7	5	4	6	2	9	1	6
Australia	509	2	11	▼ -1	7	6	7	5	3	7	2	6
Finland	504	-7	12	▼ -3	5	3	4	4	2	10	8	8
United States*	502	2	13	▲ +3	..	..	9	7	3	10	2	4
Switzerland	501	-1	14	▼ -1	7	6	6	5	4	8	10	2
Ireland	500	-4	15	▼ -3	9	6	6	3	2	10	3	4
Austria	497	6	16	▲ +7	8	7	7	3	5	10	10	1
Hong Kong (China)	496	**-25**	17	▼ -10	5	2	1	8	3	1	1	2
Poland	495	-4	18	▼ -1	3	1	5	1	1	8	2	1
Türkiye	494	**18**	19	▲ +15	8	8	7	4	3	8	6	7
Czechia	490	-7	20	▼ -2	1	1	2	1	1	6	2	3
Belgium	490	-1	21	▲ +3	3	4	4	2	2	7	7	8
Lithuania	488	3	22	▲ +7	2	2	4	3	4	2	3	5
Germany	486	-7	23	▼ -1	7	4	7	2	2	9	9	1
Netherlands*	485	-3	24	▲ +1	1	1	2	2	1	5	8	1
Sweden	485	-8	25	▼ -4	..	..	..	7	6	3	9	..
OECD average[3]	484	-3	..	..	6	6	5	4	3	8	7	4
Slovenia	484	**-16**	26	▼ -12	2	1	6	1	4	8	8	3
France	483	-4	27	▼ -1	8	6	5	1	1	10	6	9
Italy	483	6	28	▲ +5	6	5	1	4	4	8	6	4
Portugal	482	-3	29	▲ +1	8	9	3	7	6	7	7	8
Hungary	480	-6	30	▼ -3	4	4	1	3	5	7	8	1
Denmark	478	**-16**	31	▼ -11	2	3	5	4	1	7	7	2
Spain	477	-7	32	▼ -4	8	9	9	6	8	..	10	5
Croatia	476	-6	33	▼ -2	4	4	7	3	7	8	10	3
Slovak Republic	475	**13**	34	▲ +3	4	1	2	1	3	6	4	3
Luxembourg	474	..	35	..	5	2	4	1	3	9	7	2
Norway*	470	-8	36	▼ -4	..	3	..	4	2	4	10	1
Latvia	468	**-25**	37	▼ -18	3	2	3	2	5	9	3	6
United Arab Emirates	458	**26**	38	▲ +8	9	10	9	10	10	7	5	5
Viet Nam	457	..	39	..	7	9	8	10	9	3	1	10
Malta	453	**-13**	40	▼ -5	7	8	7	4	8	6	3	2
Ukrainian regions (17 of 27)	448	-1	41	▼ -3	1	1	9	2	5	8	6	2
Uruguay	445	**9**	42	▲ +2	6	8	3	7	2	9	9	7
Chile	442	-1	43	▼ -1	10	10	8	6	5	7	4	6
Israel	442	**-23**	44	▼ -8	4	5	9	6	4	6	8	1
Iceland	441	-6	45	▼ -5	7	10	6	8	6	5	10	4

*Caution is required when interpreting these estimates because one or more PISA sampling standards were not met. In addition, particular caution is required when interpreting questionnaire results for Albania and the United States (see the Reader's Guide of the *PISA 2025 Results Volume I*).
1. The groups from 1 to 10 correspond to how country/economy averages compare to each other, with 1 representing the lowest 10% and 10 the highest 10%.
2. The Value of School data are based on the item "School has taught me things which could be useful in a job".
3. The OECD average for science score change does not include Costa Rica, Luxembourg and Spain. See Volume I Reader's Guide for more information.
Note: Values that are statistically significant are indicated in bold (see Annex A3 of *PISA 2025 Results Volume I*).
Source: OECD, PISA 2025 Database, Tables I.B1.2a.36, I.B1.3.1, I.B1.3.9, I.B1.3.16, I.B1.3.40, I.B1.3.44, I.B1.3.49, I.B1.3.62 and I.B1.3.71.

Comparing performance in science and other areas of learning [2/2]

	Academic performance				Drive to learn[1]		Agency and adaptability[1]				Attitudes towards school[1]	
	Science score	Score change from 2022	Science ranking	Ranking change since 2022	Curiosity	Perse-verance	Adapt-ability	Help seeking	Goal setting	Growth mindset	Sense of belong-ing	Value of school[2]
Brunei Darussalam	439	-6	46	▼ -5	10	7	1	10	6	3	1	10
Mauritius	438	..	47	..	10	8	..	..	..	4	1	10
Uzbekistan	438	**83**	48	▲ +28	9	9	9	7	10	3	9	6
Montenegro	435	**32**	49	▲ +10	2	2	10	5	8	7	9	2
Albania*	435	..	50	..	10	..	10	10	10	5	10	9
Qatar	434	2	51	▼ -5	6	6	5	8	10	6	2	4
Greece	434	-7	52	▼ -8	5	3	3	2	3	9	5	6
Thailand	432	**23**	53	▲ +4	6	10	2	7	8	1	1	10
Serbia	429	**-18**	54	▼ -14	2	2	8	3	7	7	9	5
Romania	425	-3	55	▼ -7	8	8	3	4	8	5	7	6
Mongolia	424	**12**	56	▼ -3	10	4	5	8	7	8	8	8
Costa Rica	424	**13**	57	▼ -2	10	10	10	10	7	5	8	9
Georgia	422	**38**	58	▲ +7	3	1	8	2	9	8	7	1
Moldova	422	5	59	▼ -8	4	5	5	5	8	5	5	5
Bulgaria	421	0	60	▼ -10	1	1	8	1	4	4	5	2
Kazakhstan	420	-4	61	▼ -12	4	..	10	5	10	9	7	4
Malaysia	419	3	62	▼ -10	9	10	1	10	8	1	2	10
Colombia	414	3	63	▼ -9	10	10	10	9	5	4	6	8
Mexico	414	4	64	▼ -8	10	10	10	9	3	5	6	9
Saudi Arabia	413	**23**	65	▼ -2	7	8	10	10	10	6	10	9
Azerbaijan	409	..	66	..	2	7	8	5	10	3	8	4
Brazil	409	6	67	▼ -6	5	..	2	5	4	3	4	9
Jordan	407	**32**	68	▲ +1	1	3	3	5	7	4	4	6
Peru	406	-2	69	▼ -11	10	9	3	4	8	1	2	8
Ecuador	393	..	70	..	9	10	9	9	6	2	5	10
Argentina	393	**-13**	71	▼ -12	3	5	5	7	6	5	4	8
Indonesia	389	6	72	▼ -6	9	..	2	9	9	1	4	10
El Salvador	385	**12**	73	▼ -3	4	7	10	8	3	2	4	3
Cambodia	382	**35**	74	▲ +4	..	..	..	..	..	2	..	10
North Macedonia	378	-1	75	▼ -8	5	7	8	3	9	3	9	5
Philippines	373	**17**	76	0	8	9	2	8	9	1	1	10
Lebanon	372	..	77	..	3	6	2	1	9	4	..	3
Armenia	369	..	78	..	2	4	9	2	9	6	8	7
Kyrgyzstan	363	..	79	..	5	1	4	3	7	9	6	6
Dominican Republic	361	0	80	▼ -6	4	3	6	6	5	3	5	3
Palestinian Authority	359	**-10**	81	▼ -13	1	3	6	6	8	4	3	7
Morocco	358	-7	82	▼ -9	1	6	7	8	9	4	4	8
Kosovo	357	0	83	▼ -8	5	7	4	6	10	4	7	7
Paraguay	355	**-13**	84	▼ -12	5	5	10	8	6	2	2	5
Kurdistan Region (Iraq)	352	..	85	..	4	9	..	..	..	2	..	7
Guatemala	351	**-22**	86	▼ -15	9	9	6	9	5	2	..	7
Zambia	337	..	87	..	9	..	..	..	..	5	..	9
Kenya	335	..	88	..	6	..	5	8	10	1	1	9
Dushanbe (Tajikistan)	334	..	89	..	2	5	..	..	..	3	3	9
Rwanda	317	..	90	..	1	2	..	..	..	2	..	5

*Caution is required when interpreting these estimates because one or more PISA sampling standards were not met. In addition, particular caution is required when interpreting questionnaire results for Albania and the United States (see the Reader's Guide of the PISA 2025 Results Volume I).
1. The groups from 1 to 10 correspond to how country/economy averages compare to each other, with 1 representing the lowest 10% and 10 the highest 10%.
2. The Value of School data are based on the item "School has taught me things which could be useful in a job".
3. The OECD average for science score change does not include Costa Rica, Luxembourg and Spain. See Volume I Reader's Guide for more information.
Note: Values that are statistically significant are indicated in bold (see Annex A3 of *PISA 2025 Results Volume I*).
Source: OECD, PISA 2025 Database, Tables I.B1.2a.36, I.B1.3.1, I.B1.3.9, I.B1.3.16, I.B1.3.40, I.B1.3.44, I.B1.3.49, I.B1.3.62 and I.B1.3.71.

Countries' or economies' scores in reading

	Score 2025	Score change since 2022	Ranking 2025	Ranking change since 2022
Singapore	535	**-8**	1	0
B-S-J-Z (China)	527	..	2	..
Chinese Taipei	508	-7	3	▲ +2
Japan	503	**-13**	4	▼ -1
Macao (China)	501	**-9**	5	▲ +2
Korea	501	**-15**	6	▼ -2
Ireland	500	**-16**	7	▼ -5
Estonia	499	**-12**	8	▼ -2
New Zealand*	497	-4	9	▲ +1
United Kingdom	494	0	10	▲ +3
Australia	491	**-7**	11	▲ +1
Canada*	490	**-17**	12	▼ -4
United States*	490	**-14**	13	▼ -4
Poland	482	-7	14	▲ +2
Hong Kong (China)	480	**-20**	15	▼ -4
Finland	474	**-16**	16	▼ -2
Italy	474	-7	17	▲ +3
Türkiye	472	**16**	18	▲ +17
Switzerland	470	**-13**	19	0
Czechia	468	**-20**	20	▼ -3
Austria	467	**-13**	21	0
Sweden	466	**-21**	22	▼ -4
Belgium	466	**-13**	23	0
Germany	465	**-15**	24	▼ -2
Lithuania	464	**-8**	25	▲ +7
OECD average-35	463	**-14**	..	..
Portugal	462	**-15**	26	▼ -2
Denmark	460	**-29**	27	▼ -12
France	456	**-18**	28	▲ +1
Croatia	453	**-22**	29	▼ -3
Norway*	453	**-24**	30	▼ -5
Hungary	452	**-21**	31	0
Spain	451	**-23**	32	▼ -4
Slovak Republic	448	1	33	▲ +4
Slovenia	445	**-24**	34	▼ -1
Luxembourg	443	..	35	..
Netherlands*	441	**-18**	36	▼ -2
Israel	436	**-38**	37	▼ -7
Chile	436	**-12**	38	▼ -2
United Arab Emirates	433	**15**	39	▲ +8
Latvia	430	**-45**	40	▼ -13
Brunei Darussalam	426	-4	41	▲ +2
Uruguay	423	**-7**	42	0
Greece	423	**-16**	43	▼ -3
Iceland	422	**-14**	44	▼ -3
Ukrainian regions (17 of 27)	418	-8	45	0
Montenegro	418	**13**	46	▲ +9
Qatar	418	-1	47	▼ -1
Costa Rica	416	1	48	▲ +1
Malta	415	**-31**	49	▼ -11
Serbia	415	**-26**	50	▼ -11
Romania	413	**-16**	51	▼ -7
Brazil	408	-2	52	▼ -1
Mexico	408	-7	53	▼ -5
Albania*	408	..	54	..
Mauritius	405	..	55	..
Moldova	404	-7	56	▼ -5
Colombia	399	-9	57	▼ -3
Malaysia	393	5	58	▲ +2
Thailand	392	**13**	59	▲ +4
Viet Nam	392	..	60	..
Peru	390	**-18**	61	▼ -6
Argentina	389	**-12**	62	▼ -4
Saudi Arabia	387	5	63	▼ -1
Bulgaria	387	**-18**	64	▼ -7
Ecuador	385	..	65	..
Kazakhstan	385	-1	66	▼ -5
Georgia	384	**10**	67	▼ -1
Mongolia	374	-4	68	▼ -4
Azerbaijan	374	..	69	..
Dushanbe (Tajikistan)	368	..	70	..
Philippines	367	**20**	71	▲ +2
El Salvador	366	2	72	▼ -4
Indonesia	365	7	73	▼ -4
Jordan	363	**20**	74	▲ +1
North Macedonia	357	-1	75	▼ -5
Paraguay	352	**-21**	76	▼ -9
Palestinian Authority	350	1	77	▼ -6
Armenia	348	..	78	..
Cambodia	347	**18**	79	▼ -1
Dominican Republic	346	-6	80	▼ -8
Kyrgyzstan	344	..	81	..
Kosovo	340	-2	82	▼ -8
Guatemala	337	**-37**	83	▼ -18
Lebanon	331	..	84	..
Zambia	325	..	85	..
Morocco	321	**-18**	86	▼ -10
Kenya	320	..	87	..
Kurdistan Region (Iraq)	312	..	88	..
Rwanda	301	..	89	..

*Caution is required when interpreting these estimates because one or more PISA sampling standards were not met (see the Reader's Guide of the *PISA 2025 Results Volume I*).
Notes: Values that are statistically significant are indicated in bold (see Annex A3 of *PISA 2025 Results Volume I*).
Only countries and economies with available data are shown.
The OECD average score change does not include Costa Rica, Luxembourg, and Spain. See Volume I Reader's Guide for more information.
Source: OECD, PISA 2025 Database, Table I.B1.2a.37.

Countries' or economies' scores in mathematics

	Score 2025	Score change since 2022	Ranking 2025	Ranking change since 2022
B-S-J-Z (China)	612	..	1	..
Singapore	563	**-12**	2	-1
Macao (China)	549	-3	3	-1
Chinese Taipei	546	-1	4	-1
Japan	525	-10	5	0
Korea	522	-5	6	0
Hong Kong (China)	522	**-19**	7	-3
Estonia	508	-2	8	-1
Switzerland	499	**-9**	9	-1
United Kingdom	488	-1	10	+4
Canada*	485	**-12**	11	-2
Poland	484	-5	12	+3
Netherlands*	483	-9	13	-3
Ireland	480	**-12**	14	-3
Belgium	480	**-10**	15	-3
New Zealand*	480	1	16	+7
Australia	478	**-10**	17	0
Austria	477	**-10**	18	-2
Czechia	477	**-10**	19	-1
Denmark	471	**-19**	20	-7
Lithuania	470	-5	21	+3
Slovak Republic	469	5	22	+12
Finland	469	**-15**	23	-3
Italy	468	-3	24	+6
OECD average-35	465	**-9**	..	..
Sweden	464	**-18**	25	-3
Germany	464	**-11**	26	-1
United States*	463	-2	27	+6
Türkiye	462	**8**	28	+10
Latvia	460	**-23**	29	-8
Portugal	460	**-12**	30	-1
Slovenia	460	**-25**	31	-12
Hungary	459	**-13**	32	-4
Luxembourg	458	..	33	..
France	458	**-16**	34	-8
Spain	457	**-16**	35	-8
Croatia	455	**-8**	36	-1
United Arab Emirates	453	**21**	37	+5
Norway*	452	**-17**	38	-7
Iceland	450	**-9**	39	-3
Viet Nam	443	..	40	..
Malta	439	**-27**	41	-9
Brunei Darussalam	435	**-7**	42	-3
Israel	433	**-25**	43	-6
Albania*	433	..	44	..

	Score 2025	Score change since 2022	Ranking 2025	Ranking change since 2022
Ukrainian regions (17 of 27)	431	-9	45	-4
Greece	424	-6	46	-2
Azerbaijan	422	..	47	..
Romania	419	-9	48	-3
Mongolia	419	-6	49	-2
Serbia	417	**-23**	50	-8
Georgia	416	**26**	51	+7
Qatar	416	2	52	-2
Kazakhstan	414	**-12**	53	-7
Montenegro	411	**5**	54	0
Moldova	410	-4	55	-6
Mauritius	407	..	56	..
Thailand	407	**13**	57	-1
Bulgaria	405	**-12**	58	-10
Uruguay	405	-4	59	-7
Chile	403	**-9**	60	-9
Malaysia	397	**-11**	61	-8
Saudi Arabia	390	1	62	-3
Mexico	388	**-7**	63	-8
Jordan	388	**26**	64	+6
Costa Rica	387	3	65	-4
Peru	382	**-9**	66	-9
Dushanbe (Tajikistan)	382	..	67	..
Colombia	381	-2	68	-6
North Macedonia	380	**-9**	69	-9
Lebanon	377	..	70	..
Brazil	377	-2	71	-8
Armenia	376	..	72	..
Philippines	371	**16**	73	0
Argentina	367	**-11**	74	-10
Cambodia	366	**29**	75	+3
Ecuador	366	..	76	..
Indonesia	364	-2	77	-10
Kyrgyzstan	364	..	78	..
Morocco	355	**-10**	79	-11
Palestinian Authority	354	**-11**	80	-14
Kosovo	350	**-5**	81	-9
El Salvador	346	3	82	-7
Dominican Republic	339	0	83	-7
Kurdistan Region (Iraq)	339	..	84	..
Guatemala	334	**-10**	85	-11
Paraguay	334	-4	86	-9
Kenya	326	..	87	..
Zambia	314	..	88	..
Rwanda	312	..	89	..

*Caution is required when interpreting these estimates because one or more PISA sampling standards were not met (see the Reader's Guide of the *PISA 2025 Results Volume I*).
Notes: Values that are statistically significant are indicated in bold (see Annex A3 of *PISA 2025 Results Volume I*).
Only countries and economies with available data are shown.
The OECD average score change does not include Costa Rica, Luxembourg, and Spain. See Volume I Reader's Guide for more information.
Source: OECD, PISA 2025 Database, Table I.B1.2a.37.

“

Did you know…

…more than 760 000 students took the PISA test in 2025 in 91 countries and economies, representing around 33 million 15-year-olds across the globe.

The state of global education

At a time when technological innovation and interconnected global challenges are reshaping societies, one would hope that educational attainment is going up. The need for a highly educated and adaptable population has never been greater. But the PISA results show that progress in educational outcomes has been uneven. Learning outcomes have stagnated or declined in many countries, in some cases for well over a decade, and gaps in achievement persist across socioeconomic groups.

In science, the focus of the latest PISA assessment, results have been broadly stable. Between 2015 and 2025, OECD countries have seen a 7-point decline, on average, while other countries and economies held their ground. In mathematics, scores dropped by 22 points across the OECD on average, but only by 8 points for other education systems. Reading performance has seen the most significant decline: 28 points among OECD countries and 16 points among other countries and economies over the past decade. Interpreting changes in PISA scores is always complex, but 20 score points is roughly equivalent to a year of learning gains in any of these subjects.

Overall, some 29% of 15-year-olds in OECD countries are now estimated to be low performers across all three subjects, including students not covered by PISA - up from 25% in 2022. In science, this means they struggle to interpret simple data or identify evidence in a graph. In reading, they will find it hard to understand simple texts, while in maths they could have trouble deciphering the relationship between units and price - the kind of tasks embedded in everyday life, from grocery shopping to reading a utility bill.

Regarding the results in reading, it is particularly concerning that large and significant declines in success rates have been observed in reading tasks that are the most essential for today's world of artificial intelligence: skills such as evaluating information, reflecting critically and integrating multiple pieces of evidence, which require careful reading and sustained attention. By contrast, the instances of "hasty reading", where students give fast and incorrect responses, have increased.

These trends are likely driven by a combination of factors. These include the changing nature of reading through digitalisation and screen use, which may be displacing time previously devoted to deeper reading; falling rates of reading for enjoyment, including among young people; and changing attitudes towards learning and school since the COVID-19 pandemic, possibly reflected in increasing levels of student absence in many countries, as some studies have suggested. The interaction of these factors has likely created a more challenging environment for reading and literacy development.

The steep declines in reading performance are particularly concerning as reading is the gateway through which most academic learning passes. Whether students are solving algebra problems, analysing a historical source or interpreting a science experiment, they must first understand language. The stronger a student's reading ability, the easier it becomes to develop knowledge in every subject area. According to PISA, the education systems that experienced the biggest drops in reading also tended to see larger falls in maths and science performance.

Although the overall picture is gloomy, a closer look at the data reveals a more differentiated situation. Within the OECD, Costa Rica, the Slovak Republic, Türkiye and the United Kingdom have seen science scores go up since 2022. Among other countries and economies, improvements were seen in Cambodia, El Salvador, Georgia, Jordan, Mongolia, Montenegro, the Philippines, Saudi Arabia, Thailand, the United Arab Emirates, Uruguay and Uzbekistan. These are big achievements worth celebrating and a testament to the hard work of students, teachers, schools and policymakers.

Students in the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang topped the PISA science test, achieving 597 points on average - over 100 points above the OECD average (482 points) - followed by Singapore (560), Macao (China) (541), Chinese Taipei (540) and Japan (538). Students at this level can tackle challenging scientific concepts and evaluate claims, spot errors and identify flaws in scientific arguments, making them prepared for some of tomorrow's top jobs. All of these education systems are also top performers in maths and reading, with students in Beijing, Shanghai, Jiangsu, Zhejiang and Singapore achieving the highest scores on average.

Another measure of educational success highlighted in PISA is the score gap that separates the highest- and lowest-achieving students within a country or economy. The data show that while the highest achieving students' scores have remained largely stable in science, lower achieving students are often doing worse than they were 20 years ago. Across education systems, the gap between low- and high-performing students is now the largest ever recorded by PISA, across all subjects.

In science, the gap widened by more than 15 score points on average across OECD countries between 2018 and 2025. Luxembourg and the United States* see the biggest differences, with over 290 score points separating top and bottom performers in science, indicating highly unequal learning outcomes. Similar patterns are seen in reading and mathematics in many countries. The data suggest that many education systems are becoming less successful at supporting all learners, with a rising share of students struggling to achieve even the most basic levels of proficiency.

However, this is not true everywhere. Over the past decade, five education systems - Türkiye, the United Arab Emirates, Montenegro, Qatar and the Slovak Republic - have simultaneously reduced their share of low-performing students, while increasing their share of top performers. Seven other countries and economies have also reduced their share of low-performing students. In addition, Chinese Taipei, Colombia, Korea, Luxembourg, Macao (China), Romania and the United States* increased their share of top performers.

The data reveal other forms of educational success. In Iceland, Cambodia and Finland, for example, there is very little variation in performance between schools, with school-level differences accounting for less than 10% of the overall variation in student achievement. This means schools are serving a broad mix of students across the achievement spectrum.

In contrast, in 10 countries - Bulgaria, Germany, Mauritius, Netherlands*, Romania, the Slovak Republic, Slovenia, Türkiye, the United Arab Emirates and Zambia - differences between schools account for at least 50% of the total variation in performance. This suggests many schools may only be accessible to higher-achieving students, while other schools enroll disproportionately large numbers of lower-achieving students. Where such academic segmentation compounds with social background, it can amplify inequalities, producing pockets of excellence while failing to ensure consistent learning outcomes across the education system as a whole.

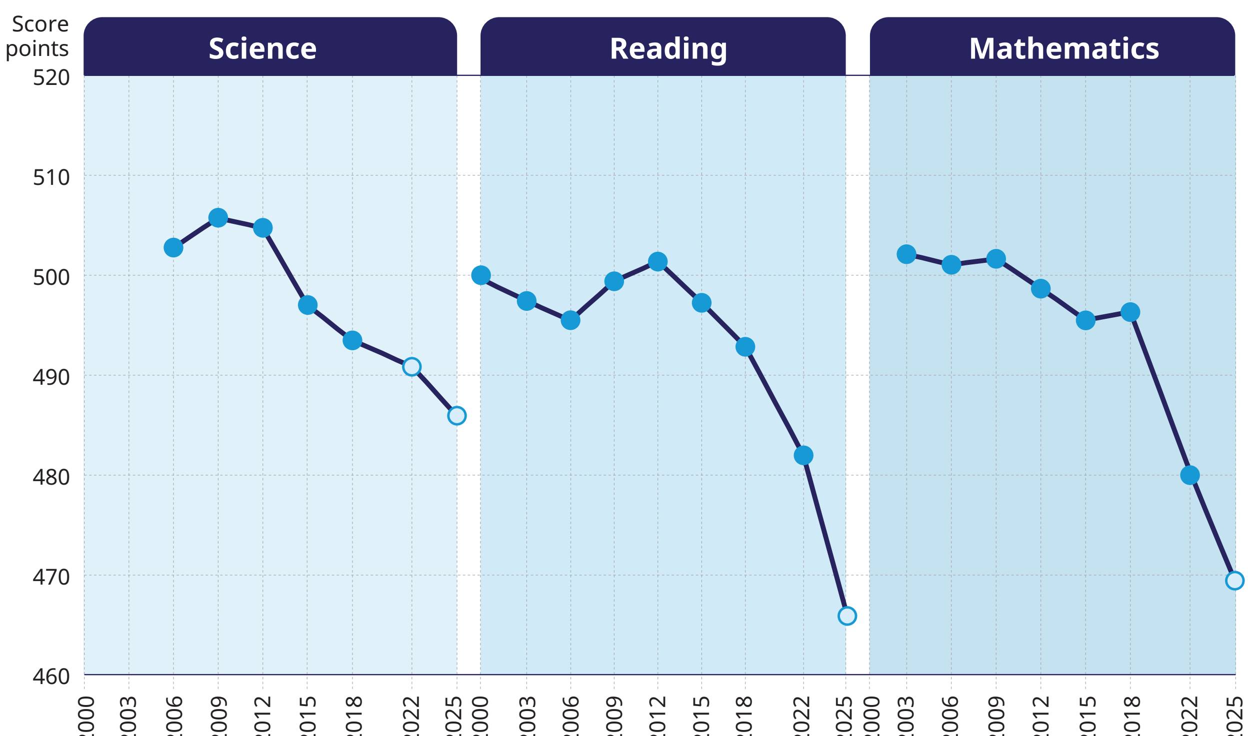
Why is educational performance falling globally overall? The data do not give us the answer, but many would argue that the fallout from the COVID-19 pandemic in 2020 and subsequent widespread school closures cannot be ignored. However, OECD analysis suggests that there is no simple relationship between the duration of closures and subsequent reading trends. Plus, educational performance was already trending downward in many countries long before the pandemic struck.

The long-term declines in performance suggest deeper structural issues within education systems, with challenges at the school and system level. These include changing attitudes towards reading, the impact of digital distractions on students and rising levels of absenteeism.

Overall, the data suggest weaknesses in how education systems are adapting to social, technological and economic change. Looking ahead, the challenge for policymakers is not simply recovering lost ground, but to ensure schools meet the rapidly changing demands of the world. As PISA shows, it is not an easy task.

Trends in performance over time in science, reading and mathematics

OECD average-23



Note: Dots shown in a lighter tone indicate mean-performance estimates that are not statistically significantly above/below PISA 2025 estimates.

Source: OECD, PISA 2025 Database, Tables I.B1.2a.36, I.B1.2a.37 and I.B1.2a.38.

Did you know…

…29% of 15-year-olds
in OECD countries are now
estimated to be low performers
across all three subjects, including
students not covered by PISA.

Reading in reverse

Out of all the results in PISA 2025, global reading scores are the most concerning. Average reading performance declined significantly in three-quarters of education systems between 2018 and 2025 - 56 out of 74 with comparable data, to be exact. Across the OECD, reading scores fell by 25 score points on average, with Iceland and Slovenia seeing particularly large drops of over 50 points. Given that 20 score points is roughly equivalent to a year of learning, this implies that a majority of 15-year-old students across the OECD in 2025, on average, were performing at a level typically expected of 14-year-olds.

Only a handful of places bucked the trend and saw statistically significant improvements: Qatar (up 11 points), Brunei Darussalam (18), Cambodia (26), the Philippines (27) and Zambia (50). These education systems all remain below the OECD average but deserve recognition for achieving measurable gains despite the broader global decline.

Given the widespread collapse in reading scores, the results warrant closer inspection - particularly as reading ability is a crucial factor in how well students perform in other subjects. By examining student responses to different PISA tasks, it is possible to identify areas of specific performance decline. The data show that gender gaps in performance have remained relatively the same, as have the gaps between immigrant and non-immigrant students. But a large share of students struggled on reading tasks involving longer texts, requiring higher-order cognitive skills. These types of tasks demand careful reading, the ability to focus over an extended period and to integrate multiple pieces of information to form well-reasoned judgments.

At the same time, all students are more likely to “read in haste”, at least some of the time. This means they are more likely to rush through texts and give quick but incorrect answers. Between 2018 and 2025, the instances in which students read quickly but inaccurately nearly doubled to 9%. In three education systems - Kosovo, the Dominican Republic and Bulgaria - the rise exceeded 10 percentage points. Interestingly, students in all three systems report higher levels of digital distractions than the OECD average.

The rise in hasty readers, together with the decline in performance on more demanding reading tasks, is arguably easy to link to the growing shift towards digital reading. We cannot say for sure, but skimming social media feeds and rapidly processing information may be contributing to worsening ability and motivation to engage with complex texts and data. Since 2022, the share of students reporting that they spend more than one hour per day using digital devices to browse social networks has increased by almost six percentage points, according to PISA.

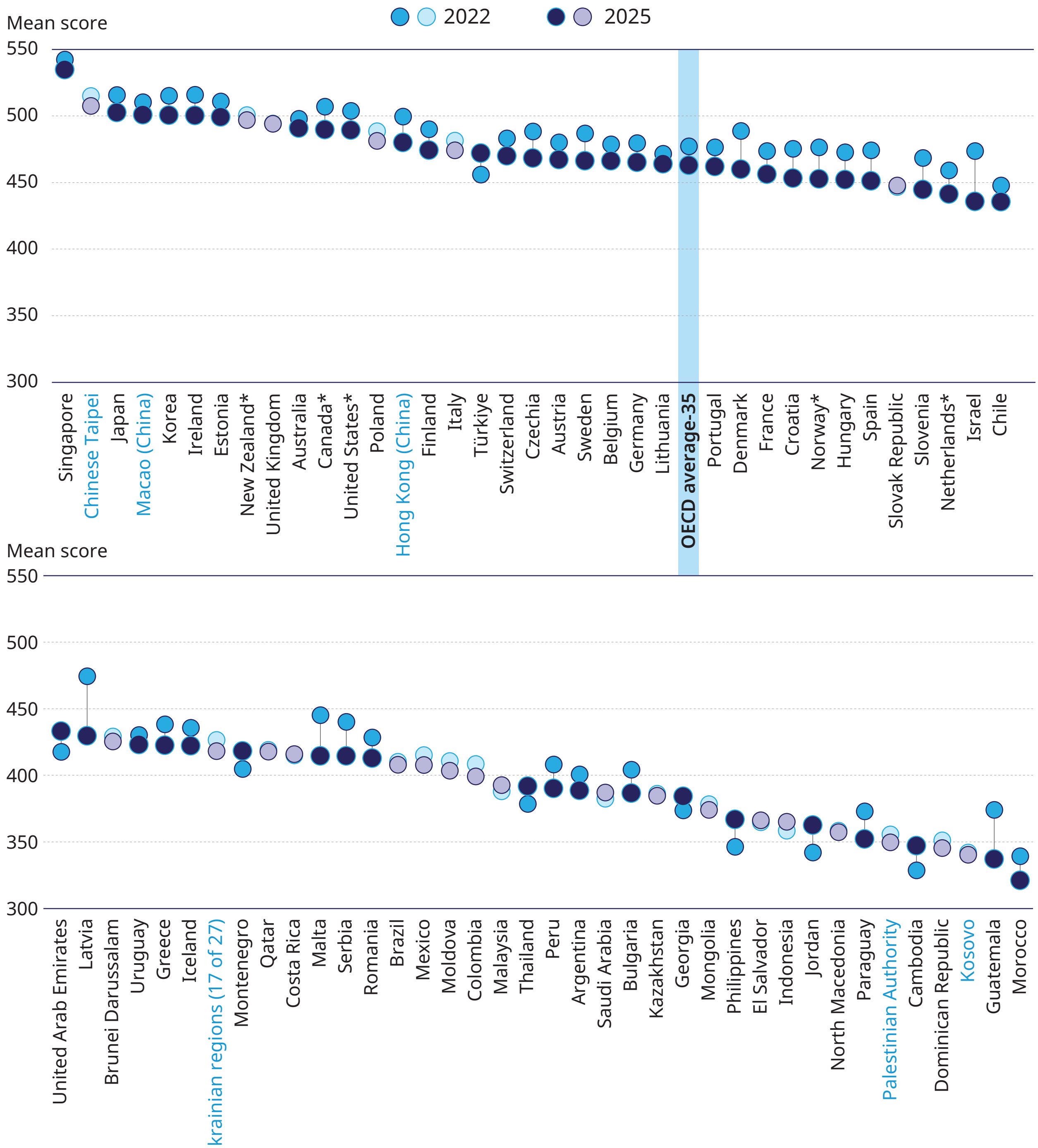
The impact of COVID and school closures is another explanation for at least some of the declines in performance. However, data suggest structural issues in education well before COVID. It is possible to compare the PISA data for 15-year-olds with another survey - PIRLS - which assessed mainly 9- to 10-year-old students in primary schools in 2016 and 2021. As many of the 2016 PIRLS students, for example, became eligible to take the PISA test in 2022, one can establish if there is a correlation. The analysis suggests that most of the falls in PISA reading scores were foreshadowed by falls observed in the PIRLS test at earlier ages. This suggests that at least part of the drops in reading skills can plausibly be linked to earlier childhood experiences, including learners' home environment, early reading development and earlier schooling. In effect, the drops in reading scores are not just affecting teenagers; this worrying trend is already apparent in primary schools.

Analysis of the data highlights other correlations: Students across the OECD reported making less effort on the PISA test in 2025, compared to 2022 and 2018. Also, the share of students "curious about many different things" declined compared to 2022, particularly in education systems where reading scores declined the most. And countries and economies which saw relatively large increases in students who consider school a "waste of time" also saw large drops in reading performance. Such correlations are not proof of why reading scores have collapsed, but they are part of the context.

There is one other, perhaps surprising, finding buried in the PISA data concerning socio-economic status that is worth highlighting. Between 2018 and 2025, the most advantaged quarter of students saw the largest drops in performance. You read that right. It might be contrary to expectations, but students from relatively well-off families saw the biggest falls in reading ability. This suggests a new phenomenon, with the biggest factor in the overall drop in scores being advantaged students who are performing below what one would expect given their background. As a result, the socio-economic gap with the most disadvantaged students reduced by 11 points, on average across 35 OECD countries (from 88 score points in 2018 to 77 points in 2025).

How to sum up all this analysis? The negative trends in reading are pervasive and the drops in reading performance primarily reflect a decline in focus and attention. This leads us to a broader issue for policymakers, and for societies more generally: in an era of rapidly advancing artificial intelligence, the ability to read critically, assess the credibility of information, understand nuance and make informed judgments is likely to become even more valuable. The challenge for education systems, therefore, is how to re-engage young people with reading. In a world where many adults have also lost their love for reading, it is a challenge.

Trends in reading performance between 2022 and 2025



*Caution is required when interpreting these estimates because one or more PISA sampling standards were not met (see the Reader's Guide of the *PISA 2025 Results Volume I*).

Notes: Statistically significant values are shown in a darker tone (see Annex A3).

Only countries and economies with available data are shown.

The OECD average score change does not include Costa Rica, Luxembourg, and Spain. See Volume I Reader's Guide for more information.

Countries and economies are ranked in descending order of the mean reading score.

Source: OECD, PISA 2025 Database, Table I.B1.2a.37.

Did you know...

...46% of students use
AI chatbots weekly or more
to help them learn.

From chalkboards to chatbots

The arrival of generative artificial intelligence in classrooms has been swift and its impact immediate. PISA data show that AI chatbots are now routinely used for schoolwork in many countries. More than 40% of students say they use AI to draft texts for writing assignments once or twice a week, or even every day, in Macao (China), Thailand, the Philippines, the Ukrainian regions (17 of 27), Saudi Arabia, Türkiye, Singapore, Mongolia and the United Arab Emirates (in ascending order). In Viet Nam, the share reaches 52%. These proportions are considerably higher if you include more sporadic use.

The findings will be of little surprise for many teachers. For a start, lots of teachers are already using AI to plan their lessons, increasing numbers are marking schoolwork with it, and many have noticed that student essays now arrive suspiciously polished, with homework on time and notably thorough. These developments have raised difficult questions about authorship, originality and the impact of AI on student outcomes.

Is AI supporting student learning or not? PISA doesn't give a definitive answer but, at first glance, the data isn't positive. Students who report using AI chatbots get lower scores in science, on average, than those who don't use AI. This includes using AI to summarise texts they had to read, conduct preliminary research on a new topic, or draft texts for writing assignments. In these scenarios, the students who don't use AI outperform those who do, on average, by around 20 points - that is equivalent to being around one year of schooling ahead of their peers. In some countries, there is an even larger difference; students in Canada* and New Zealand* scored 29 and 36 fewer points, respectively, when they used AI chatbots to draft texts for writing assignments on a fairly regular or daily basis. Students who do not use AI chatbots for specific schoolwork tasks are also more likely to report higher levels of self-regulated help seeking, according to PISA data. All these findings do not necessarily represent a causal relationship. Lower performance outcomes could be linked to AI use or to other reasons, such as struggling students potentially being more likely to rely on AI.

The relationship between AI use and science performance is complex. For example, students using AI to draft text for writing assignments on a weekly or daily basis in Thailand and Macao (China) both saw significantly higher average scores (+24 and +21 points, respectively) than their classmates. In addition, the purpose and frequency of AI use appear to be important factors. For example, students who report using AI chatbots to help them learn once or twice a week perform at a similar level to students who report not using AI at all, on average across the OECD. This reflects the notion that digital tools can support learning when used purposefully and in moderation. In contrast, overuse or a lack of guidance can lead to distraction, limiting meaningful engagement and negatively affecting learning outcomes. Students who frequently use AI for learning - and learn to assess the quality of AI-generated information at school - also achieve slightly higher science performance than non- or infrequent users, according to PISA. However, advantaged students have greater access to these opportunities, which raises concerns about a potential AI divide.

The picture is further complicated when we look at the differences in AI use across high-performing systems. For example, students in Korea and Singapore are in the top tier for science scores and both countries have implemented large-scale, comprehensive policies to foster digital learning. In the case of Singapore, authorities have explicitly included the use of AI tools. In contrast, while students in Japan and Estonia perform at a high level in the PISA test, students' use of AI for schoolwork is more limited in scope.

Overall, there isn't one clear narrative, but the findings still raise some concerns. While the data is not proof of causality, proponents of AI have repeatedly argued that the technology can help improve student outcomes by providing personalised learning pathways, giving students instant feedback and support, and enabling teachers to identify learning gaps more quickly. But the evidence, so far, is less than clear cut.

'Educational' GenAI tools can lead to sustained learning gains, according to the OECD's Digital Education Outlook, but 'general-purpose' GenAI tools often do not support deep learning. The reason? Researchers say the use of AI frequently leads to the offloading of cognitive tasks, creating a risk of "metacognitive laziness and disengagement". It's not exactly positive, is it?

Few countries would allow millions of children to receive a new vaccine without first conducting rigorous clinical trials and carefully evaluating the evidence. Yet in education, new technologies are often rolled out at scale with far less scrutiny. That may be the fundamental problem with edtech and AI in particular: we frequently experiment on groups of students before establishing whether a tool actually improves learning outcomes. The fact that AI exists and has catapulted itself into classrooms doesn't mean we should ignore evidence suggesting potential harm. In the same way, the PISA data - at best - is a mixed bag. The bottom line seems to be that GenAI can support learning under certain conditions, yet frequently fails to do so in practice.

Going forward, governments and education authorities have an important role to play. Clear guidelines are needed on when, where and how AI should be used in schools, covering issues such as pedagogical value and appropriate classroom use, age-appropriateness, academic integrity, data privacy, transparency and bias. The OECD-EU AI Literacy Framework and OECD Insights on the effective use of generative AI in education are good starting points. Teachers also need substantial training and ongoing professional development to understand both the capabilities and limitations of AI bots. Without adequate support, educators risk either over-relying on AI or rejecting potentially useful applications altogether.

Most importantly, everyone in education - students, teachers, schools - needs to be aware of the limitations. Generative AI is an amplifier. Used well, some AI can explain, prompt, challenge and correct in a constructive way. Used poorly, it becomes a shortcut that bypasses the very cognitive work education is meant to develop. And if AI is used uncritically, this risks widening existing inequalities and creating new divides in the classroom. Until there is stronger evidence that AI is routinely resulting in positive outcomes, teachers and students should use with caution.

Overall level of use of artificial intelligence and mean performance in science

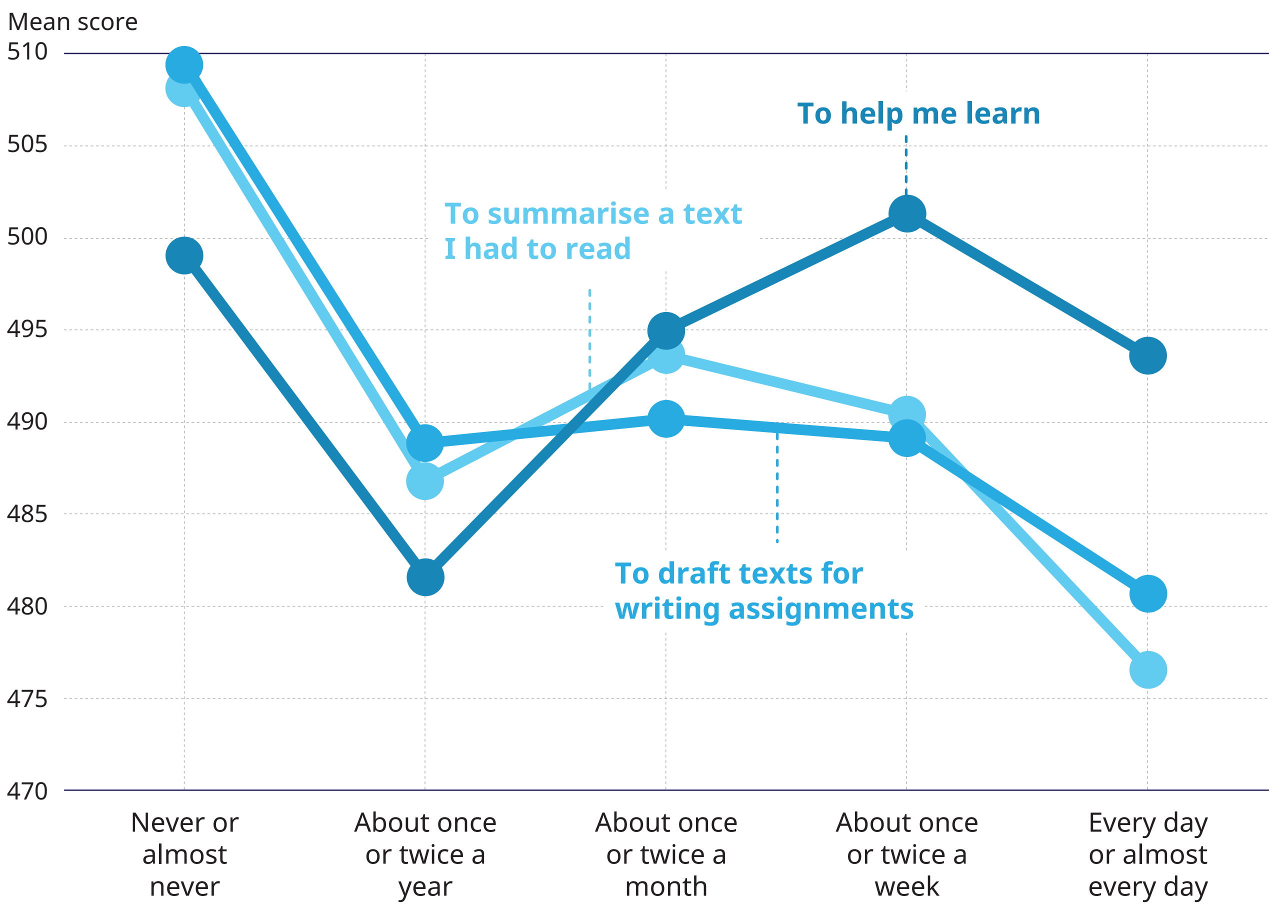
1. Netherlands*
2. Sweden
3. Belgium
4. Australia
5. Czechia
6. Denmark
7. Luxembourg
8. Norway*
9. Slovak Republic
10. Croatia
11. Slovenia
12. Germany
13. Austria
14. Lithuania
15. Lithuania
16. Portugal
17.Switzerland
18. Poland
19. Romania
20. Qatar
21. Brunei Darussalam
22. Israel
23. Chile
24. Ukrainian regions (17 of 27)
25. Uzbekistan
26. Serbia
27. Costa Rica
28. Moldova
29. Mexico
30. Azerbaijan
31. Kazakhstan
32. Malaysia
33. Mongolia

Notes: The index of students’ AI use for schoolwork (AIUSESCH) combines students’ responses to a set of four questions asking how often they use artificial intelligence chatbots (e.g. ChatGPT) for school-related activities. Specifically, students were asked how frequently they use AI chatbots (1) to summarise a text they had to read, (2) to conduct preliminary research on a new topic, (3) to draft texts for writing assignments, and (4) to help them learn. Higher values on the AIUSESCH index reflect a higher overall frequency of students’ AI chatbot use for schoolwork.

Source: OECD, PISA 2025 Database, Tables I.B1.4.53 and I.B1.2a.1 (Chapter 2).

Mean score in science, by frequency of AI use for schoolwork

Based on students' reports; OECD average



Note: Mean scores adjusted for socio-economic status are predicted science scores obtained from separate regressions of science performance on the frequency of each type of AI use, after accounting for students' socio-economic status.

Source: OECD, PISA 2025 Database, Table I.B1.4.61.

In an AI era, checking sources is essential

In recent years, artificial intelligence has become the newest student study companion, with tools such as ChatGPT and Gemini as common in some classrooms as calculators once were. But how many students are checking whether the information they receive is actually true?

New PISA data indicate that most students do carry out checks - and that a belief in fact-checking has a strong positive association with higher performance in science. Across the OECD, 83% of students agree or strongly agree that “information from one source should be checked from a range of other reliable sources before it is accepted”. The share tops 90% in Hong Kong, Ireland, Korea, Singapore, Chinese Taipei and Macao (China), and reaches 96% in the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang. In contrast, fewer than 70% of students in Lebanon, Cambodia, Bulgaria, Armenia, the Dominican Republic and Rwanda believe that information should be confirmed by several reliable sources before it is trusted.

This is important as AI frequently produces false information. Unlike traditional search engines, which direct users towards external sources, generative AI systems produce information themselves. They do so by predicting likely combinations of words rather than by evaluating the truthfulness of their statements. The result is a phenomenon politely known (in AI PR land) as “hallucination” - confident assertions that may be inaccurate, misleading or entirely fabricated. AI systems have been known to invent academic references, misquote sources and present disputed claims as settled facts. This presents obvious risks to a student who copies such material without verification.

Experienced researchers understand the limitations of AI. They treat AI-generated information as a starting point rather than a final authority. And it is good to see that a lot of students seem to know this. According to PISA, 46% of students have a strong scientific profile - they fact-check information with a range of sources and do not believe in relying on so-called ‘common sense’. This shows they understand the need to assess evidence, question intuitive claims and judge the reliability of different types of information.

Another 37% of students say that while they believe in fact-checking, they would also prioritise common sense over scientific evidence. This is worrying, as students with this profile may be more likely to accept AI-generated responses at face value, perceiving them as common sense rather than critically evaluating their accuracy through scientific reasoning and evidence. More than 65% of students in Serbia, North Macedonia, Montenegro and Dushanbe (Tajikistan) (in ascending order) say “it is important to rely more on common sense and less on scientific studies”. In Indonesia and Uzbekistan the proportion tops 76%.

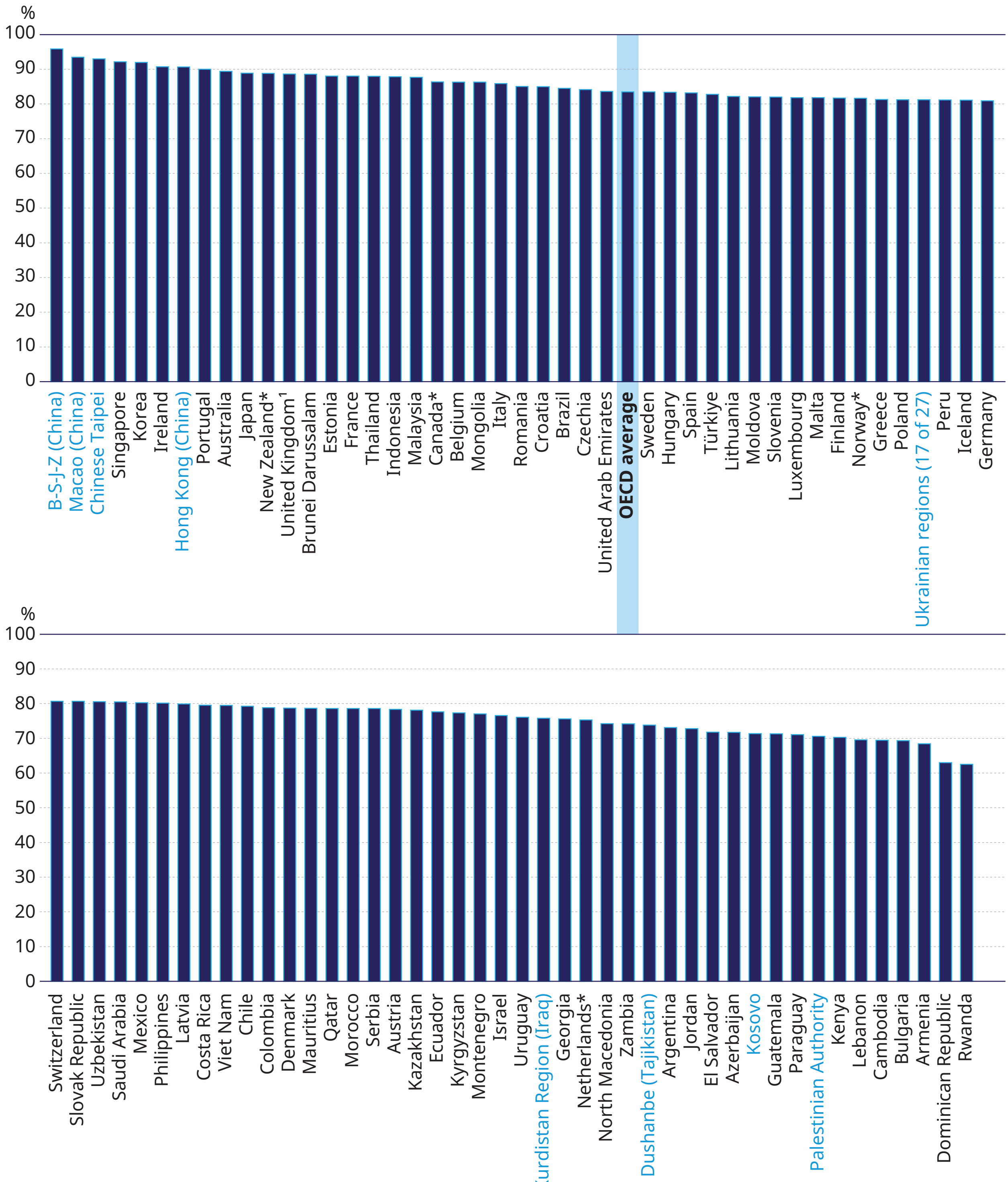
Even more concerning is the small but sizeable share of students in certain countries and economies who say they like to “rely on common sense” and “not check sources”. Some 10% or more of students fall into this bracket in Cambodia, Dushanbe (Tajikistan), Kenya, Kosovo, Lebanon, the Palestinian Authority, Rwanda and Zambia. This is a major issue as, faced with coherent prose and an authoritative tone, many of these students are likely to assume that if an AI answer sounds convincing it must be correct.

From a policy perspective, this highlights the importance of helping students become more autonomous learners. Schools can play a central role by strengthening students’ capacity to verify claims and compare sources. This will help students understand how information is created, how algorithms influence what they see, and how bias, misinformation and inaccuracies can spread online. These abilities, in turn, will also improve academic performance and help foster critical thinking, adaptability and resilience - all qualities essential for success in higher education and the workplace.

The students who thrive in the AI era will not be those who merely know how to prompt a machine. They will be those who know when to trust AI. PISA data highlight that socio-economically disadvantaged students are less likely to say they have been tasked to assess AI-generated information during school lessons. This warrants closer examination to prevent the emergence of a new form of socio-economic divide. In an AI age, the skills required to verify information have never been more important. Teachers and schools should place greater emphasis on developing discerning, independent thinkers - and ensure they reach all students and leave no one behind.

Students checking reliability of sources

Percentage of students who agree or strongly agree information from one source should be checked from a range of reliable sources before it is accepted



1. Only Scotland administered this item.

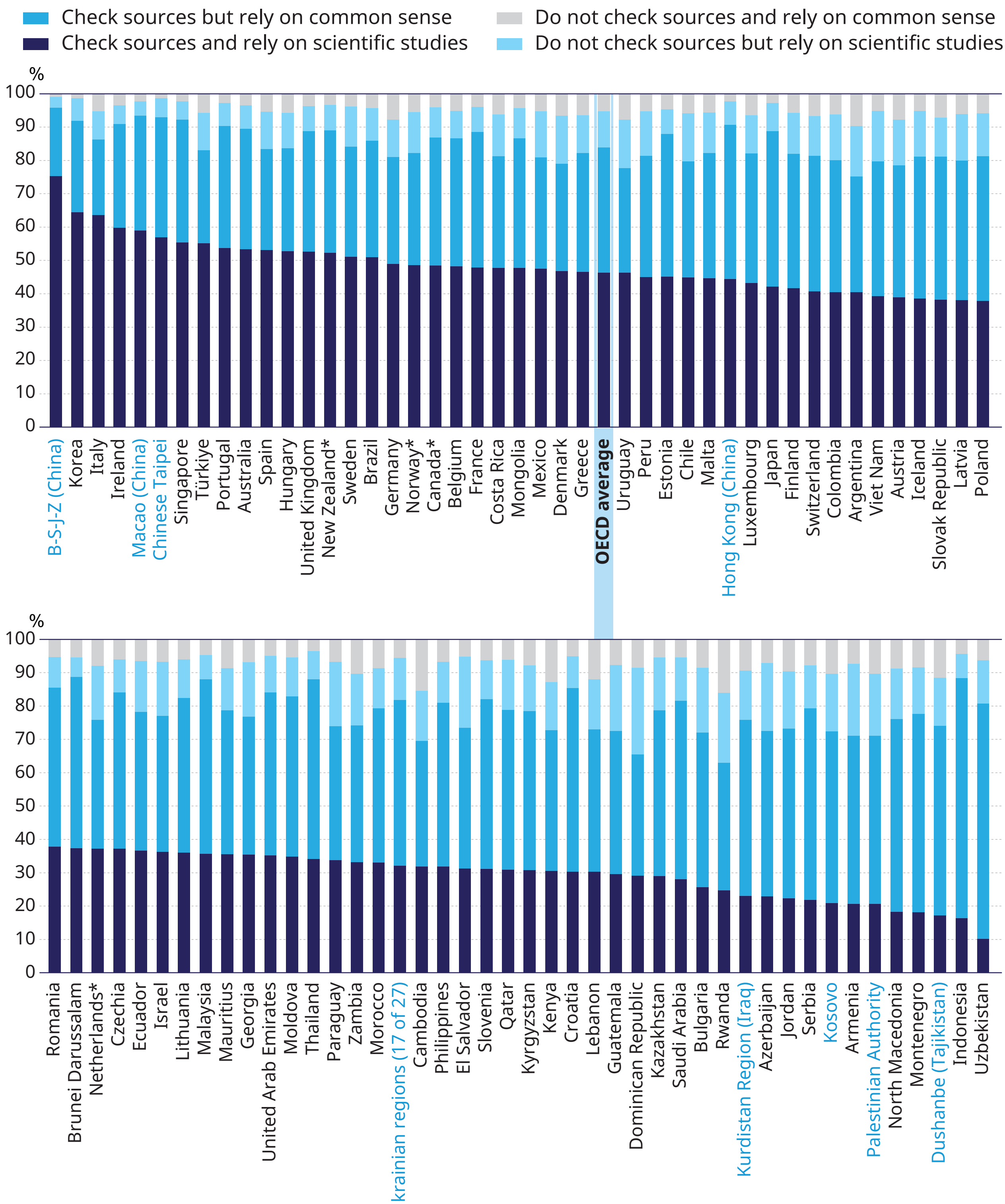
Note: Only countries and economies with available data are shown.

Countries and economies are ranked in descending order of the percentage of students who agree or strongly agree "Information from one source should be checked from a range of other reliable sources before it is accepted".

Source: OECD, PISA 2025 Database, Table I.B1.3.30.

How students learn in a world of misinformation

Percentage of students by epistemic profile - individual's beliefs about the nature of science, knowledge and learning



Note: Only countries and economies with available data are shown.

Countries and economies are ranked in descending order of the percentage of students who check sources and rely on scientific studies.

Source: OECD, PISA 2025 Database, Table I.B1.3.36.

Should more schools consider banning smartphones?

The regulation of digital devices in schools is now very common. In just a few years, various forms of mobile phone bans in schools have been introduced in countries across the globe. Earlier this year, UNESCO reported that 114 education systems now have a national ban on mobile phones in schools, representing 58% of countries worldwide. Some bans apply only in classrooms, others extend across the entire school day. In certain cases, phones must be switched off or locked away; in others, limited educational use is permitted. The new PISA data show that most schools across OECD countries are part of this widespread global policy shift, with nearly half of students not allowed to use their mobile phones on school premises.

This change has been driven by increasing recognition among governments that smartphones can distract students and pose risks to their well-being. On average across OECD countries, 28% of students told PISA that their peers are distracted by the use of digital devices during most or all science lessons. In Bulgaria, Chile and Poland, the proportion tops 40%. In Argentina and Uruguay, the share is a massive 55% and 57%, respectively. Neither Argentina nor Uruguay have nationwide school phone bans (although several provinces in Argentina have introduced restrictions since July 2025).

Higher levels of distraction are associated with lower science performance, according to PISA, in 59 out of 82 participating countries and economies (those with available data in this area). On average across OECD countries, students who report digital distraction in their science classes a lot of the time score 11 points lower than students who report no digital distraction, after accounting for socio-economic differences. In several countries and economies, the performance gap is substantially larger, exceeding 30 points in Kenya, Lebanon, Qatar, Brunei Darussalam, the United Kingdom, the Palestinian Authority, Japan, Jordan, Saudi Arabia, Türkiye and the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang (in ascending order). In Malta the performance gap reaches a massive 67 points. These patterns may point to the hidden cognitive costs of divided attention.

The fact that some students struggle to concentrate on their studies will come as no surprise, particularly as smartphones capable of delivering an endless stream of messages, videos, notifications and games now sit in almost every student pocket. Even when unused, their presence can compete for attention. The possibility of receiving a notification can even be enough to divert mental resources away from a lesson. It is stating the obvious that constant interruptions and competing digital distractions will likely undermine students' capacity to absorb instruction, retain key concepts and engage deeply with scientific reasoning.

But how effective are restrictions on digital devices? Schools that do not allow mobile phone use, or have subject-specific guidelines, tend to have fewer students reporting that classmates are distracted by digital devices, according to PISA.

This raises the question: should more schools ban smartphones? Supporters of phone use often argue that the technology itself is not the problem. Smartphones can provide access to educational apps, online research tools and collaborative platforms. This is true. But while a calculator may be useful for mathematics, few would argue that students should also have unrestricted access to social media while solving equations.

The debate is not really about technology versus tradition. Rather, it is about whether a highly personalised device - designed to maximise a user's attention - is compatible with sustained academic attention. Few technologies have infiltrated daily life as completely as smartphones. Within little more than a decade, they have become cameras, maps, libraries, entertainment centres and social hubs. They have also become constant companions for many teenagers. This has significant social consequences, with teachers reporting that smartphones contribute to anxiety, cyberbullying and social isolation.

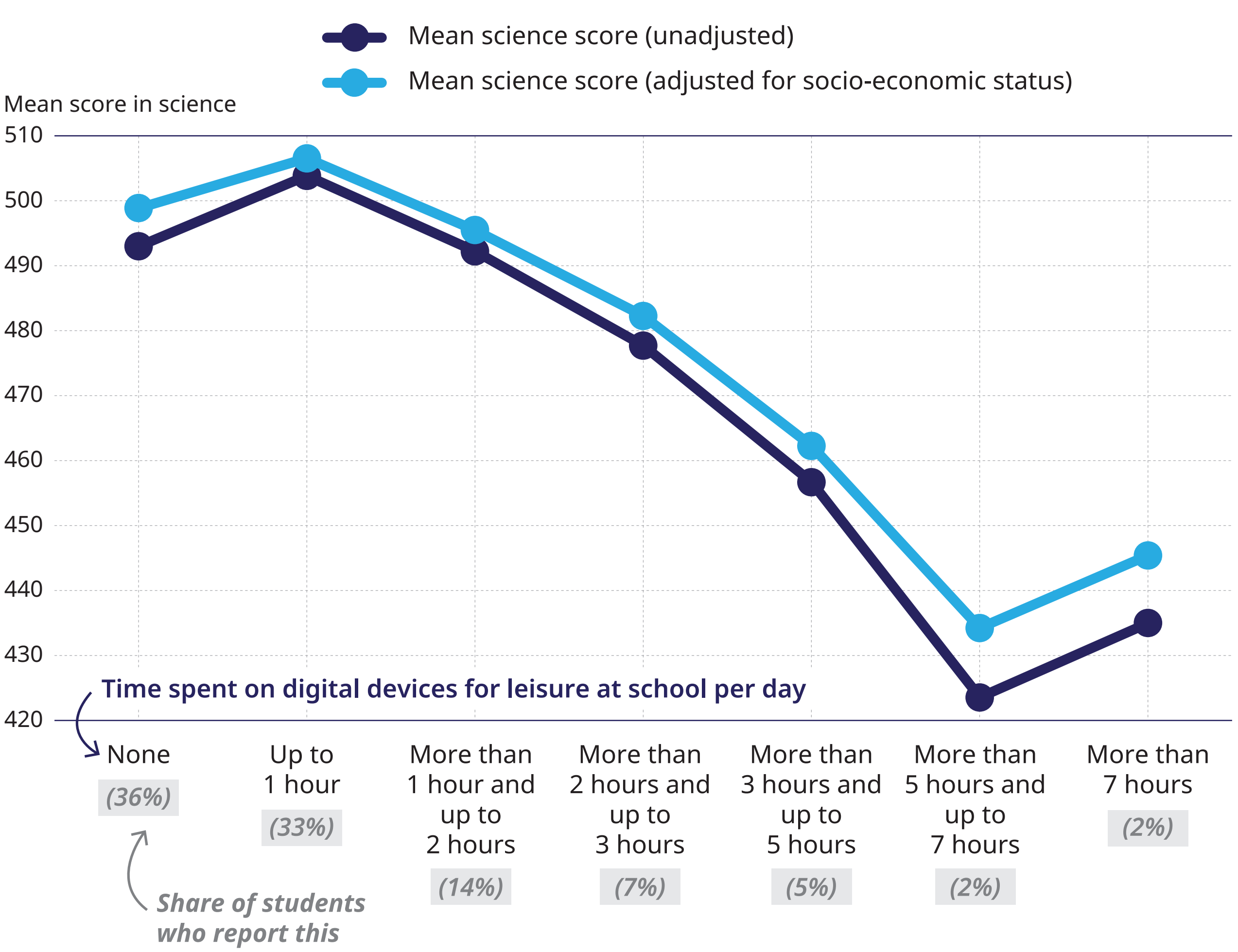
PISA data highlight the amount of time that students spend staring at screens. On average across OECD countries, students use digital devices nearly 3.4 hours per day on leisure activities, both on weekdays and weekends. In comparison, students use digital devices for close to 3 hours per weekday for learning, and 1.4 hours per day on weekends. The weekday figures include time at school, as well as before and after school.

The amount of time spent on digital devices at school relates to learning outcomes. While a limited or moderate use of digital devices for learning activities is associated with higher science performance, time spent using digital devices for leisure at school - such as social media apps, browsing the internet or games - is associated with progressively lower scores beyond very limited use. For example, students who spend up to one hour a day at school on digital devices for leisure score 72 points higher in science than students whose eyes are glued to their screens for between five and seven hours per day at school, after taking into account students' and schools' socio-economic profile. This is a huge difference, and notably larger than similar data from PISA 2022. Beyond academic performance, it is worth noting that digital distraction at school is also consistently associated with less positive attitudes towards learning, in areas such as perseverance and self-regulated goal setting.

Overall, the evidence suggests that the use of digital devices in schools is associated with negative outcomes if their use becomes excessive, unstructured or distracting. Beyond a certain threshold, the PISA data show that device use is linked to interference with attention and learning. Where smartphones are permitted during the school day, their presence must be guided by intentional and purposeful use.

Time spent on digital devices for leisure at school per day and science performance

Based on students' reports; OECD average



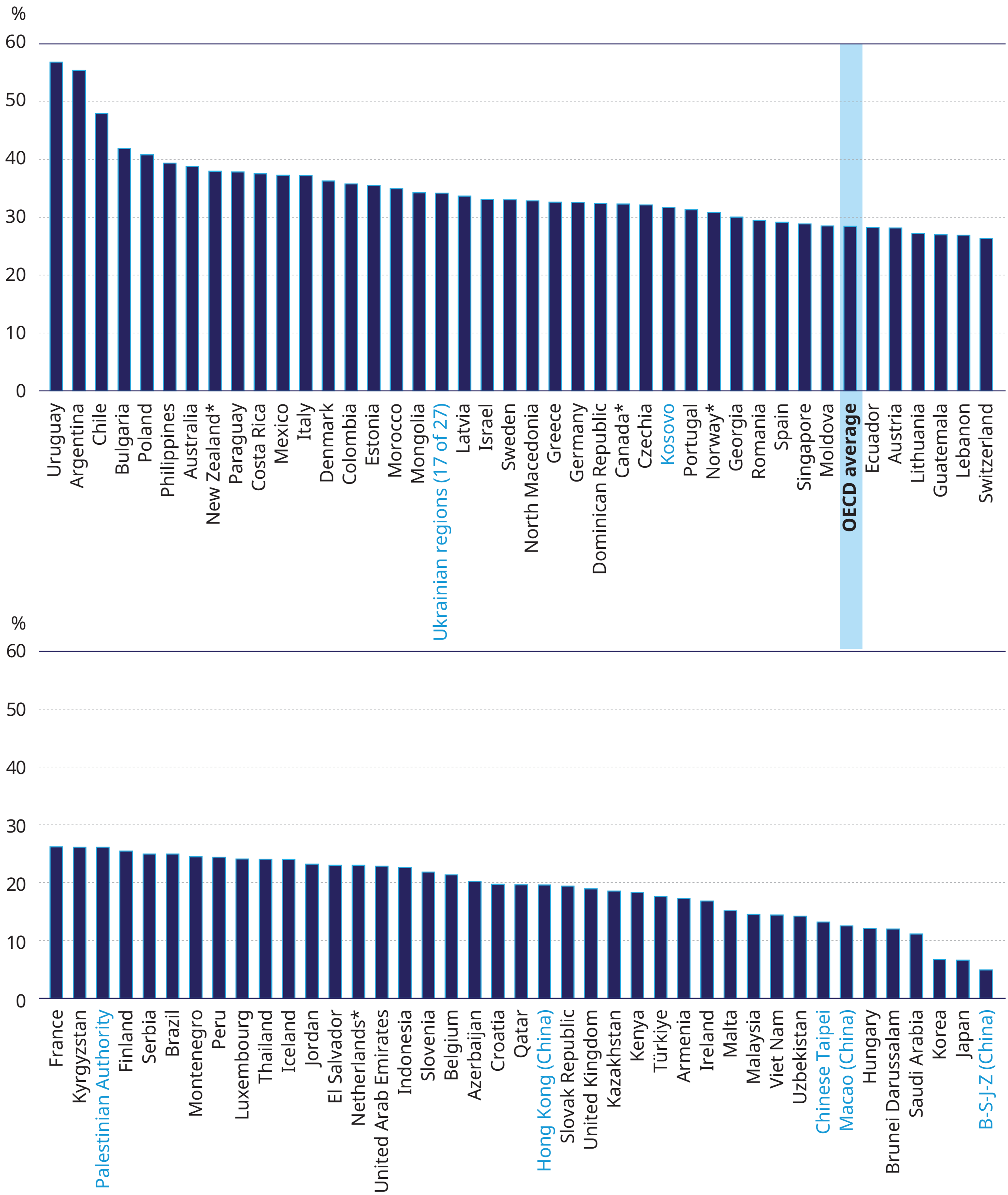
Notes: Mean scores adjusted for socio-economic status are predicted science scores estimated from a regression of science performance on the daily time spent using digital devices for leisure at school, after accounting for students' socio-economic status.

The percentages in parentheses under each horizontal-axis category indicate the percentage of students who reported using digital devices for leisure at school for that amount of time, on average across OECD countries (e.g. 36% reported no use; 33% reported up to 1 hour).

Source: OECD, PISA 2025 Database, Tables I.B1.4.21 and I.B1.4.35.

Distraction from digital devices in science lessons

Percentage of students who report that students get distracted by using digital devices in most or every science lesson

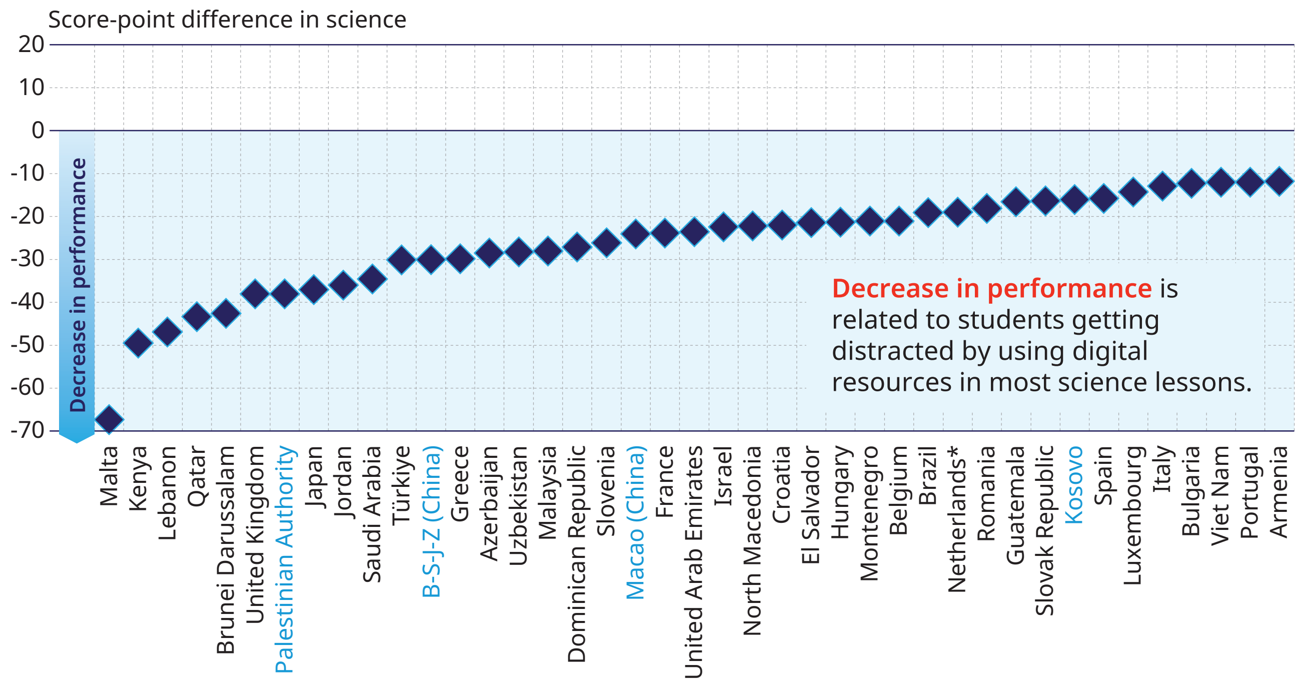


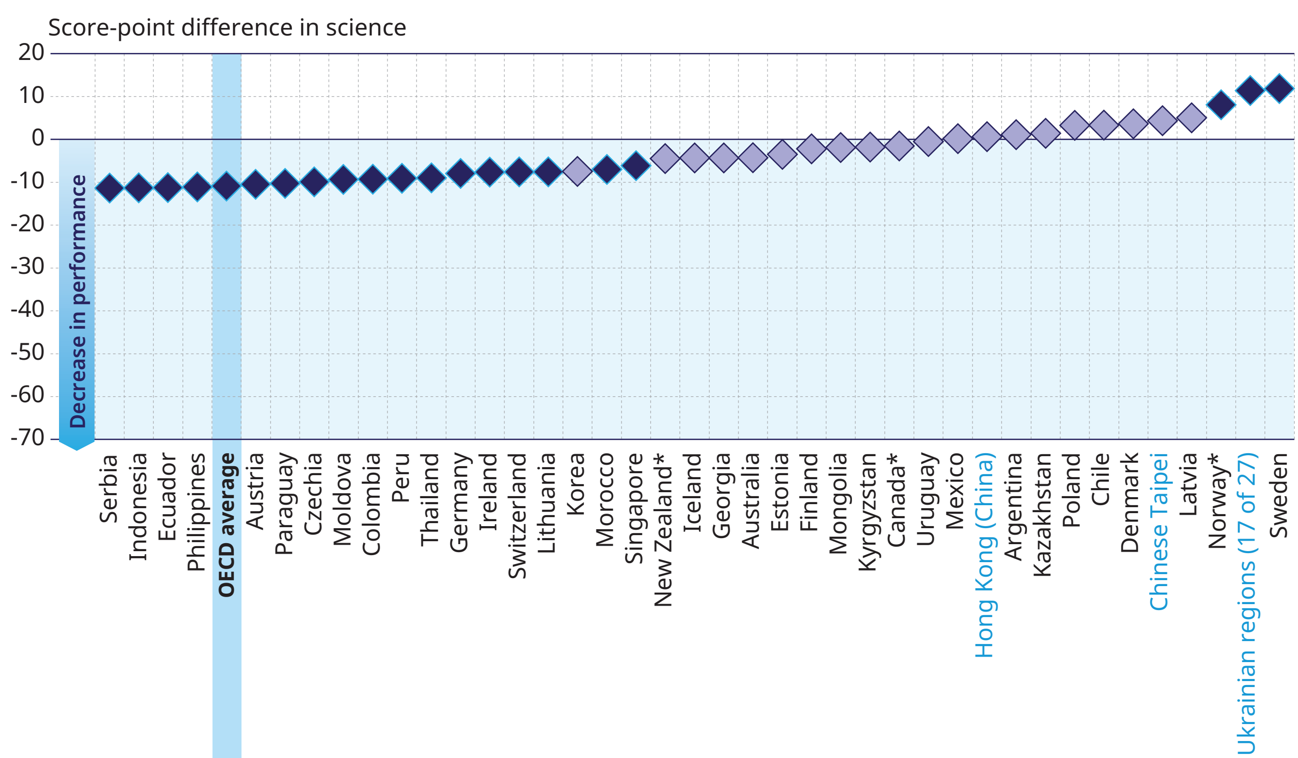
Countries and economies are ranked in descending order of the percentage of students who reported that students get distracted by using digital devices in most or every science lesson.

Source: OECD, PISA 2025 Database, Table I.B1.4.43.

How science performance relates to distraction from digital devices

Change in science performance when students report that students get distracted by using digital resources in most or every science lesson





Note*:* Statistically significant values are shown in a darker tone (see Annex A3 of *PISA 2025 Results Volume I*).

Countries and economies are ranked in ascending order of the change in science performance, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2025 Database, Table I.B1.4.44.

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Did you know...

...28% of students say
their classmates are distracted
using digital devices during most
or every science class.

Are students setting their own goals?

Learning is more than just following the teacher's agenda - like life, it's also about figuring things out for yourself. Effective education systems encourage self-regulated learning, where young people have the autonomy to structure and monitor their studies. Part of that process is setting goals for themselves.

PISA questioned students about different aspects of goal setting: Do you plan your approach to study? Change if unsuccessful? Test yourself by asking questions or summarise information without referring to notes?

Girls are, by and large, much better goal setters than boys. This holds true in all but 12 education systems, where there is no significant difference in attitude between the two. Girls in the United Arab Emirates and Kosovo are the most enthusiastic goal setters, boys in Japan and Czechia the least. Five OECD countries - Spain, Belgium, Ireland, Finland and Canada* - are among those with the widest gender gaps.

Students who are better goal setters are more likely to have higher academic performance. On average, better goal setters tend to score higher in science, with the strongest correlation seen in the Philippines, Korea and Kenya. However, this correlation does not exist in more than two dozen education systems. Simply telling students to set goals does not automatically lead to higher performance.

PISA data show that, overall, girls also outperform boys on perseverance and curiosity; key indicators of student motivation. Both are closely related to goal setting. For example, on average across OECD countries 83% of goal setters have a curious mindset, saying they like to learn new things. This compares to just 57% for the less goal-oriented.

Goal setting, therefore, is perhaps most significant in the way it intertwines with other factors to make students successful learners. PISA data suggest that teachers can play a key role turning student motivation into proactive goal setting. On average across the OECD and in 38 education systems, the relationship between curiosity and goal setting strengthens when teacher support for students is high. In the Philippines, Bulgaria, Peru, Uzbekistan, the Dominican Republic and Lebanon (in ascending order) the link is over twice as strong in high support environments compared to low support ones.

Goal setting is currently something of a minority pursuit for students. Only 37% plan their approach to learning often or very often. Socio-economic status plays a part, with advantaged students more likely to have goal setting attitudes than their disadvantaged peers. Policymakers may wish to look at how they can change students' behaviour in contexts where their confidence, motivation and achievement are low. For example, PISA reading results show disadvantaged boys score 25 points below their female cohorts. Could encouraging them to set their own learning goals lift performance? Could it prove effective for girls who lag behind boys in mathematics? Or for those who, despite doing well in science, lack the self-belief to pursue studies and careers in the male-dominated STEM sector?

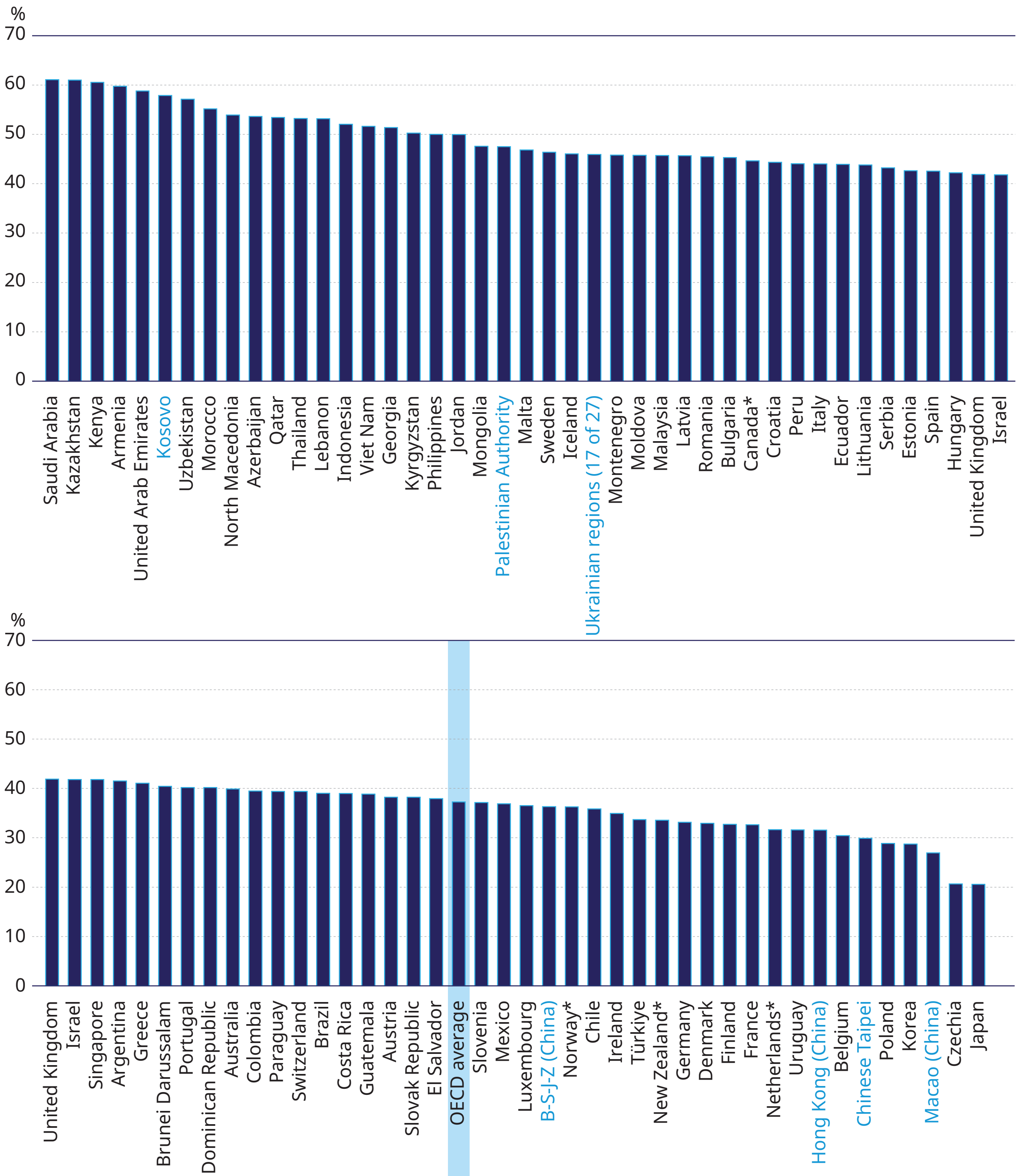
Encouraging goal setting can be particularly valuable because it fosters a sense of agency. Academic success often appears mysterious to struggling pupils, who may conclude that intelligence is fixed and achievement beyond their control. Breaking success into smaller, manageable objectives helps demonstrate that progress is attainable.

The OECD highlights the importance of students having agency over their learning journey. Self-regulated learning is beneficial not just in schools but in life because the tech-heavy job market of the future is likely to reward those who can progress, adapt and innovate independently. Young people need objectives and structure but, rather than giving them goals to meet, schools should support students to set their own.

What to take from all this? Simply telling pupils to set goals is unlikely, on its own, to transform academic performance. But goal setting is among a cluster of attitudes and learning strategies consistently associated with higher achievement. Education systems that cultivate these habits, alongside strong teaching, supportive relationships and high expectations, are more likely to see students succeed.

Students who plan their approach to studying

Percentage of students who report "I plan my approach to studying" often or very often



Note: Only countries and economies with available data are shown.

Countries and economies are ranked in descending order of the percentage of students who report "I plan my approach to studying" often or very often.

Source: OECD, PISA 2025 Database, Table I.B1.3.49.

“

Did you know...

...76% of students feel
they belong at school.

Fixing the aspiration gap

Young people from disadvantaged backgrounds often grow up hearing two conflicting messages: *get a degree and you're set for life* and *people like us do not go to university*. Higher education has long been seen as key to social mobility but for some students it still feels out of reach or simply not for them. Schools have a responsibility to help all young people fulfil their potential, regardless of personal circumstance. But how far does family background, financial situation and community expectation ultimately determine academic ambitions?

PISA data show that, almost everywhere, socio-economically disadvantaged students aspire less to higher education than advantaged ones. Even if they are high-achieving, they are 20 percentage points less likely to harbour ambitions to go to university compared to advantaged peers with a similar level in science. The gap is 30 percentage points or more in seven countries and economies, led by Kazakhstan, Latvia, Indonesia and Moldova. Low-achieving disadvantaged students are even less likely to consider higher education.

Although global expansions in schooling over the past century have dramatically increased access to education, socio-economic inequalities in learning outcomes are remarkably persistent. PISA data show that, on average, advantaged students outperform their disadvantaged peers across all assessed domains. In science, the average difference between the two groups is a hefty 85 points. In six OECD countries - Luxembourg, Germany, the Slovak Republic, the Netherlands*, Hungary and France - it is 100 points or more.

This matters because educational disadvantage can become a cycle that reinforces inequality. When disadvantaged students consistently achieve lower results than their more advantaged peers, they are less likely to access future educational opportunities, secure higher-paying jobs or participate fully in social and economic life. The achievement gap also represents a loss of talent and potential for society as a whole. In addition, if student outcomes are determined more by socio-economic background than by ability or effort, education is not fulfilling its role as a pathway to opportunity and social mobility.

Parents' attitudes towards higher education seem to matter. PISA data show that the gap in higher education aspirations between advantaged and disadvantaged students is reduced by 40% once parental expectations are factored in, on average across

OECD countries. Interestingly, the expectations of fellow students seem to have less of a link to young people's academic ambitions.

What's more, in nearly all countries and economies, higher levels of family support are associated with increased science performance and positive learning attitudes, especially perseverance and goal setting. This is driven largely by parental interest in children's school life. Even something as simple as asking children what they learned or did at school, about once a week or more, is associated with an average 26-point increase in science performance, after accounting for socio-economic status. The difference is most noticeable in Sweden (+40 points), followed by the United Arab Emirates, Australia, Israel, Malta, Moldova and Romania. More than 70% of students report discussing what they did at school at least once per week with parents, the most such conversations take place in Ireland at 83%, the fewest in Cambodia at 37%.

Supportive home environments need to be matched in the classroom. Young people deserve teachers who take an interest in their progress and give extra help and encouragement when needed. According to PISA data, teacher support in science lessons has increased on average across OECD countries since 2015, with the most notable improvements observed in Korea, Japan, Indonesia, Croatia, the Slovak Republic and Thailand. But in some places there have been significant drops, such as in Poland, Greece, Lithuania, Kosovo, Czechia and Moldova. Greater teacher support is also consistently associated with positive learning attitudes and a stronger sense of belonging among students.

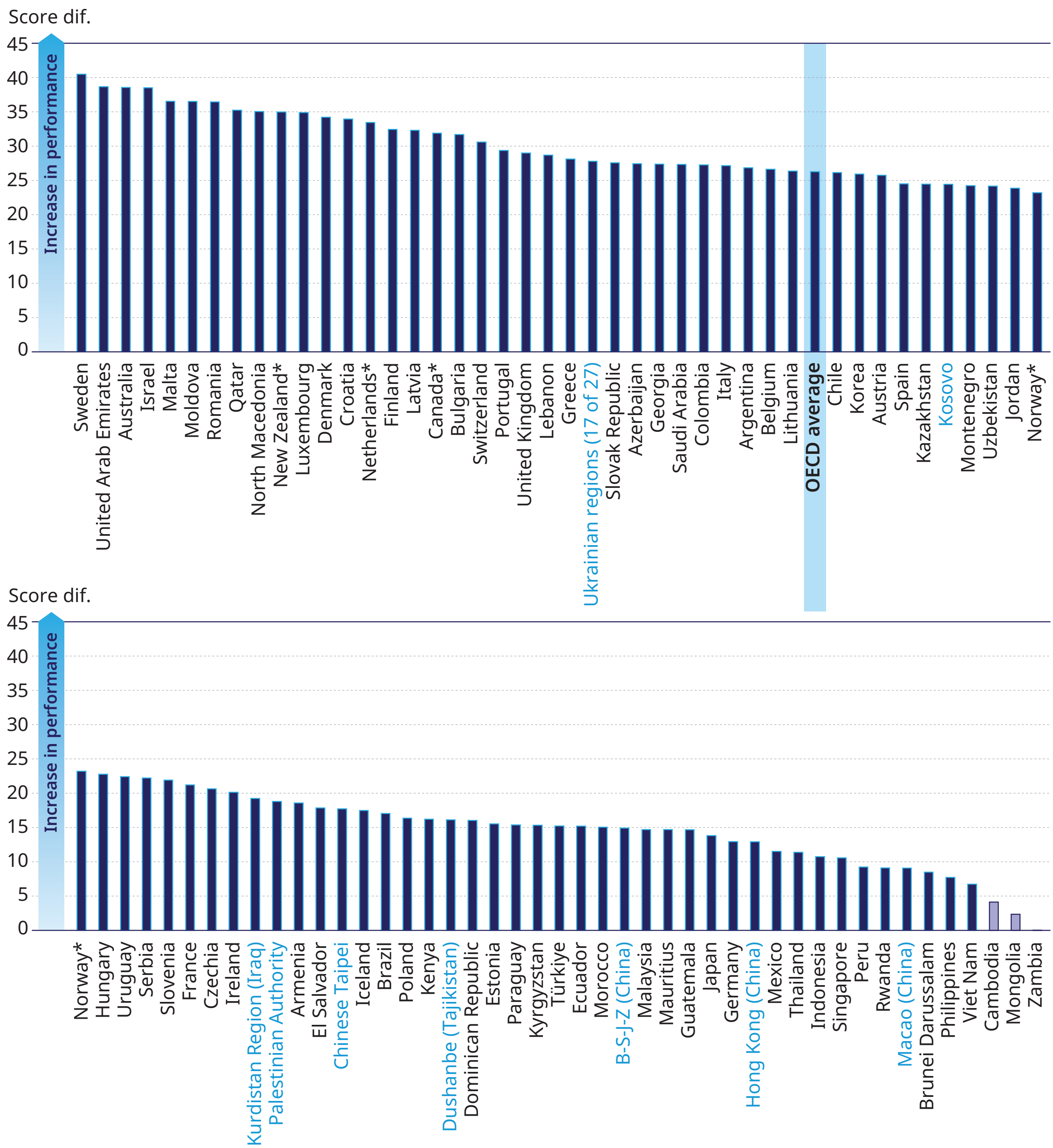
Much has been written about concerns that today's young people may be the first generation in decades to face worse life prospects than their parents. Against this backdrop, PISA offers policymakers valuable insights into how students view the future. On average across OECD countries, 23% of students expect to attain a higher level of education than their parents, 15% a lower one. Students in Morocco, Cambodia, Türkiye and the Kurdistan Region (Iraq) are the most optimistic. Yet there are plenty of pessimists, particularly in wealthy countries. In Norway*, Finland and Denmark, 1 in 4 students or more expect lower educational outcomes.

In terms of employment prospects, students are also split. Some 37% expect to work in higher occupational groups than their parents, 31% in lower ones. The biggest optimists are in Morocco, Colombia and Cambodia, where 70% or more expect to move into higher-status occupations. At the other end of the scale, the share is below 20% in Qatar. This issue is important for policymakers because student expectations about their future employment can influence motivation, educational engagement and career decisions. If large numbers of students believe that education will not lead to better opportunities, they may become disengaged from learning, invest less in developing skills or lose confidence in the value of higher education. Conversely, realistic optimism can encourage persistence, ambition and lifelong learning.

For policymakers, these perceptions provide valuable clues into how students view the future. The PISA data reflect how even though talent is distributed across society, opportunity is not. Children from affluent families typically benefit from a web of advantages, such as private tutoring and access to well-connected social networks. Those from less privileged backgrounds often have far fewer opportunities and many more obstacles. For them, a good school and an effective teacher can be the difference between a closed door and a chance to succeed. Education systems need to strive to deliver high-quality learning to all students, regardless of where they start in life.

Family support and science performance

Score-point difference associated with students who report parents or other family members ask what they did at school, at least a few times a week



Notes: Statistically significant values are shown in a darker tone (see Annex A3 of *PISA 2025 Results Volume I*).

Countries and economies are ranked in descending order of the score-point difference in science associated with students who reported that their parents or someone in their family ask them what they did at school, at least a few times a week, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2025 Database, Table I.B1.4.124.

Did you know…

… 69% of students believe in a growth mindset, across the OECD.

Bridging learning gaps through a growth mindset

Can intelligence increase over time or is it determined from birth? "Growth mindset" - a term coined by psychologist Carol Dweck - is the belief that intellectual ability is not fixed but can be improved. Advocates argue that students, with teachers' help and feedback, can develop their abilities through hard work, adapting learning strategies and never giving up. Sceptics think no amount of support is going to significantly change someone's intelligence.

The sceptics, however, may be overly deterministic. While the PISA data do not prove that growth mindset alone causes large improvements in achievement, the findings suggest that, overall, students who believe they can develop their abilities perform better. On average, students who demonstrate a growth mindset outperform peers with a fixed mindset by a significant margin - scoring 28 points higher in science, after accounting for socio-economic status. In New Zealand* and the United Arab Emirates, the score difference is 59 points. This finding also holds across education systems - those in which a larger share of students hold a growth mindset tend to do better on the PISA test.

The data appear to be clear cut, however a note of caution: While growth mindset can be presented as a driver of academic success, in some cases that success may itself help to create a growth mindset. For example, a student who works hard but repeatedly receives poor grades may conclude that effort does not pay off. In such circumstances, telling students that hard work leads to success may ring hollow, because it conflicts with their lived experience.

In contrast, students who consistently improve their efforts are more likely to believe that ability can be developed. What appears to be a growth mindset may therefore be, at least partly, the product of previous success rather than its cause.

This may help explain why growth mindset is more prevalent among higher-performing students. These pupils are often capable of experiencing meaningful improvements when they increase their effort, making the link between persistence and success visible. Lower-performing students, however, may need additional support before their efforts translate into success. Without it, repeated setbacks can reinforce the belief that hard work is futile.

The policy implications are significant. If low attainment is treated primarily as a mindset problem, the underlying causes may be missed. Academic difficulties can stem from a wider set of challenges, including gaps in prior knowledge, weaker literacy or numeracy skills, poor attendance, or broader social and emotional factors. Addressing these obstacles requires targeted support, not merely a change in mindset.

Given this context, it is still interesting to note some of the striking country differences in the data. Across the OECD, 69% of students believe in a growth mindset. In Estonia and France the proportion tops 80%. In contrast, students in Lithuania, Sweden, Colombia and Norway* are more pessimistic: more than 40% of students in each country agree with the idea that people have a certain amount of intelligence and cannot do much to change it.

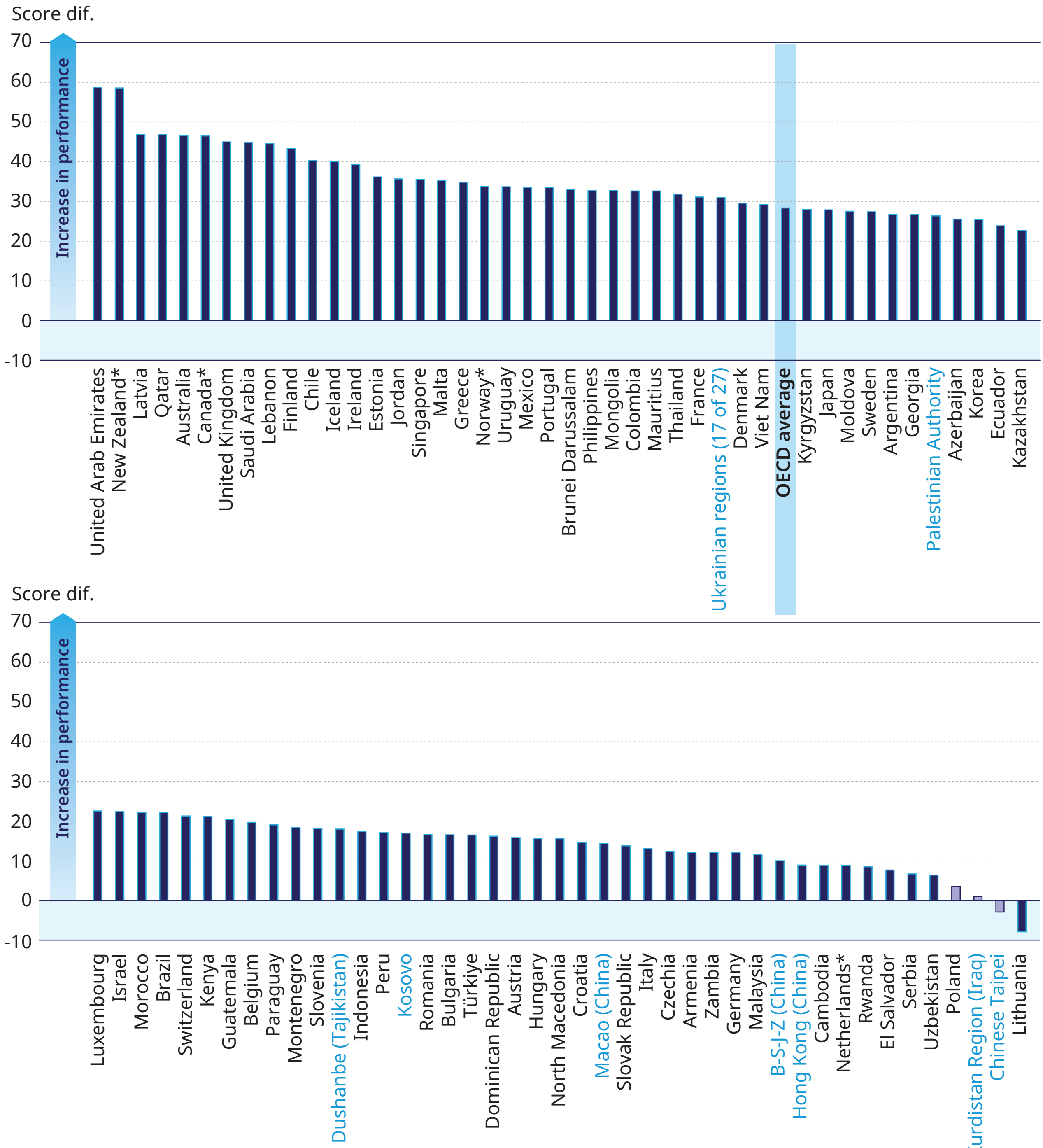
How does the teacher data tally with that for students? The OECD's TALIS (Teaching and Learning International Survey) found that 78% of teachers across 27 OECD countries have a growth mindset. This is important as teachers with a growth mindset are more likely to praise student effort, challenge learners, offer constructive feedback and encourage students to keep trying. A more fixed view of ability can lead teachers to lower expectations for some students, while learners themselves may be less encouraged to persevere through challenges and build confidence in their potential.

Students from disadvantaged backgrounds may particularly benefit from having teachers who embrace a growth mindset. A growth-minded teacher can help counteract stereotypes and deficit-based assumptions that sometimes influence perceptions of students from disadvantaged backgrounds. PISA data show that 65% of students from disadvantaged backgrounds report a growth mindset, compared to 73% for advantaged students. This pattern holds true in 71 countries and economies.

How can disadvantaged students improve their performance if neither they, nor their classmates, believe in their ability to do so? Policymakers might like to research those systems where disadvantaged students buck the trend. Among OECD members, that is the case in Belgium, Czechia, Germany, Lithuania, the Netherlands*, Poland, Switzerland and Türkiye. Understanding the reasons for this - whether it is school culture, high expectations, targeted support or broader social factors - could provide lessons for all education systems.

Students' beliefs in growth mindset and science performance

Change in science performance when students disagree or strongly disagree they have a certain amount of intelligence, and can't do much to change it



Notes: Statistically significant values are shown in a darker tone (see Annex A3 of *PISA 2025 Results Volume I*).

Countries and economies are ranked in descending order of the score-point difference in science associated with students' disagreeing or strongly disagreeing they have a certain amount of intelligence and can't do much to change it, after accounting for students' and schools' socio-economic profile.

Source: OECD, PISA 2025 Database, Table I.B1.3.18.

Teachers' and students' growth mindset

Percentage of teachers participating in TALIS 2024 and students participating in PISA 2025 who report a growth mindset[1]

1. The wording of the questions on growth mindset in TALIS 2024 and PISA 2025 is not identical. It is therefore not possible to draw direct comparisons of absolute proportions between the two groups.

Note: Only countries and economies with available data are shown.

Source: OECD, PISA 2025 Database, Table I.B1.3.16 and TALIS 2024 Database, Table 2.37.

Success often starts with belonging

School is not just an educational experience but a social one. After all, it is where many lifelong friendships begin. Yet for those who struggle to fit in, the classroom can be a lonely place. The extent to which learners feel included, accepted and connected to others can impact academic outcomes. That is why PISA measures students' sense of belonging at school.

Across the OECD, on average 76% of students say they feel like they belong at school. The share reaches 90% in Spain, followed by Japan. At the other end of the scale, 64% or less feel they belong at school in Denmark, Poland, Italy and Lithuania. This is a concern, as if students do not feel like they belong, they are probably less likely to participate in class, be motivated to learn and be able to build positive relationships with teachers and students.

Two disparities stand out in the data. First, girls report a significantly weaker sense of belonging than boys. The largest gaps are observed in six OECD countries - Finland, Sweden, Iceland, Norway*, Denmark and the United Kingdom. Only in Dushanbe (Tajikistan), the Palestinian Authority, Uzbekistan and Kazakhstan do more girls say they belong. Second, socio-economically disadvantaged students feel less like they belong than advantaged ones. Kenya is the only country where the opposite is true.

A sense of belonging is also important as it is associated with better science performance in most countries and economies, according to PISA, although the relationship is inconsistent. In 31 education systems it does not exist at all. In Italy, Norway*, the Netherlands*, Chinese Taipei and Finland, students with a weak sense of belonging perform better in science than those with a strong one.

The association with student motivation and positive learning behaviours is more pronounced. Those who feel they belong are more likely to have high levels of curiosity and a growth mindset, to set goals for themselves and seek help when required. About 68% of students with a strong sense of belonging say they apply additional effort when work becomes challenging. For students with a weak sense of belonging the figure is just 51%. In the Ukrainian regions (17 of 27), Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang, Kenya, Kazakhstan and Uzbekistan, the difference between the two groups is 25 percentage points or more.

All this shows that the social and educational aspects of school are intricately linked. A sense of belonging is one of the emotional foundations on which students build their approach to learning. Teachers can take steps to support a sense of belonging by creating an inclusive classroom climate, encouraging student participation and recognising effort and achievement. When students feel respected, valued and connected, they are more likely to engage in school. According to PISA, stronger teacher support is associated with a stronger connection between students' sense of belonging and their curiosity.

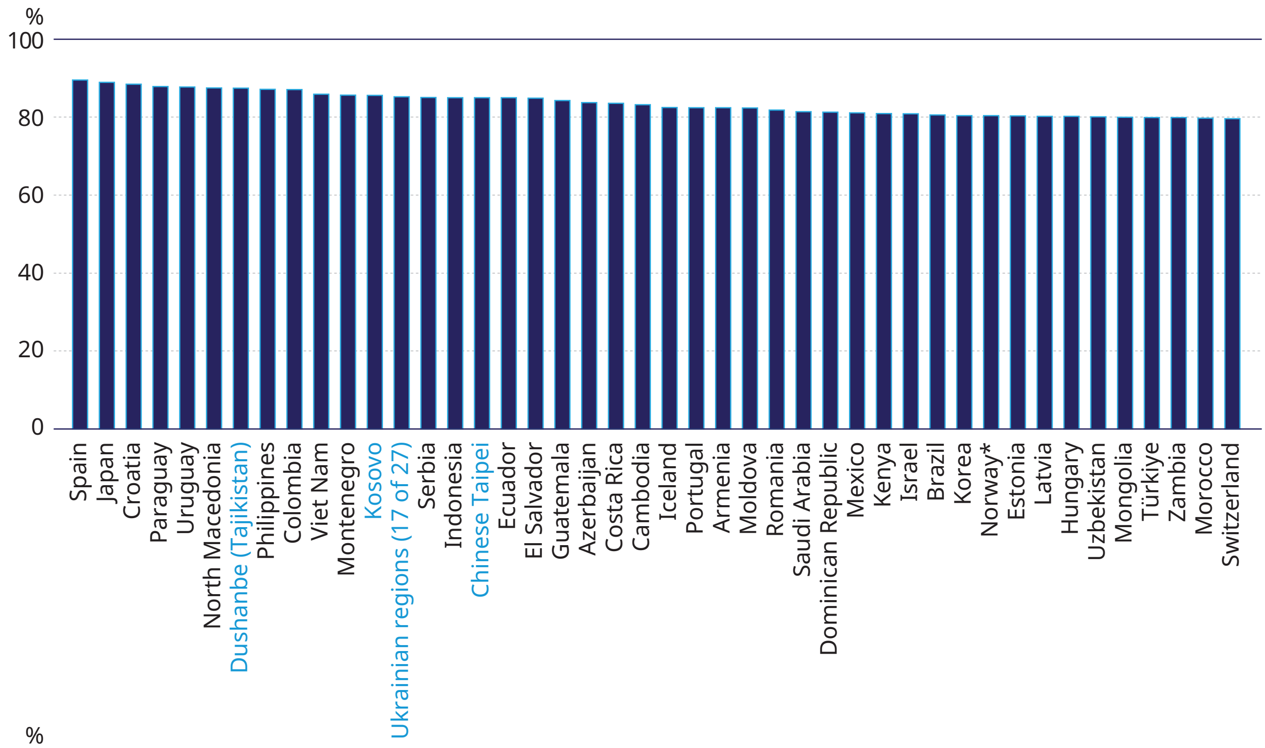
Sense of belonging also relates to how students value education. According to PISA, 71% of students who 'feel they belong' report that school teaches them skills and knowledge that would be useful in a job. However, across OECD countries, nearly one in two students complain that school does little to prepare them for adult life. A quarter of students say that school is a waste of time altogether. In Poland, Israel and the Netherlands* 35% or more of students feel this way. Across the OECD, 13% of children say they feel lonely at school. The proportion rises to at least 25% in Lebanon, Paraguay, Moldova, Kenya, the Kurdistan Region (Iraq) and Zambia (in ascending order). In Rwanda, the share is 44%.

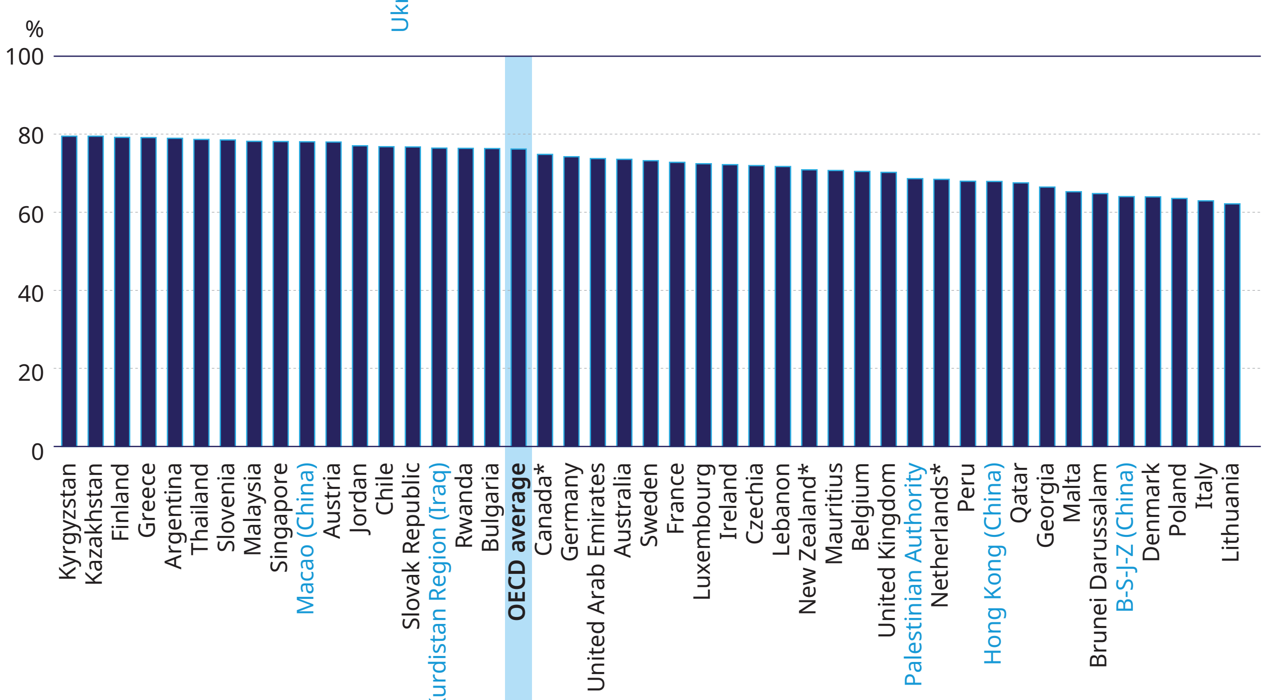
A lack of friends and feelings of social disconnection or isolation can negatively affect students. OECD evidence shows that strong social connections and a sense of belonging are associated with better health, greater life satisfaction and stronger academic outcomes, while loneliness and social isolation are linked to poorer outcomes, including a higher risk of dropping out of school. It is stating the obvious, but when students lack meaningful relationships and supportive interactions, they are less likely to feel accepted and integrated into the school community.

Looking ahead, policymakers should make developing a strong sense of belonging a priority for schools. Students who feel connected, valued and supported are more likely to engage in learning, and succeed socially, emotionally and academically.

Students who feel they belong at school

Percentage of students who agree or strongly agree that "I feel like I belong at school"





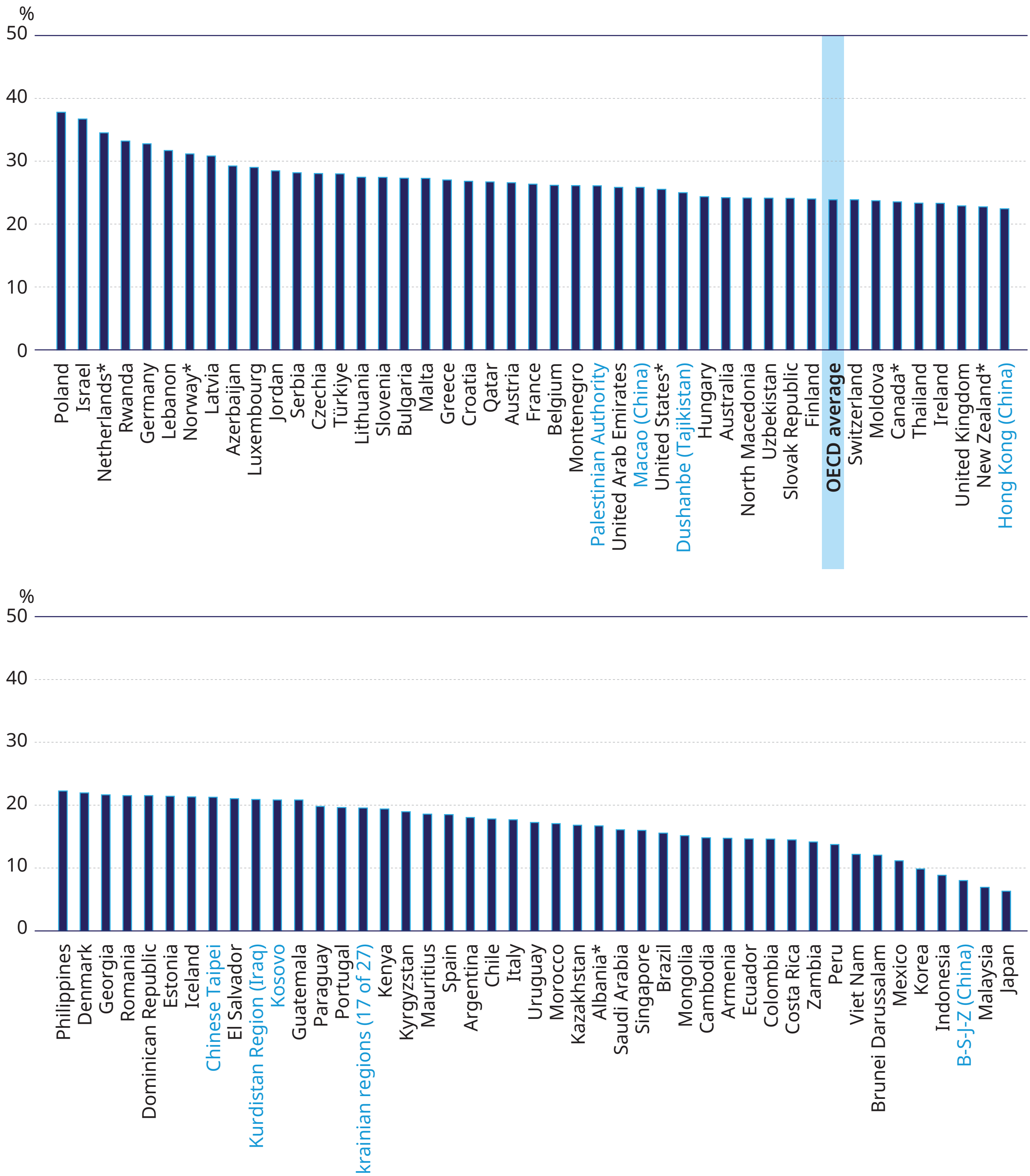
Note: Only countries and economies with available data are shown.

Countries and economies are ranked in descending order of the percentage of students who agree or strongly agree that "I feel like I belong at school".

Source: OECD, PISA 2025 Database, Table I.B1.3.62.

School is a “waste of time”

Percentage of students who agree or strongly agree that “school has been a waste of time”



Note: Only countries and economies with available data are shown.

Countries and economies are ranked in descending order of the percentage of students who agree/strongly agree that school has been a waste of time.

Source: OECD, PISA 2025 Database, Table I.B1.3.70.

Educating a generation for sustainability

Across the world, young people are coming of age in an era defined by environmental uncertainty. They are exposed daily to headlines about extreme weather, biodiversity loss, water scarcity and pollution. Recent events have put these threats into sharp focus. This summer, huge wildfires tore through parts of Spain and France. Temperatures soared above 40C across much of Europe, and major rivers such as the Rhine, Danube and the Po dropped to record low levels. In Paris, where the OECD is based, a government minister observed that "(we are) in the process of finding out we've become a hot country".

The changing environment is a daunting challenge for policymakers and educators, who need to inform students about the issues and equip them with the skills and motivation to shape a more sustainable future. Luckily, they have a largely receptive audience. Three-quarters of students across OECD countries say that caring for the environment is important to them, according to PISA. In 42 countries and economies, this share exceeds 80% and tops 90% in the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang, Indonesia, Korea and Cambodia.

But caring for the environment is only the beginning. Meeting tomorrow's challenges will require engineers and innovators who can turn concern into solutions. PISA data show that about three-quarters of students attain at least baseline proficiency (Level 2) in environmental science, on average across OECD countries. The share tops 90% in Singapore and Macao (China) and reaches an astonishing 98% in the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang. Students with higher scores in environmental science tend to report more positive environmental attitudes such as environmental awareness, belief in one's personal capacity to drive change and belief in collective efficacy. On average across the OECD, over half of students engage in environmental discussions (56%) and report making sustainability-based purchases (54%), and 40% say they have stopped eating certain foods to reduce their environmental impact at least once in the year preceding the PISA test. What's more, students who learn more about environmental issues in class are significantly more confident in their ability to drive change. For example, they are 25 percentage points more likely to believe they can work with others to reduce the use of fossil fuels compared to students who have less environmental learning in class, on average.

The data include some less positive outcomes. Over the past decade, student environmental awareness has declined, with the share of students who report understanding environmental issues, and being able to explain them, dropping in all topics assessed by PISA. For example, in 2025, 68% of students on average reported having an understanding of water shortages (down 4 percentage points on 2015), 57% of students said they could explain the increase of greenhouse gases in the atmosphere (down 6 percentage points), and 45% said they had an understanding of nuclear waste (down 9 percentage points).

This fall in students' environmental awareness is concerning because it weakens society's capacity to build a sustainable future. When people lack environmental knowledge, pressing challenges can go unrecognised and unaddressed. For example, how many adults, let alone students, understand key concepts such as environmental tipping points? A tipping point occurs when gradual environmental change crosses a critical threshold, triggering rapid and often irreversible consequences.

Climate scientists warn that some of the Earth's major ecosystems and climate systems, including coral reefs, the Amazon rainforest and polar ice sheets, may become increasingly unstable beyond certain levels of warming. Once these thresholds are crossed, reversing the damage may be impossible or extraordinarily difficult.

PISA data show, at the very least, that some students are awake to the growing crisis we all face. At the time of writing (August 2026), I am 62 years old. When my grandchildren are my age, they will be living in the closing decades of the 21st century. Children will still be born, fall in love, learn, work, travel and dream. But what will their world be like? Will they inherit a planet where summer heatwaves are occasional discomforts, or where stepping outdoors is dangerous for months at a time? Will food shortages remain rare disruptions, or become recurring features of life? Will millions be forced from their homes by drought, flooding and rising seas, creating pressures that spill across borders and generations?

The future is not a binary choice between catastrophe and safety. It is a spectrum. Every decision made today shapes the conditions under which future generations will live. PISA provides policymakers with a snapshot of student abilities and their views on our changing environment. The climate decisions being made now, during their childhoods, will shape the environmental conditions of their entire lives.

My hope is that although ecosystems can change rapidly, so can human behaviour. Public opinion can shift and political priorities can transform. PISA data show that, in almost all countries and economies, a clear majority of students are interested in pursuing an environment-related career. This suggests that environmental engagement is not a niche concern but a mainstream aspiration among young people around the world. That makes me optimistic. The future is not something we simply discover; it is something we create.

Students' environmental awareness

Percentage of students (OECD average) reporting that…

	… they have never heard of this	… they have heard about this but they would not be able to explain what it is really about	… they know something about this and could explain the general issue	… they are familiar with this and they would be able to explain this well
Effects of plastic pollution	6	18	44	33
Extinction of plants and animals	6	19	45	30
The consequences of clearing forests for other land use	10	23	41	26
Water shortages	8	24	43	25
The increase of greenhouse gases in the atmosphere	15	28	36	21
Nuclear waste	14	41	33	12

Source: OECD, PISA 2025 Database, Table I.B1.5.6.

Did you know…

… 26% of 15-year-old students across the OECD can be considered top performers in computational problem-solving, meaning they have strong ability in programming and modelling.

OK COMPUTER skills

The ability to read and write has always been a vital part of education. In more recent times, numeracy has grown in importance. And in the decades ahead, one aspect of mathematics could prove to be just as significant: computational problem solving.

Many parents still regard computer science as a specialist subject, useful mainly for aspiring software engineers. This is a mistake. The real value of computational problem solving lies not in coding itself, but in the habits it develops: logical reasoning, pattern recognition and the ability to break complex challenges into manageable parts. These are becoming essential skills for a world increasingly shaped by technology and data.

That is why the latest PISA introduced a new assessment focusing on 15-year olds' computational problem solving skills. Tests examined their capacity to use modelling and programming tools, conduct experiments and build, design and develop digital products.

The PISA data show that some students across the OECD have excellent skill sets to build a productive future in the digital economy. About one quarter can be considered top performers in computational problem solving (26%), meaning they have strong ability in programming and modelling.

Students in Macao (China), Singapore, the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang, Japan and Chinese Taipei (in descending order) top the charts, all scoring above 550 points on average. Other than Japan, Estonia, Korea, Australia and New Zealand* are the highest performing OECD countries (above 530 points), with another 15 education systems also performing significantly above the OECD average of 500 points. At the other end of the table, students in Kenya, Paraguay, Armenia, Lebanon and Kosovo scored below 360 points, on average. A high proportion of these latter students are capable only of simple interactions with digital tools. They are likely to struggle in many of the digital-first workplaces of the future.

Artificial intelligence is already transforming industries, from healthcare to finance, to manufacturing and everything in between. Tasks that once depended on routine human effort are increasingly being automated. Consequently, employers need people who can understand systems, evaluate data, identify inefficiencies and design solutions. Computational problem solving supports the development of these abilities.

The PISA data show that students who score strongly in computational problem solving often demonstrate high educational achievement across the board. However, education systems such as Iceland, Macao (China), the Philippines, Brunei Darussalam, Malaysia and Hong Kong (China) (in ascending order) all scored far better in computational problem solving (over 30 points higher) than might be expected based on their science results. In an increasingly tech- and AI-driven world, better results in computational problem solving could well translate into better job prospects for students. The country with by far the weakest relative performance using this metric was Kenya, followed by Uzbekistan and Azerbaijan.

Going forward, countries that performed poorly in the PISA computational problem solving test need to recognise the subject for what it is becoming: a foundational skill for modern life. Nations increasingly compete on their capacity to innovate, adapt rapidly to technological change and cultivate highly skilled workforces. The world's most successful economies will therefore be those that can quickly adapt to change, and develop and use new technologies effectively, sustainably and responsibly. Schools play a pivotal role in this process. Teaching computational problem solving helps build a pipeline of talent capable of driving future growth. Countries that neglect this area may find themselves struggling to remain competitive in an increasingly digital global economy.

Countries’ or economies’ scores in computational problem solving

	Mean score
Macao (China)	572
Singapore	563
B-S-J-Z (China)	560
Japan	557
Chinese Taipei	551
Hong Kong (China)	545
Estonia	541
Korea	538
Australia	532
New Zealand*	531
Canada*	525
United Kingdom	523
Switzerland	520
Czechia	517
United States*	513
Lithuania	512
Ireland	511
Austria	509
Belgium	508
Latvia	507
Poland	507
Finland	507
Netherlands*	506
Denmark	506
Luxembourg	506
Sweden	503
Portugal	501
OECD average	500
Spain	499
Germany	498
France	497
Slovak Republic	497
Brunei Darussalam	496
Hungary	495
Norway*	491
Italy	490
Iceland	490
Slovenia	486
Malaysia	484
Ukrainian regions (17 of 27)	478
Thailand	476
United Arab Emirates	476
Türkiye	473

	Mean score
Chile	466
Croatia	464
Malta	463
Uruguay	462
Viet Nam	461
Greece	461
Mexico	453
Moldova	452
Qatar	452
Costa Rica	452
Kazakhstan	449
Israel	444
Mongolia	443
Romania	442
Serbia	437
Albania*	437
Peru	436
Philippines	434
Colombia	432
Indonesia	427
Saudi Arabia	426
Bulgaria	425
Montenegro	423
Ecuador	422
Georgia	413
Jordan	408
Brazil	406
Argentina	403
Uzbekistan	402
El Salvador	401
Palestinian Authority	393
North Macedonia	389
Azerbaijan	388
Kyrgyzstan	388
Dominican Republic	379
Morocco	374
Guatemala	369
Kosovo	359
Lebanon	358
Armenia	354
Paraguay	352
Kenya	278

*Caution is required when interpreting these estimates because one or more PISA sampling standards were not met. (see the Reader’s Guide of the *PISA 2025 Results Volume I*).
Notes: Values that are statistically significant are indicated in bold (see Annex A3 of *PISA 2025 Results Volume I*).
Only countries and economies with available data are shown.
Source: OECD, PISA 2025 Database, Table I.B1.2a.4.

“

Did you know…

… across OECD countries there are now nine computers per ten students on average, compared to just six in 2012.

Ctrl + Alt + Educate?

In recent decades, many classrooms have undergone a profound transformation. Blackboards, textbooks, pencils and pens are not yet museum pieces, but in some countries they are gradually being binned in favour of laptops, tablets and other digital tools. This technological shift is intended to enhance learning and equip students with the digital literacy needed to succeed in a complex, digitalised world. Evidence on the educational impact of technology is mixed, and greater access to digital devices does not automatically lead to improved learning outcomes. But digital skills remain important, and schools have a vital role to play in ensuring that technology is used purposefully, supported by effective teaching practices and training.

From 2022 to 2025, the availability of computers in schools rose in 31 of 75 countries and economies - and only fell in ten. Across OECD countries there are now nine computers per ten students on average, compared to just six in 2012. The four best equipped countries were Latvia, where that figure neared 16 computers per ten students, followed by Austria, the United Kingdom and Lithuania.

Overall, the level of concern among school principals about shortages in digital resources decreased slightly across OECD countries from 2022 to 2025. But many countries, particularly low-income ones, still report a lack of provision that could dramatically affect young people's chances. In Zambia, Kenya, Cambodia, Colombia and Kyrgyzstan (in descending order), over 64% of students attend schools where principals report that inadequate or poor-quality digital resources are hindering the capacity to teach. In Singapore, Denmark, Sweden, Switzerland, the Netherlands* and Luxembourg that proportion is five percent or less.

This divide between digital haves and have-nots also exists within countries. PISA data show that shortages of digital resources are more pronounced in public schools and socio-economically disadvantaged ones. What's more, a lack of digital resources in school systems is associated with poorer scores in science, although this is largely accounted for by socio-economic disparities.

While digitalisation has the potential to reduce educational inequalities, this can only happen if all students have proper access to digital resources and teachers know how to use technology effectively. For example, students unable to use the latest software, or working on faulty machines, risk losing out. That is why policymakers need to ensure the provision of digital resources in schools that are fit for purpose.

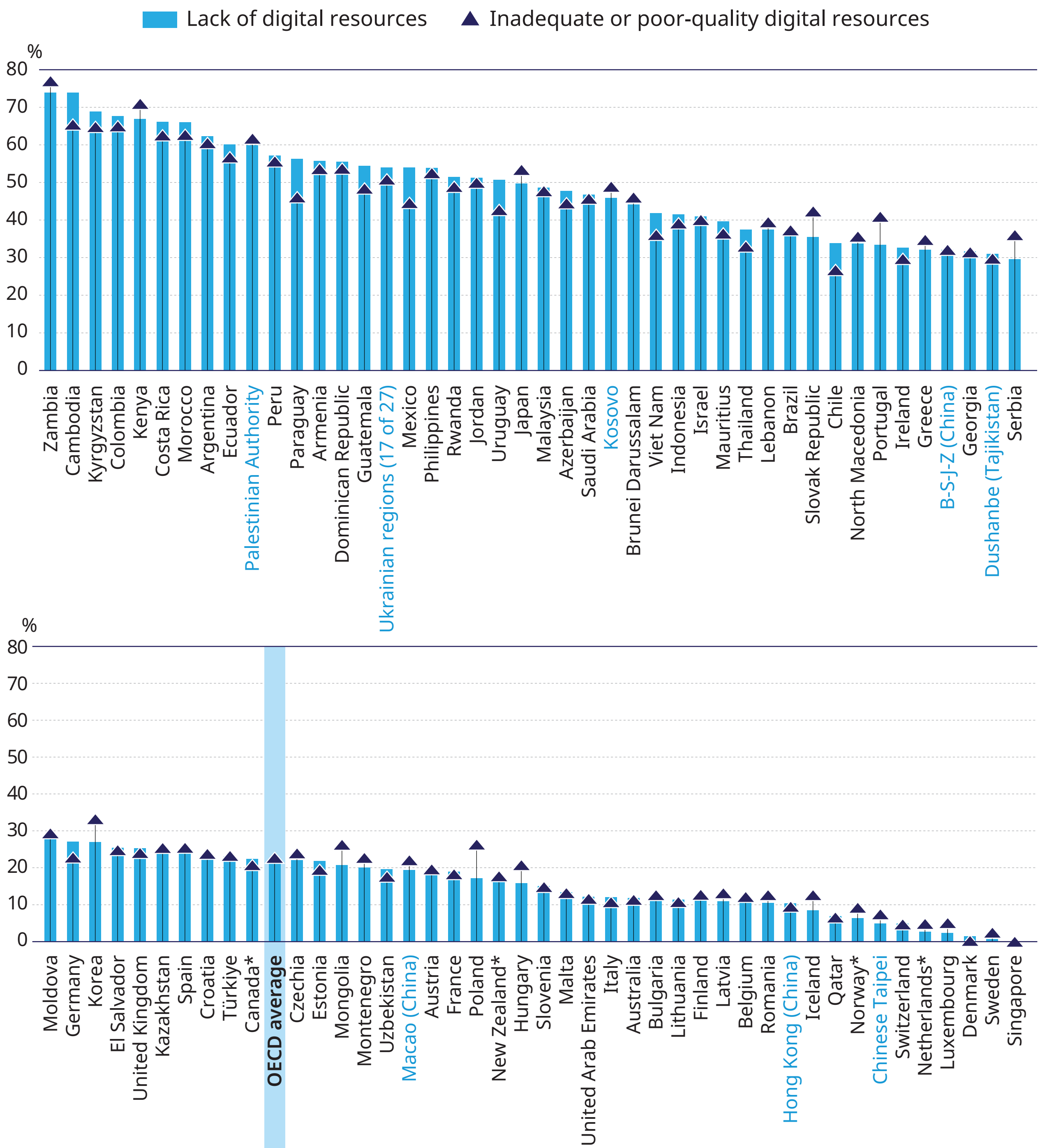
Equipment and tools alone, however, are not enough to deliver better outcomes for students. Technology has the greatest impact when it is thoughtfully integrated into teaching and learning, enhancing rather than simply supplementing classroom practice. To unlock its full potential, schools must ensure teachers have the time and training to use digital and AI-powered tools confidently and effectively.

PISA asked school principals whether their teachers had the skills needed to integrate digital devices into instruction. Eleven countries and economies scored over 90% for positive responses, led by Thailand, Uzbekistan, the United Arab Emirates, Singapore and Kazakhstan. Five countries - Argentina, Brazil, France, Costa Rica and Morocco - posted scores under 56%, well below the OECD average of 75%. This is an issue, as if teachers are not considered digitally competent, they will struggle to effectively use technology to enhance learning. Skilled use of digital devices also enables teachers to facilitate collaboration, strengthen communication with families, as well as adapt to different learning environments.

As digital technologies evolve and AI becomes increasingly integrated into education, the demands on teachers will continue to grow. While technology is not a substitute for good teaching, teachers who lack digital competence will be at a disadvantage. Policymakers therefore need to ensure that teachers have access to appropriate training and resources so that digital tools are used thoughtfully and add real value.

Shortage of digital devices hindered teaching

Percentage of students whose principal reported that digital resource availability and quality hindered teaching to some extent or a lot



Countries and economies are ranked in descending order of the percentage of students enrolled in schools whose principal reported that a lack of digital resources hindered the school's capacity to provide instruction to some extent or a lot.

Source: OECD, PISA 2025 Database, Table I.B1.4.6.

“

Did you know…

… around 30% of students report disruptions from noise and disorder in most or every science lesson, on average across OECD countries.

School discipline is improving. Should we celebrate?

The debate about what makes a good school often focuses on elements like better funding, superior teachers or more rigorous curricula. Less attention is usually paid to the disciplinary climate in classrooms. But having an orderly place in which learning can happen is important and PISA data suggest that classroom discipline is related to better student performance.

Since 2015, 11 countries and economies have seen their science performance go up. In nine of them, students say the disciplinary climate in science lessons has improved or remained stable: Lithuania, Macao (China), Montenegro, Qatar, the Slovak Republic, Türkiye and the United Arab Emirates (all improved) and the Dominican Republic and Thailand (stable). Of the remaining two, Uruguay and Georgia have noted a decline in disciplinary climate, while recording the smallest increases in science performance.

The data is likely not a coincidence. Less teaching and learning takes place in classrooms where teachers must spend substantial portions of a lesson restoring order. Every minute spent dealing with lateness, inattentiveness, bullying or persistent interruptions is a minute not spent explaining algebra, discussing literature or conducting a science experiment. The cumulative effect can be considerable. In nearly all education systems, students reporting a higher disciplinary climate in science lessons tend to perform better and have more positive attitudes towards learning.

According to students, the disciplinary climate has improved in most education systems taking part in PISA, with especially noteworthy improvements in Korea and Croatia. However, 10 countries and economies saw their disciplinary climate deteriorate since 2015, with large drops in Moldova and Kazakhstan, and a particularly stark decrease in Kosovo. Students in socio-economically disadvantaged schools also tend to report a more disruptive disciplinary climate than students in advantaged schools.

On average across OECD countries, around 30% of students report disruptions from noise and disorder in most or every science lesson. In some places this is a big issue, for example in Uruguay and Argentina the share is 50% and 58%, respectively. More than a third of students in Greece, the Palestinian Authority, Morocco and Bulgaria report regular difficulty of working well in the classroom.

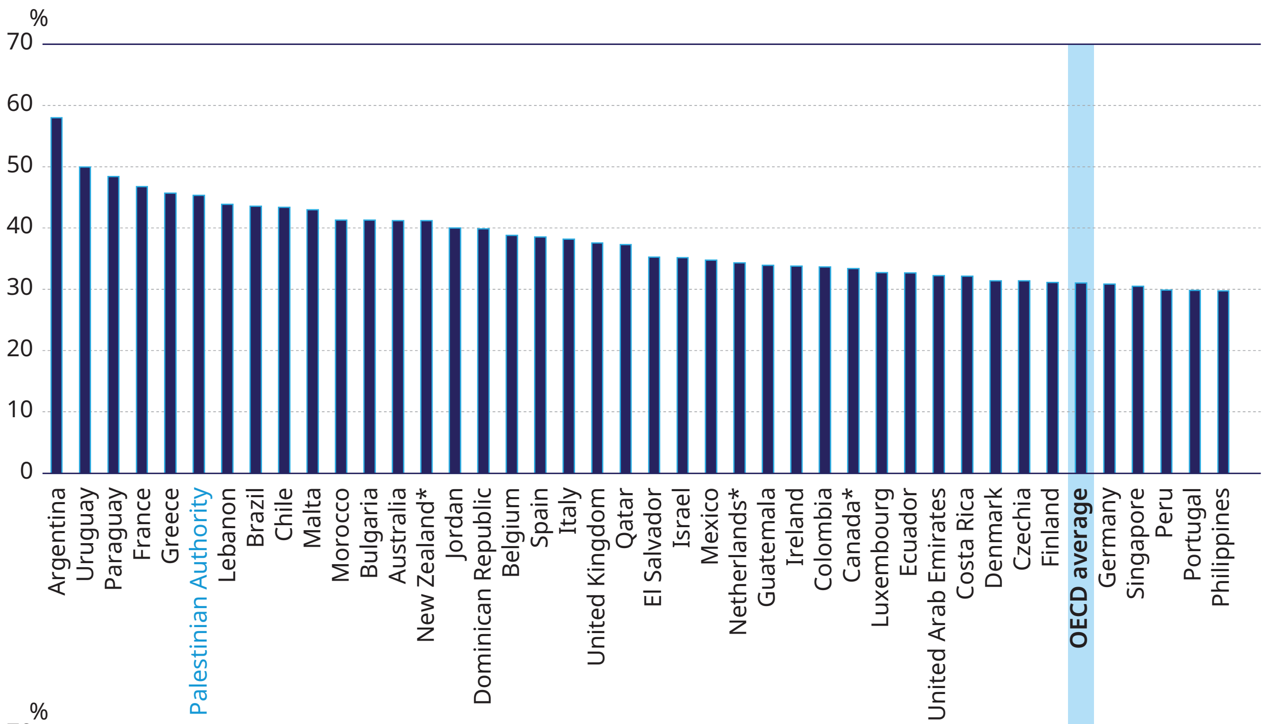
The overall picture is confusing. While many students say discipline has improved, school principals report a more negative school climate, including more frequent vandalism, theft, profanity, intimidation and verbal abuse of students or teachers, and physical injury, since 2022. Evidence from the OECD global teacher survey, TALIS, also points towards worsening discipline in lower-secondary classrooms in recent years. Teachers reported spending more time keeping order in the classroom in 2024 than in 2018, leaving less time for teaching and learning. On average, the share of class time spent keeping order increased from 13% in 2018 to 16% in 2024, according to TALIS. Even with unchanged formal instructional time, more time spent managing disruption reduces time for learning activities.

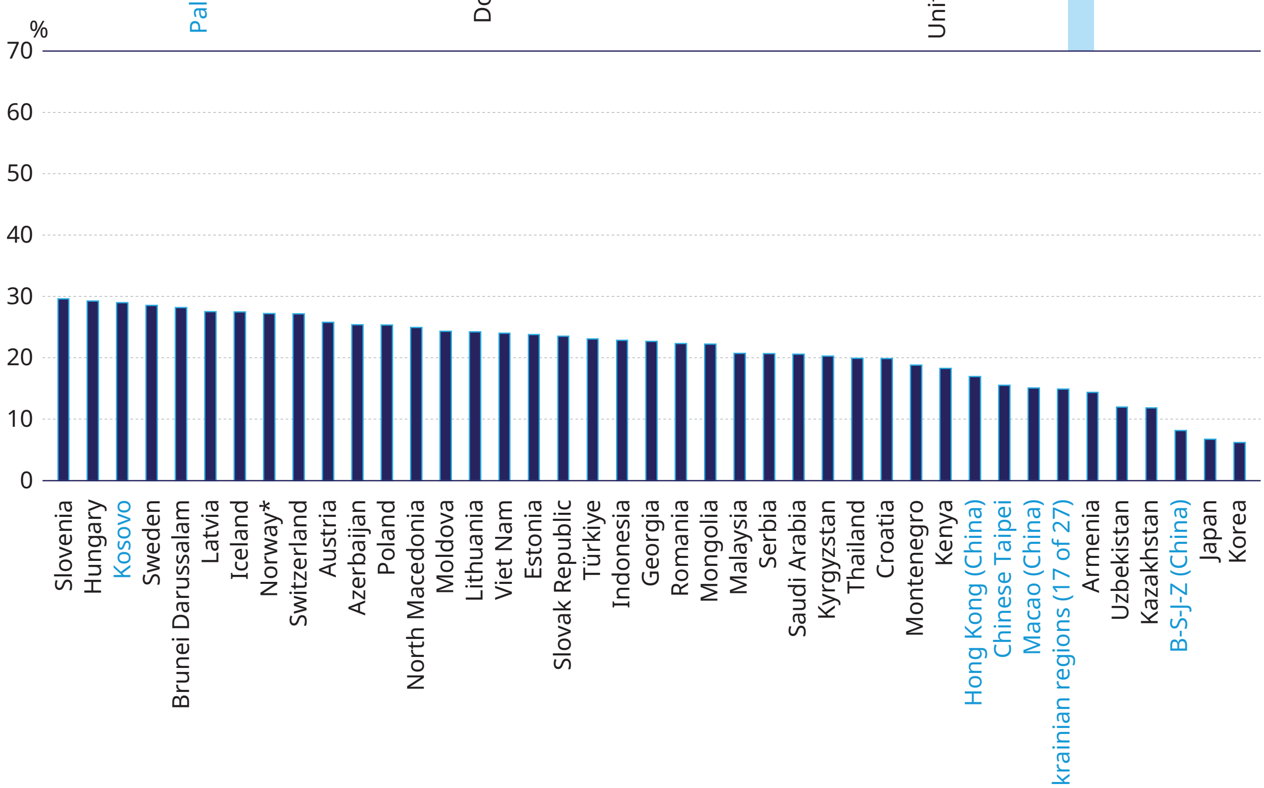
We know that after the pandemic many countries experienced persistently high levels of student absence. This has resulted in lots of students potentially missing more school than previous generations. The share of 9- and 10-year-old students absent from primary school at least once every other week increased from 10.7% in 2019 to 14.8% in 2023, on average across OECD countries, according to international data on fourth-grade students. According to PISA, the share of students who reported skipping a whole day of school has increased by about 3 percentage points since 2022. Skipping classes rose 2 percentage points and lateness increased by 4 percentage points, on average across OECD countries.

Lower exposure to regular instruction, even if spread across several years, may have weakened the accumulation of reading and maths skills. It is possible that shifting parental perceptions about the value of regular school attendance have also played a role. As a result, while more orderly classrooms are likely a net positive for education, any learning gains may have been lost due to other issues.

Disciplinary climate in school science lessons

Percentage of students who report noise and disorder in every or most lessons





Countries and economies are ranked in descending order of the percentage of students who reported "there is noise and disorder" in every or most science lessons.

Source: OECD, PISA 2025 Database, Table I.B1.4.132.

Did you know...

... within the OECD,
Costa Rica, the Slovak Republic,
Türkiye and the United Kingdom
have seen science scores
go up since 2022.

The joy of science

Where will the next generation of scientists, engineers and innovators come from? The dominant thinking for decades has been that better science education leads to higher attainment, which in turn produces more graduates and professionals in science, technology, engineering and mathematics (STEM). But PISA data suggest that while excellence in science is necessary, enjoyment also plays a decisive role.

Consider the data for the highest performing students in science - those who score around 700 points on the PISA test - and their varying levels of enjoyment in the subject. For students who have a low level of enjoyment in science, about 36% are estimated to have STEM-related jobs in the future. Now compare the stats to those who enjoy science: the proportion of students expecting to become scientists or engineers, for example, leaps to 62%.

When you think about it, the correlation isn't surprising. Enjoyment creates curiosity, encourages persistence and helps students see science as personally meaningful. Thus, high-achieving students who enjoy science are considerably more likely to imagine themselves becoming engineers, researchers or technology entrepreneurs. Those with similar academic ability but little passion for the subject are far less inclined to pursue such paths (and it begs the question, why did they choose to study a STEM-subject in the first place?).

Out of high performing students in science, just over half (55%) are interested in pursuing STEM-related careers. This suggests that education systems are leaking talent. And countries and economies that produce scientifically proficient students who are indifferent to pursuing science may struggle to generate the innovators they need to compete in a STEM-heavy marketplace.

How can schools encourage the enjoyment of science? The PISA data suggest that cognitive activation could play a role. Cognitive activation refers to teaching that prompts students to think rather than merely absorb information. It encourages them to explain ideas, connect concepts and grapple with unfamiliar problems. In science lessons, for example, students might be asked to formulate hypotheses, interrogate evidence and reflect on their conclusions. The aim is to engage students in the process of scientific reasoning itself, helping them construct understanding rather than passively receiving established facts.

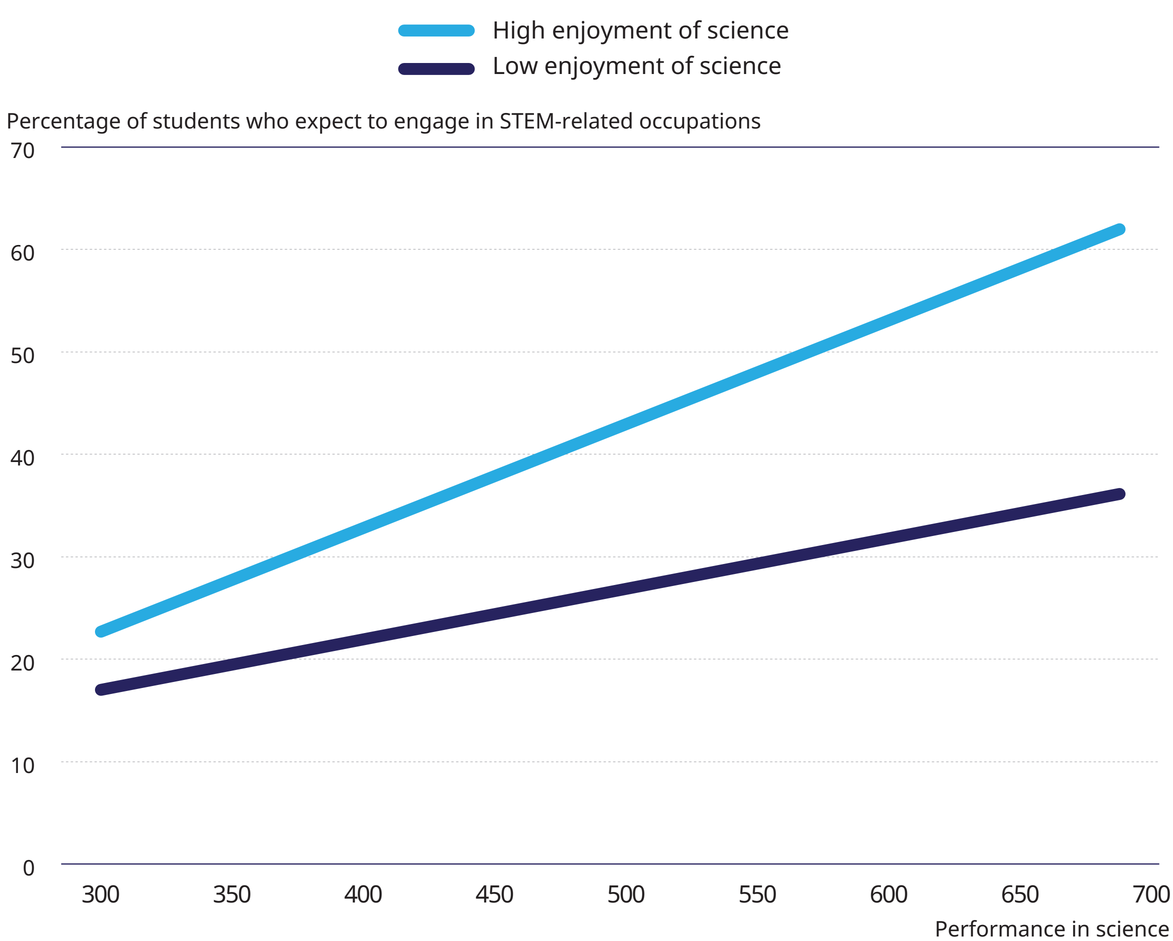
According to PISA, students in the top quarter of cognitive activation report higher levels of enjoyment alongside higher levels of curiosity, perseverance, self-regulation and goal setting. In addition, cognitive activation is related to higher performance. The data suggest that improving the ability of teachers to design cognitively demanding science lessons might yield a double dividend: stronger learning outcomes and greater enjoyment of the subject.

The finding has a clear implication for policymakers. Supporting teachers to design tasks that encourage explanation, reasoning and reflection can help students engage more deeply with science. Combined with classroom environments that are both supportive and intellectually stimulating, this may foster stronger scientific understanding and a more positive attitude towards the subject.

While high achievement remains essential, if governments want more future scientists, engineers and inventors, they should worry about more than performance. The students most likely to shape tomorrow's discoveries are those who both perform well and enjoy the subject enough to pursue it as a career.

The importance of enjoying science

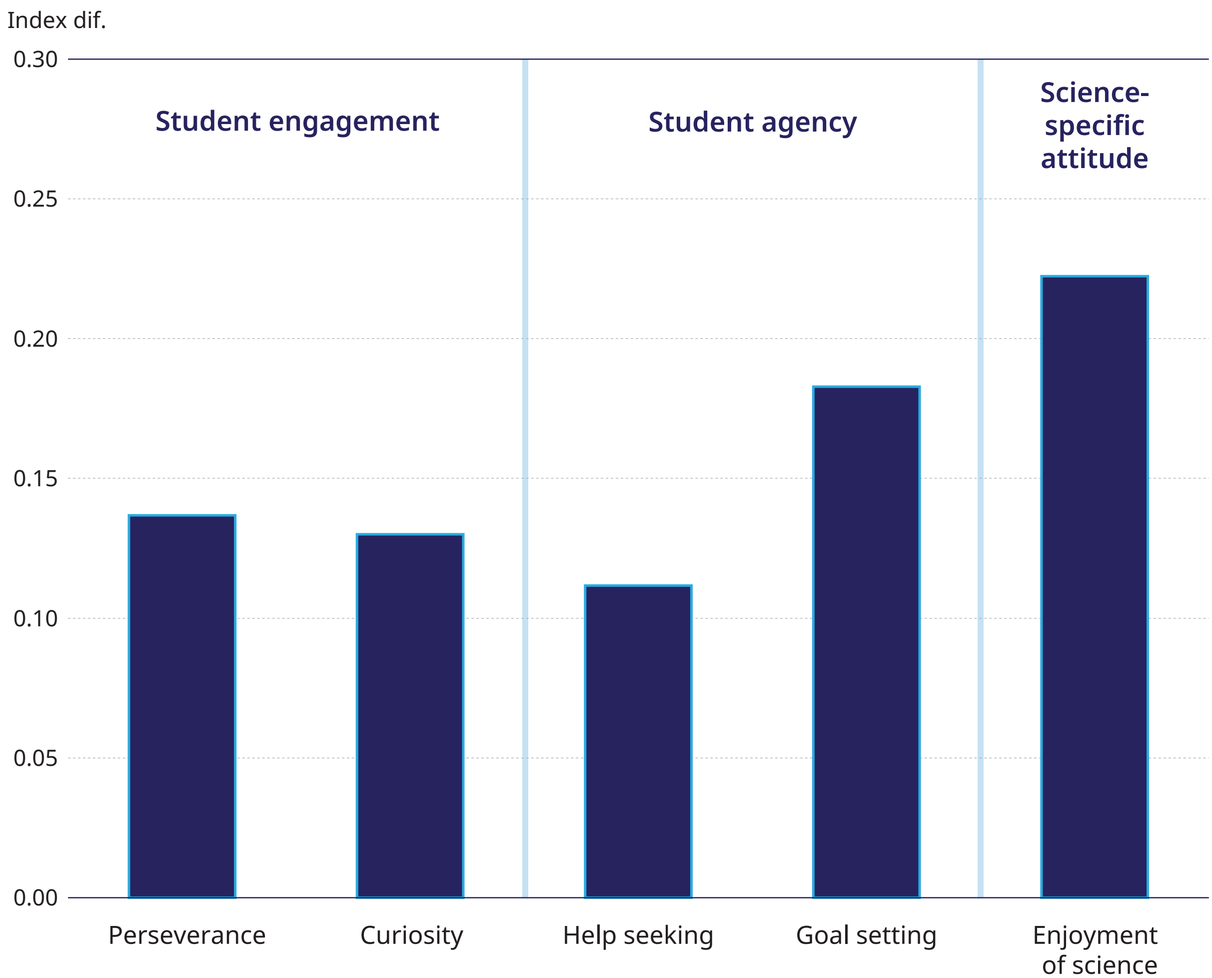
Relationship between the percentage of students estimated to have STEM-related jobs in the future and science performance by student enjoyment of science



Source: PISA 2025 database.

Cognitive activation: teaching that prompts students to think rather than merely absorb information

Change in PISA index of cognitive activation in science classes by a one-unit increase in the PISA indices for students' attitudes and beliefs, OECD average



Note: All differences are statistically significant (see Annex A3 of *PISA 2025 Results Volume I*).
Source: OECD, PISA 2025 Database, Table I.B1.3.61.

ISO codes for countries and economies used in this report

Albania	ALB
Argentina	ARG
Armenia	ARM
Australia	AUS
Austria	AUT
Azerbaijan	AZE
Belgium	BEL
Brazil	BRA
Brunei Darussalam	BRN
B-S-J-Z (China)	QCI
Bulgaria	BGR
Cambodia	KHM
Canada	CAN
Chile	CHL
Colombia	COL
Costa Rica	CRI
Croatia	HRV
Czechia	CZE
Denmark	DNK
Dominican Republic	DOM
Dushanbe (Tajikistan)	QTJ
Ecuador	ECU
El Salvador	SLV
Estonia	EST
Finland	FIN
France	FRA
Georgia	GEO
Germany	DEU
Greece	GRC
Guatemala	GTM
Hong Kong (China)	HKG
Hungary	HUN
Iceland	ISL
Indonesia	IDN
Ireland	IRL
Israel	ISR
Italy	ITA
Japan	JPN
Jordan	JOR
Kazakhstan	KAZ
Kenya	KEN
Korea	KOR
Kosovo	KSV
Kurdistan Region (Iraq)	QKI
Kyrgyzstan	KGZ
Latvia	LVA
Lebanon	LBN
Lithuania	LTU
Luxembourg	LUX
Macao (China)	MAC
Malaysia	MYS
Malta	MLT
Mauritius	MUS
Mexico	MEX
Moldova	MDA
Mongolia	MNG
Montenegro	MNE
Morocco	MAR
Netherlands	NLD
New Zealand	NZL
North Macedonia	MKD
Norway	NOR
Palestinian Authority	PSE
Paraguay	PRY
Peru	PER
Philippines	PHL
Poland	POL
Portugal	PRT
Qatar	QAT
Romania	ROU
Rwanda	RWA
Saudi Arabia	SAU
Serbia	SRB
Singapore	SGP
Slovak Republic	SVK
Slovenia	SVN
Spain	ESP
Sweden	SWE
Switzerland	CHE
Chinese Taipei	TAP
Thailand	THA
Türkiye	TUR
Ukrainian regions (17 of 27)	QUA
United Arab Emirates	ARE
United Kingdom	GBR
United States	USA
Uruguay	URY
Uzbekistan	UZB
Viet Nam	VNM
Zambia	ZMB

Note: Following OECD data regulations, a visual distinction between countries (in black) and territories (in blue) has been used in all charts to reduce the risk of data misinterpretation.

Rethinking educational spending

A country's GDP accounts only for half of the variation in its educational performance, according to PISA. In other words, while the wealth of a country provides a major advantage for education, it is far from the only determinant of success. As a result, the world is no longer neatly divided between rich and well-educated nations, and poor and badly educated ones.

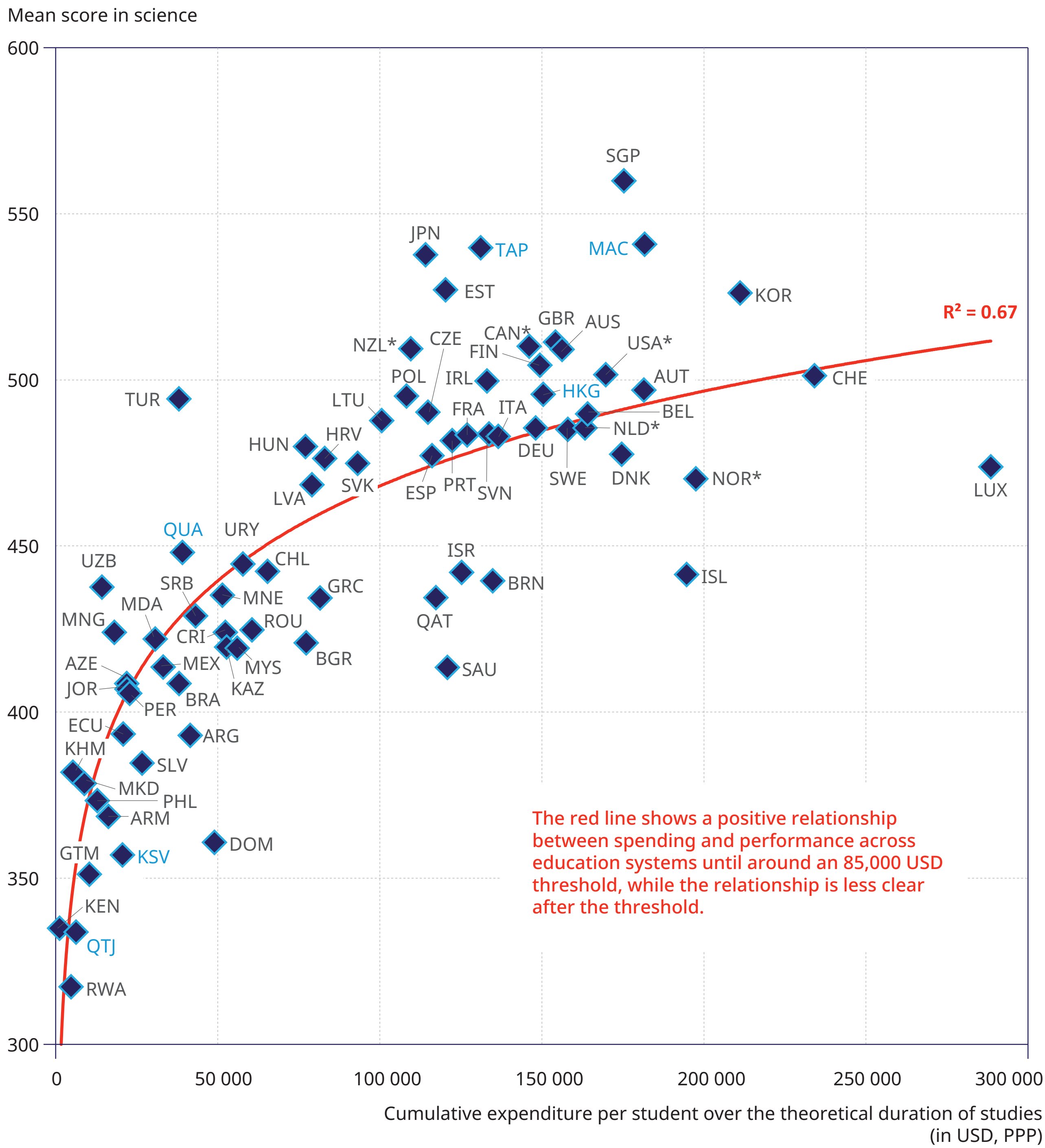
This raises an important question: if money is not the whole story, what role does funding actually play? When education systems underperform, a common response is to call for more investment. But do systems spending more cash consistently have better student outcomes? The evidence suggests only up to a point.

PISA data show that, overall, the more systems spend per student, the better their results in science. But the relationship is only visible until the USD 85,000 mark. After that, and this concerns the majority of OECD countries, the correlation falls apart. For example, at USD 288,521 per student, Luxembourg is by far the biggest spender on education, but it posted lower average science scores than Ireland, France and Italy - all of which invested less than half that amount per student. The data reflect previous PISA findings, such as in 2022.

Importantly, spending levels must be interpreted in context. Differences in language, culture, geography, demographics and education system design can have a significant impact on costs. For example, multilingual systems such as Luxembourg's face additional expenses associated with teaching and administering education in multiple languages. Likewise, systems serving students dispersed across remote or sparsely populated areas, including small islands, often incur higher costs to maintain equitable access to education.

That said, let's not underplay what the data suggest: past a certain level, forking out more cash is not going to automatically ensure better educational outcomes. And cash-pressured education systems are certainly not destined to underperform. In fact, they can match or even exceed the results of better funded systems. Outstanding teachers, a positive learning environment and smart financial decisions can all make a big difference to student learning outcomes. The key policy lesson is clear: spending more on education can have huge benefits, but spending wisely is just as crucial.

Student science performance and spending on education



Notes: Only countries and economies with available data are shown.
Source: OECD, PISA 2025 Database, Tables I.B1.2a.1 and I.B3.2.2.

Should we be more worried about bullying and cyberbullying?

Concerns about classroom distractions are nothing new. Mobile phones, social media and AI are often blamed for pulling students' attention away from their studies. Yet the potentially devastating impact of bullying on learning should not be overlooked in the debate. Across the OECD, 20% of students report being bullied at least a few times per month, according to PISA. The share tops 40% in the Philippines and Zambia and reaches a massive 55% in Kenya and 57% in Rwanda. Many of these children are being bullied on a weekly basis and potentially facing name-calling, threats, violence and a whole lot worse. At the other end of the scale, the proportion is just 9% in Armenia and Kazakhstan.

The relationship with student performance, unsurprisingly, appears to be negative. Students who report being hit or pushed at least a few times a month score 24 points less on the PISA science test, on average, after accounting for socio-economic differences. Students who have nasty rumours spread about them, or are threatened, score around 30 points less. The data do not show causality, but numerous studies have found a strong association between bullying and weaker educational outcomes.

According to PISA, boys and socio-economically disadvantaged students are more likely to be bullied in many countries and economies. And the type of bullying that seems to have the biggest association with poorer student performance? Cyberbullying. While overall levels of cyberbullying are relatively low, 3% of students report that upsetting information about them is posted online without their consent at least a few times per month across the OECD. The relationship with student outcomes is stark: in 82 out of 86 education systems, victims of cyberbullying scored between 13 points and almost 90 points lower in science compared to students who do not experience cyberbullying. There may be a combined effect here - students who report that they are victims of cyberbullying are also very likely to experience other forms of bullying. Across the OECD, nine out of ten students who report being cyberbullied also say they experience other forms of bullying at least once a month, on average. This could mean that the amount of bullying a student experiences matters as much as the form of bullying in affecting their school performance.

Unsurprisingly, students who spend more time on digital devices are more likely to experience cyberbullying. Around 8% of students who report high levels of use - over 60 hours per week for either learning or leisure - said that upsetting information about them is published online at least a few times per month. In contrast, limited or moderate use of digital devices is not strongly associated with experiencing cyberbullying.

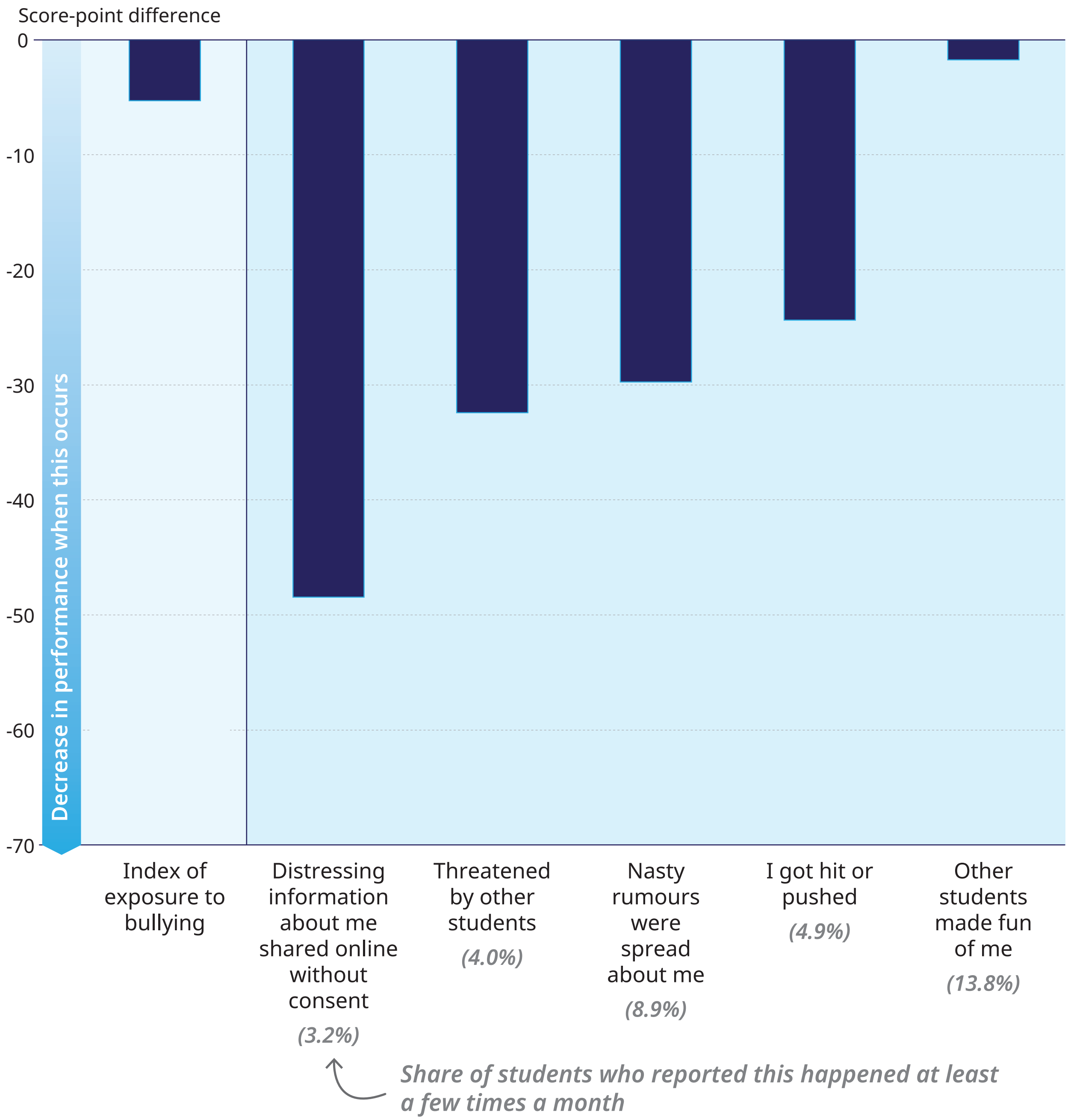
Cyberbullying is often an extension of traditional bullying, with conflict, harassment and power imbalances that begin in school continuing on social media and messaging apps. Digital environments can change the speed and scale at which victims experience harm: a cruel comment or embarrassing photo posted publicly can reach thousands of people within minutes.

Being a victim of bullying can have a profound impact on well-being. Research suggests that bullying and cyberbullying victims are more likely to have symptoms of anxiety and depression, and poorer self-esteem. These are also factors that bullies can prey on: students with lower self-esteem, and who are more anxious to begin with, are also more likely to be targeted by bullies, which can contribute to a self-perpetuating cycle. Attendance often suffers as well. In all education systems in PISA, bullying is associated with a lower sense of belonging at school. The data show that students who report higher levels of teacher support and better disciplinary climates are less exposed to bullying.

How can schools and teachers tackle bullying and cyberbullying? The data suggest that an orderly disciplinary climate and a strong sense of safety are particularly important protective factors. This underscores the role of taking whole-of school approaches to bullying prevention and mitigation. Anti-bullying programmes typically seek to increase awareness, improve the identification and tracking of bullying, and engage teachers, students and parents in supporting those affected and addressing inappropriate behaviour. Although approaches should reflect local needs, a clear and coordinated commitment to tackling bullying is crucial. Without sustained action the consequences can extend far beyond the classroom, affecting students' mental and physical well-being for years to come.

Students' exposure to bullying and science performance

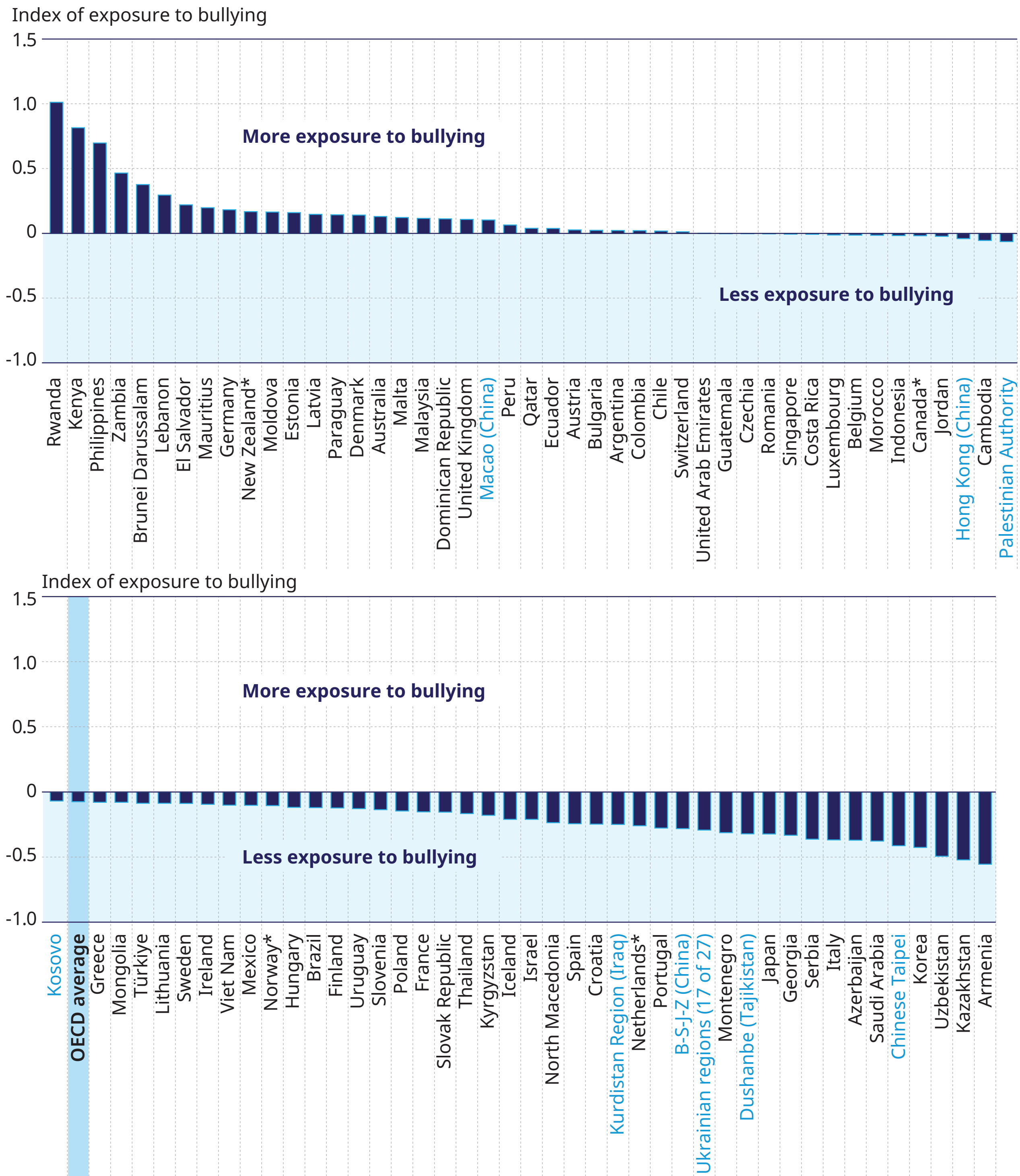
Change in science performance when students report exposure to bullying at least a few times a month compared to those who report less; OECD average



Notes: All values are statistically significant (see Annex A3 of *PISA 2025 Results Volume I*).
Percentage of students who reported the following happened at least a few times a month is shown in parentheses.
Source: OECD, PISA 2025 Database, Table I.B1.4.144.

Students' exposure to bullying

Results based on students' self-reports



Note: Positive values in the index of exposure to bullying indicate that students are more exposed to bullying at school than are students on average across OECD countries.

Countries and economies are ranked in descending order of the index of exposure to bullying.

Source: OECD, PISA 2025 Database, Table I.B1.4.138.

How much do 15-year-olds learn in one year of schooling?

Understanding how PISA scores translate into real world learning is essential for interpreting the performance of education systems. But interpreting PISA results is sometimes not straightforward. The data span multiple countries and cultures, with different curricula, teaching styles and social conditions.

To bring some clarity, OECD analysts have offered a rule of thumb: roughly 20 points on the PISA scale equates to a year of schooling, on average. This benchmark has often been used as a rough guide to interpret differences in the outcomes of participating countries. But averages, as ever, do not tell the whole story.

Research makes clear that the "20-point average" masks substantial variation. In practice, students in some education systems progress much faster than others. For example, researchers previously showed that in earlier PISA mathematics tests, students in countries such as Austria, Scotland (United Kingdom) and Singapore made roughly twice as much progress over a year as students in Brazil and Malaysia. In other words, a year of schooling is not a fixed unit. It does not deliver the same learning everywhere.

The new PISA data highlight these differences in learning gains. For example, in the United Kingdom, one year of schooling creates around a 25-point increase in student PISA scores in science, reading and maths. In Cambodia and the United States, the gain is equivalent to roughly 15 points. Meanwhile, in Serbia the learning gain drops to around 10 points. This implies that a year of schooling stretches far further in some classrooms than others. The test scores of students in the United Kingdom are increasing more than twice as fast as students in Serbia.

This context has important implications. For education systems, it highlights that time alone is not the key driver of learning. Rather, the quality and effectiveness of that time is what matters most.

That said, differences in teaching practices, curriculum design, teacher training and school resources can significantly influence how much students actually learn in a year. An education system where students progress more quickly is not simply "ahead"; it is delivering learning more efficiently. And that is something all countries should strive to do.

Important context

Readers should note that the speed at which children learn can vary considerably at different ages, and the PISA data only measure the pace of learning around the age of 15. As a result, we should not extrapolate the learning gains for a year of schooling over a long period.

Yearly learning gain in PISA scores in 10 countries and economies

	Yearly learning gain (effect of one year of schooling)		
	Science	**Reading**	**Mathematics**
Austria	22.4	24.9	21.9
Brunei Darussalam	19.1	15.8	14.9
Cambodia	16.6	14.8	13.0
Ireland	19.7	16.2	19.0
Netherlands*	21.3	22.3	23.8
Serbia	13.7	11.4	7.4
England (United Kingdom)	24.5	24.0	27.0
Northern Ireland (United Kingdom)	26.0	23.3	25.1
Scotland (United Kingdom)	28.1	33.6	29.1
United States*	13.8	12.0	13.5

Note: Estimates are based on the methodology in Avvisati, F. and P. Givord (2023), "The learning gain over one school year among 15-year-olds: An international comparison based on PISA", *Labour Economics*, Vol. 84, and include controls for gender, socio-economic status and immigrant background (except for the United States, where these control variables are missing for a large portion of the sample in 2025 and no controls were therefore included). See notes under Table 2 in the original study for more details.

Results for Scotland are based only on 2018, 2022 and 2025 data.

Source: PISA 2015, 2018, 2022 and 2025 databases.

Why are students in some countries bored with learning?

Since 2022, the share of students who definitively believe that learning new things is boring has gone up in almost every education system. PISA asked students whether they get bored when learning new things and they were given some response options: agree, disagree or neither. The data show that more than 38% of 15-year-olds have lost interest in learning in the Philippines, Uzbekistan, Thailand and Kosovo. In Rwanda, the share of bored students tops 41%. In OECD countries, the average share is somewhat lower, at 16%, with Japan and Germany dropping below 10%. However, regardless of the location, the trend is generally the same: from East Asia to Europe and the Americas an increasing proportion of students are bored with learning – often up by 10 percentage points or more. In Guatemala and Viet Nam, the rises are 26 and 23 percentage points, respectively.

This is a serious concern. When students are bored, they are less likely to pay attention in class, participate or try their best. For some children, boredom can be a sign that their schoolwork is either too easy, too hard or not engaging enough. Regardless of the cause, over time boredom can lead to poor understanding, lower grades and difficulties in catching up. Persistent boredom can also make kids feel disconnected from school. This disconnection can increase the likelihood of skipping classes, dropping out and have a long-term impact on student attitudes towards learning.

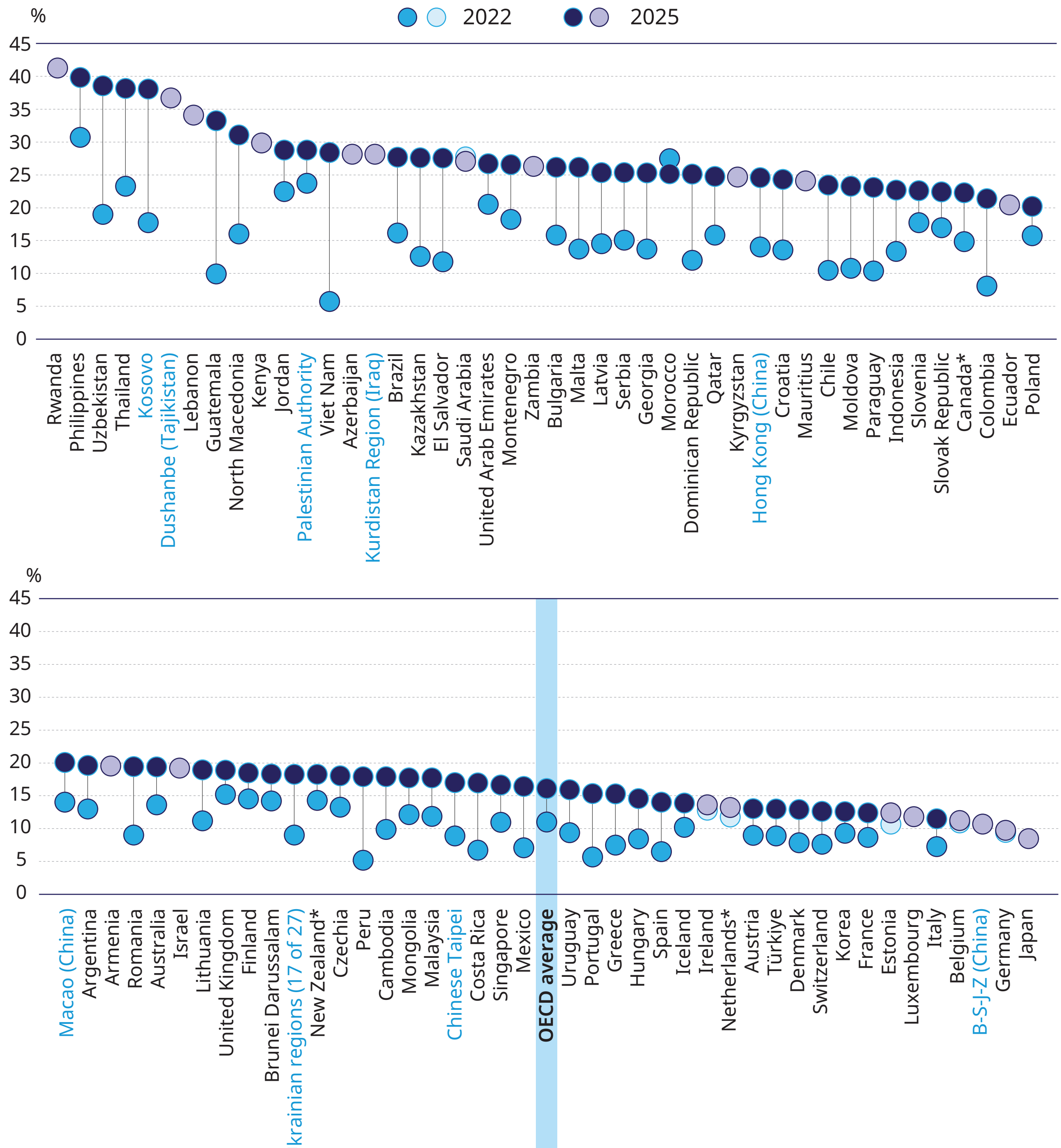
A decline in student curiosity may be contributing to the situation. Between 2022 and 2025, PISA data show a drop in the share of students reporting several aspects of curiosity, including being curious about different things. In fact, in most education systems, students appear to be less curious than three years earlier. The share of students who report they give up easily has also risen in almost all education systems since 2022. And about a third of students say they quit doing homework when it takes too long, on average across OECD countries. The share reaches close to 50% in Rwanda and the Netherlands*, compared to around one in seven students in the Chinese jurisdictions of Beijing, Shanghai, Jiangsu and Zhejiang (China) and Macao (China).

These declines in curiosity, perseverance and commitment can have a direct impact on whether students stay engaged when learning gets difficult. The downward patterns suggest that several dimensions of engagement may be weakening at the same time.

Looking ahead, policymakers must consider how to keep students engaged in education and motivated to learn. This includes creating learning experiences that are active and student-centered, giving learners greater choice and responsibility in their education. When learning is relevant to students' lives and future goals, they are more likely to see the purpose and value of their studies and develop the skills needed for lifelong learning. In an increasingly complex world, the ability and willingness to keep learning may be one of the strongest skills of all.

Student boredom levels

Percentage of students who agree or strongly agree that they find learning new things to be boring, difference between 2022 and 2025



Notes: Statistically significant differences between PISA 2022 and PISA 2025 are shown in a darker tone (see Annex A3 of *PISA 2025 Results Volume I*).

Only countries and economies with available data in PISA 2025 are shown.

Countries and economies are ranked in descending order of the percentage of students agree or strongly agree "I find learning new things to be boring" and 2025.

Source: OECD, PISA 2025 Database, Table I.B1.3.2 and PISA 2022 Compendia.

Some of the graphs/charts in this brochure are adaptations from graphs/charts in *PISA 2025 Volume I*.

Following OECD data regulations, a visual distinction between countries (in black) and territories (in blue) has been used in all charts to reduce the risk of data misinterpretation.

An asterisk (*) by the name of a country or economy means that caution is required when interpreting these estimates because one or more PISA sampling standards were not met. In addition, particular caution is required when interpreting questionnaire results for Albania and the United States (see the Reader's Guide of the *PISA 2025 Results Volume I*).

- Albania
- Canada
- Netherlands
- New Zealand
- Norway
- United States

Note on B-S-J-Z (China)
"B-S-J-Z (China)" refers to the four PISA-participating provinces/municipalities of the People's Republic of China (hereafter "China"): Beijing, Shanghai, Jiangsu and Zhejiang.

Note on Ukrainian regions (17 of 27)
The designation "Ukrainian regions (17 of 27)" refers to the 17 PISA-participating jurisdictions of Ukraine: Cherkasy Oblast, Kirovohrad Oblast, Poltava Oblast, Vinnytsia Oblast, Chernihiv Oblast, Kyiv Oblast, the City of Kyiv, Zhytomyr Oblast, Odesa Oblast, Chernivtsi Oblast, Ivano-Frankivsk Oblast, Khmelnytskyi Oblast, Lviv Oblast, Rivne Oblast, Ternopil Oblast, Volyn Oblast and Zakarpattia Oblast. Due to Russia's large-scale aggression against Ukraine, the following 10 jurisdictions were not covered: Dnipropetrovsk Oblast, Donetsk Oblast, Kharkiv Oblast, Luhansk Oblast, Zaporizhzhia Oblast, Kherson Oblast, Mykolaiv Oblast, the Autonomous Republic of Crimea, the city of Sevastopol and Sumy Oblast.

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

For further details on coverage, see the Reader's Guide of *PISA 2025 Results Volume I*.

Note on the example question
The answer to the question on page 3 is Zone C.

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This brochure was produced with support from Duncan Crawford, Della Shin, Christopher Moore and the PISA analysis team.

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https://doi.org/10.1787/73451bc5-en

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