What are the likely impacts of rising temperatures on students and how are countries adapting?

EDUCATION INDICATORS IN FOCUS

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#91

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BETTER POLICIES FOR BETTER LIVE

- Students in OECD countries will be exposed to a greater number of hot days at school by 2050. Bulgaria and Chile are projected to join Colombia, Costa Rica and the United States on the list of countries where over one-quarter of primary school students will attend schools experiencing more than 60 hot days a year.
- Hot temperatures affect students' learning both directly, by impacting their well-being and performance at school, and indirectly through disruptions to their schooling.
- Heatwaves are already affecting schooling in various countries, with countries from France to Brazil forced to close schools due to intense heat in 2025, highlighting vulnerabilities in school infrastructure.
- Countries are already adapting their school systems to rising temperatures, whether by changes to the school calendar, investing in cooling systems in schools or making children's outdoor environments more suitable for hot temperatures.
- Adaptations to high temperatures involve trade-offs. Upgrading infrastructure improves learning conditions but is costly. Adapting the school calendar and school activities can be cheaper and faster to implement, but needs to be well planned to avoid losing instruction time.

This Education Indicators in Focus brief is accompanied by a technical paper that outlines the methodology used to derive projected exposure to hot temperatures:
OECD (2025), *Using Climate Projections to Assess Increasing Student Exposure to High Temperatures*, OECD Publishing, Paris, https://doi.org/10.1787/98a7f132-en.

Projected changes to temperatures in schools

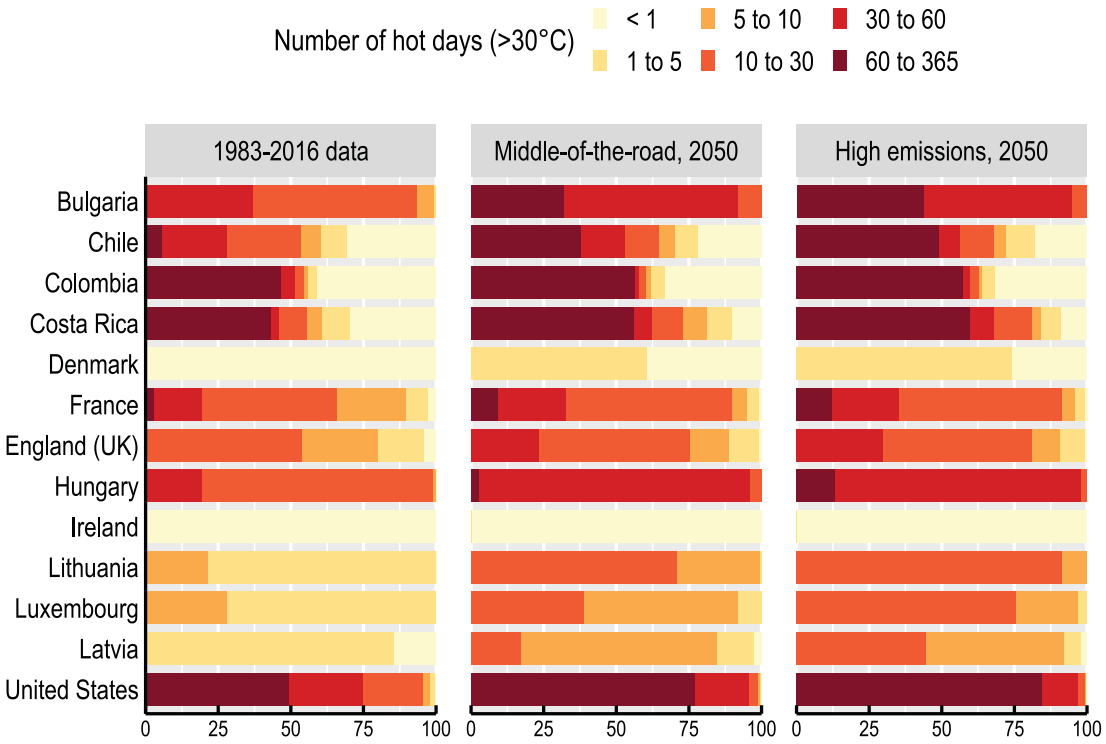
Heat can affect students' health, well-being and educational outcomes. Several studies have linked high temperatures with lower performance on cognitive and curricular tests as well as lower school engagement. School systems face a mounting need to adapt to rising temperatures which are already affecting students' ability to learn, with school buildings in many countries lacking adequate cooling. The first step towards adapting school systems to hotter temperatures begins by identifying those most at risk.

A novel OECD analysis combining school locations and climate projections shows that, by 2050, primary school students will be exposed to more days with high temperatures at school (Box 1). Figure 1 shows the shares of primary school students in OECD countries currently exposed to different numbers of "hot days" per year, defined as temperatures above 30°C, and how that could change in the future. Even under a middle-of-the road climate scenario, by 2050 Bulgaria and Chile are projected to join Colombia, Costa Rica and the United States on the list of countries where over one-quarter of primary school students attend schools experiencing more than 60 hot days a year.

Different countries face very different levels of change when it comes to rising temperatures in primary schools (Figure 1). In Chile, less than 12% of students currently attend schools with over 60 hot days a year. Under the middle-of-the-road scenario commonly used in climate models, this will rise to 37% of students by 2050, and the typical student in Chile will be exposed to 44 hot days at school per year, compared to 16 today (Table 1). In Hungary, the share of students exposed to more than 30 hot days per year will increase more than fourfold, from 19% now to 96% in 2050, with the typical student facing 49 hot days in a year. In England (United Kingdom), no primary school students currently face more than 30 hot days per year but by 2050 the share will rise to just under 25%. The impact is less marked in countries like Denmark, Ireland, Latvia and Lithuania, where no primary school students will be exposed to more than 30 hot days per year. By 2050, even under the high-emissions scenario, only a little over half of Danish primary school students will experience 1-5 hot days in school per year and those in Ireland will not experience any. Although schools tend to be closed for the hottest parts of the year, even when adjusted for the school holiday calendar the overall findings hold for most countries, albeit with a somewhat reduced number of hot days (See Annex A in OECD, 2026[1]).

Figure 1. Distribution of students by school exposure to hot days, by climate scenario (1983-2016 and 2050)

Share of primary students enrolled in schools exposed to days of 30°C or over



Note: Schools are grouped according to the number of hot days experienced in the calendar year. The share of students is determined using each school's enrolment numbers for 2024.
Source: OECD, 2026[1].

Table 1. Number of hot days faced by a typical student, and share of students at risk of exposure to 30 hot days or more, by climate scenario (1983-2016 and 2050)

Primary school students

	Number of annual hot days a typical (median) student will experience at school			Percentage of students exposed to more than 30 hot days a year		
	1983-2016 data	Middle-of-the-road, 2050	High-emissions, 2050	1983-2016 data	Middle-of-the-road, 2050	High-emissions, 2050
Bulgaria	24	48	54	36.7	91.6	94.8
Chile	16	44	56	28.0	52.8	56.3
Colombia	39	153	199	51.4	57.9	59.6
Costa Rica	21	82	115	45.8	62.0	67.9
Denmark	0	1	2	0.0	0.0	0.0
England (UK)	11	18	20	0.0	23.2	29.7
France	12	20	22	19.4	32.6	35.2
Hungary	27	49	54	19.2	95.9	97.6
Ireland	0	0	0	0.0	0.0	0.0
Latvia	2	7	10	0.0	0.0	0.0
Lithuania	3	11	14	0.0	0.0	0.0
Luxembourg	5	9	11	0.0	0.0	0.0
United States	59	93	100	74.6	95.5	96.7

Note: The "typical" student refers to the median student. Days refer to calendar days.
Source: OECD, 2026[1].

There are also stark regional variations within countries, highlighting the need for localised policies. By 2050, a typical student in Colombia will be exposed to 153 hot days under the middle-of-the-road scenario, almost half the year, while in Costa Rica the number will be 80 days a year (Table 1). However, despite their closeness to the equator, more than one-quarter of students in these two countries attend schools in cooler areas at higher altitudes, with no hot days on average per year (see Figure 2 for the distribution for Colombia). Similarly, in large countries that span multiple climate zones like Chile and the United States, the number of hot days that students experience can differ widely. Regional variations are also present in European countries, where schools in southern areas tend to be more exposed to higher temperatures than in northern areas (see Figure 3 for the distribution of France).

Box 1. Assessing students' exposure to hot temperatures using climate projections

The analysis presented above builds on the combination of school location data from the OECD 2024 ad-hoc survey on primary schools and granular climate projections from the Climate Hazards Centre Coupled Model Intercomparison Project Phase 6 (CHC-CMIP6).

Information on primary school locations and enrolment come from the 2024 OECD ad-hoc survey on primary schools. The data, first presented in Education at a Glance 2024 (OECD, 2024[2]), contain high-precision geographical information for 13 OECD countries and economies.

Data on climate conditions and projections for 2050 come from the CHC-CMIP dataset (Williams et al., 2024[3]). This dataset includes temperature estimates for the period 1983-2016, and climate projections for 2050 under two scenarios of the Shared Socio-economic Pathways (SSP): the middle-of-the-road scenario (SSP2-4.5), projecting a rise in global temperatures between 2.1 and 2.5°C by 2100 relative to pre-industrial levels, and the high-emissions scenario (SSP5-8.5), projecting a rise of between 3.3. and 5.7°C. The dataset is released as grids covering the entire globe, with grid cells representing areas of approximately 5.6 by 5.6km at the equator. The data were annualised to obtain a yearly grid containing the number of days in a calendar year where the maximum temperature exceeds 30°C, in the 1983-2016 period and the two SSP 2050 scenarios.

The datasets can be combined through spatial matching: school locations are laid over the climate grid, and the value of the underlying grid cell is assigned to each school. The resulting dataset gives the average number of hot days per year observed in each school location during 1983-2016, and projected numbers for 2050 under the middle-of-the-road and high-emissions scenarios. The share of students at risk of exposure is then derived using the student population enrolled in each school location, assuming the geographical distribution of students remains stable over that period.

Source: OECD, 2026[1].

Evidence of the effect of school temperatures on learning outcomes

Beyond immediate health effects, heat exposure negatively impacts cognitive function and learning outcomes. One study using Programme for International Student Assessment (PISA) data across multiple countries found that higher temperatures reduce test performance among school-age children. Each additional day above 26.7°C during the 3 years preceding an exam lowered PISA test scores by 0.18% of a standard deviation (Park, Behrer and Goodman, 2021[4]). Evidence also suggests that hot days can reduce overall school attendance and engagement, compounding long-term learning losses (Conte Keivabu, 2024[5]).

Heat-related declines in learning are more severe in classrooms lacking adequate cooling and ventilation, linking environmental conditions directly to educational inequalities. One study in the United States found that without air-conditioning, a 1°F (0.55°C) hotter school year reduces that year's learning by 1% as measured by the Preliminary Scholastic Assessment Test (PSAT) scores (Park et al., 2020[6]). A study in Japan found that, on average, test scores decline by 0.56% standard deviations for every additional school day above 34°C where there is no air conditioning, with the effect on the most disadvantaged students being nearly three times as large. However, access to air conditioning in school alleviates approximately three-quarters of the negative effects of hot temperatures on learning (Akesaka and Shigeoka, 2025[7]).

Impact of recent heatwaves

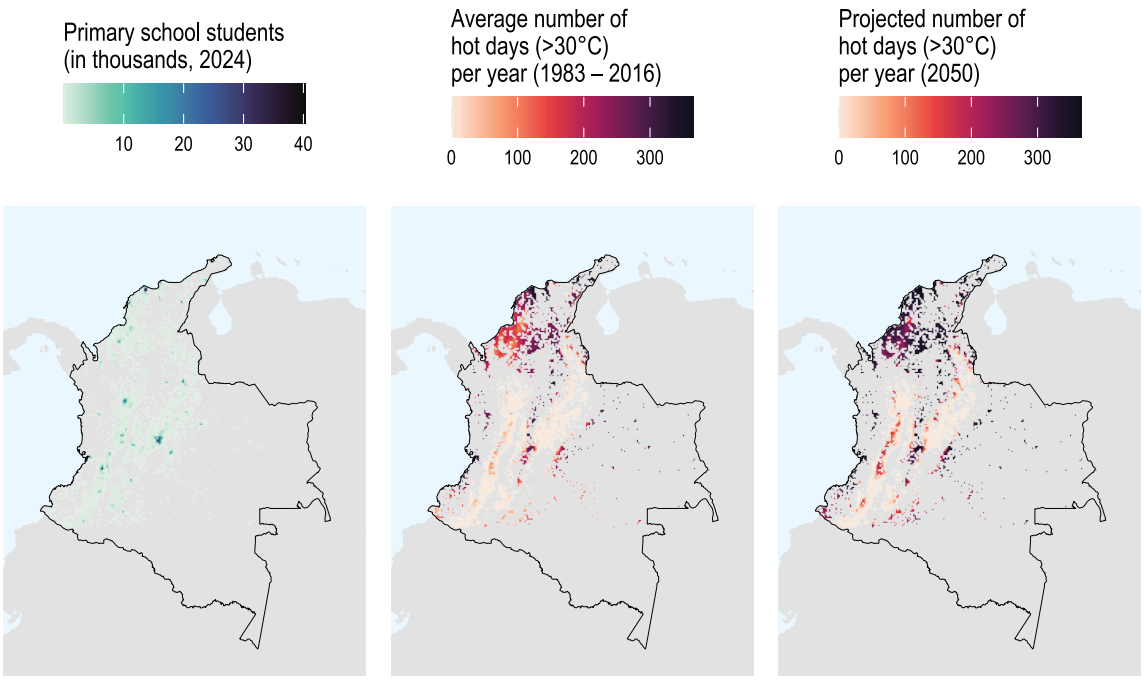
In Europe, heatwaves in 2025 led to widespread school closures, highlighting the urgent need for climate adaptation in educational infrastructure. In France, nearly 1 900 schools were closed due to extreme temperatures, with local governments in Paris and other cities advising parents to keep children at home (FRANCE 24, 2025[8]). The very limited penetration of air conditioning in French schools likely contributed to the widespread closures, a 2020 survey found that only 7% of the surface area of French educational buildings was equipped with air conditioning (ADEME, 2021[9]).

Other countries have also been affected by heatwaves. An intense heatwave in 2025 forced schools in southern Brazil to suspend the return to classes (Climate Central, 2025[10]). In response, the Brazilian government issued recommendations to the public to cope with the high temperatures (Government of Brazil, n.d.[11]). Extreme heat in Mexico in early 2023, with temperatures exceeding 35°C and even 45°C, led 18 states to adopt a range of emergency measures, including school closures and restrictions on outdoor exercise, that affected the education of 13.1 million students. At national level, 15% of schools in Mexico do not have access to water, making them more vulnerable to heatwaves and school disruptions (Unicef, 2023[12]). In a region where education is one of the main tools for reducing inequality, extreme heat undermines progress in equity and human development (Bos et al., 2025[13]).

Rising temperatures and more frequent extreme hot days in the United States may be exposing students to unsafe classroom conditions, while many school buildings, particularly older urban schools, still lack adequate air conditioning. The US Government Accountability Office estimates that 41% of public-school districts need to update or replace heating, ventilation and air conditioning (HVAC) systems in at least half of their schools, which amounts to 36 000 schools nationwide (GAO, 2020[14]). Evidence also shows that in the largest cities of the United States 76% of public school students attend schools in urban heat islands, which are areas of dense buildings and roads that trap heat and stay much hotter than surrounding greener areas (Climate Central, 2025[15]).

Figure 2. Observed and projected student exposure to hot days in Colombia (1983-2016 and 2050)

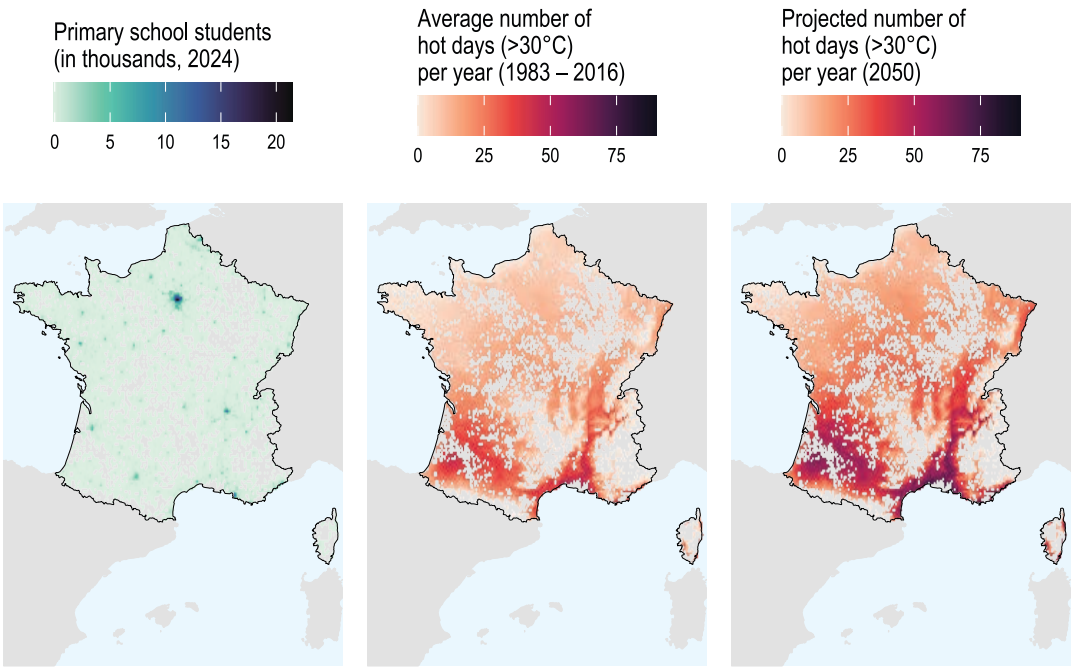
Primary school students; projection based on the middle-of-the-road scenario



Source: OECD, 2026[1].

Figure 3. Observed and projected student exposure to hot days in France (1983-2016 and 2050)

Primary school students; projections based on the middle-of-the-road scenario



Source: OECD, 2026[1].

Adaptation measures in school systems

Monitoring schools and assessing schools at risk

Effective adaptation to extreme temperatures in schools depends on robust monitoring and assessment systems that identify heat risks and guide protective actions for students and staff. Monitoring can help prevent harm by using early warning systems that alert citizens of risks of heatwaves. The challenge is to ensure that these systems account for the fact that vulnerable groups, like children, have different heat stress thresholds to the general population (Brimicombe, Gao and Otto, 2024[16]). In Italy for example, the Heat Health Action Plan includes formal identification of vulnerable subgroups each summer for active monitoring (G7 Germany, 2022[17]).

Monitoring temperature at school locations can help school systems adapt to heat by identifying schools at risk. In England (United Kingdom), researchers mapped overheating risks in schools to find which buildings are most likely to get hot, helping decision makers plan improvements like better ventilation or cooling (Dawkins et al., 2024[18]). As a response to climate risks of overheating, the UK Department of Education is ensuring that new school buildings are designed to be climate resilient, and that pilot evaluations and assessments guide strategic, evidence-based investment decisions (UK Department for Education, 2025[19]). Likewise, the Oasis Project assessed 670 city-owned school grounds in Paris to find which ones should be prioritised for cooling improvements against urban heat. Using geographical information system (GIS) analysis, researchers created a cooling indicator based on how much of each school ground is exposed to strong sunlight (Karam et al., 2024[20]). This type of initiative allows planners to implement shading, vegetation and other cooling interventions in the most vulnerable schools.

Government guidelines to schools on addressing heatwaves

Schools are increasingly implementing government guidelines to protect students and staff during heatwaves. In Queensland, Australia, the Department of Education recommends schools modify or suspend outdoor activities, make cooler indoor spaces at school more accessible, ensure students stay hydrated, and use simple cooling techniques to reduce heat stress (Queensland Government Education, 2024[21]). Similar measures were encouraged in France during the heatwave in July 2025, where the Ministry of Education published specific recommendations to school heads during

heatwaves including building measures, behaviour rules and exam arrangements, and advised monitoring classroom temperatures, adapting schedules, postponing or cancelling outdoor activities, and ensuring access to water and shaded areas (Ministère de l'Éducation nationale, 2025[22]). The UK government provides advice for teachers and early years professionals on protecting children's health during hot weather, as part of the UK's heat hazard response (UK Health Security Agency, 2024[23]). The Japanese government established national standards that help schools decide when to limit outdoor exercise based on a heat index that considers both temperature and humidity (Japan Sport Association, 2019[24]).

Adapting the school calendar

Many education systems are adapting their schedules and school calendars to minimise children's exposure to heat. Often, these adjustments involve school closures either for the full day or for a part of the day when temperatures exceed a certain threshold. School closures can help manage the effects of extreme heat on student well-being, but also have potential downsides, as they risk aggravating the learning loss from high temperatures. School closures should therefore remain a last resort unless they are accompanied by measures to compensate for the loss of instruction time. These could include pre-planned contingency days built into the calendar at the end of the school year that could become school days if needed to make up for lost time. This is current practice in the US state of Rhode Island, for example, where the school calendar must include four contingency days in the event of "inclement weather or other school closure" (Rhode Island Department of Education, 2025[25]).

Other adaptation measures to the school calendar include changes to the timing of summer breaks, something being planned or under discussion in several countries. In the United States, for example, some school districts are pushing back the start date of the new school year from August to September to avoid holding classes during the hottest period of the year (Rode, 2024[26]). In Spain, Madrid's Action Plan for Heat Waves foresees adjusting timetables during episodes of hot weather, for example by moving classes into the cooler early morning hours and scheduling physical education classes during cooler hours (Communidad de Madrid, 2023[27]). It is essential that calendar or operational modifications include strategies to sustain learning, involve stakeholders such as family and transportation services, and assess their impact on equity (Nusche, Fuster Rabella and Lauterbach, 2024[28]).

Cooling classrooms

Investment in HVAC systems is a common way for governments to provide thermal comfort for children in schools, although costs can be a major challenge. Japan has been successfully equipping schools with air conditioning. In 2004, only 6% of its primary and lower secondary schools were equipped with air conditioning (Sekartaji et al., 2023[29]). By 2022, nearly 100% of all public schools had adopted air conditioning (MEXT, 2024[30]; Akesaka and Shigeoka, 2025[7]). This investment was partly financed through public-private-partnerships in which local governments entered long-term contracts with private companies that installed and maintained school air conditioning systems in return for service fees (Sekartaji et al., 2023[29]). In 2022, the government of Queensland, Australia invested AUD 477 million to equip 649 state schools with air conditioning. The plan includes additional investment in measures to offset the additional energy consumption, for example by installing solar panels (Queensland Government, 2022[31]).

Efforts have also been made in European countries, where air conditioning is less common. France aims to upgrade the infrastructure of 40 000 primary schools during the next 10 years. The plan involves energy upgrades, insulation and transitioning to geothermal systems, among other improvements. This initiative is supported by the Green Fund, which initially allocated EUR 2 billion in decentralised credits to local authorities and was reinforced in 2024 with an additional EUR 500 million dedicated to schools (Cerema, 2024[32]). Barcelona City Council has committed to directing 25% of school renovation funds into measures to adapt to high temperatures. An investment of EUR 3.6 million enabled the renovation of 56 schools during the summer of 2024 (Climate Adapt, 2024[33]).

Other measures to reduce temperatures in schools can include building design improvements, such as insulation, shading and natural ventilation. Examples from New Zealand show that optimising window placement, cross-ventilation and controlled mechanical systems can reduce overheating in classrooms, helping maintain student concentration and well-being during heatwaves (C40 Cities, 2020[34]). These measures can be cheaper than retrofitting air conditioning and prevent negative side effects such as strain on the electricity grid and the worsening of urban heat island effects due to the release of waste heat.

Adapting outdoor environments

Cities are adopting practical design strategies to adapt children's outdoor environments to hot temperatures. The C40 Cool Cities Network highlights measures such as installing reflective "cool roofs" and pavements to reduce heat absorption, adding vegetation to roofs and facades for shade and insulation, and creating shaded outdoor play areas. In Madrid, the Caring for School Environments pilot project assessed 241 public schools for heat vulnerability and worked with school communities to co-design shaded nature-based school grounds, as well as developing guidelines for wider city adoption. The pilot was implemented using the municipal budget. The local government of Barcelona has refurbished 11 schools with a package of climate-adaptation upgrades, selected through an open process, co-designed with students, evaluated by research centres and opened for community use in summer, funded by more than EUR 5 million from the EU's Urban Innovation Action programme and the City of Barcelona. In Rio de Janeiro, the Hortas Escolares (School Gardens) project has introduced green spaces, gardens and native plants in over 250 schools, providing seedlings, pedagogical support and hands-on lessons to engage students and staff in maintaining these cooling spaces. This project was funded by the federal government (C40 Cities, 2020[34]).

The bottom line

High temperatures affect children's learning directly by impacting their well-being and performance at school, as well as indirectly by disrupting schooling. In 2025, heatwaves led to school closures across several OECD countries. By 2050, children in many countries will face more hot days, which, without adequate adaptation measures, will undermine learning outcomes. Countries have started to implement policies such as identifying vulnerable schools, improving infrastructure and adapting school calendars and timetables. Although infrastructure improvements, such as the installation of air conditioning, are effective, they are also costly. In contrast, changes to the school calendar are cheaper to implement but need to be well planned to avoid a loss of instruction time. A balanced approach that combines these strategies is therefore likely the most effective way to safeguard both health and education.

REFERENCES:

ADEME (2021), *La climatisation : vers une utilisation raisonnée pour limiter l'impact sur l'environnement*, https://www.ademe.fr/presse/communique-national/la-climatisation-vers-une-utilisation-raisonnee-pour-limiter-limpact-sur-lenvironnement/ (accessed on 10 March 2025). [9]

Akesaka, M. and H. Shigeoka (2025), "Hotter days, wider gap: The distributional impact of heat on student achievement", *RIETI Discussion Paper Series*, No. 25-E-024, The Research Institute of Economy, Traide and Industry, https://www.rieti.go.jp/jp/publications/dp/25e024.pdf (accessed on 10 March 2025). [7]

Bos, M. et al. (2025), *Heat-Proof Education in Latin America and the Caribbean*, Inter-American Development Bank, https://doi.org/10.18235/0013780. [13]

Brimicombe, C., C. Gao and I. Otto (2024), "Vulnerable to heat stress: Gaps in international standard metric thresholds", *International Journal of Biometeorology*, Vol. 68, pp. 2495-2506, https://doi.org/10.1007/s00484-024-02783-6. [16]

C40 Cities (2020), *Cooling schools: Experiences from C40"s cool cities network*, C40 Knowledge Hub, https://www.c40knowledgehub.org/s/article/Cooling-schools-Experiences-from-C40s-Cool-Cities-Network. [34]

Cerema (2024), *Rénovation des écoles : un guides à destination des élus locaux*, https://www.cerema.fr/fr/actualites/renovation-ecoles-guide-elus-locaux (accessed on 18 November 2025). [32]

Climate Adapt (2024), *Nature-based solutions in schools: a green way to adapt buildings to climate change in Solana de los Barros, Extremadura (Spain)*, https://climate-adapt.eea.europa.eu/en/metadata/case-studies/nature-based-solutions-in-schools-a-green-way-to-adapt-buildings-to-climate-change-in-solana-de-los-barros-extremadura-spain (accessed on 26 November 2025). [33]

Climate Central (2025), *Climate change fuels record February heat in Brazil ahead of Carnival*, https://www.climatecentral.org/climate-shift-index-alert/brazil-february-2025. [10]

Climate Central (2025), *Public schools in urban heat islands*, https://www.climatecentral.org/climate-matters/schools-and-urban-heat-2025. [15]

Communidad de Madrid (2023), *Plan de Actuación ante Episodios de Altas Temperaturas*, Communidad de Madrid, https://www.comunidad.madrid/sites/default/files/plan-contra-calor.pdf. [27]

Conte Keivabu, R. (2024), "Temperature and school absences: evidence from England", *Population and Environment*, Vol. 40/6, https://doi.org/10.1007/s11111-024-00448-5. [5]

Dawkins, L. et al. (2024), "Quantifying overheating risk in English schools: A spatially coherent climate risk assessment", *Climate Risk Management*, Vol. 44, https://doi.org/10.1016/j.crm.2024.100602. [18]

FRANCE 24 (2025), *France shuts schools as temperatures peak amid Europe-wide heatwave*, https://www.france24.com/en/environment/20250701-france-braces-for-peak-temperatures-amid-europe-wide-heatwave. [8]

G7 Germany (2022), *G7 Health Communiqué to Action: Health and Climate: Heat Preparedness through Early Warning Systems*, G7 Germany, https://heathealth.info/wp-content/uploads/G7-report-heat-EWS.pdf. [17]

GAO (2020), "School districts frequently identified mulitple building systems needing updates or replacement", *GAO Highlights*, No. GAO-20-494, United States Government Accountability Office, https://www.gao.gov/products/gao-20-494. [14]

Government of Brazil (n.d.), *Federal Government takes action to tackle heat waves*, https://www.gov.br/secom/en/latest-news/2025/03/federal-government-takes-action-to-tackle-heat-waves. [11]

Japan Sport Association (2019), *Guidebook for prevention of heat* (in Japanese), https://www.japan-sports.or.jp/404.aspx (accessed on 7 October 2024). [24]

Karam, G. et al. (2024), "The Oasis Project: UHI mitigation strategies applied to Parisian schoolyards", *5th International Conference on Countermeasures to Urban Heat Islands*, International Institute of Information Technology Hyderabad, Dec 2019, Hyderabad, India. [20]

MEXT (2024), *Installation of air conditioning equipment in public school facilities*, Ministry of Education, Culture, Sports, Science, and Technology, https://www.mext.go.jp/a_menu/shotou/zyosei/mext_01278.html (accessed on 7 October 2024). [30]

Ministère de l'Éducation nationale (2025), *Vague de chaleur : le ministère rappelle les mesures de prévention et les gestes adéquats à adopter*, https://www.education.gouv.fr/vague-de-chaleur-le-ministere-rappelle-les-mesures-de-prevention-et-les-gestes-adequats-adopter-450755. [22]

Nusche, D., M. Fuster Rabella and S. Lauterbach (2024), "Rethinking education in the context of climate change: Leverage points for transformative change", *OECD Education Working Papers*, No. 307, OECD Publishing, Paris, https://doi.org/10.1787/f14c8a81-en. [28]

OECD (2026), *Using Climate Projections to Assess Increasing Student Exposure to High Temperatures*, OECD Publishing, Paris, https://doi.org/10.1787/98a7f132-en. [1]

OECD (2024), *Education at a Glance 2024: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/c00cad36-en. [2]

Park, R., A. Behrer and J. Goodman (2021), "Learning is inhibited by heat exposure, both internationally and within the United States", *Nature Human Behaviour,* Vol. 5, pp. 19-27, https://doi.org/10.1038/s41562-020-00959-9. [4]

Park, R. et al. (2020), "Heat and learning", *American Economic Journal: Economic Policy*, Vol. 12/2, pp. 306-339, https://doi.org/10.1257/pol.20180612. [6]

Queensland Government (2022), *Air conditioning delivered for ALL Queensland state schools*, https://statements.qld.gov.au/statements/94979. [31]

Queensland Government Education (2024), *Managing excessive heat in schools*, https://education.qld.gov.au/students/student-health-safety-wellbeing/student-health/managing-excessive-heat-schools. [21]

Rhode Island Department of Education (2025), *Calendar Guidance: Guidance for Estabilishing School Calendars and Length of the School Day*, Rhode Island Department of Education, https://ride.ri.gov/sites/g/files/xkgbur806/files/2025-04/SchoolCalendarGuidance_v250411.pdf. [25]

Rode, E. (2024), "109 degrees on the first day of school? In some districts, extreme heat is changing the school calendar", *Chalkbeat*, https://www.chalkbeat.org/2024/09/11/extreme-heat-is-changing-school-district-calendars/ (accessed on 4 December 2025). [26]

Sekartaji, D. et al. (2023), "Energy-use and indoor thermal performance in junior high school building after air-conditioning installation with the private finance initiative", *Buildings*, Vol. 13/2, p. 455, https://doi.org/10.3390/buildings13020455. [29]

UK Department for Education (2025), *Summary of findings in relation to 3 climate risks: Overheating, flooding and water scarcity*, GOV.UK, https://www.gov.uk/government/publications/impact-of-uk-climate-change-risk-on-the-delivery-of-education/summary-of-findings-in-relation-to-3-climate-risks-overheating-flooding-and-water-scarcity. [19]

UK Health Security Agency (2024), *Looking after children and those in early years settings before and during hot weather: Teachers and other educational professionals*, GOV.UK, https://www.gov.uk/guidance/looking-after-children-and-those-in-early-years-settings-before-and-during-hot-weather-teachers-and-other-educational-professionals. [23]

Unicef (2023), *Las olas de calor, agravadas por el cambio climático, afectan la garantía del derecho a la educación de la niñez y adolescencia en México*, https://www.unicef.org/mexico/comunicados-prensa/las-olas-de-calor-agravadas-por-el-cambio-clim%C3%A1tico-afectan-la-garant%C3%ADa-del (accessed on 7 October 2025). [12]

Williams, E. et al. (2024), "High resolution climate change observations and projections for the evaluation of heat-related extremes", *Scientific Data*, Vol. 11/1, https://doi.org/10.1038/s41597-024-03074-w. [3]

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