6 Governing education systems

This chapter explores how education systems balance the autonomy they give schools with the choices they give parents who are choosing a school and the mechanisms they put in place to ensure that certain quality standards are met. The chapter also examines how all of the above are related to student performance and equity of school systems.

For Australia*, Canada*, Denmark*, Hong Kong (China)*, Ireland*, Jamaica*, Latvia*, the Netherlands*, New Zealand*, Panama*, the United Kingdom* and the United States*, caution is advised when interpreting estimates because one or more PISA sampling standards were not met (see Reader's Guide, Annexes A2 and A4).

Over the past few decades, education systems have grown in complexity (Burns and Köster, 2016[1]). Many decisions that were previously made by education authorities are today shared among multiple actors, including principals, teachers, labour unions, local communities, parents and students themselves.

Partly fuelled by a growing demand for school choice, the private sector is also playing an increasingly important role in education (OECD, 2020[2]), even if the state remains the guarantor of compulsory education. In this regard, large corporations and multinationals are ever more present in the world of education, and not only as providers of online and foreign-language learning (Engwall, 2008[3]; Facts and Factors, 2022[4]; Healey, 2023[5]).

The decentralisation of school governance and the greater choice of school given to parents have usually been accompanied by the implementation of quality-assurance mechanisms. These measures are related to how student progress is assessed, how teacher practices are monitored, how school leaders are appraised, and how schools are held accountable for the quality of the education they provide. These quality-assurance mechanisms are common to responsive education systems (OECD, 2013[6]).

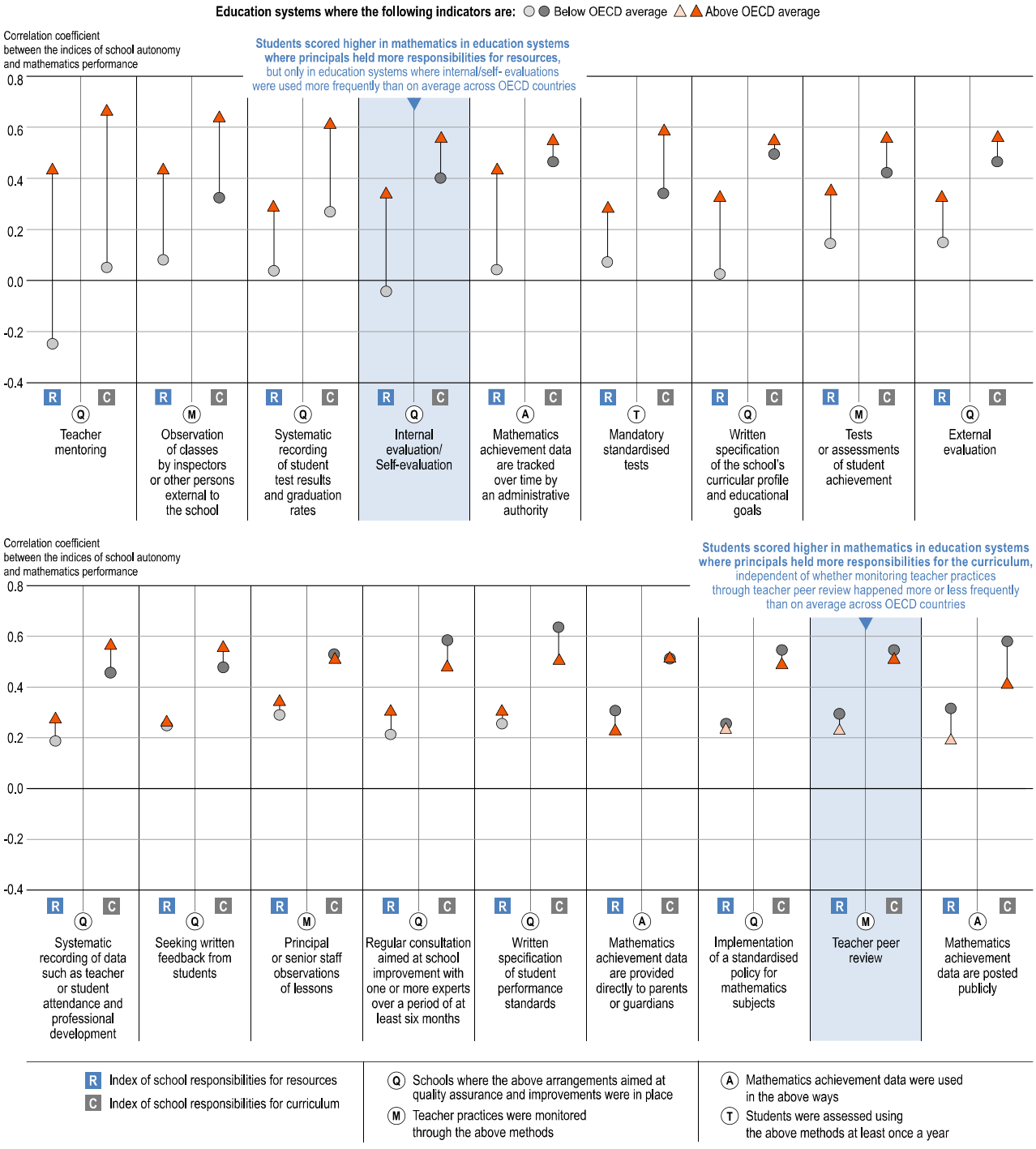
What the data tell us

- The top three quality-assurance mechanisms that appear to ensure that greater school autonomy is associated with better academic performance in mathematics are: teacher mentoring; monitoring teacher practice by having inspectors observe classes; and systematic recording of students' test results and graduation rates.
- Strong-performing school systems entrust principals and teachers with more responsibility.
- Students in disadvantaged public schools outperformed their peers in disadvantaged private schools; but this performance gap narrowed as schools moved up the socio-economic ladder.
- School fees appear to discourage some disadvantaged families from enrolling their children: a ten percentage-point increase in the share of school funding that comes from fees paid by parents was associated with a 3.5 percentage-point decrease in the share of students from disadvantaged homes.
- Principals of private schools were more likely than their counterparts in public schools to report that their school is prepared for remote learning – even after all the efforts public schools made to improve digital learning during the COVID-19 pandemic.

Understanding the conditions under which schools' increasing autonomy works in the interests of students is critical for education policy making. In this regard, PISA data show that the greater the autonomy granted to schools in an education system, the higher the average mathematics performance; but this was more the case when education authorities and schools had certain quality-assurance mechanisms in place (Figure II.6.1). More specifically, the quality-assurance mechanisms that appeared to ensure that greater school autonomy was associated with better academic performance in mathematics across PISA-participating countries/economies were (in descending order of importance):[1] teacher mentoring arrangements; the monitoring of teacher practices through the observation of classes by inspectors; schools' systematic recording of students' test results and graduation rates; internal or self-evaluations; the tracking of achievement data by an administrative authority; and the use of mandatory standardised tests at least once a year. Other quality-assurance arrangements, such as posting achievement data publicly, implementing a standardised policy for mathematics subjects, and monitoring teacher practices through teacher peer review, seemed to matter less.

Figure II.6.1. Quality-assurance mechanisms, school autonomy and mathematics performance

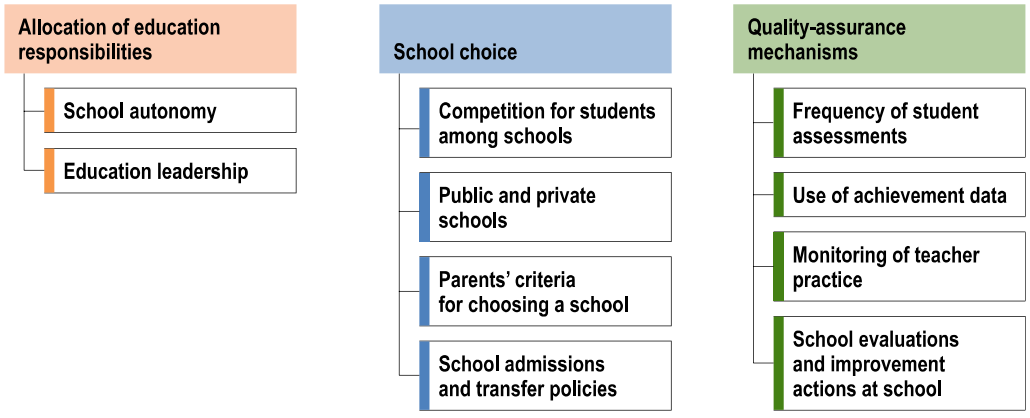
Results based on System-level analyses



1. Index of school responsibilities for resources. 2. Index of school responsibilities for curriculum. Q: Schools where the above arrangements aimed at quality assurance and improvements were in place. M: Teacher practices were monitored through the above methods. A: Mathematics achievement data were used in the above ways. T: Students were assessed using the above methods at least once a year. Notes: Results based on correlation analyses of all PISA-participating countries/economies. Statistically significant correlation coefficients are shown in a darker tone (see Annex A3). *The variables are ranked in descending order of the differences in the correlation coefficients between the education systems with values "above OECD average" and "below OECD average" in the quality-assurance indicators (indices of school responsibilities for resources and curriculum combined).* Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

This chapter begins by describing the distribution of responsibilities within education systems, focusing on the autonomy granted to schools, the degree to which teachers participate in school governance, and the role played by school leaders (Figure II.6.2). The chapter then considers four aspects of school choice: school competition; public and private schools; parents' criteria for choosing a school; and schools' admissions and transfer policies. The third section of the chapter examines the quality-assurance mechanisms put in place by education systems, including the assessment of student performance, the monitoring of teacher practices, and school evaluations and improvement actions.

Figure II.6.2. Governance of education systems as covered in PISA 2022



Allocation of education responsibilities

One of the most important decisions education authorities have to make is how responsibilities for education are distributed among different levels of government, and among education authorities, school leaders and educators. Over the past few decades, many education systems have given local authorities and schools greater responsibility, most notably in the areas of resource allocation, curriculum planning and student assessment (Burns and Köster, 2016[1]). Policy makers and experts have highlighted the benefits associated with granting schools greater autonomy, which almost always entails giving principals greater authority to make decisions and, in some cases, getting teachers involved in school management. Indicators in this section are mostly related to the performance (school autonomy) and fairness (educational leadership) components of resilience (Table II.B1.6.71).

PISA 2022 asked school principals to report whether the principal, the teachers, the school's governing board, the local/municipal education authority, the regional/state education authority, the national/federal education authority have the main responsibility for allocating resources to schools (appointing and dismissing teachers; determining teachers' starting salaries and salary raises; and formulating school budgets and allocating them within the school), for the school curriculum (choosing learning materials; deciding which courses are offered; and determining the content of those courses), and for establishing student assessment, disciplinary and school admissions policies.

.

Table II.6.1 presents a summary of "who is responsible for what" in managing schools. On average across OECD countries in 2022, hiring and firing responsibilities lay mainly with school principals, while decisions on salaries were made mostly by national/regional authorities. The budgeting process was led mainly by the school principal, with assistance from the school governing board and education authorities. Responsibilities for curriculum and assessment were largely held by teachers or members of the school management team, but national/regional authorities also played a big role in determining how students were assessed, which courses were offered and what

content was covered in these courses. Principals played the central role in the school's admissions process, and disciplinary policies were established by teachers, with a secondary role played by principals and the school board.

The distribution of education responsibilities differed considerably from this general picture in many education systems (Table II.B1.6.1). Appointing and dismissing teachers is usually the task of school principals, but in some school systems, such as Argentina, Brazil, France, Japan, Morocco, Spain and Viet Nam, these tasks were mainly the responsibility of regional authorities, and in others, such as Costa Rica, Greece, Malaysia, Panama*, Paraguay, Saudi Arabia, Singapore, Türkiye and Uruguay, such responsibility lay largely with national authorities. Establishing teacher salaries tends to be managed by national authorities. Nonetheless, in several school systems, including Bulgaria, the Czech Republic, the Netherlands* and Sweden, this responsibility lay mainly with principals. Formulating the school budget is typically the remit of principals, but in some education systems, such as Albania, Canada*, Costa Rica, Georgia and Montenegro, this responsibility was held mostly by the school governing board, while in Baku (Azerbaijan), the Dominican Republic, El Salvador, Panama* and Uruguay, this task was centralised at the national level.

The school governing board was the key actor in determining student disciplinary policies in several school systems, such as Colombia, France, Ireland*, Italy, Morocco, Romania and Ukrainian regions (18 of 27), while this is a task usually performed by principals and teachers (Table II.B1.6.1). In the majority of school systems, principals played the central role in the school's admissions process. However, in Ireland*, this responsibility lay mostly with the school governing board; in Malaysia, with local authorities; in France, Spain and Viet Nam, with regional authorities; and in Chile, Croatia, Montenegro and Romania, with the national authority. Choosing which learning materials to use is generally the remit of teachers, but in several countries and economies, such as Baku (Azerbaijan), Greece, Jordan, Morocco, the Palestinian Authority, Saudi Arabia and Uzbekistan, the national authority took responsibility in this area. Determining course content is a task typically shared between teachers and national authorities, but in Estonia, Iceland, Macao (China), the Netherlands*, New Zealand*, Thailand and the United Kingdom*, the responsibility for the curriculum lay almost exclusively with teachers, probably a sign that these systems are placing greater trust in them.

Table II.6.1. Summary of how responsibilities for school governance are allocated

Based on principals' reports; OECD average

Responsibility		Held mainly by[1]	Shared with[2]
Human resources	Appointing or hiring teachers	Principal	National/Regional authorities[3]
	Dismissing or suspending teachers from employment	Principal	National/Regional authorities
	Establishing teachers' starting salaries, including setting pay scales	National/Regional authorities	Principal
	Determining teachers' salary increases	National/Regional authorities	Principal
Financial resources	Formulating the school budget	Principal	National/Regional authorities, local authority and school board
	Deciding on budget allocations	Principal	School board and local authority
Curriculum and assessment	Choosing which learning materials are used	Teachers	
	Determining course content, including national/regional curricula	National/Regional authorities and teachers	
	Deciding which courses are offered	National/Regional authorities and teachers	Principal
	Establishing student assessment policies, including national/regional assessments	National/Regional authorities and teachers	Principal
Establishing student disciplinary policies and procedures		Teachers	Principal and school board
Approving students for admission to the school		Principal	

1. More than 30% of students attended a school whose principal reported that a given actor had the main responsibility. 2. Between 15% and 30% of students attended a school whose principal reported that a given actor had the main responsibility. 3. For the purposes of this table, national and regional authorities are merged into the same category.
Note: "Teachers" include members of the school management team.
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Public schools in some education systems enjoy greater autonomy than the typical private school in OECD countries

School systems differ in the degree of autonomy granted to schools and in the domains over which this autonomy is awarded. Since the early 1980s, many school systems have given individual schools more discretion to make decisions about curricula and resource allocation (Cheng, Ko and Lee, 2016[7]; Mentini and Levatino, 2023[8]; Wang, 2014[9]). The underlying premise is that individual schools are best placed to promote innovation, allocate resources more effectively, and respond to local needs. They have highly qualified teachers and effective leaders who are good judges of their students' learning needs, and who can (re)design and implement rigorous curricula, internal evaluations and appraisal mechanisms without feeling overburdened (Caldwell and Spinks Jim M., 2013[10]; Department for Education of the United Kingdom, 2010[11]).

However, when given greater responsibilities, some school leaders may lack the time, motivation or skills to innovate (Almeida et al., 2020[12]; Hanushek, Link and Woessmann, 2013[13]; Lubienski, 2003[14]). Some may even use greater authority over school matters for their own selfish interests. For these reasons, education authorities, as the ultimate guarantor of the quality of the school system, have typically coupled such decentralisation efforts with accountability mechanisms (OECD, 2013[15]; Verger, Parcerisa and Fontdevila, 2019[16]). But these, in turn, have sometimes created new challenges, such as limiting, in practice, the autonomy granted to schools, constraining the professionalism of the school staff, and increasing teachers' feeling of being constantly scrutinised (Earley, 2019[17]; Skerritt, 2020[18]).

The indices of school responsibility for resources and for curriculum measure the extent to which members of the school staff (principal, teachers or the school governing board) assumed governance responsibilities in their schools. They were calculated as a ratio between the responsibilities granted to the school staff and the responsibilities retained by education authorities. The index of responsibility for resources combines the six tasks related to human and financial resources, and the index of responsibility for curriculum combines the four tasks related to the curriculum and assessment. Higher values in the indices imply that the school staff assumed more responsibilities than education authorities.

According to the index of school responsibility for resources, the education systems where schools enjoyed the highest degree of autonomy were Bulgaria, the Czech Republic, Guatemala, Latvia*, Macao (China), the Netherlands*, Thailand, the United Arab Emirates, the United Kingdom* and the United States* (Table II.B1.6.1). At the other end of the spectrum, the autonomy over resources that management granted to school principals, teachers or the governing board was limited in Austria, Baku (Azerbaijan), France, Germany, Greece and Kosovo, at least in comparison with other education systems.

The analysis of the index of school responsibility for curriculum provides some interesting contrasts. For instance, Estonia and Japan stood out as granting the greatest levels of curricular autonomy to schools among all PISA-participating countries/economies but displayed moderate levels of school autonomy over resource management. Other education systems granting schools considerably more autonomy over curricular matters than over resource management included Colombia, Finland, Iceland, Ireland*, Italy, Korea and New Zealand*. By contrast, countries/economies where the education authorities granted more autonomy over resource management than over the curriculum included Bulgaria, Macao (China), the Netherlands*, Sweden, the United Arab Emirates and the United States*.

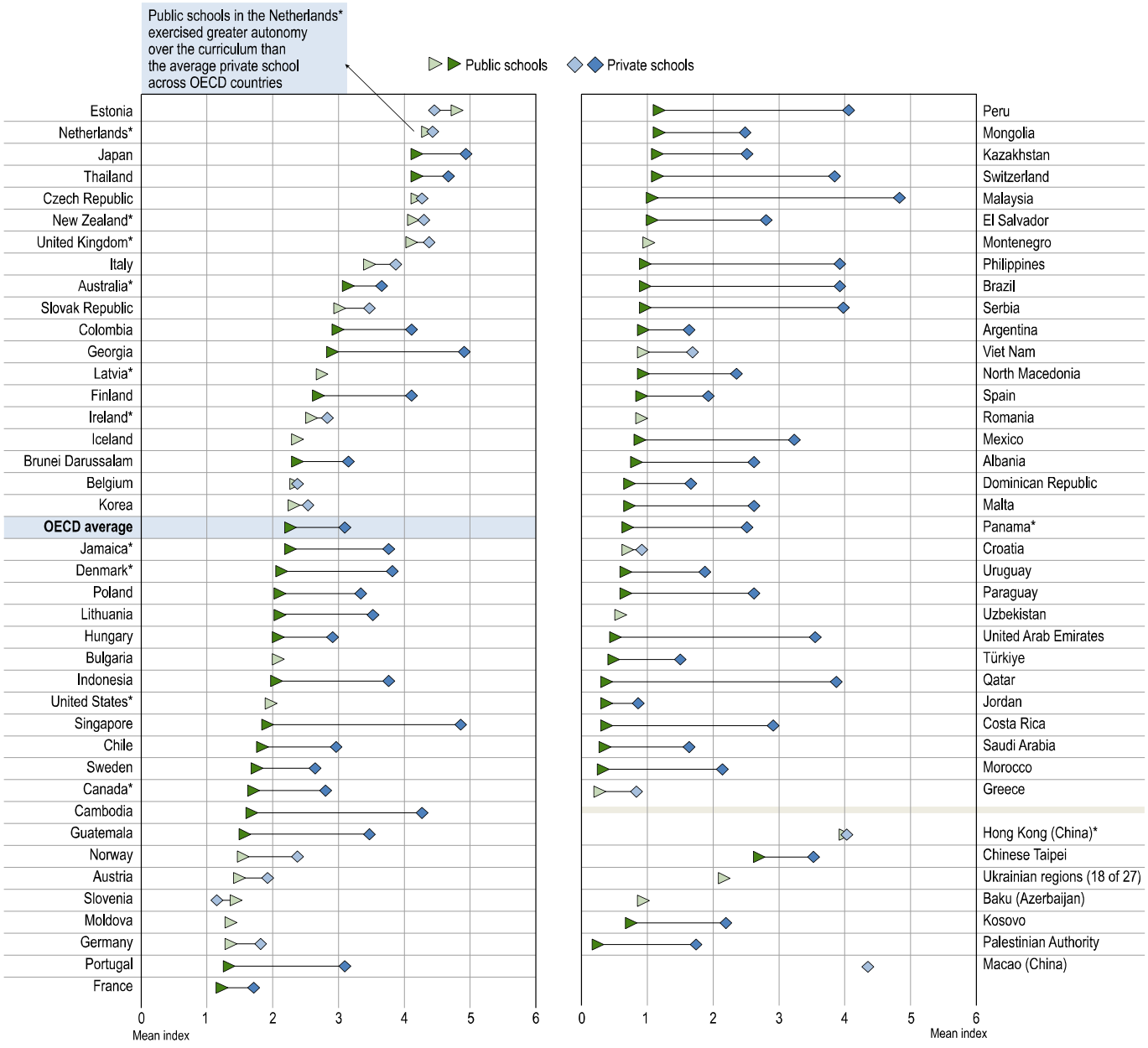
On average across OECD countries, socio-economically advantaged schools enjoyed greater autonomy than disadvantaged schools over resources and the curriculum; and likewise, urban schools were granted more autonomy than rural schools, but only over resource management (Tables II.B1.6.2 and II.B1.6.3). Not surprisingly, in a great majority of education systems, private schools exercised greater autonomy than public schools (Figure II.6.3 and Figure II.6.4). The largest differences between these two types of schools were observed in Japan, Malaysia and Türkiye, in the case of resource management, and in Malaysia, Qatar, Serbia and the United Arab Emirates, in the case of curriculum. Some of the smallest private-public gaps in school autonomy were observed in Belgium[2], Estonia, Ireland*, Korea and the Netherlands*. In some of these cases, most notably in the Netherlands*, the absence of differences in autonomy between private and public schools was due to the high levels of autonomy enjoyed by

public schools, while in others, especially Korea, moderate differences in autonomy between the two types of schools were related to the limited autonomy granted to private schools.

On average across OECD countries, students in schools whose principal reported that more responsibilities for the curriculum or resource management lie with the school scored slightly lower in mathematics, after accounting for socio-economic factors (Table II.B1.6.4). These results are consistent with a comprehensive review by Jensen, Weidmann and Farmer (2013[19]) who reported that increasing school autonomy may improve academic achievement only to some extent, and only in some countries. After all, several studies found that to reap the full benefits of school autonomy, education systems need to have effective accountability systems, as well as highly qualified teachers and strong school leaders to design and implement rigorous internal evaluations and curricula (Hanushek, Link and Woessmann, 2013[13]; OECD, 2011[20]). In any case, variations in school autonomy within education systems are expected to be modest in size and are largely explained by the public or private nature of schools. To fully understand the relationship between school autonomy and student outcomes, it is helpful to examine cross-country variations.

Figure II.6.3. Index of school responsibility for curriculum, by school type

Based on principals' reports



Notes: Statistically significant differences between public and private schools are shown in a darker tone (see Annex A3).
Questions about the type of school were not asked in the Flemish-speaking Community of Belgium. Data for Belgium represent only the French-speaking and German-speaking Communities.
Countries and economies are ranked in descending order of the index of school responsibility for curriculum for public schools.
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Figure II.6.4. Index of school responsibility for resources, by school type

Based on principals' reports

Notes: Statistically significant differences between public and private schools are shown in a darker tone (see Annex A3).

Questions about the type of school were not asked in the Flemish-speaking Community of Belgium. Data for Belgium represent only the French-speaking and German-speaking Communities.

Countries and economies are ranked in descending order of the index of school responsibility for resources for public schools.

Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Strong-performing school systems entrust principals and teachers with more responsibility

This section examines how education responsibilities were allocated in four groups of 20 education systems that were organised according to their average performance in mathematics. The analysis shows that the way education responsibilities were distributed varied greatly across school systems, and that part of these differences were associated with the academic performance of 15-year-olds. As Figure II.6.5 shows, education responsibilities were

allocated very differently in low- and high-performing education systems. In the education systems in the bottom quarter of mathematics performance, the responsibilities for human resources (i.e. hiring, firing, salaries) were largely centralised at the national level, whereas in the 20 education systems in the top quarter of mathematics performance, principals had been granted the main responsibility over human resources (Figure II.6.5a). A somewhat similar picture emerges from the analysis of budgeting responsibilities. In high-performing school systems, the budget is managed almost exclusively by principals, whereas in low-performing school systems, they are managed to a similar extent by principals, the national authorities and the school governing board (Figure II.6.5b).

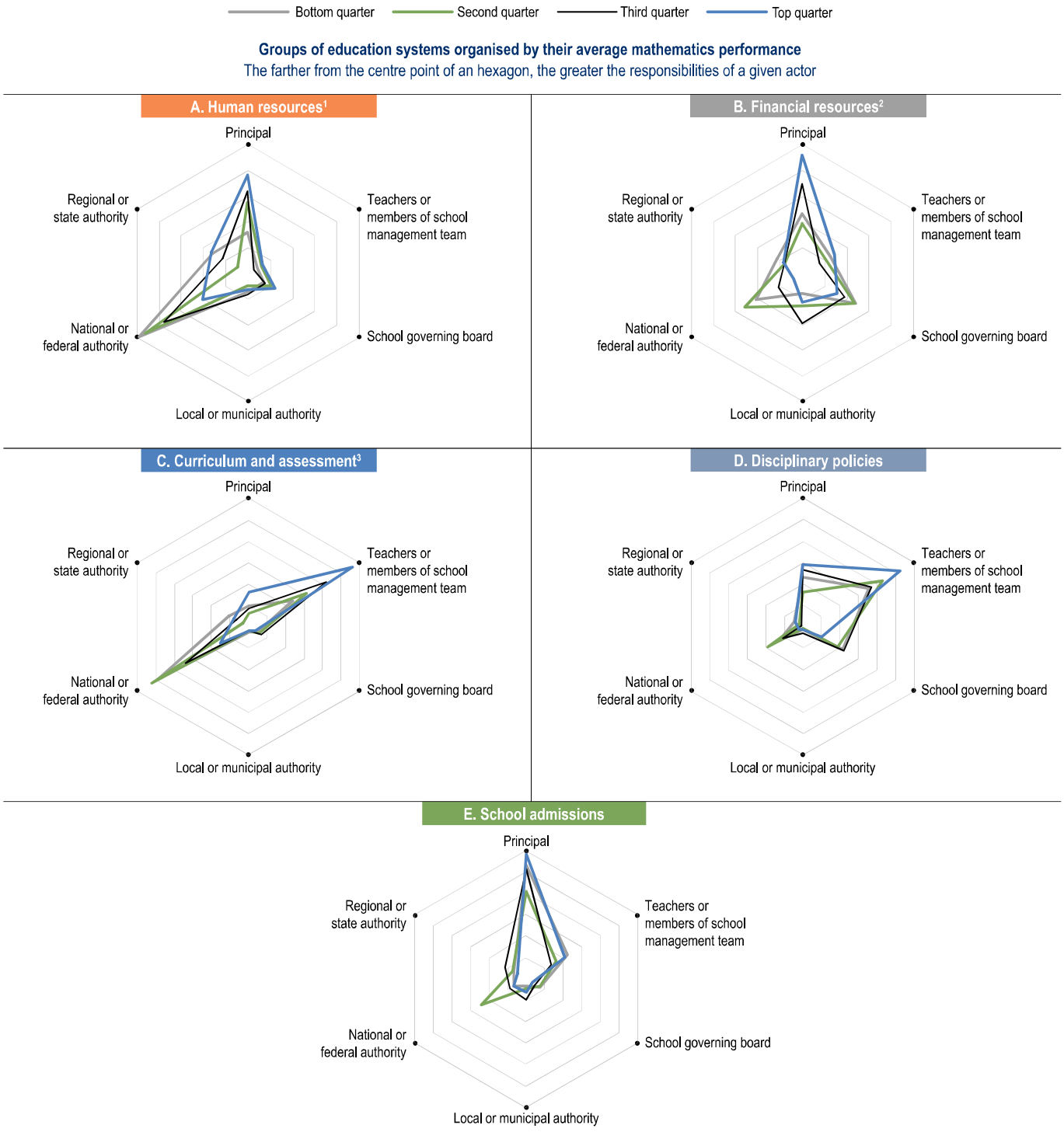
More striking are the results for curriculum and assessment (Figure II.6.5c). In education systems in the bottom quarter of mathematics performance, national authorities played the central role in these areas, with teachers playing a minor role. By contrast, in strong-performing school systems, the responsibilities over curriculum and assessment were mostly assumed by teachers or members of the school management team, and in a few cases by the principal or national authorities.

Low- and high-performing systems looked more alike when examining who had the main responsibility for disciplinary and school admissions policies (Figure II.6.5d and Figure II.6.5e). In both low- and high-performing school systems, the school principal usually led the process of admitting students to the school, with other school staff playing a minor role; teachers played the main role when tackling disciplinary problems.

Overall, these results indicate that strong-performing school systems granted more responsibility to school principals and teachers. Analyses at the system level show that students scored higher in mathematics in the education systems that granted more autonomy to schools over the curriculum, even after accounting for per capita GDP (Table II.B1.6.71). The cross-sectional nature of PISA data cannot determine whether granting greater responsibilities for resources to principals, and for curriculum and assessment to teachers, were the reasons students excelled academically in these strong-performing school systems; but the results suggest that, in these countries/economies, education authorities have learned to trust their principals and teachers. As for low-performing education systems, the literature suggests that granting greater autonomy to schools may not necessarily produce the desired results, either because the schools lack effective quality-assurance and accountability mechanisms, or because the school staff is not qualified enough to take full advantage of the greater responsibilities (Hanushek, Link and Woessmann, 2013[13]).

Figure II.6.5. Allocation of education responsibilities, by average performance in mathematics

System-level analysis



1. Average of the following items: "Appointing or hiring teachers"; "Dismissing or suspending teachers from employment"; "Establishing teachers' starting salaries, including setting pay scales"; and "Determining teachers' salary increases".
2. Average of the following items: "Formulating the school budget"; and "Deciding on budget allocations".
3. Average of the following items: "Establishing student assessment policies, including national/regional assessments"; "Choosing which learning materials are used"; "Determining course content, including national/regional curricula"; and "Deciding which courses are offered".

Note: Each quarter is composed of 20 education systems.

Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Quality education leadership builds supportive school environments

School leaders not only manage administrative and organisational tasks, such as budgeting, staffing and planning the maintenance of school buildings, they also play a key role by actively shaping the school culture and the learning environment (Barber, Whelan and Clark, 2010[21]; Bloom et al., 2015[22]; Leithwood, 2021[23]; Pont, Nusche and Moorman, 2008[24]). The most effective schools are led by principals who define, communicate and build consensus around the school's education goals, ensure that the curriculum and instructional practices are aligned with these goals, and foster healthy social relationships within the school community (Branch, Rivkin and Hanushek, 2013[25]; Goddard et al., 2019[26]; Grissom, Loeb and Master, 2013[27]). Some of the educational practices in which principals usually engage include setting and communicating learning standards; collaborating with teachers on curriculum, instruction and assessment; planning the professional development of school staff; fostering a positive school climate; and identifying ways to involve parents and the larger community in school life. The extent to which principals emphasise different activities and leadership styles largely depend on the school context (Brauckmann, Pashiardis and Ärlestig, 2023[28]; Hardwick-Franco, 2019[29]). The adaptive nature of school leadership has never been more evident than during the COVID-19 pandemic when most principals were obliged to engage in crisis-management activities (Adams et al., 2021[30]; Chatzipanagiotou and Katsarou, 2023[31]; Harris and Jones, 2020[32]).

The PISA 2022 school questionnaire asked school principals to report how frequently ("never or almost never", "about once or twice a year", "about once or twice a month", "about once or twice a week", or "every day or almost every day") they, or someone else in the school management team, engaged in seven actions related to school management in the previous academic year. These actions were combined to create the index of education leadership. An index of instructional leadership was also created based only on the five items referring to instructional leadership. Higher values in both indices indicate that school principals engaged in these activities more frequently. Some of the answers given by school principals may be coloured by social desirability, particularly those referring to leadership styles that are positively viewed by others, so over-reporting should be considered when interpreting the findings.

Almost all school principals reported doing all of the leadership activities at least once during the previous year (Table II.6.2 and Table II.B1.6.5 from Annex B1). On average across OECD countries, more than nine out of ten students were enrolled in schools whose principal reported that they, or someone else in the school management team, engaged in each of the seven management activities at least once a year. The action in which more principals engaged, at least once a month, was collaborating with teachers to solve classroom discipline problems (85%), whereas the activity in which fewer principals engaged was working on a professional development plan for the school (35%). Between 58% and 67% of principals reported that, at least once a month, they: provided feedback to teachers based on classroom observations (58%); ensured that teachers take responsibility for improving their teaching skills (61%); provided parents with information on the school and student performance (65%); supported teacher co-operation to develop new teaching practices (67%); or ensured that teachers feel responsible for their students' learning outcomes (67%).

According to the index of education leadership, school principals in Brazil, the Philippines, Qatar, the United Arab Emirates and Uzbekistan were the most likely to report participating in education leadership actions, while those in Austria, France, the Slovak Republic, Slovenia and Switzerland were the least likely to report so (Table II.B1.6.5). Overall, OECD countries showed lower values in the index of education leadership than partner countries/economies.

In general, school differences in education leadership did not follow clear patterns (Table II.B1.6.6). On average across OECD countries, principals of private and public schools reported similar levels of education leadership, and the rural-urban or socio-economic gaps, while statistically significant, were small.

In most PISA-participating countries/economies, the measures of education leadership examined were only weakly associated with students' performance in mathematics, after accounting for the socio-economic profile of students and schools (Table II.B1.6.8). The only item that showed a relatively strong, and negative, association with mathematics performance was "collaborating with teachers to solve classroom discipline problems", which can probably be explained by the fact that school leaders may (need to) show more active leadership when the

disciplinary climate deteriorates (OECD, 2016[33]). In Israel, for instance, students who were enrolled in a school whose principal performed this action at least once a month scored 43 points lower than students who attended a school whose principal engaged in this type of action less frequently.

Education systems that scored higher in the indices of educational and instructional leadership scored lower in mathematics, on average (not when OECD countries were examined separately), but were more socio-economically fair, after accounting for per capita GDP (Table II.B1.6.71).

School choice

Students are often assigned to their neighbourhood school. However, in recent decades, reforms in many countries have tended to give greater choice to parents and students, enabling them to choose the schools that meet the child's education needs or family preferences. As a result, competition for enrolment among schools has increased (Heyneman, 2009[34]; Musset, 2012[35]).

There are different types of school-choice policies with different financial implications for schools. In some systems, schools receive public funding based on the number of enrolled students; in others, families are given vouchers or scholarships to use on the "approved" school of their choice. School-choice systems also differ in the role played by the private sector. In some education systems, school choice is a way of offering families alternatives to public schooling; in others, school-choice policies give families a greater choice within the public education system, i.e. instead of being assigned to the school in their catchment area.

Advocates of school choice argue that competition among schools creates incentives for institutions to organise programmes and instruction in ways that better meet diverse student requirements and interests (Card, Dooley and Payne, 2010[36]; Wößmann, 2007[37]; Wößmann et al., 2007[38]). Some studies find moderate positive effects of school choice on student outcomes (Epple, Romano and Urquiola, 2017[39]; Jabbar et al., 2022[40]). Advocates also posit that school choice widens access to private schools for low-income families.

However, some studies have questioned the validity of the underlying assumptions about school choice, such as equal access to information about schools (Ainsworth et al., 2021[41]; Jensen, Weidmann and Farmer, 2013[19]). Findings in this report show that, among families searching for high-quality schools, socio-economically disadvantaged families ranked financial considerations higher in importance than advantaged families did (Table II.B1.6.25), often because of the time and money required to commute to a distant school, and the existence of "hidden" fees (Bierbaum, Karner and Barajas, 2021[42]; Boeskens, 2016[43]; Fast, 2020[44]; Palm and Farber, 2020[45]). Adopting school-choice practices may thus lead to greater socio-economic segregation among schools (Burgess and Briggs, 2010[46]; Rowe and Lubienski, 2017[47]; Valenzuela, Bellei and Ríos, 2014[48]), and to greater differences in teacher quality and student achievement across schools (Behrman et al., 2016[49]). Analyses in this report, however, show that education systems with more students in private schools and greater competition among schools enjoyed similar levels of socio-economic fairness than education systems with fewer private school students and less school competition (Table II.B1.6.71). Only the extent to which the school admissions process is selective was negatively associated with socio-economic fairness in mathematics.

Table II.6.2. Education leadership actions

Based on principals' reports

A Collaborating with teachers to solve classroom discipline problems
B Providing feedback to teachers based on observations of instruction in the classroom
C Taking actions to support co-operation among teachers to develop new teaching practices
D Taking actions to ensure that teachers take responsibility for improving their teaching skills
E Taking actions to ensure that teachers feel responsible for their students ' learning outcomes
F Providing parents or guardians with information on the school and student performance
G Working on a professional development plan for this school

Less than half of students | From 50% to 75% of students | From 75% to 90% of students | More than 90% of students

	Percentage of students in schools whose principals reported that they, or someone else in the management team, engaged in the following actions:						
	A	B	C	D	E	F	G
	At least once a month						At least once a year
Philippines	91	89	93	94	99	93	100
Uzbekistan	97	98	91	89	97	87	100
United Arab Emirates	86	94	96	93	95	87	100
Brazil	95	91	94	91	92	88	94
United States*	93	92	91	90	95	84	100
Qatar	86	90	93	95	94	79	100
Kazakhstan	89	99	90	82	90	85	100
Panama*	98	81	87	84	93	88	97
Jordan	87	94	90	90	89	79	97
Albania	82	94	86	87	83	87	99
Dominican Republic	94	91	94	87	84	69	97
Australia*	93	74	90	91	93	74	100
Bulgaria	92	83	75	85	88	89	99
New Zealand*	94	70	89	87	92	78	100
Latvia*	90	88	91	75	75	89	100
Montenegro	97	80	76	80	84	86	96
Chile	92	73	89	83	83	78	98
Cambodia	88	87	77	80	88	85	89
Guatemala	75	79	84	85	88	85	93
Viet Nam	63	88	87	88	90	73	99
Canada*	95	72	82	74	85	84	97
Romania	89	83	77	71	78	83	99
Spain	95	86	82	70	72	80	95
Saudi Arabia	78	76	82	77	79	87	99
Peru	83	84	86	84	81	70	85
United Kingdom*	89	70	88	87	89	49	100
Singapore	93	71	90	84	82	51	100
Thailand	92	85	84	83	90	35	100
Serbia	78	84	78	68	79	78	99
Georgia	80	86	75	56	84	85	98
Moldova	89	94	88	66	75	51	99
Türkiye	89	59	71	78	88	80	97
Mongolia	75	89	88	86	54	64	98
Israel	95	58	79	76	88	57	99
Jamaica*	97	85	82	68	84	36	100
North Macedonia	79	74	64	66	78	90	100
Uruguay	90	44	93	85	80	77	81
Colombia	88	60	79	76	75	82	90
El Salvador	86	61	78	78	80	72	93
Costa Rica	94	78	79	74	75	62	76
Argentina	85	68	76	74	74	75	86

	Percentage of students in schools whose principals reported that they, or someone else in the management team, engaged in the following actions:						
	A	B	C	D	E	F	G
	At least once a month						At least once a year
Mexico	82	59	77	71	75	78	92
Paraguay	77	65	81	76	74	63	93
Brunei Darussalam	83	64	76	80	87	36	99
Netherlands*	71	79	72	61	71	70	98
Korea	91	64	73	70	68	54	100
Malaysia	85	59	83	83	87	20	99
Czech Republic	77	76	55	60	68	81	98
Lithuania	87	67	56	55	69	65	97
OECD average	85	58	67	61	67	65	94
Norway	87	47	78	63	72	45	100
Malta	91	62	66	62	62	53	94
Indonesia	76	69	69	70	70	36	98
Portugal	87	13	81	75	74	70	89
Italy	82	49	67	54	56	80	98
Iceland	95	31	70	46	67	72	99
Croatia	71	68	61	61	66	55	95
Ireland*	82	23	73	69	74	58	97
Estonia	83	58	47	56	67	67	97
Greece	92	43	67	57	73	69	70
Sweden	84	51	68	56	59	49	97
Hungary	63	72	55	44	62	69	99
Slovak Republic	83	63	42	37	40	82	99
Belgium	91	47	49	47	54	60	94
Poland	61	72	36	45	56	66	100
Germany	88	59	47	41	46	50	93
Morocco	81	20	39	47	57	63	95
Slovenia	66	52	44	40	47	48	98
Denmark*	75	56	56	42	45	24	96
Austria	68	39	43	42	50	55	94
Finland	86	31	67	45	38	52	69
Switzerland	76	46	36	26	32	35	88
France	84	26	36	28	31	50	81
Baku (Azerbaijan)	97	96	91	89	81	87	97
Palestinian Authority	93	88	89	81	84	69	98
Macao (China)	82	85	71	71	75	70	100
Kosovo	91	63	67	64	74	88	99
Ukrainian regions (18 of 27)	60	80	48	65	79	87	100
Chinese Taipei	68	70	68	65	70	69	100
Hong Kong (China)*	54	52	49	41	44	37	98

Countries and economies are ranked in descending order of the average of the seven actions.
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Competition for students is limited in rural areas

School choice usually entails greater competition across schools, if only because school funding usually depends on the number of students enrolled. However, even when parents are given the opportunity to choose a school freely, several factors may limit school competition in practice. In rural and isolated areas, for instance, parents often have only one school to choose from, at least without enduring long commutes. In socio-economically disadvantaged neighbourhoods, the choice of school may also be constrained as private schools tend to have fewer incentives to operate in these areas. In education systems where the funding of schools is guaranteed regardless of the number of students enrolled, which is often the case among public and government-dependent private schools, there may be little to no competition among schools.

According to principals, competition for students between schools is common across the countries/economies that participated in PISA 2022 (Table II.B1.6.9). On average across OECD countries, about four in five students were enrolled in a school whose principal reported that there was at least one other school competing for their students in the same area. Competition between schools was most common in densely populated countries/economies, such as Belgium, Hong Kong (China)*, Japan, Macao (China), the Netherlands*, Singapore and Chinese Taipei, but also in Australia*, Latvia* and Türkiye. By contrast, in four sparsely populated countries (Finland, Iceland, Montenegro and Norway), but also in densely populated Switzerland, at least one in two students attended a school with no other school competing for students in the same area.

The prevalence of school competition barely changed between 2018 and 2022, on average across OECD countries (Table II.B1.6.11). According to principals, school competition decreased in a handful of education systems, most notably in the Czech Republic, Estonia and Slovenia. However, school competition increased considerably in several education systems, including the Dominican Republic, Malaysia, Montenegro, Poland and Saudi Arabia. In these education systems, the percentage of students enrolled in schools competing for students with at least one other school in the area increased by 10 percentage points or more during the period. In Poland, for instance, the share of students who were enrolled in a school that competes with other schools increased from 73% in 2018 to 91% in 2022.

The share of students in schools whose principal reported that one or more schools in the same area compete for students was larger in socio-economically advantaged schools (84% of students) than in disadvantaged schools (73% of students), in urban schools than in rural schools, and in private schools than in public schools, on average across OECD countries (Table II.B1.6.10).

In most countries/economies, and on average across OECD countries, school competition was associated with higher mathematics scores before accounting for socio-economic disparities; but this difference disappeared in most of these education systems after accounting for socio-economic characteristics (Table II.B1.6.12). Only in 13 school systems were mathematics scores higher among students in schools that competed with one other school in the area, relative to students in schools that did not compete with other schools. By contrast, in six education systems, students in schools that did not compete with other schools performed better in mathematics, relative to students in school that competed with one other school.

Public schools can help disadvantaged students thrive

Schooling mainly takes place in public institutions; but some countries, including Belgium, Ireland, the Netherlands, Spain and the United Arab Emirates, have a long-standing tradition of private schooling. Other countries, including Chile, Sweden, the United Kingdom and the United States, have implemented reforms to allow a greater variety of programmes and providers to enter the education system (Zancajo et al., 2021[50]). Advocates of private schooling argue that private schools are more responsive to parents, more cost-effective, and increase competition, accountability and pedagogical diversity throughout the school system (Bloom et al., 2015[22]; Chapman and Salokangas, 2012[51]; Jimenez and Paqueo, 1996[52]). Critics point to the detrimental effects of school choice, including social segregation of students and the threat to social cohesion (Cordini, Parma and Ranci, 2019[53]; Cordini,

Parma and Ranci, 2019[53]; Dumay and Dupriez, 2014[54]; Frohly, 2022[55]; Levin, Cornelisz and Hanisch-Cerda, 2013[56]).

Evidence of the benefits of private schooling is mixed. Some studies show that government-dependent private schools are particularly well-managed and produce the best student outcomes (Angrist, Pathak and Walters, 2013[57]; Bloom et al., 2015[22]; West and Woessmann, 2010[58]); others point to the benefits of private schooling more generally (DeAngelis, 2019[59]; Henderson et al., 2020[60]; Moulin, 2023[61]; Schwalbach and DeAngelis, 2022[62]). Some findings paint a more nuanced picture (Geller, Sjoquist and Walker, 2006[63]; Mancebón and Muñiz, 2008[64]; Smith and Meier, 1995[65]).

As defined in PISA, public schools are those managed by a public education authority, government agency, or governing board appointed by a government or elected by public franchise. Private schools refer to schools managed directly or indirectly by a non-government organisation (such as a church, trade union, business or other private institution). PISA distinguishes between two types of schools within the private school sector, based on their level of public funding. Private independent schools are those funded mainly through student fees or other private contributions (e.g. benefactors, donations); government-dependent private schools are privately managed schools that receive more than half of their funding from government sources.

According to these definitions, in 2022 about 82% of 15-year-old students attended public schools, 12% attended government-dependent private schools, and 6% attended private independent schools, on average across OECD countries (Table II.B1.6.13). About 1 in 20 students was enrolled in a school managed by a religious organisation; about 1 in 10 was enrolled in a school managed by other not-for-profit organisations; and a fraction of students (less than 3%) was enrolled in a school managed by for-profit organisations.

In some education systems, including Baku (Azerbaijan), Iceland, Latvia*, Moldova, Montenegro, Romania, Serbia and Uzbekistan, almost all 15-year-old students attended a public school (Table II.B1.6.13 and Figure II.6.6). In others, such as Australia*, Belgium, Chile, Guatemala, Hong Kong (China)*, Macao (China), Malta, the Netherlands*, Qatar, the United Arab Emirates and the United Kingdom*, more than four in ten students were enrolled in a private school. Attendance at government-dependent private schools was particularly common in Belgium, Chile, Hong Kong (China)*, Macao (China), the Netherlands* and the United Kingdom*, whereas attendance at private independent schools was most frequently observed in Guatemala, Japan, Qatar and the United Arab Emirates. Students attending religious schools was most common in Australia*, Hong Kong (China)*, Macao (China) and Malta; in these education systems at least one in three students were enrolled in this type of school. Students attending other not-for-profit schools was most frequently observed in Chile, Hong Kong (China)*, Japan, Macao (China), the Netherlands* and the United Kingdom*. Qatar and the United Arab Emirates showed the largest shares of students enrolled in for-profit schools; in the United Arab Emirates almost one in two students was enrolled in this type of school.

Across OECD countries, about 74% of socio-economically advantaged students, but 87% of their disadvantaged peers, were enrolled in public schools (Table II.B1.6.14). The largest gaps in enrolment in public schools related to students' socio-economic status were observed mostly in Latin American countries, such as Argentina, Brazil, Chile, Colombia, El Salvador, Guatemala, Panama*, Peru and Uruguay, and also in Malta and Qatar. In Argentina, for instance, almost 90% of disadvantaged students but only 41% of advantaged students were enrolled in public schools. Interestingly, in several education systems, such as Hungary, Indonesia, Macao (China), the Netherlands*, Chinese Taipei and Thailand, where many schools are managed by the private sector, there was no, or only a small, difference in enrolment at public schools related to socio-economic status. In 16 education systems, students with an immigrant background were more likely than those without an immigrant background to attend a public school, whereas the opposite was observed in 11 education systems (Figure II.6.6). The school systems where the native-immigrant gap in public school attendance was the largest, in favour of students with an immigrant background, were Chile, Denmark*, France, Malta, the Netherlands*, Peru and Spain.

On average across OECD countries and in more than 60% of education systems with available data, students in private schools (government-dependent and government-independent combined) scored higher in mathematics than students in public schools (the "raw" difference, i.e. before accounting for socio-economic profile) (Table II.B1.6.21 and Figure II.6.6). The raw score-point difference in favour of students in private schools was particularly large in

Brazil, the United Arab Emirates and Uruguay. By contrast, the raw score-point difference in mathematics performance favoured public schools in Kazakhstan, Serbia, Chinese Taipei and Thailand.

However, after accounting for students' and schools' socio-economic profile, mathematics scores were higher in public schools than in private schools, on average across OECD countries (an 11 score-point difference in favour of public schools) and in 22 education systems (Table II.B1.6.21 and Figure II.6.6). In Jamaica*, Singapore and Türkiye, the public-private school gap in mathematics performance, in favour of public schools, amounted to more than 50 points even after accounting for students' and schools' socio-economic profile. By contrast, in 17 education systems, students in private schools scored higher than students in public schools, after accounting for socio-economic characteristics.

When compared with public schools, private-dependent schools scored higher in mathematics than private-independent schools, after accounting for students' and schools' socio-economic profile (Table II.B1.6.21). On average across OECD countries, students in private-dependent schools scored 8 points lower than students in public schools, whereas students in private-independent schools scored 17 points lower than students in public schools, after accounting for socio-economic characteristics.

The public-private gaps in mathematics performance are also presented in Figure II.6.7 in a more intuitive way. As expected, the graph shows that students in both private and public schools in OECD countries scored higher as the socio-economic profile of the school improved. More tellingly, at the bottom end of the socio-economic ladder, students in public schools outperformed their peers in private schools; but this public-private gap closed as schools moved up the socio-economic ladder.

Another way in which the public-private gap can be analysed is by grouping schools according to their socio-economic profile. However, few public schools attained the very top of the socio-economic ladder, and even fewer private schools were found at the bottom of the socio-economic distribution, which means that examining the public-private gap in schools with an average socio-economic profile is the most appropriate comparison. Figure II.6.8 shows that, when schools with similar socio-economic profiles are compared, the differences in mathematics performance between public and private schools were mostly significant, but not always in the same direction. For instance, for the schools with negative values in the PISA index of economic, social and cultural status, students in public schools outperformed their peers in private schools by about 12 score points. By contrast, when schools with a higher socio-economic profile were compared, the public-private gap either disappeared (in the 0 to 0.25 group) or switched direction in the group with the highest socio-economic profile. In this group, students in public schools scored 501 points in mathematics, whereas those in private schools scored 508 points, a difference of 7 points.

Figure II.6.6. Attendance at public school, student characteristics and mathematics performance

	A	B	C	D
Countries/economies with a positive difference	0	16	4	22
Countries/economies with no difference	22	47	19	28
Countries/economies with a negative difference	54	11	45	17

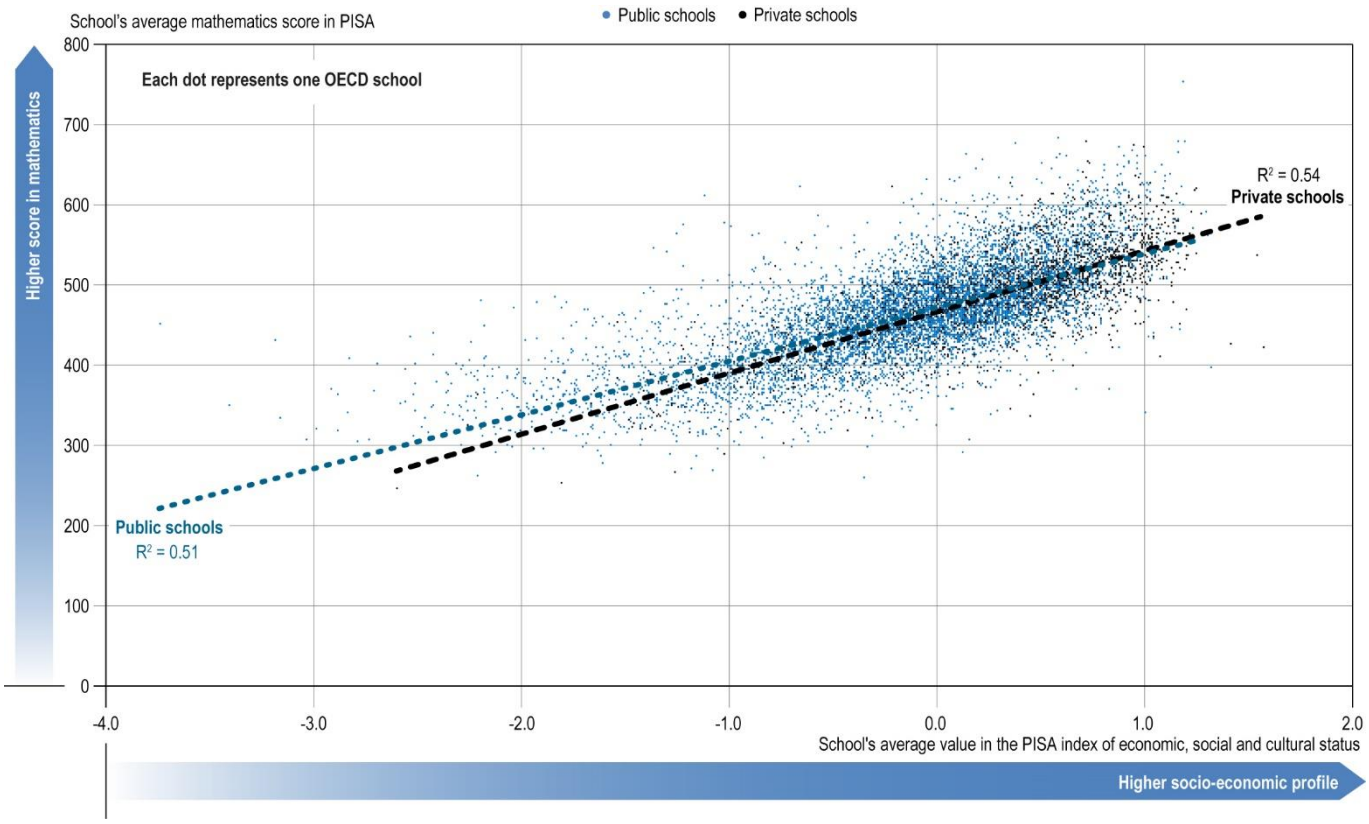
Note: Questions about the type of school were not asked in the Flemish-speaking Community of Belgium. Data for Belgium represent only the French-speaking and German-speaking Communities.

Countries and economies are ranked in descending order of the percentage of students who attended a public school.

Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Figure II.6.7. Mathematics performance and socio-economic status, by type of school

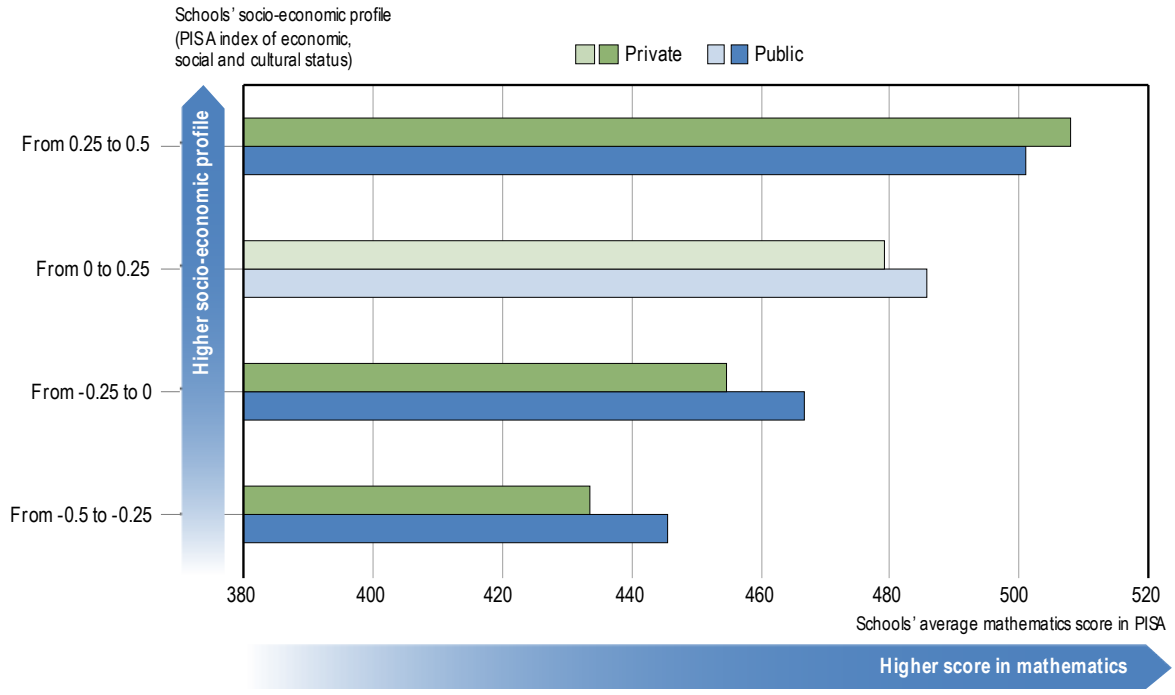
Data aggregated at the school level; OECD countries



Note: The regression lines need to be interpreted with caution because only within-school student-level weights have been applied.
Source: OECD, PISA 2022 Database.

Figure II.6.8. Mathematics performance in public and private schools with a similar socio-economic profile

OECD countries



Notes: Statistically significant differences between public and private schools are shown in a darker tone (see Annex A3).
Results are based on a pooled analysis of all students in OECD countries. Senate weights have been applied so that all countries contribute equally to the results.
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

School fees discourage disadvantaged families from enrolling their children

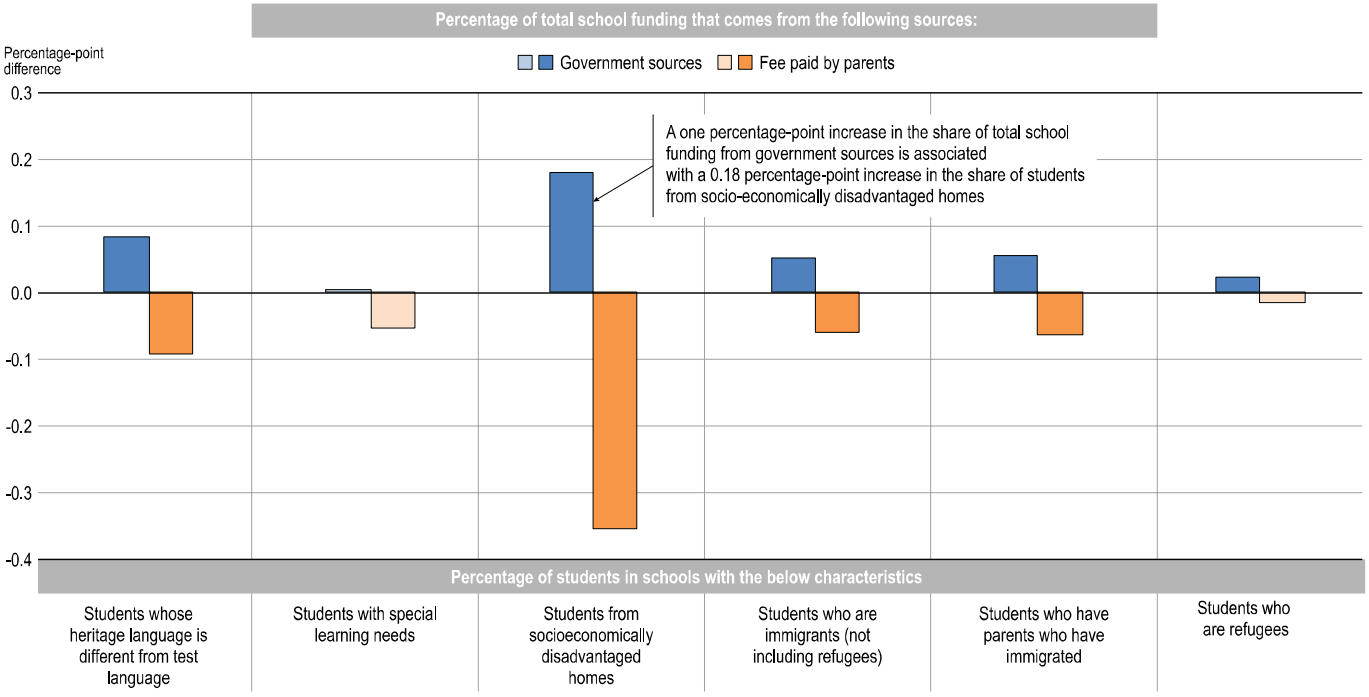
While most school funding typically comes from government sources (88% according to Table II.B1.6.22), schools often charge different types of fees to parents, either because they receive little or no funding from the government, as in the case of private independent schools, or because they provide services that are not (fully) covered by the government. These (additional) fees, however, may discourage some families, particularly those that are socio-economically disadvantaged, from enrolling their children (as the next section on parents' criteria for choosing a school shows).

PISA 2022 asked principals about their school's sources of funding (government, families, voluntary contributions and other sources), and about the composition of their school (see Chapter 4 for more details). Based on principals' answers to these questions, it is possible to estimate how much the characteristics of the student body varies depending on the amount of fees these schools charge to parents (Figure II.6.9). On average across OECD countries, the share of funding that comes from government sources was positively associated with the presence of students from more challenging circumstances, such as having a heritage language that is different from the test language; coming from socio-economically disadvantaged homes; or having an immigrant background (including refugees). However, the only student characteristic that was strongly and consistently associated, across most PISA-participating systems, was students´ socio-economic status. When considering the percentage of school funding that comes from fees paid by parents, the opposite is observed. For example, a ten percentage-point increase in the share of school funding that comes from fees paid by parents was associated with a 3.5 percentage-point decrease in the share of students from disadvantaged homes. Interestingly, the sources of school funding and the presence of students with special learning needs were not associated, on average across OECD countries.

So: are the fees paid by parents related to the composition of the student body? The answer is yes: school fees appear to discourage some disadvantaged families from enrolling their children. These results suggest that policies to increase school choice should be combined with measures to reduce, or eliminate, student fees so that greater school choice does not lead to more school segregation (Lewis and Patrinos, 2011[66]).

Figure II.6.9. School funding sources and school composition

Percentage-point change in the share of students with a given characteristic per percentage-point increase in the share of total school funding from a given source (based on principals' reports); OECD average



Note: Statistically significant percentage-point differences are shown in a darker tone (see Annex A3).
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Did private schools handle school closures due to COVID-19 better than public schools?

There is a widely held belief that private schools handled the COVID-19 pandemic better than public schools, at least in the initial days of the pandemic (Harris et al., 2020[67]), and that this unequal response aggravated pre-existing inequalities in some education systems (Anders, 2022[68]). PISA data show that, not only did private schools close their buildings for a shorter period of time than public schools did (13 fewer days, on average across OECD countries), but they also entered the early days of the pandemic better prepared for remote learning (Table II.B1.6.23 and Figure II.6.10). On average across OECD countries, private schools scored higher than public schools in the index of school preparation for remote instruction before COVID-19, which measures the extent to which, prior to the pandemic, schools took a series of actions to prepare students and staff for distance learning activities. Private schools also reached a larger number of their students through distance learning activities than public schools did. The public-private gap in the percentage of students who attended distance learning activities in a typical week, in favour of private schools, was 8 percentage-points wide; in Argentina, Cambodia, Costa Rica, Jordan, Morocco, New Zealand*, the Palestinian Authority, Türkiye and Uruguay the gap was at least 20 percentage-points wide. In Costa Rica, for instance, about 1 in 4 students in public schools never participated in distance learning activities, compared to only 1 in 50 students in private schools.

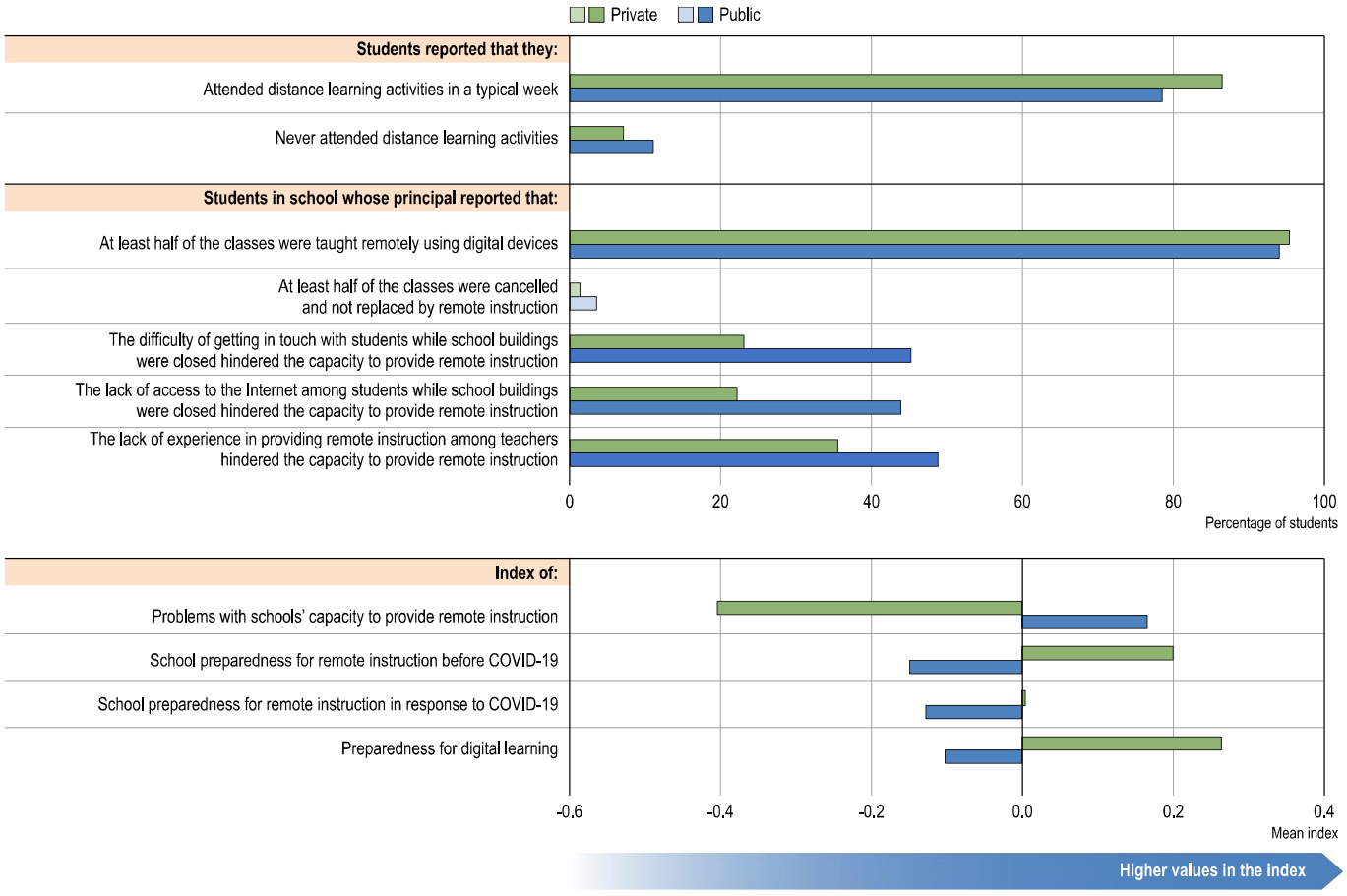
Although public schools entered the pandemic less prepared than private schools, many ended up catching up as the pandemic unfolded. PISA data show that, on average across OECD countries, public schools scored lower than private schools in the index of school preparedness for remote instruction in response to COVID-19, but the gap was less than half the size of that observed concerning preparation for remote teaching prior to the pandemic (Figure II.6.10). In addition, the share of classes that were taught remotely using digital devices was similar in public and private schools. For instance, for 94% of students in public schools, more than half of their classes were taught remotely using digital devices, similar to the percentage observed in private schools (95% of students). Furthermore, 4% of students in public schools saw at least half of their classes cancelled (and not replaced by remote instruction) – just two percentage points larger than the share observed in private schools. A similar finding had been observed in the United Kingdom (Anders, 2022[68]), where the gap in the provision of online learning between public and private schools, which was clearly evident in the first national lockdown, largely disappeared by the third national lockdown, especially when schools with similar socio-economic intakes were compared. However, despite the efforts public schools put into catching up with remote learning, by the time the PISA assessment took place, private schools were still more prepared for digital learning than public schools, according to school principals. On average across OECD countries and in 25 education systems, private schools showed higher values in the index of preparedness for digital learning; the opposite was observed in only 4 education systems (Table II.B1.6.23).

One explanation for the differences observed above is related to the greater problems that public schools faced, in comparison to private schools, in organising distance learning activities. On average across OECD countries and in most education systems, principals in public schools reported higher values than principals in private schools in the index of problems with their school's capacity to provide remote instruction, which measures the extent to which the capacity to provide remote instruction was hindered by nine different issues (Figure II.6.10). For instance, 44% of public-school students, but only 22% of private-school students, attended a school where the capacity to provide remote instruction was hindered to some extent or a lot by the lack of access to the Internet for students. More surprisingly, a similar public-private gap was observed when principals were asked whether the difficulty of getting in touch with students was a barrier to distance teaching.

Interestingly, the differences in the way public and private independent schools handled the pandemic seem to be unrelated to enrolment patterns. The share of students who attended public schools, government-dependent private schools and private independent schools remained stable between 2018 and 2022, on average across OECD countries (Table II.B1.6.20). There may be several reasons for this stability. For instance, parents may have anticipated that the exceptional circumstances during COVID-19 would soon disappear and preferred not to choose a new school based on the ways schools responded (or were perceived to respond) to the pandemic. In addition, the ways in which public and private schools responded to COVID-19 were not that different once the pandemic unfolded. Another reason could simply be that, during the COVID-19 pandemic, parents decided not to disrupt their children's lives even further.

Figure II.6.10. Handling school closures due to COVID-19, by school type

OECD average



Note: Statistically significant differences between private and public schools are shown in a darker tone (see Annex A3).
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Disadvantaged families cannot afford to care only about quality when choosing a school

Parents usually want to have a say in which school their child attends and are prepared to invest time and resources in choosing a school. From talking to family, friends and neighbours, and surfing the Internet for reviews and rankings, to visiting schools and even moving home, many parents are ready to go the extra mile to see their children placed in the best school possible. Schools, too, especially those facing competition, want to know what parents are looking for so they can become more attractive options. Information on parents' preferences is also useful for education systems, in general, as it helps school systems accommodate family expectations, get parents involved in school matters, and ensure that teachers, students and parents are all working towards the same goals. However, not all parents have equal access to information about neighbouring schools, and not all parents can afford, financially, to care only about issues of quality (OECD, 2015[69]; Rich and Jennings, 2015[70]; Waslander, Pater and Van der Weide, 2010[71]).

In PISA 2022, students in 17 countries and economies took home a questionnaire for their parents to complete. One of the questions was related to the criteria parents consider important when choosing a school for their child. They were asked to report how much importance they give ("not important", "somewhat important", "important" or "very important") to 14 criteria, mainly related to school quality, financial constraints, the school's philosophy or mission, and geographic distance between their home and the school.

On average across the eight OECD countries where parents answered this question, parents were more likely to consider important or very important that there is a safe school environment, that the school has an active and pleasant climate, and that the school has a good reputation – even more so than the academic achievement of the students in the school (Table II.B1.6.24). In this regard, the education systems where parents cared the most about the academic achievement of students when choosing their children's school were Brazil, Ireland* and Korea, whereas the school systems where they cared the least were Belgium, Germany and Italy. Furthermore, about six in ten parents considered important or very important the commuting distance to the school, and eight in ten gave the same level of importance to the course offerings in schools. The least important criterion for parents was whether the school adheres to a particular religious philosophy, followed by attendance at the school of other family members.

Among the above criteria, socio-economically disadvantaged families gave more importance than advantaged families to financial considerations, whereas advantaged families cared relatively more about quality-related criteria, such as the reputation, climate and academic achievement in the school (Table II.B1.6.25).

On average across the OECD countries that distributed the parent questionnaire, the children of parents who assigned more importance to school reputation, the school climate and the academic achievement of students scored considerably higher in the mathematics assessment than the students whose parents were less concerned by these criteria, even after accounting for the students' and schools' socio-economic profile (Table II.B1.6.26). By contrast, the children of parents giving greater importance to financial considerations scored about ten points lower than students whose parents considered low expenses or the availability of financial aid to be only somewhat important or not important, after accounting for socio-economic factors.

School admissions and transfers policies

Admitting certain types of students into a school, or transferring them out, are ways of streaming students according to their career goals, education needs, academic achievement and behaviour. In countries with large differences in student performance among schools, admissions and transfer policies may have high stakes for schools and students. The most prestigious schools may attract motivated and highly skilled students, with potential benefits to the school's learning environment. Conversely, the learning environment of the least prestigious schools may be undermined because of their inability to attract or retain high-performing students.

Selective admissions procedures are associated with less socio-economic fairness

In 2022, PISA asked school principals how often ("never", "sometimes" or "always") they considered a range of factors when admitting students to their school. Ten potential and not mutually exclusive criteria for admissions were considered: students' academic performance; recommendations of feeder schools; parental endorsement of the instructional or religious philosophy of the school; students' requirement of or interest in a special programme offered by the school; preference to family members of current or former students; families' residence in a particular area; students' disciplinary record; students' parental status or pregnancy; students' working status; and students' cultural or ethnic background. An index of school selectivity was created depending on how frequently the first two items ("students' academic performance" and "recommendations of feeder schools") were considered for school admissions.

On average across OECD countries, the most common criteria used in school admissions were admitting students based on their area of residence, and admitting students based on students' need or interest in a special programme offered by the school (almost 60% of students attended schools that considered such factors "sometimes" or "always") (Table II.B1.6.27). By contrast, granting admission to school based on students' parental status or pregnancy, working status, or their cultural or ethnic background were the least common (about 90% of students attended schools that never considered these factors). Still, in some education systems, including Albania, Baku (Azerbaijan), Cambodia, Kosovo, Montenegro, the Philippines, Thailand, the United Arab Emirates and Viet Nam, at

least 20% of students were enrolled in schools where the ethnic or cultural background of students was always considered when admitting students.

Checking the academic and disciplinary record of students who apply for entry into a school is widespread in some education systems (Table II.B1.6.27). While on average across OECD countries, about 52% of students attended a school that gives at least some consideration to a student's academic record for school admissions, in Bulgaria, Cambodia, Croatia, Hong Kong (China)*, Jamaica*, Japan, Kosovo, Macao (China) and Singapore, more than 95% of students were enrolled in a school that took this criterion into account sometimes or always. By contrast, in Chile and many Northern and Southern European countries, including Finland, Greece, Iceland, Ireland*, Norway, Portugal, Spain and Sweden, more than 80% of students attended a school that never based admission on student performance. Furthermore, on average across OECD countries, about 43% of students attended a school that considered students' disciplinary record in the school admissions process; but in some education systems, such as Cambodia, Hong Kong (China)*, Jamaica* and Macao (China), almost all schools considered this factor.

Between 2018 and 2022, school admissions criteria did not change greatly, on average across OECD countries, but they did in certain education systems (Table II.B1.6.29). The schools in some education systems, such as Baku (Azerbaijan), Chile, Peru and Türkiye, became less selective in the admissions process, which means that they gave less importance to candidates' academic record and to the recommendations of feeder schools. By contrast, schools in the Dominican Republic, Germany, Iceland, Montenegro and Poland became more selective. In addition, in Brazil, Denmark*, France and especially in Poland, the candidate´s area of residence was less often considered as an admissions criterion in 2022 than in 2018, while it was more frequently considered in Latvia*, Macao (China), Norway, Panama* and Türkiye.

Within education systems, not all schools are equally selective when admitting students. On average across OECD countries, socio-economically advantaged, urban and private schools were more academically selective (based on the index of school selectivity) than disadvantaged, rural and public schools, respectively (Table II.B1.6.28). The education systems with the largest socio-economic gaps in school selectivity were Austria, the Czech Republic, the Dominican Republic, Lithuania, Qatar, the Slovak Republic and Switzerland; those with the largest public-private school gaps were Canada*, Estonia, France, Greece and Qatar. Interestingly, there were four countries (Iceland, Korea, Malta and Norway) where socio-economically disadvantaged schools were more academically selective than advantaged schools.

Most admissions criteria were not associated with higher student performance, especially after accounting for socio-economic factors – with the single exception of students' academic record (Table II.B1.6.30). On average across OECD countries, students in schools that considered a student's academic record sometimes or always when admitting students to the school scored about four points higher in mathematics than students in schools that never based admission on this criterion, after accounting for students' and schools' socio-economic profile. At the system level, OECD countries with less selective admissions processes showed greater socio-economic fairness, even after accounting for per capita GDP (Table II.B1.6.71).

Transferring students because of low achievement was most common in East Asian school systems

For the first time, PISA 2022 asked principals how likely ("not likely", "likely" or "very likely") it was that a student in the modal grade for 15-year-olds would be transferred to another school for low academic achievement, high academic achievement, behavioural problems, special learning needs, or in response to parents' request. Transferring students to another school is likely to negatively shape how inclusive a school climate is, but it may be justified if certain students are better supported in other schools.

PISA 2022 results suggest that transferring students to a different school is not a common practice across OECD countries (Table II.B1.6.31). For instance, at least three in four students attended a school whose principal reported that it would be unlikely for a student to be transferred to another school for low or high academic achievement, or for special learning needs. Transferring a student for behavioural problems would be somewhat more likely: about

one in three students was enrolled in a school where it would be likely or very likely that a student would be transferred for bad behaviour. Unsurprisingly, schools would be more inclined to transfer a student if parents requested so; only one in three students attended a school where students would not be transferred following a parents' request.

Some education systems were much more inclined to transfer students than others. For instance, in East Asian school systems, such as Hong Kong (China)*, Japan, Macao (China) and Chinese Taipei, and also in Slovenia, more than two in three students attended a school where it would be likely or very likely that a student is transferred to another school for low academic achievement; this would almost never happen in Finland, Iceland, Malta, New Zealand*, Norway, Spain, Sweden or the United Kingdom* (Table II.B1.6.31). Transferring a student for bad behaviour was more likely to happen, according to school principals, in Indonesia, Jordan, Kosovo, Macao (China), North Macedonia, the Palestinian Authority, Chinese Taipei and Thailand, and least likely to happen in Finland, Iceland, Ireland*, Moldova, Norway, Singapore and Sweden.

In some education systems, mainstream schools are reasonably well prepared to serve children with special education needs and may have fewer incentives to transfer these students out to special schools. This appeared to be the case in Finland, Hungary, Iceland, Ireland*, New Zealand* and Singapore where more than 92% of students attended a school whose principal reported that it would not be likely that a student is transferred to another school for special learning needs (Table II.B1.6.31). By contrast, in Jordan, Macao (China), Morocco, the Palestinian Authority, Saudi Arabia and Chinese Taipei more than 70% of students were enrolled in a school where students with special learning needs would probably be transferred to a different school. This does not necessarily imply that these students were not taken care of in these education systems, but rather that students with special learning needs in these education systems may have continued to be educated in special schools.

On average across OECD countries, students with bad performance or behaviour were more likely to be transferred to another school if they attended a private school than if they attended a public school (Tables II.B1.6.32 and II.B1.6.34). Similarly, urban schools were more likely to transfer students with low academic achievement or behavioural problems than rural schools. Students in socio-economically advantaged schools were more likely to be transferred than students in disadvantaged schools, but only for low academic achievement. The socio-economic gap in school transfers was particularly large in Albania, the Dominican Republic, Georgia, Germany and Switzerland. In Switzerland, for instance, 6% of students in disadvantaged schools attended a school whose principal reported that they could be transferred to another school for poor academic performance, compared to 58% of students in advantaged schools.

Government-dependent private schools play a leading role in fair and high-performing education systems

Table II.6.3 provides an overview of the school-choice policies in four groups of education systems, organised according to whether their mathematics performance and their ability to ensure that all students, regardless of their socio-economic background, can achieve at high levels (socio-economic fairness), were below or above the median value of all PISA-participating countries/economies. Based on this classification, the high-performing systems in which all students could flourish were, in many ways, different from the other three groups of education systems, particularly from the groups of low-performing education systems. The group of fair and high-performing education systems had fewer students who attended public schools, and more students who attended government-dependent private schools, than the other three groups. Almost 1 in 4 students attended a government-dependent private school in these education systems, compared to 1 in 10 in the group of high-performing, but not as equitable, education systems, and fewer than 1 in 20 in the group of low-performing education systems.

As regards the criteria that schools consider when admitting and transferring students, the groups of high-performing education systems were less selective overall than the groups of low-performing systems. For instance, whereas in the groups of high-performing countries/economies, about one in three students attended a school where students were likely or very likely to be transferred to another school for behavioural problems, in the groups of low-performing countries/economies about half of students attended such schools. However, in other aspects, particularly the degree

to which schools compete for students, the share of students enrolled at private independent schools, and the extent to which students could be transferred for low academic achievement, the four groups looked similar.

Table II.6.3. Summary of school-choice policies, by mathematics performance and socio-economic fairness

System-level analysis

All countries and economies		Groups of countries and economies according to their mathematics performance and socio-economic fairness[1]: Low performance - Low fairness N[2] = 14	Low performance - High fairness N = 26	High performance - Low fairness N = 27	High performance - High fairness N = 14
Competition for students among schools	Percentage of students enrolled in schools whose principal reported that at least one other school competes for students in the area	77.67	75.32	79.62	77.07
School type	Percentage of students enrolled in public schools	87.81	82.40	84.52	69.37
	Percentage of students enrolled in government-dependent private schools	2.34	4.31	9.63	23.61
	Percentage of students enrolled in private independent schools	9.85	13.28	5.85	7.02
School selectivity	Index of school selectivity (in student admissions)	2.24	2.33	2.17	2.02
	Percentage of students in schools where students are likely or very likely to be transferred to another school for low academic achievement	23.71	28.76	28.00	24.27
	Percentage of students in schools where students are likely or very likely to be transferred to another school for high academic achievement	22.24	25.61	11.63	11.76
	Percentage of students in schools where students are likely or very likely to be transferred to another school for behavioural problems	45.76	58.64	35.37	35.53

1. Socio-economic fairness is measured by the percentage of variation in student performance that is accounted for by the PISA index of economic, social and cultural status.
2. N = Number of countries/economies in each group. Due to missing data, the number of cases for individual variables may be lower.
Notes: Countries and economies are considered to have low(high) performance/equity if they are below(above) the median value of all PISA-participating countries/economies.
Values in grey indicate that the difference with the group "High performance - High fairness" was statistically significant.
Source: OECD, PISA 2022 Database.

Quality-assurance mechanisms

Quality assurance refers to the systematic review of school practices to ensure that certain quality, equity and efficiency standards are met. These reviews almost always include some form of internal or external school evaluation, including visits from the inspectorate, and may also encompass student assessments, the monitoring of teacher practices and the appraisal of the school-management team. The use of such mechanisms often leads to improvements in how schools function, particularly when the information they produce is informative, sets quality standards and is fed back to schools (Cuttance, 1998[72]; Geijsel, Krüger and Sleegers, 2010[73]; Gustafsson et al., 2015[74]; OECD, 2013[6]; Visscher and Coe, 2013[75]).

While the use of performance data to improve teaching and learning has expanded in recent years (OECD, 2013[6]) (Schildkamp, 2019[76]; Al-Samarrai et al., 2018[77]), the practice of school inspections often has a limited impact on school-quality indicators (Gaertner, Wurster and Pant, 2014[78]; Hofer, Holzberger and Reiss, 2020[79]) and may have unintended consequences, including a narrowing of the curriculum and the discouragement of innovation (Ehren et al., 2015[80]; Jones et al., 2017[81]). This section examines quality-assurance mechanisms at three levels: student assessment, teacher appraisal and school evaluation. Quality-assurance mechanisms are mostly related to the fairness component of resilience (Table II.B1.6.71).

Most 15-year-old students are assessed with mandatory standardised tests

Tests serve as powerful incentives for students to put greater effort into learning, particularly if the tests have direct consequences for students (Duflo, Dupas and Kremer, 2011[82]; Holm and Kousholt, 2019[83]). For teachers, standardised assessments provide a way of contrasting instructional objectives against the results achieved, and comparing the performance of their students to the performance of students elsewhere in the school system, so that teachers can tailor their pedagogy accordingly (Anghel et al., 2015[84]; Datnow and Hubbard, 2015[85]; Hamilton et al., 2009[86]).

However, student assessments and examinations have their critics. For example, some argue that standardised tests and examinations may reinforce the advantages of schools that serve students from privileged backgrounds (Downey, von Hippel and Hughes, 2008[87]; Datnow and Hubbard, 2015[85]). In addition, teachers may respond strategically to accountability measures by sorting out or retaining disadvantaged students (Lauen and Gaddis, 2016[88]; Ortagus et al., 2020[89]). Standardised tests and examinations might also have the adverse effect of narrowing education goals to passing or showing proficiency on particular tests, and focusing instruction on those students who are close to average in performance while giving less attention to those who are far below or above the average (Neal and Schanzenbach, 2010[90]). In order to avoid the negative impact of "teaching to the test", most OECD countries are using more diverse methods of evaluation (OECD, 2013[6]).

PISA 2022 asked school principals how often ("never", "1-2 times a year", "3-5 times a year", "monthly" or "more than once a month") students in the national modal grade for 15-year-olds are assessed using the following methods: mandatory standardised tests, non-mandatory standardised tests, teacher-developed tests, and teachers' judgemental ratings.

On average across OECD countries, about one in four students attended a school whose principal reported that mandatory standardised tests are never used to assess students in the modal grade for 15-year-olds, and six in ten students attended schools where these tests are used once or twice a year (Table II.B1.6.38). In Austria, Belgium, Costa Rica, Croatia, Iceland and Slovenia at least one in two students attended a school where mandatory standardised tests are never used, while in Malta, Sweden, Chinese Taipei and Uzbekistan all school principals reported that such tests are used at least once a year.

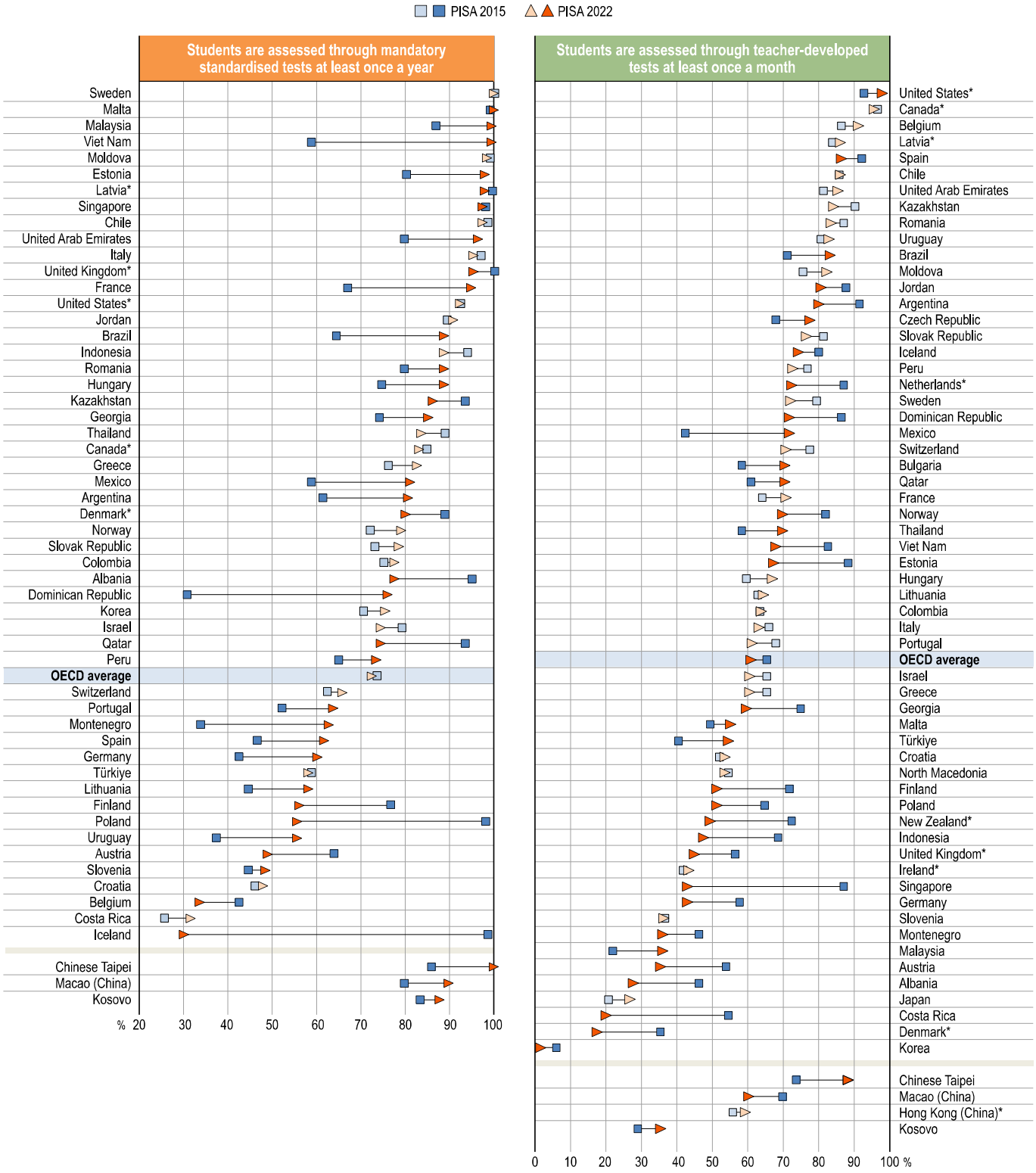
Non-mandatory standardised tests were used somewhat less frequently than mandatory standardised tests, whereas teacher-developed tests and judgemental ratings were used considerably more frequently. For example, on average across OECD countries, about six out of ten students attended a school whose principal reported that teacher-developed tests and teachers' judgemental ratings are used at least once a month.

Education systems where students in the modal grade were more frequently assessed using teacher-developed tests include, among others, Belgium, Canada*, Panama*, Spain, Chinese Taipei and the United States* where at least 60% of students were assessed with these tests more than once a month. By contrast, in Denmark* and Korea less than 2% of students were assessed using teacher-developed tests more than once a month. In Denmark*, 20% of students attended schools where teacher-developed tests are never used to assess students in the modal grade for 15-year-olds, according to school principals.

On average across OECD countries, the use of teacher-developed tests and teachers' judgemental ratings to assess student progress decreased moderately between 2015 and 2022, but the use of standardised tests remained stable (Figure II.6.11 and Table II.B1.6.43). The percentage of students who were assessed through teacher-developed tests at least once a month decreased by more than 20 percentage points in Costa Rica, Estonia, Indonesia, New Zealand* and Singapore. Similarly, the percentage of students assessed once a month through teachers' judgemental ratings decreased by more than 20 percentage points in Brazil, the Czech Republic, Estonia, Indonesia, Latvia*, Moldova, Portugal, the Slovak Republic and the United Kingdom*.

Figure II.6.11 Trends in the frequency of using standardised and teacher-developed tests

Based on principals' reports



Note: Statistically significant changes between PISA 2015 and PISA 2022 are shown in a darker tone (see Annex A3).

For each graph, countries and economies are ranked in descending order of the percentage of students in 2022.

Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Analyses of how the use of the four types of assessment varies across different kinds of schools show few large differences (Tables II.B1.6.39, II.B1.6.40, II.B1.6.41 and II.B1.6.42). On average across OECD countries and in 20 education systems, non-mandatory standardised tests were more frequently used in private than in public schools, according to school principals, while in only three countries (Malta, Sweden and the United Arab Emirates) were they more frequently used in public schools. On average across OECD countries, teacher-developed tests were used slightly more frequently in advantaged and private schools than in disadvantaged and public schools, respectively.

In only a few education systems did mathematics performance vary according to the method of assessment employed, at least once the socio-economic profile of students and schools is accounted for (Table II.B1.6.44). On average across OECD countries, students in schools whose principal reported that non-mandatory standardised tests were used at least once a year scored three points lower in the mathematics assessment than students in schools where these tests were never used, after accounting for socio-economic factors.

How systems use achievement data is unrelated to students' performance

PISA 2022 collected data on the nature of accountability systems, and the ways in which the resulting information is used for school improvement and made available to various stakeholders and the general public. School principals were asked to report on whether mathematics achievement data, such as the school's performance on tests or graduation rates, are posted publicly, tracked over time by an administrative authority or provided directly to parents.

On average across OECD countries, achievement data were more frequently shared with parents (80% of students attended schools whose principals so reported) than tracked by an administrative authority (48% of students attended such schools) or posted publicly (13% of students attended such schools) (Table II.B1.6.45). But there was considerable variation across countries and economies. For example, in Cambodia, Thailand, the United States* and Viet Nam at least 50% of students were enrolled in schools that post data publicly, while in 30 countries/economies, less than 10% of students were enrolled in such schools.

Across PISA-participating countries/economies, socio-economically advantaged and urban schools posted data somewhat more frequently than disadvantaged and rural schools did (Table II.B1.6.46). In 17 out of 80 education systems, posting data publicly was more common in advantaged than in disadvantaged schools, and in 16 out of 67 education systems it was more common in urban than in rural schools. On average across OECD countries, there were no differences between advantaged and disadvantaged schools, or between public and private schools, in the degree to which school achievement data were tracked by administrative authorities (Table II.B1.6.47). Sharing achievement data with parents was more frequently observed in disadvantaged than in advantaged schools (Table II.B1.6.48).

On average across OECD countries and in a majority of PISA-participating education systems, students performed similarly in mathematics regardless of whether the achievement data from their schools was tracked by an administrative authority, shared directly with parents, or posted publicly (Table II.B1.6.50).

Teachers are monitored less frequently

Teacher appraisal refers to the formal evaluation of teachers "to make a judgement and/or provide feedback about their competencies and performance" (OECD, 2013[6]). Teacher appraisal can take many forms, ranging from centralised national appraisal systems with strictly regulated procedures to approaches developed autonomously within schools. The actors and methods involved differ widely across education systems, as do the consequences for teachers. Typical examples across education systems include appraisal for the completion of a probationary period, registration as a qualified teacher (e.g. through national exams or peer committees), regular performance appraisal (e.g. by the school principal) and reward schemes based on the identification of high-performing teachers (OECD, 2013[6]; Paletta, Basyte Ferrari and Alimehmeti, 2020[91]).

Teacher appraisal serves several important functions. It can be a tool for quality assurance, when aimed at ensuring that required standards are met or recommended practices followed. Teacher appraisal can also provide an opportunity for teachers to reflect on their teaching practice and on their strengths and weaknesses, and to identify

areas for improvement. Teacher appraisal can yield important information to support schools, teachers and external authorities in their decisions on career advancement and professional development (Garrett and Steinberg, 2015[92]).

PISA 2022 asked school principals to report whether the following methods were used to monitor the practice of mathematics teachers in their schools during the previous academic year: tests or assessments of student achievement; teacher peer review of lessons plans, assessment instruments and lessons; principal or senior staff observations of lessons; and observation of classes by inspectors or other persons external to the school.

On average across OECD countries, between 2015 and 2022 there was a decrease in the use of tests or assessments of student achievement and of teacher peer-review to monitor teachers' practice (a drop of nine percentage points in the share of students in schools where such practice was used), and a decrease in the use of observation of classes by inspectors or other persons external to the school (a drop of eight percentage points in the share of students in schools where such practice was used) (Figure II.6.12). Principal or senior staff observations of lessons decreased less than the other practices over this time period (by four percentage points). On average across OECD countries in 2022, and according to principals' reports, 77% of students attended a school where principal or senior staff observations of lessons are used to monitor the practice of teachers; 73% of students attended a school where tests or assessments of student achievement are used to that end; 59% of students attended a school that uses teacher peer reviews of lesson plans, assessment instruments or lessons; and 34% attended a school where classes are observed by inspectors or other persons external to the school with the aim of monitoring teacher practice (Table II.B1.6.51).

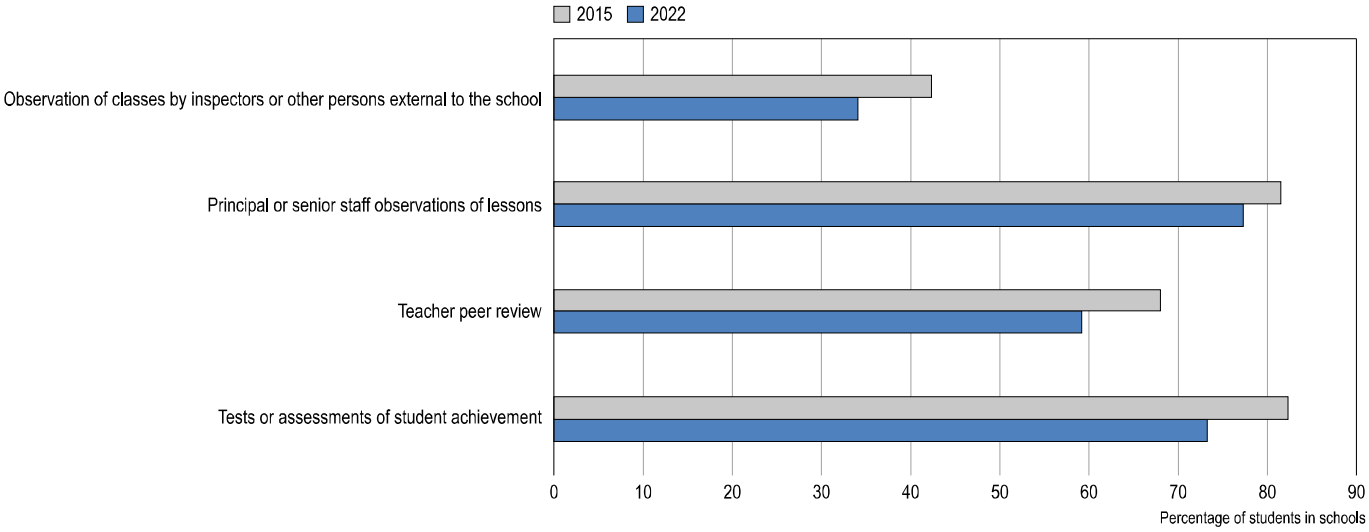
In general, there were wide differences in the extent to which, and how, schools monitor teacher practice. In 54 education systems, at least 90% of students attended a school whose principal or senior staff observe lessons, but in Finland, Greece and Portugal, less than 33% of students attended such a school. In Finland, in addition, only 20% of students attended a school whose principal reported that tests or assessments of student achievement were used to monitor teacher practice during the previous year. Based on principals' reports, in 11 countries/economies, more than 95% of students were in schools where teacher practice is monitored using teacher peer reviews, but in Bulgaria, Finland, France, Germany and Iceland, less than 33% of students attended such a school. In Finland, Italy and Slovenia, less than 10% of students attended a school where inspectors or other persons external to the school observe classes.

On average across OECD countries, there were small differences in how extensively the four methods of monitoring teacher practice are used when considering the socio-economic profile of the school (Tables II.B1.6.52, II.B1.6.53, II.B1.6.54 and II.B1.6.55). However, larger differences were observed when considering other school characteristics. For example, private schools were more likely than public schools to use principal or senior staff observation of classes to monitor teacher practice; and urban schools were more likely than rural schools to monitor teacher practice using tests or assessments of student achievement, teacher peer-reviewing and observation of classes by inspectors or external persons.

On average across OECD countries, students scored similarly in mathematics regardless of whether or not their schools use the four types of monitoring teacher practice (Table II.B1.6.57). Across the four monitoring methods and all education systems, there were only 5 cases where using a particular method was associated with an improvement of more than 20 score points in mathematics performance, after accounting for the socio-economic profile of students and schools.

Figure II.6.12. Trends in monitoring teacher practice

Percentage of students in schools where, during the previous academic year, the following methods were used to monitor the practice of teachers (based on principals' reports); OECD average



Note: All changes between PISA 2015 and PISA 2022 are statistically significant (see Annex A3).
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

School evaluation and improvement actions are widely mandatory

Certain types of school evaluations and improvement actions are widely mandatory PISA 2022 asked school principals which arrangements aimed at quality assurance and improvement are used in their schools. They could choose from ten suggested arrangements, and for each of them, could specify whether it was a mandatory or school initiative-based arrangement.

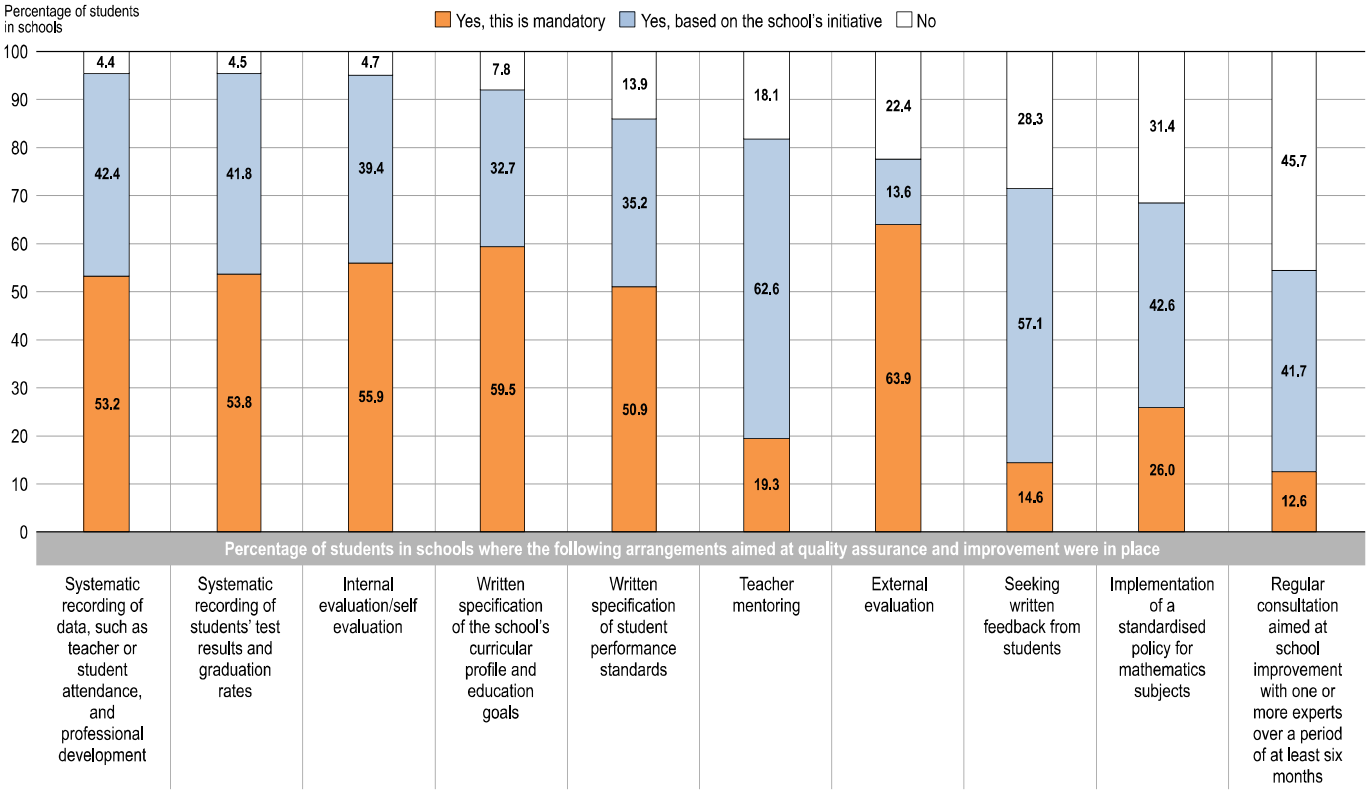
On average across OECD countries in 2022, principals reported that the following quality assurance and improvement actions were in place at their school (in decreasing order of prevalence) (Figure II.6.13):

- 96% of students attended schools with systematic recording of data, such as teacher or student attendance, and professional development; 42% of students attended schools where such recording of data is initiated by the schools themselves.
- 96% of students attended schools with systematic recording of students' test results and graduation rates; 42% of students attended schools where such recording is initiated by the schools themselves.
- 95% of students attended schools with internal evaluation/self-evaluation; 39% attended schools with school-initiated internal evaluation.
- 92% of students attended schools that have a written specification of the school's curricular profile and education goals; 33% of students attended schools where this written specification is formulated on the schools' initiative.
- 86% of students attended schools with a written specification of student performance standards; 35% attended schools where this written specification is initiated by the schools themselves.
- 82% of students attended schools where teacher mentoring is available; 63% of students attended schools where teacher mentoring is conducted on the schools' initiative.
- 78% of students attended schools where external evaluations are in place; 14% were in schools where external evaluation is conducted on the schools' initiative.

- 72% of students attended schools that seek students' written feedback; 57% of students attended schools where students' written feedback is sought on the schools' initiative.
- 69% of students attended school where a standardised policy for mathematics subjects is implemented; 43% of students attended schools where this policy is formulated on the schools' initiative.
- 54% of students attended schools with regular consultations with one or more experts, over a period of at least six months, aimed at school improvement; 42% of students attended schools where this consultation is organised on the schools' own initiative.

Figure II.6.13. Quality assurance and improvement actions at school

Based on principals' reports; OECD average



Items are sorted in descending order of the percentage of students in schools where the arrangements were in place.
Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

Some quality-assurance and improvement arrangements, such as internal evaluations, systematic recording of data, and written specifications of the school's curricular profile and educational goals, were widely used in all, or almost all, education systems (Table II.6.4). However, there were large differences across education systems in the prevalence of other quality-assurance mechanisms. For instance, seeking written feedback from students, teacher mentoring, and regular consultations with experts were almost universal in some education systems, such as Indonesia, New Zealand*, the Philippines and Uzbekistan; but in Argentina and Italy less than 60% of students were in schools where these arrangements were in place. Education systems where quality-assurance mechanisms were prevalent, according to principals, included Indonesia, Kazakhstan, Malaysia, New Zealand*, the Philippines, Qatar, Saudi Arabia, Singapore, Thailand, the United Arab Emirates and Uzbekistan. By contrast, according to principals, these mechanisms were least likely to be found in many European and Latin American countries, including Argentina, Finland, France, Germany, Italy, Spain, Switzerland and Uruguay.

Table II.6.4. Quality assurance and improvement actions at school, by country/economy

Based on principals' reports

A Internal evaluation/Self-evaluation
B External evaluation
C Written specification of the school's curricular profile and educational goals
D Written specification of student performance standards
E Systematic recording of data such as teacher or student attendance and professional development
F Systematic recording of student test results and graduation rates
G Seeking written feedback from students
H Teacher mentoring
I Regular consultation aimed at school improvement with one or more experts over a period of at least six months
J Implementation of a standardised policy for mathematics subjects

Less than half of students | From 50% to 75% of students | From 75% to 90% of students | More than 90% of students

	Percentage of students in schools where the following arrangements aimed at quality assurance and improvement at school were in place									
	A	B	C	D	E	F	G	H	I	J
Philippines	100	94	99	100	100	100	96	99	98	98
Qatar	100	99	99	100	100	100	98	95	87	99
United Arab Emirates	100	98	99	99	100	100	92	99	87	97
Uzbekistan	99	91	98	98	100	99	95	97	96	94
Malaysia	99	89	99	100	100	98	86	100	94	98
Kazakhstan	99	96	99	99	100	98	96	99	85	89
Thailand	100	100	100	99	100	100	97	84	88	89
New Zealand*	100	100	100	94	100	100	94	98	92	80
Saudi Arabia	99	95	95	97	99	100	98	99	81	93
Singapore	99	99	100	97	100	100	92	100	67	99
Indonesia	99	94	97	91	98	99	93	99	93	87
Brunei Darussalam	100	92	99	96	100	100	77	100	88	96
United Kingdom*	100	97	100	96	100	100	84	97	89	81
Australia*	98	92	98	97	100	99	86	99	87	88
Albania	100	94	98	97	97	99	94	98	78	85
North Macedonia	100	94	99	93	98	99	91	100	83	81
Jordan	99	89	95	94	99	100	89	98	81	92
Mongolia	99	97	94	85	99	99	95	98	74	93
Jamaica*	100	95	99	98	99	100	69	96	79	89
United States*	92	86	97	97	99	99	73	99	87	96
Korea	100	72	100	100	100	100	95	98	65	90
Moldova	99	98	92	92	100	98	86	95	66	93
Viet Nam	100	91	99	93	99	100	90	92	60	93
Georgia	99	86	99	96	96	93	90	82	82	89
Malta	100	99	89	98	100	100	59	94	85	83
Türkiye	99	80	96	95	99	99	93	86	64	92
Israel	98	92	99	90	100	98	68	94	65	94
Serbia	99	99	99	94	99	94	70	98	66	77
Netherlands*	97	91	99	88	92	100	92	94	78	62
Cambodia	97	72	98	94	90	91	91	94	76	88
El Salvador	95	77	90	91	99	98	69	96	77	96
Dominican Republic	94	93	93	97	99	96	98	77	70	70
Ireland*	100	93	93	77	97	98	76	96	78	81
Panama*	99	72	95	90	100	89	90	100	74	80
Colombia	99	95	97	100	97	93	84	84	67	71
Montenegro	100	99	100	86	100	100	66	100	55	75
Romania	100	97	93	88	98	98	94	90	58	62
Brazil	97	93	100	93	95	92	80	91	60	66
Bulgaria	96	95	92	90	99	99	68	81	73	69
Croatia	97	86	95	89	94	90	75	98	62	74
Estonia	100	81	98	78	95	98	78	96	52	76
Latvia*	100	96	98	94	99	99	79	88	40	55
Slovenia	100	62	99	98	98	98	85	84	35	88
Morocco	98	85	89	85	96	98	64	94	49	82
Peru	90	78	99	98	98	94	73	100	49	61
Costa Rica	95	71	89	96	96	95	73	76	57	88
Portugal	99	96	91	94	92	93	83	79	41	56
Canada*	83	65	94	84	93	97	62	91	72	83
Japan	99	82	97	96	97	98	88	88	20	58
OECD average	95	78	92	86	96	96	72	82	54	69
Norway	97	76	83	91	95	97	68	93	83	33
Chile	94	82	96	84	96	95	82	65	55	56
Austria	93	48	84	80	97	90	92	72	64	83
Iceland	100	100	99	92	98	97	50	52	60	53
Lithuania	100	87	100	87	98	97	65	79	35	53
Sweden	98	73	81	99	97	88	75	88	38	60
Paraguay	95	73	92	90	96	96	77	50	59	67
Czech Republic	97	65	98	92	96	96	63	99	39	48
Poland	90	56	66	77	99	97	72	95	58	82
Hungary	93	81	99	98	99	98	57	86	25	54
Mexico	91	75	93	86	95	95	75	54	55	68
Belgium	90	84	92	65	95	90	56	92	60	59
Guatemala	93	69	89	91	94	94	76	46	57	71
Slovak Republic	96	58	91	90	99	97	58	65	66	58
Greece	99	61	82	69	85	82	47	90	90	74
Denmark*	89	76	74	86	96	96	61	88	42	55
Switzerland	85	75	84	66	87	84	72	83	39	66
Spain	92	70	94	84	97	95	76	39	34	44
Uruguay	89	69	82	79	98	96	60	77	31	40
Germany	85	65	92	79	91	95	64	44	30	76
Finland	95	66	80	75	91	95	74	71	12	56
Italy	97	60	99	76	87	94	33	59	20	69
Argentina	89	61	89	72	92	88	48	57	39	57
France	88	65	82	38	84	94	18	71	13	50
Macao (China)	98	95	98	98	100	100	75	100	66	93
Palestinian Authority	97	87	95	95	100	100	84	98	70	89
Kosovo	98	90	96	95	97	96	84	95	72	69
Ukrainian regions (18 of 27)	99	89	96	97	98	93	61	95	84	75
Hong Kong (China)*	100	98	96	87	99	100	80	89	52	85
Chinese Taipei	98	84	100	93	100	100	81	88	50	66
Baku (Azerbaijan)	97	78	89	91	96	99	78	70	65	74

Countries and economies are ranked in descending order of the average of the 10 actions.

Source: OECD, PISA 2022 Database, Annex B1, Chapter 6.

On average across OECD countries, four out of the ten quality-assurance mechanisms and improvement actions at school varied by whether the school is public or private (Tables II.B1.6.59 to II.B1.6.68). Private schools were more likely than public schools to: have written specifications of the school's curricular profile and education goals; have written specifications of student performance standards; request written feedback from students; and hold regular consultations, with one or more experts over a period of at least six months, aimed at school improvement.

Table II.6.5. Governing education systems figures and tables

Figure II.6.1	Quality-assurance mechanisms, school autonomy and mathematics performance
Figure II.6.2	Governance of education systems as covered in PISA 2022
Table II.6.1	Summary of how responsibilities for school governance are allocated
Figure II.6.3	Index of school responsibility for curriculum, by school type
Figure II.6.4	Index of school responsibility for resources, by school type
Figure II.6.5	Allocation of education responsibilities, by average performance in mathematics
Table II.6.2	Education leadership actions
Figure II.6.6	Attendance at public school, student characteristics and mathematics performance
Figure II.6.7	Mathematics performance and socio-economic status, by type of school
Figure II.6.8	Mathematics performance in public and private schools with a similar socio-economic profile
Figure II.6.9	School funding sources and school composition
Figure II.6.10	Handling school closures due to COVID-19, by school type
Table II.6.3	Summary of school-choice policies, by mathematics performance and socio-economic fairness
Figure II.6.11	Trends in the frequency of using standardised and teacher-developed tests
Figure II.6.12	Trends in monitoring teacher practice
Figure II.6.13	Quality assurance and improvement actions at school
Table II.6.4	Quality assurance and improvement actions at school, by country/economy

StatLink https://stat.link/6nwqli

Notes

[1] Statistically speaking, identifying the quality assurance arrangements that qualify, or moderate in statistical terminology, the relationship between school autonomy and mathematics performance was done by estimating the differences in the correlation coefficient of both indices of school autonomy (resources and curriculum) with mathematics average scores between the groups of education systems where a given quality assurance mechanism was employed more frequently and less frequently than on average across OECD countries. Positive differences are interpreted as strengthening the association between school autonomy and academic performance (positive moderation), whereas negative differences are interpreted as weakening the association (negative moderation). To rank the different quality assurance mechanisms, the differences for the indices of school responsibility for resources and curriculum were added up.

[2] Questions about the type of school were not asked in the Flemish-speaking Community of Belgium. Data for Belgium represent only the French-speaking and German-speaking Communities.

References

Adams, D. et al. (2021), "Leading schools through the COVID-19 crisis in a South-East Asian country", *Management in Education*, p. 089202062110377, https://doi.org/10.1177/08920206211037738. [30]

Ainsworth, R. et al. (2021), "The Importance of Value Added in School Choice: Evidence from an Information Experiment in Romania"*, KDI School of Pub Policy & Management Paper Forthcoming; NYU Wagner Research Paper Forthcoming*. [41]

Almeida, S. et al. (2020), "Curriculum flexibility policies expressed in school timetables in Portugal: from prescribed curriculum to practiced curriculum", *European Journal of Curriculum Studies*, Vol. 6, pp. 30-55. [12]

Al-Samarrai, S. et al. (2018), "Introducing a performance-based component into Jakarta's school grants: What do we know about its impact after three years?", *Economics of Education Review*, Vol. 67, pp. 110-136, https://doi.org/10.1016/j.econedurev.2018.10.005. [77]

Anders, J. (2022), *How has Covid-19 affected inequalities between state and private schools?*. [68]

Anghel, B. et al. (2015), "Publicizing the results of standardized external tests: does it have an effect on school outcomes?", *IZA Journal of European Labor Studies*, Vol. 4/1, p. 7, https://doi.org/10.1186/s40174-014-0029-3. [84]

Angrist, J., P. Pathak and C. Walters (2013), "Explaining Charter School Effectiveness", *American Economic Journal: Applied Economics*, Vol. 5/4, pp. 1-27, https://doi.org/10.1257/app.5.4.1. [57]

Barber, M., F. Whelan and M. Clark (2010), *Capturing the leadership premium: How the world's top school systems are building leadership capacity for the future*, McKinsey. [21]

Behrman, J. et al. (2016), "Teacher Quality in Public and Private Schools under a Voucher System: The Case of Chile", *Journal of Labor Economics*, Vol. 34/2, pp. 319-362, https://doi.org/10.1086/683642. [49]

Bierbaum, A., A. Karner and J. Barajas (2021), "Toward Mobility Justice: Linking transportation and education equity in the context of school choice", *Journal of the American Planning Association*, Vol. 87/2, pp. 197-210, https://doi.org/10.1080/01944363.2020.1803104. [42]

Bloom, N. et al. (2015), "Does Management Matter in schools?", *The Economic Journal*, Vol. 125/584, pp. 647-674, https://doi.org/10.1111/ecoj.12267. [22]

Boeskens, L. (2016), "Regulating Publicly Funded Private Schools: A Literature Review on Equity and Effectiveness"*, OECD Education Working Papers*, No. 147, OECD Publishing, Paris. [43]

Branch, G., S. Rivkin and E. Hanushek (2013), "School Leaders Matter: Measuring the impact of effective principals", *Education Next*, Vol. 13/1, pp. 62-69. [25]

Brauckmann, S., P. Pashiardis and H. Ärlestig (2023), "Bringing context and educational leadership together: fostering the professional development of school principals", *Professional Development in Education*, Vol. 49/1, pp. 4-15, https://doi.org/10.1080/19415257.2020.1747105. [28]

Burgess, S. and A. Briggs (2010), "School assignment, school choice and social mobility", *Economics of Education Review*, Vol. 29/4, pp. 639-649, https://doi.org/10.1016/j.econedurev.2009.10.011. [46]

Burns, T. and F. Köster (2016), "Modern governance challenges in education", in *Governing Education in a Complex World*, OECD Publishing, Paris, https://doi.org/10.1787/9789264255364-3-en. [1]

Caldwell, B. and Spinks Jim M. (2013), *The self-transforming school*, Routledge. [10]

Card, D., M. Dooley and A. Payne (2010), "School Competition and Efficiency with Publicly Funded Catholic Schools", *American Economic Journal: Applied Economics*, Vol. 2/4, pp. 150-76, https://doi.org/10.1257/APP.2.4.150. [36]

Chapman, C. and M. Salokangas (2012), "Independent state-funded schools: some reflections on recent developments", *School Leadership & Management*, Vol. 32/5, pp. 473-486, https://doi.org/10.1080/13632434.2012.731329. [51]

Chatzipanagiotou, P. and E. Katsarou (2023), "Crisis Management, School Leadership in Disruptive Times and the Recovery of Schools in the Post COVID-19 Era: A Systematic Literature Review", *Education Sciences*, Vol. 13/2, p. 118, https://doi.org/10.3390/educsci13020118. [31]

Cheng, Y., J. Ko and T. Lee (2016), "School autonomy, leadership and learning: a reconceptualisation", *International Journal of Educational Management*. [7]

Cordini, M., A. Parma and C. Ranci (2019), "'White flight' in Milan: School segregation as a result of home-to-school mobility", *Urban Studies*, Vol. 56/15, pp. 3216-3233, https://doi.org/10.1177/0042098019836661. [53]

Cuttance, P. (1998), "Quality Assurance Reviews as a Catalyst for School Improvement in Australia", in Hargreaves, A. et al. (eds.), *International Handbook of Educational Change*, Springer, Dordrecht. [72]

Datnow, A. and L. Hubbard (2015), "Teachers' Use of Assessment Data to Inform Instruction: Lessons from the past and Prospects for the Future", *Teachers College Record: The Voice of Scholarship in Education*, Vol. 117/4, pp. 1-26, https://doi.org/10.1177/016146811511700408. [85]

DeAngelis, C. (2019), "Does Private Schooling Affect Noncognitive Skills? International Evidence Based on Test and Survey Effort on PISA", *Social Science Quarterly*, Vol. 100/6, pp. 2256-2276, https://doi.org/10.1111/ssqu.12702. [59]

Department for Education of the United Kingdom (2010), "The Importance of Teaching: The Schools White Paper 2010", The Stationery Office, Norwich. [11]

Downey, D., P. von Hippel and M. Hughes (2008), ""Are "Failing" Schools Really Failing? Removing the Influence of Nonschool Factors from Measures of School Quality": Erratum.", *Sociology of Education*, Vol. 81/4, pp. No Pagination Specified-No Pagination Specified. [87]

Duflo, E., P. Dupas and M. Kremer (2011), "Peer Effects, Teacher Incentives, and the Impact of Tracking: Evidence from a Randomized Evaluation in Kenya", *American Economic Review*, Vol. 101/5, pp. 1739-1774, https://doi.org/10.1257/aer.101.5.1739. [82]

Dumay, X. and V. Dupriez (2014), "Educational quasi-markets, school effectiveness and social inequalities", *Journal of Education Policy*, Vol. 29/4, pp. 510-531, https://doi.org/10.1080/02680939.2013.850536. [54]

Earley, P. (2019), "School autonomy and accountability in England: The rhetoric and the reality?", in Raucher, E. et al. (eds.), *Schulautonomie–Perspektiven in Europa*, Waxmann, Munster. [17]

Ehren, M. et al. (2015), "Comparing effects and side effects of different school inspection systems across Europe", *Comparative Education*, Vol. 51/3, pp. 375-400, https://doi.org/10.1080/03050068.2015.1045769. [80]

Engwall, L. (2008), "The university: a multinational corporation", *The university in the market*, Vol. 84, pp. 9-21. [3]

Epple, D., R. Romano and M. Urquiola (2017), "School Vouchers: A Survey of the Economics Literature", *Journal of Economic Literature*, Vol. 55/2, pp. 441-492, https://doi.org/10.1257/jel.20150679. [39]

Facts and Factors (2022), *Childhood Education Market By Product (Distance Education Institution and Early Childhood Education School), By Application (5-8 Age, 3-5 Age, and <3 Age), and By Region: Global Industry Perspective, Market Size, Statistical Research, Market Intelligence, Comprehensive Analysis, Historical Trends, and Forecast 2019–2026*. [4]

Fast, I. (2020), "Unequal traveling: How school district and family characteristics shape the duration of students' commute to school", *Travel Behaviour and Society*, Vol. 20, pp. 165-173, https://doi.org/10.1016/j.tbs.2020.03.008. [44]

Frohly, C. (2022), "Does school choice increase social segregation? Evidence from private schools opening in France between 2005 and 2019", Sciences Po. [55]

Gaertner, H., S. Wurster and H. Pant (2014), "The effect of school inspections on school improvement", *School Effectiveness and School Improvement*, Vol. 25/4, pp. 489-508, https://doi.org/10.1080/09243453.2013.811089. [78]

Garrett, R. and M. Steinberg (2015), "Examining Teacher Effectiveness Using Classroom Observation Scores: Evidence From the Randomization of Teachers to Students", *Educational Evaluation and Policy Analysis*, doi: 10.3102/0162373714537551, pp. 224-242, https://doi.org/10.3102/0162373714537551. [92]

Geijsel, F., M. Krüger and P. Sleegers (2010), "Data feedback for school improvement: The role of researchers and school leaders", *The Australian Educational Researcher*, Vol. 37/2, pp. 59-75, https://doi.org/10.1007/BF03216922. [73]

Geller, C., D. Sjoquist and M. Walker (2006), "The Effect of Private School Competition on Public School Performance in Georgia", *Public Finance Review*, Vol. 34/1, pp. 4-32, https://doi.org/10.1177/1091142105283631. [63]

Goddard, Y. et al. (2019), "From School Leadership to Differentiated Instruction", *The Elementary School Journal*, Vol. 120/2, pp. 197-219, https://doi.org/10.1086/705827. [26]

Grissom, J., S. Loeb and B. Master (2013), "Effective Instructional Time Use for School Leaders", *Educational Researcher*, Vol. 42/8, pp. 433-444, https://doi.org/10.3102/0013189X13510020. [27]

Gustafsson, J. et al. (2015), "From inspection to quality: Ways in which school inspection influences change in schools", *Studies in Educational Evaluation*, Vol. 47, pp. 47-57, https://doi.org/10.1016/j.stueduc.2015.07.002. [74]

Hamilton, L. et al. (2009), *Using Student Achievement Data to Support Instructional Decision Making*, National Center for Education Evaluation and Regional Assistance. [86]

Hanushek, E., S. Link and L. Woessmann (2013), "Does school autonomy make sense everywhere? Panel estimates from PISA", *Journal of Development Economics*, Vol. 104, pp. 212-232, https://doi.org/10.1016/j.jdeveco.2012.08.002. [13]

Hardwick-Franco, K. (2019), "Educational leadership is different in the country; What support does the rural school principal need?", *International Journal of Leadership in Education*, Vol. 22/3, pp. 301-315, https://doi.org/10.1080/13603124.2018.1450997. [29]

Harris, A. and M. Jones (2020), "COVID 19 – school leadership in disruptive times", *School Leadership & Management*, Vol. 40/4, pp. 243-247, https://doi.org/10.1080/13632434.2020.1811479. [32]

Harris, D. et al. (2020), *How America's Schools Responded to the COVID Crisis*, National Center for Research on Education Access and Choice. [67]

Healey, N. (2023), "Reinventing international higher education for a socially just, sustainable world", *Perspectives: Policy and Practice in Higher Education*, pp. 1-10, https://doi.org/10.1080/13603108.2023.2217780. [5]

Henderson, M. et al. (2020), "Private schooling, subject choice, upper secondary attainment and progression to university", *Oxford Review of Education*, Vol. 46/3, pp. 295-312, https://doi.org/10.1080/03054985.2019.1669551. [60]

Heyneman, S. (2009), "International Perspectives on School Choice", in *Handbook of Research on School Choice*, Routledge. [34]

Hofer, S., D. Holzberger and K. Reiss (2020), "Evaluating school inspection effectiveness: A systematic research synthesis on 30 years of international research", *Studies in Educational Evaluation*, Vol. 65, p. 100864, https://doi.org/10.1016/j.stueduc.2020.100864. [79]

Holm, L. and K. Kousholt (2019), "Beyond washback effect: A multidisciplinary approach exploring how testing becomes part of everyday school life focused on the construction of pupils' cleverness", *Annual Review of Critical Psychology*, Vol. 16, pp. 917-952. [83]

Jabbar, H. et al. (2022), "The Competitive Effects of School Choice on Student Achievement: A Systematic Review", *Educational Policy*, Vol. 36/2, pp. 247-281, https://doi.org/10.1177/0895904819874756. [40]

Jensen, B., B. Weidmann and J. Farmer (2013), *The Myth of Markets in School Education*, Grattan Institute. [19]

Jimenez, E. and V. Paqueo (1996), "Do local contributions affect the efficiency of public primary schools?", *Economics of Education Review*, Vol. 15/4, pp. 377-386, https://doi.org/10.1016/S0272-7757(96)00029-5. [52]

Jones, K. et al. (2017), "The unintended consequences of school inspection: the prevalence of inspection side-effects in Austria, the Czech Republic, England, Ireland, the Netherlands, Sweden, and Switzerland", *Oxford Review of Education*, Vol. 43/6, pp. 805-822, https://doi.org/10.1080/03054985.2017.1352499. [81]

Lauen, D. and S. Gaddis (2016), "Accountability Pressure, Academic Standards, and Educational Triage", *Educational Evaluation and Policy Analysis*, Vol. 38/1, pp. 127-147, http://www.jstor.org/stable/44984531. [88]

Leithwood, K. (2021), "A Review of Evidence about Equitable School Leadership", *Education Sciences*, Vol. 11/8, p. 377, https://doi.org/10.3390/educsci11080377. [23]

Levin, H., I. Cornelisz and B. Hanisch-Cerda (2013), "Does educational privatisation promote social justice?", *Oxford Review of Education*, Vol. 39/4, pp. 514-532, https://doi.org/10.1080/03054985.2013.825983. [56]

Lewis, L. and H. Patrinos (2011), "Framework for engaging the private sector in education", *SABER Working Paper Series*, The World Bank, Washington D.C. [66]

Lubienski, C. (2003), "Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools", *American Educational Research Journal*, Vol. 40/2, pp. 395-443, https://doi.org/10.3102/00028312040002395. [14]

Mancebón, M. and M. Muñiz (2008), "Private versus public high schools in Spain: disentangling managerial and programme efficiencies", *Journal of the Operational Research Society*, Vol. 59/7, pp. 892-901, https://doi.org/10.1057/palgrave.jors.2602427. [64]

Mentini, L. and A. Levatino (2023), "A "three-legged model": (De)constructing school autonomy, accountability, and innovation in the Italian National Evaluation System", *European Educational Research Journal*, p. 147490412211482, https://doi.org/10.1177/14749041221148280. [8]

Moulin, L. (2023), "What are the medium-term educational and labour market effects of private schooling?", *Applied Economics*, pp. 1-17, https://doi.org/10.1080/00036846.2023.2165620. [61]

Musset, P. (2012), "School Choice and Equity: Current Policies in OECD Countries and a Literature Review", OECD Publishing, Paris. [35]

Neal, D. and D. Schanzenbach (2010), "Left Behind by Design: Proficiency Counts and Test-Based Accountability", *Review of Economics and Statistics*, Vol. 92/2, pp. 263-283, https://doi.org/10.1162/rest.2010.12318. [90]

OECD (2020), *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/ca768d40-en. [2]

OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264267510-en. [33]

OECD (2015), "What do parents look for in their child's school?", *PISA in Focus*, No. 51, OECD Publishing, Paris, https://doi.org/10.1787/5js1qfw4n6wj-en. [69]

OECD (2013), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264201156-en. [15]

OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, https://doi.org/10.1787/9789264190658-en. [6]

OECD (2011), ""School Autonomy and Accountability : Are They Related to Student Performance?", *PISA in Focus*, No. 9, OECD Publishing, Paris. [20]

Ortagus, J. et al. (2020), "Performance-Based Funding in American Higher Education: A Systematic Synthesis of the Intended and Unintended Consequences", *Educational Evaluation and Policy Analysis*, Vol. 42/4, pp. 520-550, https://doi.org/10.3102/0162373720953128. [89]

Paletta, A., E. Basyte Ferrari and G. Alimehmeti (2020), "How Principals Use a New Accountability System to Promote Change in Teacher Practices: Evidence From Italy", *Educational Administration Quarterly*, Vol. 56/1, pp. 123-173, https://doi.org/10.1177/0013161X19840398. [91]

Palm, M. and S. Farber (2020), "The role of public transit in school choice and after-school activity participation among Toronto high school students", *Travel Behaviour and Society*, Vol. 19, pp. 219-230, https://doi.org/10.1016/j.tbs.2020.01.007. [45]

Pont, B., D. Nusche and H. Moorman (2008), *Improving School Leadership, Volume 1: Policy and Practice*, OECD Publishing, Paris, https://doi.org/10.1787/9789264044715-en. [24]

Rich, P. and J. Jennings (2015), "Choice, Information, and Constrained Options", *American Sociological Review*, Vol. 80/5, pp. 1069-1098, https://doi.org/10.1177/0003122415598764. [70]

Rowe, E. and C. Lubienski (2017), "Shopping for schools or shopping for peers: public schools and catchment area segregation", *Journal of Education Policy*, Vol. 32/3, pp. 340-356, https://doi.org/10.1080/02680939.2016.1263363. [47]

Schildkamp, K. (2019), "Data-based decision-making for school improvement: Research insights and gaps", *Educational Research*, doi: 10.1080/00131881.2019.1625716, pp. 257-273, https://doi.org/10.1080/00131881.2019.1625716. [76]

Schwalbach, J. and C. DeAngelis (2022), "School sector and school safety: a review of the evidence", *Educational Review*, Vol. 74/4, pp. 882-898, https://doi.org/10.1080/00131911.2020.1822789. [62]

Skerritt, C. (2020), "School autonomy and the surveillance of teachers", *International Journal of Leadership in Education*, pp. 1-28, https://doi.org/10.1080/13603124.2020.1823486. [18]

Smith, K. and K. Meier (1995), "Public Choice in Education: Markets and the Demand for Quality Education", *Political Research Quarterly*, Vol. 48/3, pp. 461-478, https://doi.org/10.1177/106591299504800301. [65]

Valenzuela, J., C. Bellei and D. Ríos (2014), "Socioeconomic school segregation in a market-oriented educational system. The case of Chile", *Journal of Education Policy*, Vol. 29/2, pp. 217-241, https://doi.org/10.1080/02680939.2013.806995. [48]

Verger, A., L. Parcerisa and C. Fontdevila (2019), "The growth and spread of large-scale assessments and test-based accountabilities: a political sociology of global education reforms", *Educational Review*, Vol. 71/1, pp. 5-30, https://doi.org/10.1080/00131911.2019.1522045. [16]

Visscher, A. and R. Coe (eds.) (2013), *School improvement through performance feedback*, Routledge. [75]

Wang, Y. (2014), *Education policy reform trends in G20 members*, Springer Science & Business Media. [9]

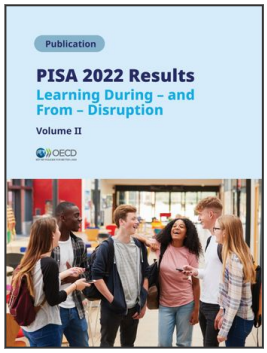
Waslander, S., C. Pater and M. Van der Weide (2010), "Markets in education: An analytical review of empirical research on market mechanisms in education"*, OECD Education Working Papers*, No. 52, OECD Publishing, Paris. [71]

West, M. and L. Woessmann (2010), "'Every Catholic Child in a Catholic School': Historical Resistance to State Schooling, Contemporary Private Competition and Student Achievement across Countries", *The Economic Journal*, Vol. 120/546, pp. F229-F255, https://doi.org/10.1111/j.1468-0297.2010.02375.x. [58]

Wößmann, L. (2007), "International Evidence on School Competition, Autonomy, and Accountability: A Review", *Peabody Journal of Education*, Vol. 82/2-3, pp. 473-497, https://doi.org/10.1080/01619560701313176. [37]

Wößmann, L. et al. (2007), ""School accountability, autonomy, choice, and the level of student achievement: International evidence from PISA 2003"*, OECD Education Working Papers*, No. 13, OECD Publishing, Paris. [38]

Zancajo, A. et al. (2021), "Regulating public-private partnerships, governing non-state schools: an equity perspective: Background paper for UNESCO Global Education Monitoring Report", UNESCO. [50]



From:

PISA 2022 Results (Volume II)

Learning During – and From – Disruption

Access the complete publication at:
https://doi.org/10.1787/a97db61c-en

Please cite this chapter as:

OECD (2023), "Governing education systems", in *PISA 2022 Results (Volume II): Learning During – and From – Disruption*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/c212eef9-en