GLOBAL EDUCATION MONITORING REPORT SUMMARY 2021/2

Non-state actors in education:

WHO CHOOSES? WHO LOSES?

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Sustainable Development Goals

Global Education Monitoring Report

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The Education 2030 Incheon Declaration and Framework for Action specifies that the mandate of the *Global Education Monitoring Report* is to be 'the mechanism for monitoring and reporting on SDG 4 and on education in the other SDGs' with the responsibility to 'report on the implementation of national and international strategies to help hold all relevant partners to account for their commitments as part of the overall SDG follow-up and review'. It is prepared by an independent team hosted by UNESCO.

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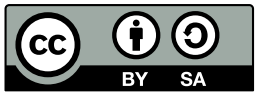

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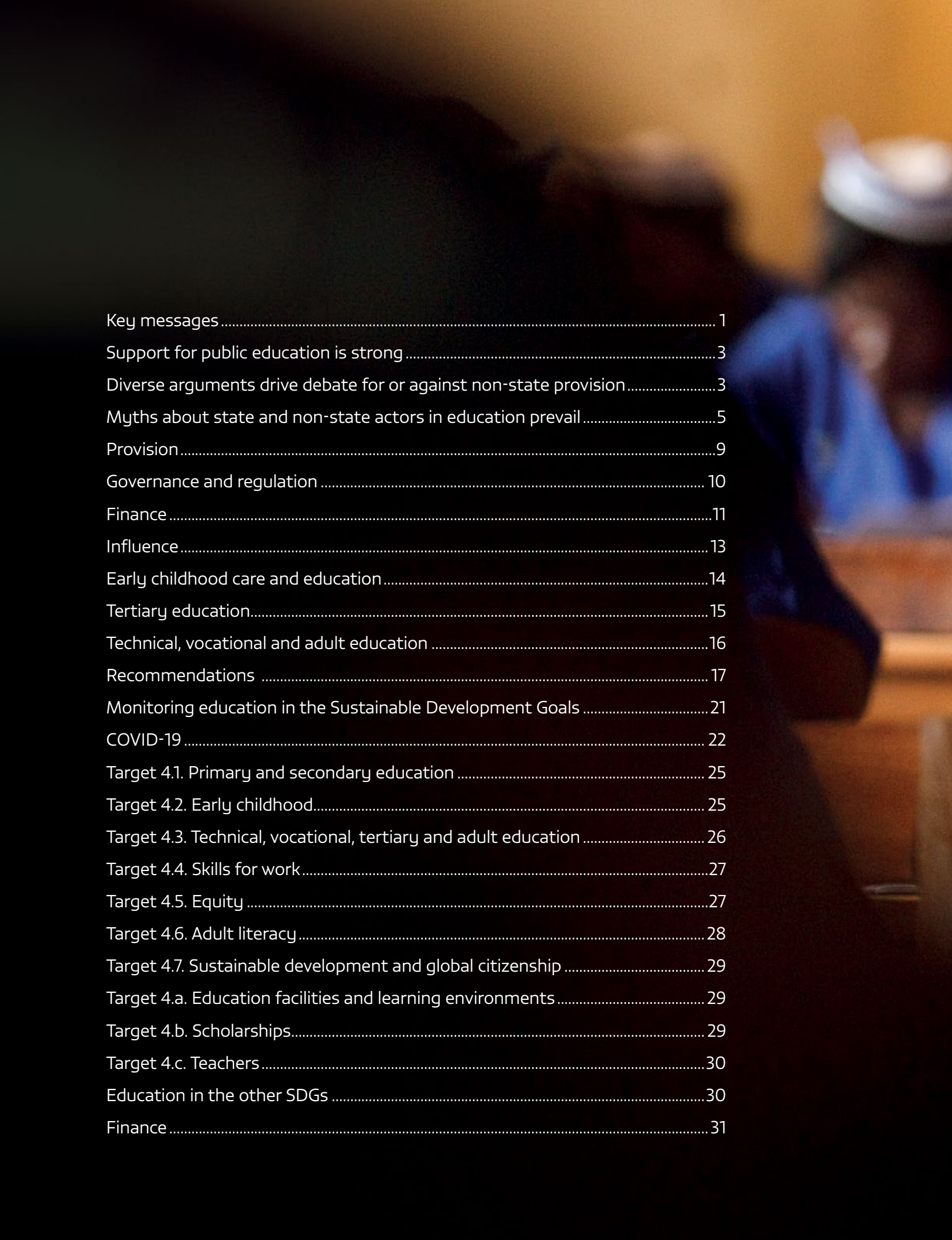

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KEY MESSAGES

There is no part of education in which non-state actors are not involved.

Put simply, without non-state actors, the education of 350 million more children would fall to the responsibility of the state. But non-state engagement also affects the textbooks they use, the food in their canteens, the additional support they get, the skills they learn and much more.

Most people support public education.

Three in four people in 34 middle- and high-income countries would prefer more public spending on education, with support increasing the more unequal the country. Almost 9 in 10 think education should primarily be public.

But such support has gradually eroded in several low- and middle-income countries.

Where public schools had been in short supply and their quality had deteriorated, many families voted with their feet. The share of private institutions worldwide increased by seven percentage points in about 10 years: to 17% by 2013 in primary and to 26% by 2014 in secondary education. It has remained roughly constant since. In Central and Southern Asia the share of private enrolment is 36% in primary and 48% in secondary education.

Public education is not free.

Households account for 30% of total education spending globally and 39% in low- and lower-middle-income countries. Part is due to wealthier families trying to give their children a competitive advantage. But a large part is spent on pre-primary, primary and secondary education that governments committed to provide free of charge. About 8% of families borrow to pay for education, rising to 12% in low-income countries and 30% or more in Haiti, Kenya, the Philippines and Uganda.

Public education is often not inclusive.

Many public education systems fail to prevent stratification and segregation. An index of social diversity in schools, based on Programme for International Student Assessment data, found that Argentina, Brazil, Chile and Mexico had similar high levels of stratification in 2018, although only Chile tends to be criticized for the high share of private institutions in its system.

No one type of provider delivers education of better quality than any other.

Data from 30 low- and middle-income countries show that, once household characteristics are accounted for, the apparent premium from attending private school drops by half to two-thirds. In a sample of 49 countries, the richest are almost 10 times likelier than the poor to go to private school. And parents who can choose schools do so because of religious beliefs, convenience and student demographic characteristics rather than quality, about which they rarely have sufficient information.

Regulatory, monitoring and enforcement capacity tends to be low where the need is high.

Analysis of 211 education systems for the PEER website shows that regulations tend to focus on registration, approval or licensing (98%), teacher certification (93%), infrastructure (80%) and pupil/teacher ratios (74%). Regulations are least likely to focus on quality or equity: 67% regulate fee setting, 55% prevent selective student admission procedures in non-state schools, 27% ban profit making and only 7% have quotas supporting access of disadvantaged groups. Private tutoring is unregulated in 48% of countries and regulated only in commercial legislation in 11% of countries.

Non-state actors are even more present in early childhood, technical, tertiary and adult education.

This is sometimes at the expense of equity and quality. The generally higher cost of non-state early childhood and tertiary education means urban elites are over-represented in these institutions. In the United States, profit-maximizing universities have been linked with a deterioration of student outcomes. Institutions providing private training through market competition or skills development systems, such as Australia's TVET FEE-HELP loan programme and India's National Skill Development Corporation, were forced to rethink accountability and monitoring processes to increase the quality of private provision and improve employability outcomes.

Governments need to see all education institutions, students and teachers as part of a single system.

Standards, information, incentives and accountability should help governments protect, respect and fulfil the right to education of all and should prevent them from turning their eyes away from pockets of privilege or exploitation. Publicly funded education does not have to be publicly provided, but disparity in education processes, student outcomes and teacher working conditions should be addressed head-on. Efficiency and innovation should not be a commercial secret; rather, they should be diffused and practised by all. To achieve that, transparency and integrity in the public education policy process need to be maintained.

Governments have not always led education. Historically, education was organized spontaneously and informally by religion, family and guild. From the late 18th century, states saw the opportunity to develop their economies through an educated workforce and to develop and strengthen a sense of national identity through public schools. Governments were prepared to take on the high cost of delivering this public good because of the wider benefits to societies and economies. For newly independent countries in the 20th century, building a public education system was the hallmark of emancipation from colonialism. Public education invariably aimed to promote noble ideals or ruling ideologies. The new structures superseded and absorbed traditional education structures.

Yet education is also a private good. Consuming more education improves individual opportunities and may exclude others from such opportunities. Those who manage to climb the education ladder are better placed to achieve a higher standard of living and higher returns. As education systems cannot accommodate everybody on the higher rungs, families do everything they can to ensure that their offspring are the ones who make it to the top. Such competition generates demand, which in turn leads to the supply of education goods and services. Depending on national context and disposition, markets may emerge in direct provision of education services that confer advantage.

SUPPORT FOR PUBLIC EDUCATIONIS STRONG

Education choices determine children's lives. Parents must not only make simple calculations of financial costs and benefits but also consider multiple interrelated factors. Choices regarding what is taught, how, by whom and where reflect the competing world views and aspirations of parents and of other education stakeholders. They concern two main dimensions: control and distribution of resources, and values and beliefs for changing society. Education choices are highly political and are reflected explicitly or implicitly in political agendas. In addition to individual ideological and circumstantial factors, understandings of social challenges and how government, people and institutions should relate to one another vary among countries. These understandings influence attitudes on what policies government should pursue and who should benefit from them.

Research on support for public education is overwhelmingly from high-income countries. A recent survey of attitudes in Denmark, France, Germany, Ireland, Italy, Spain, Sweden and the United Kingdom showed that when respondents were asked to prioritize one of eight potential areas for additional spending, education was the top option for 28%, with health care second at 22%. While 77% of respondents supported school choice, over 60% opposed a significant role for private schools in the national education system.

Analysis of the 2016 International Social Survey Programme (ISSP) special module data on the role of government, commissioned for this report, addressed public education support using a sample of 35 countries, including 10 middle-income countries. Overall, 89% of adult respondents said the primary responsibility for providing school education rested with governments, while 6% said families and 5% other institutions (private companies and for-profit organizations; non-profit organizations, charities and cooperatives; and religious organizations). But, reflecting strong exposure to non-state provision, respondents in India (46%),[1] the Philippines (63%) and Chile (76%) expressed the lowest support for public provision (**Figure 1**).

DIVERSE ARGUMENTS DRIVE DEBATE FOR OR AGAINST NON-STATE PROVISION

Proponents and opponents of non-state actors in education argue their cases in relation to the capacity and legitimacy of state and non-state actors to promote efficiency, equity and inclusion, and innovation in education. These issues are seen through the lens of whether people believe education is a good or service to be procured through the market and whether people should be able to choose education.

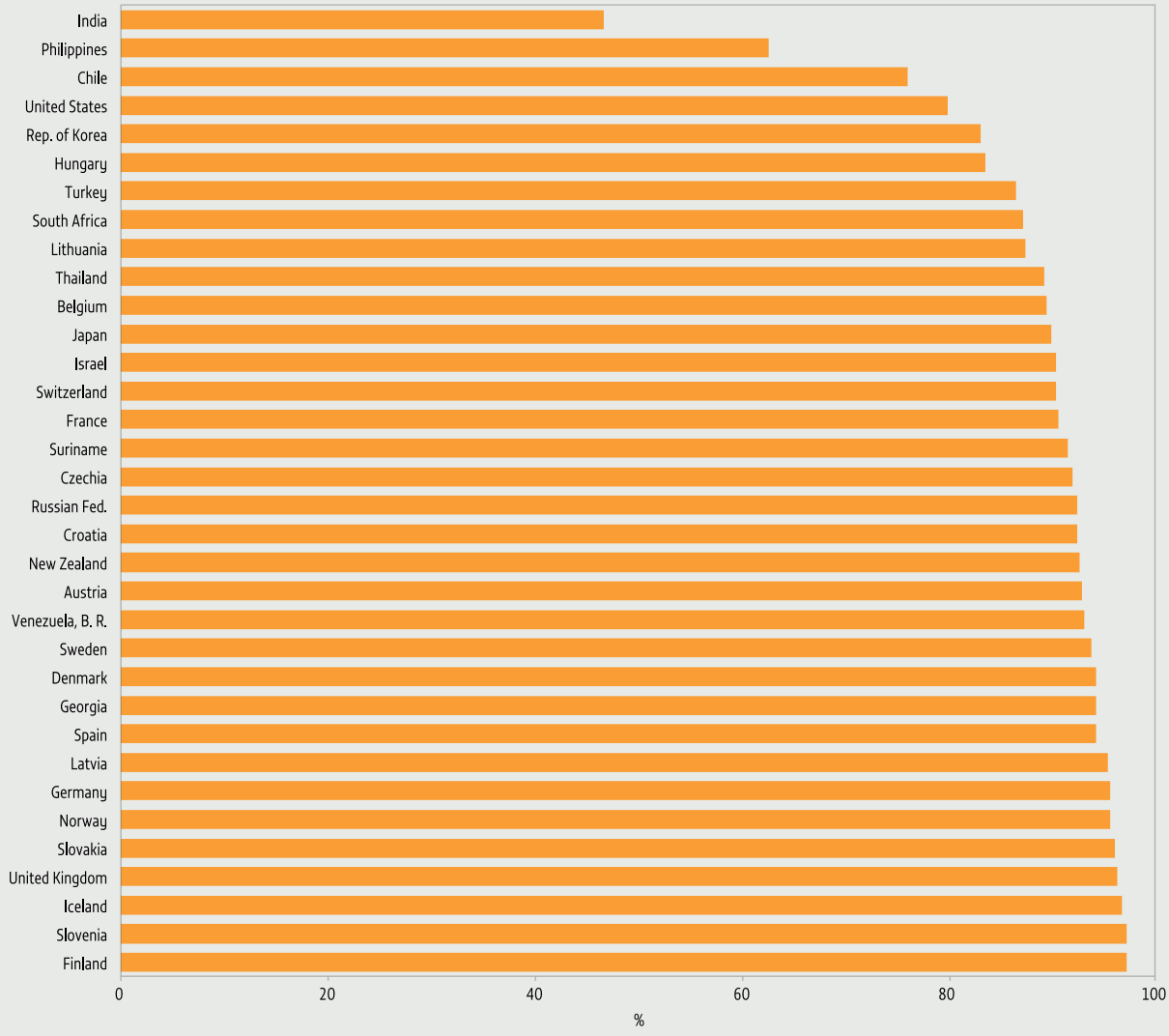
Are non-state actors more cost-efficient in education?
Proponents of non-state activity in education argue that it is inevitable since the state cannot cater for the full range of demands for education. Regardless of whether non-state actors are motivated by charity, beliefs and ideas, or profit, if the supply of education goods and services is responsive to demand, then a market is possible – if not a conventional market, then at least a planned one. Through the market, cost-efficiency objectives can be pursued.

1 The regional edition of this report on non-state actors in education will be devoted to South Asia.

FIGURE 1:

In most countries studied, over 80% support public provision of education

Percentage of adults who said the primary responsibility for providing school education rested with government, 2016



Source: Edlund and Lindh (2021) based on the 2016 ISSP.

Opponents of non-state activity in education argue that, if cost-efficient practices exist, they should be diffused throughout the education system and practised by all schools, state and non-state alike. If a case could be made that teachers in a country were paid too much, then this should be a matter for public policy to resolve, not a reason to change the model of provision. Non-state actors may increase cost-efficiency by hiring young or unqualified teachers, which is not a sustainable solution. Making reliable cost comparisons between state and non-state schools is challenging. Public schools tend to serve more disadvantaged populations, which are costlier to educate.

Do non-state actors deliver equity and inclusion in education? Proponents of non-state provision argue that non-state providers help fulfil the right to education. In many contexts, non-state actors have filled genuine gaps in education provision, often for disadvantaged groups neglected by public systems.

Governments are often reluctant to set up schools in informal settlements, as in Pakistan. Non-state actors also make valuable contributions in crisis and emergency contexts, such as the aftermath of Nepal's catastrophic 2015 earthquake. In El Salvador, in urban areas afflicted by violence and gangs, the share of enrolment in non-state schools is double the national average.

Those who oppose non-state schools point to problems caused by school choice. If parents can choose the school they want, without guiding regulations, then the richest are most likely to be able to afford the best, often non-state schools, exacerbating inequality, stratification and segregation. Parental decision making requires good information, but information on school characteristics is lacking or, if it exists, unequally provided, with more disadvantaged populations having less access to it. Moreover, there are several hard-to-reach populations to whom providers may be reluctant to provide services.

Some of those who think government should not have a primary role in education provision challenge its authority to decide on education content or its ability to deliver education of a desired standard. Parents may make a case for separate and non-state provision due to concern that the local public school threatens the values of the cultural, ethnic, linguistic or religious community in which they want to raise their child. But governments may argue that this conflicts with their commitment to ensure equitable and inclusive education and interferes with their ability to apply uniform standards in an effort to provide the same quality of education to all children, without exception.

Do non-state actors bring more innovation to education? Proponents of non-state involvement in education assert that it helps increase innovation. Many ideas that have transformed understandings of pedagogy emerged at the margins of public education systems or even outside them. Public education systems have grown into large, centralized bureaucracies that can lose sight of the populations they are to serve. A common criticism is that they blunt initiative, force standardization and demotivate students and teachers.

Delivering innovation is a complex task for public education systems. Changes need to be piloted and tested for scalability. Challenges can include bureaucratic obstacles, organizational capacity gaps, lack of teacher and parental motivation, limited financial means and political meddling and opposition. However, public education systems are not negatively predisposed to innovation by design. And some non-state actors are testing whether certain innovations work in public education.

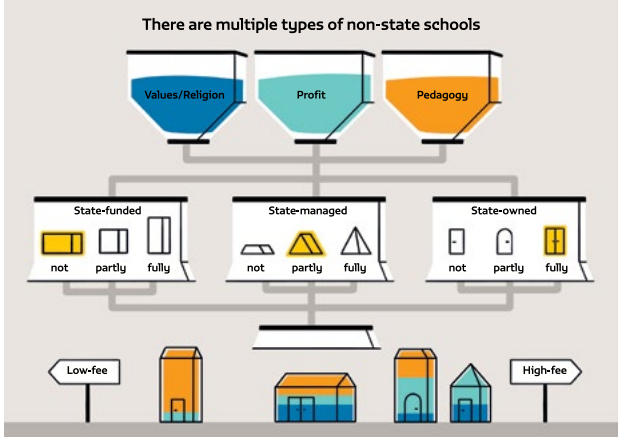
Debate on innovation is often obscured by key concepts being referred to in contradictory ways. Standardization is maligned by those opposing what they see as public education systems' rigidity, conformity and lack of differentiation, but defended by those who champion common core curricula to ensure standards are met in all schools and who suggest that it is competitive pressure, often influenced by private providers, that accelerates a tendency to conform. Ultimately, whether standardization discourages innovation depends on what standards are defined. Terms such as 'accountability', 'autonomy' and 'choice' have been both hailed and demonized as organizational principles of education. While any of these ideas can be examined on their merits, they do not necessarily justify a bigger role for non-state, and particularly private, education provision.

MYTHS ABOUT STATE AND NON-STATE ACTORS IN EDUCATION PREVAIL

Ten recurring myths about state and non-state actors in education are questioned throughout this report.

MYTH 1.

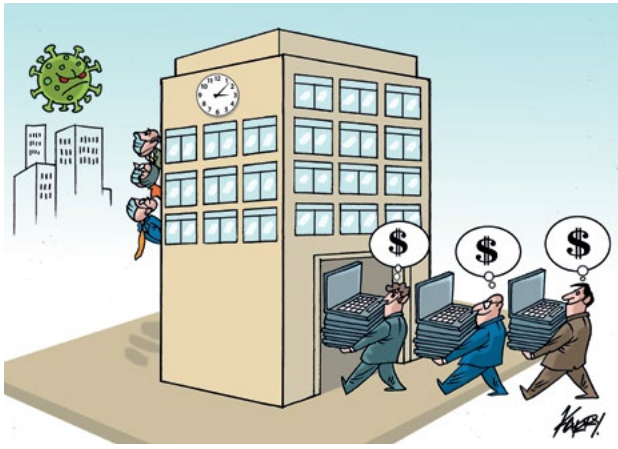
State and non-state actors can be clearly distinguished.



Discussion of non-state actors in education typically involves a binary classification: public and private schools. In practice, the landscape is more complex and distinctions are far less clearcut. Non-state actors are highly heterogeneous. They enter the education sector for diverse reasons related to ideas, values, beliefs and interests. Many enter into formal or informal organizational arrangements with government, including contracting and public–private partnerships, which blur distinguishing lines.

MYTH 2.

The extent of privatization is known.



Descriptions of trends in the role of non-state actors often rely on the share of private institutions in total enrolment. How do countries account for public school teachers who supplement their income by teaching students after hours? How public is an education system that outsources textbooks, assessment or data management, or even catering and transport? Is a government policy written by a lobbyist still considered public?

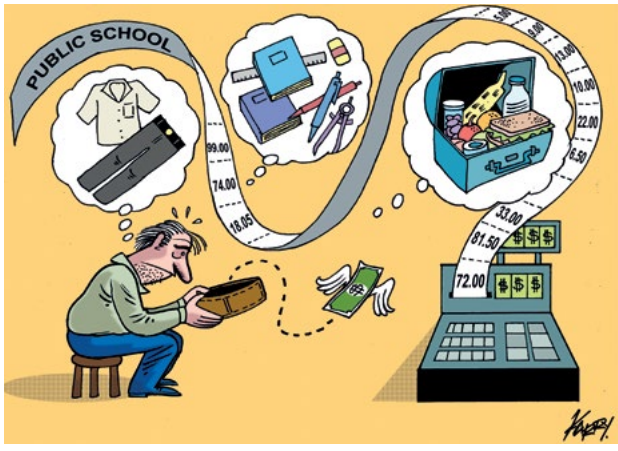
MYTH 3.

The private sector is to blame for privatization in education.

The vast majority of private providers are single proprietor schools. They emerged in response to genuine parental concerns about public school quality lowered by neglect. When the decline in quality became clear, rich and, to a lesser extent, also poorer households left the public system, which undermined its support and left it underfunded. Elitism among political leaders increased their tolerance for inequality and reduced their commitment to protect public education and the disadvantaged populations that benefited from it.

MYTH 4.

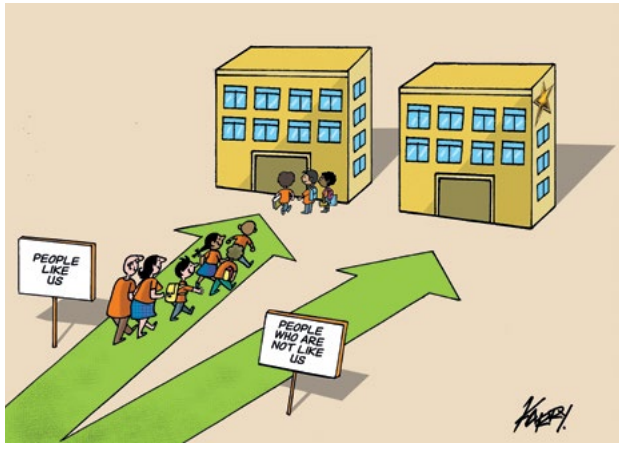
Public education is equitable.



Households often incur high education costs through hidden fees, avoidable out-of-pocket payments and additional expenditure to compensate for what public schools do not offer. While it is common to criticize education systems that have opened the doors to non-state providers, which exacerbate inequality, many public education systems fail to prevent stratification and segregation.

MYTH 5.

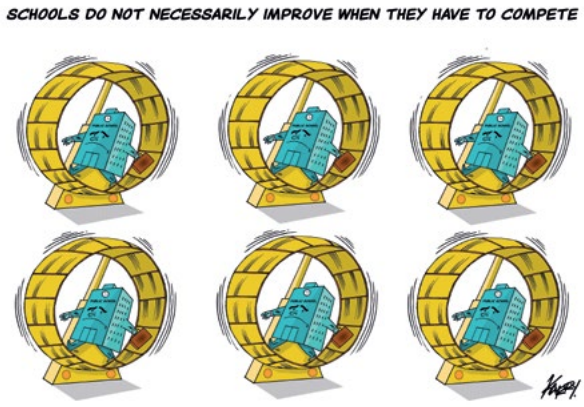
Parents base school choice on robust information about quality.



A foundational assumption among supporters of non-state schools and school choice is that parents, as consumers, have access to information about the best schools and use it efficiently. In practice, data on schools' impact are too complex for most countries to manage and communicate. And parents often ignore such information, choosing schools that appeal to them for other reasons: religious beliefs, convenience and students' demographic characteristics.

MYTH 6.

Competition leads to school improvement.



Accountability and healthy competition motivate some people to improve. In the economic sphere, firms compete to survive, as profit making is why they exist. But it is not clear how such dynamics play out in education. Studies that demonstrate system-wide effects of competition are rare, due to the complexity of the subject matter, and findings have been inconclusive. Worse, competition can lead non-state schools to pander to parents' aspirations, against good pedagogical practice.

MYTH 7.

Private schools and universities are better.

Comparison of public and private school examination pass rates is the usual evidence relied upon for school league tables as reported by the media and read by parents. In practice, student intake varies, with better-off, well-educated and highly aspirational parents far more likely to choose a private school. Private schools, in turn, may be able to screen students to maximize the possibility of top results. When such factors are controlled for, the gap between public and private schools is usually slashed or eliminated.

MYTH 8.

The private sector is a solution to the out-of-school challenge.

With more than 350 million primary and secondary school students enrolled in private institutions, a crisis would be inevitable if these students switched over to the public education system. However, private schools are booming in urban areas, where enrolment levels are already close to universal. They are largely absent in rural areas. And in low- and middle-income countries, children from the richest 20% of households are 10 times more likely to attend a private school than their peers from the poorest 20%.

MYTH 9.

The private sector is a solution to education financing gaps.

High hopes are often expressed that the private sector can play an important role in financing education to help achieve SDG 4. There is no evidence so far that it is willing or able to do so. But it could make other contributions, for instance through tax, especially in low- and lower-middle-income countries where domestic revenue mobilization rates are low and opportunities for tax evasion and avoidance are rife. The private sector could take a stronger lead in skills development and childcare services in line with national regulations.

MYTH 10.

Regulations can address all concerns about non-state provision.

There is consensus that non-state activity in education should be regulated. But regulations do not meaningfully address how to promote equity and quality system-wide. Few governments monitor whether the flight of wealthier households to private schools segregates the education system or how household education spending increases inequality. Many governments allow selective school admissions. Few regulate private supplementary tuition or lobbying, which remains largely undefined under the guise of partnerships. Even fewer have the resources to implement and enforce regulations effectively.

About 25 years ago in the United States, when evidence started emerging about the unequal effects of new organizational forms of public education based on school choice, the authors of an early study aptly summarized the findings with two questions: Who chooses? Who loses? (Fuller and Elmore, 1996). As more evidence accumulates on the mechanics, effectiveness and consequences of school choice around the world, the *Global Education Monitoring Report* takes these questions to a global audience. Four key aspects of non-state activity – provision, regulation, financing and influence – are addressed in primary and secondary education, followed by a more in-depth look at these aspects at other education levels, which tend to receive less attention: early childhood education, tertiary education and technical, vocational and adult education.

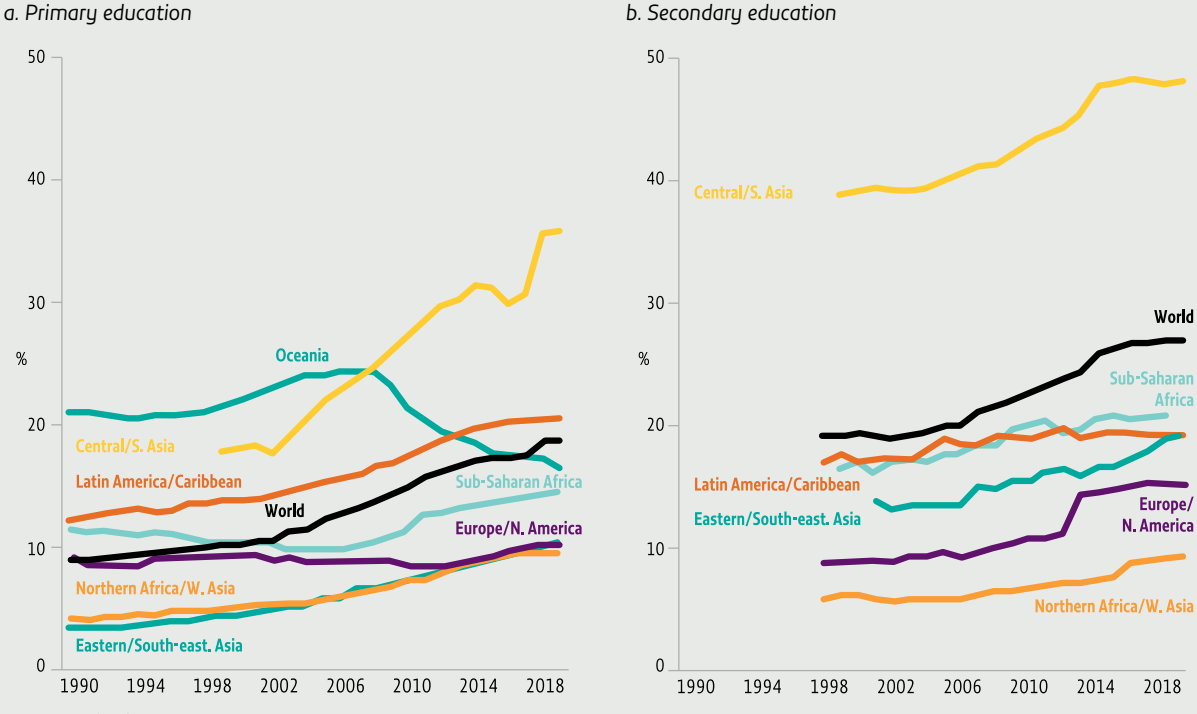
PROVISION

Enrolment in non-state schools has been growing. The share of private institutions worldwide increased by 7 percentage points in about 10 years, from 10% in 2002 to 17% in 2013 in primary education and from 19% in 2004 to 26% in 2014 in secondary education, but has since remained roughly constant (**Figure 2**).

Ownership, management and financing are the usual criteria for defining the non-state sector. Providers' relationship with the state, their motivations and their price can be used to group them. Analysis from this report found that faith-based schools can be found in 124 of 196 countries. Non-governmental organization (NGO) and community schools can be found in 74 of 196 countries, often in emergency contexts. For-profit schools are a minority, except in a few contexts, such as the United Arab Emirates. A broad range of modestly priced, mostly single-proprietor schools in low- and middle-income countries in sub-Saharan Africa and Asia are known as low-fee private schools.

State and non-state schools differ in student intake and resources. Few poor children have the choice to attend private schools. To evaluate the quality of education experience, parents refer to class size, teacher quality and effort, school responsiveness, discipline and safety, language of instruction, religion, ethnicity and culture. In the United Kingdom, analysis of 18,000 English schools comparing public schools with privately managed public schools found a greater percentage of unqualified teachers in the latter.

FIGURE 2:
Private enrolment shares are highest in Southern Asia
Percentage of enrolment in private institutions, by education level, 1990–2019



Source: UIS database.

Public and private schools may differ in other resources. In Latin America, the average number of computers per student in private schools is double that in public schools.

Most evidence shows that the learning advantage of attending private schooling is limited. Data for 31 low- and middle-income countries showed that the estimated premium from attending private school dropped by one half to two thirds after adjusting for household wealth. Moreover, while non-state provision of core education can fill gaps in the short or medium term, it can lead to segregation and inequality. In Sweden, 29 of 30 municipalities contained strongly segregated lower secondary schools; in 16, segregation appeared to have been largely driven by school choice. While competition with non-state schools is expected to prompt public schools to improve, the mere presence of private or other schools in near proximity may not be sufficient incentive for public school authorities to act if they do not have the financial resources or autonomy to respond.

Private supplementary tuition is nearly universal. This phenomenon, which has been prevalent in several countries in East Asia and the Arab States, is also spreading in regions where it was uncommon, such as sub-Saharan Africa and northern Europe. Demand for supplementary tuition is most associated with students' need to prepare for high-stakes examinations to gain a competitive advantage. But the impact of tutoring on individual student performance is mixed: Some studies have detected positive effects for those furthest behind, while other studies indicate that tutoring has no systematic positive effect on student performance. Moreover, tutoring can undermine education system performance by negatively affecting student and teacher behaviour.

Textbook policy, procurement and distribution vary in terms of state involvement. In some countries, publishing is primarily by state-owned and -controlled enterprises; in others, there is a mixed system of public and private publishing. Several high-income countries, including Spain, mainly leave textbook production to commercial providers, with government involved in providing guidelines and approving proposals. The interplay among international publishers, donors and local interests often complicates the transition to local publishing in poorer countries. For example, Gabon's textbook industry is dominated by Edicef, a textbook publishing arm of French-owned Hachette Livre, one of the world's largest publishers.

The push for content digitization is led by large publishing and technology companies. Pearson, the global market leader in education publishing, changed its slogan from 'world's largest publisher of textbooks and online teaching materials' to 'world's digital learning company', with a stronger focus on online schooling and assessment. Beyond global and regional textbook publishers, technology giants have entered the online education sector, a trend strengthened during the COVID-19 pandemic. Analysis of education technology procurement process experiences in the United States found that school districts and schools were typically overwhelmed by thousands of education technology vendors marketing a wide array of products.

Governments are outsourcing more support services in education. Critics of outsourcing fear that privatization could undermine public services and professionalism. An Australian analysis found that increased contracting of cleaning staff led to contractor proliferation, increased incidence of underpayment, reduced cleaning hours and lower occupational health and safety standards.

GOVERNANCE AND REGULATION

Governance of non-state education providers is often fragmented. Good governance and effective regulations are key determinants of governments' ability to deliver equitable education of good quality. In 94 countries, sector plans or strategies envisage intervention by non-state actors in provision or other service delivery. Ministries or departments share responsibilities in some countries. Fragmentation, lack of coordination and overlapping or unclear articulation of responsibilities can negatively influence equity and quality. Just 39% of countries have a private education department, division or agency at the national level under the education in charge of primary and secondary education. Education ministries are exclusively responsible for quality assuring non-state actors in 83% of countries, while in 13% multiple authorities do that. Religious affairs, rather than education ministries, are responsible for faith-based schools in 22% of countries – and 70% in Northern Africa and Western Asia.

Funding mechanisms have an impact on governance. Non-state actors obtain direct or indirect government financial support in various forms: per-student subsidies (in 79% of countries), subsidies to parents (23%), support to teacher salaries or other operating experiences (about 70%) and loans or gifts (27%).

Public–private partnerships involve various levels of engagement between each actor as well as diverse policy and regulatory arrangements. A review of studies on funding mechanisms found the impact was often negative. In at least two thirds of 98 studies, the impact on equity of subsidies, voucher programmes and charter programmes was found to be negative.

Regulations should help improve quality and equity in education. Nearly all countries have regulations stipulating requirements for entry and operation of non-state schools, including registration and licensing. In 80% of countries, there are regulations on space requirements, such as plot or building size and minimum classroom space. In the Indian state of Haryana, buildings need to be owned or leased for at least 20 years to set up schools. Another state, Uttar Pradesh, uses two criteria for recognizing a school: minimum area per student (9 m^2) and classroom size (180 m^2). Regulations also cover water and sanitation. In 47% of countries with data, single-sex toilets are required in non-state schools. In 74% of countries, pupil/teacher ratios are regulated. About 55% of countries have regulations concerning admission procedures in non-state schools, while 67% regulate non-state school fees in compulsory education. Two thirds have regulations on curriculum. Over the past 10 years, 21 countries have introduced regulations on profit-making and 80 on teacher certification.

Weak implementation and inadequate accountability undermine education quality and equity. Having regulations in place does not mean non-state providers comply. In some low- and lower-middle income countries, complex, expensive or long registration procedures deter providers from obtaining official recognition. Nigeria's Lagos state government had approved just 1 in 4 of some 20,000 private schools as of 2021. At least 27 countries' statistics recognize unregistered schools. Uganda classifies non-state schools as licensed, registered and unregistered: 14% of primary and 13% of secondary schools are unregistered. Lack of oversight can result in informal student selection. In Bogotá, Colombia, the Concession School programme of charter schools, set up to serve vulnerable students, had an admission policy based on non-discrimination and residence proximity; in reality, albeit informally, students were selected on the basis of academic performance.

Quality assurance processes and standards vary. Practically every country enforces non-state school standards through school inspections. In 81% of countries, this obligation concerns all types of non-state schools; in 3%, it concerns only government-aided schools. In addition, 81% of countries have regulations mandating the participation of non-state schools in large-scale assessments. In over half of those countries, the obligation covers all types of non-state schools, while in 12% it concerns only government-aided schools.

Effective accountability mechanisms, sanctions and redress mechanisms can also foster compliance. Government should hold education providers accountable for compliance with standards on quality, inputs, safety and inclusion. Almost all countries apply sanctions, school closure or licence withdrawal if non-state schools do not comply with regulations. Some 54% of countries also regulate such closures' duration. About 90 countries have codes of ethics or conduct for teachers and school personnel, which often cover non-state providers.

Private supplementary tutoring is rarely regulated. Private tutoring is unregulated in 48% of countries. Only 53 countries regulate it in education legislation, while 19 regulate it only under commercial law. In 31% of countries, regulations specify tutors' required qualifications; 10 countries explicitly ban teachers from tutoring. In China, a 2021 law bans firms teaching compulsory schooling curricula from making profits and also from raising capital, preventing the issuing of new licences. Companies need to become non-profit to continue operations. The government has set up a department exclusively for regulating and monitoring private tutoring companies.

FINANCE

Governments vary in their decisions whether and how to fund non-state providers. In Canada, government covers 30% of private but 94% of public school expenditure. In the Netherlands, all schools, regardless of type, receive block grants for staff and operating costs and additional funds for students from disadvantaged socioeconomic backgrounds and with special education needs. Since 2000, several countries, including Chile, Hungary, Sweden and the United Kingdom, have experienced increases in the enrolment share of dependent private schools, those that receive at least 50% of their funding from government.

Governments finance only some non-state school expenditure. In Bangladesh, over 16,000 non-state secondary schools and 7,600 *madrasas*, which together enrol 96% of all students, receive monthly payments for teacher salaries. But Haiti, where 85% of primary schools are non-state, does not cover salary costs. In India, just

6% of primary and secondary schools received grants for teacher salaries in 2019/20. In Indonesia, *madrasas* and Islamic boarding schools, known as *pesantren*, accounting for 35% of all private schools, are excluded from some funding mechanisms.

Some governments support non-state schools' admission of disadvantaged students. In India, the 2009 Right to Education Act required private schools to offer 25% of grade 1 places to children from low-income families; in exchange, the government reimbursed their tuition costs. By contrast, Côte d'Ivoire, where the number of students in subsidized secondary schools quadrupled between 2010/11 and 2017/18, did not target equitable access.

Households face significant burdens and tough choices. As a share of GDP, household education spending amounts to 0.3% in high-income and 1% in low- and middle-income countries. It accounts for 1.2% of GDP in El Salvador, 1.5% in Morocco, 1.8% in India and 2.5% in Ghana. While the poorest 20% of households spend practically nothing on education in Argentina, Costa Rica, the Philippines and Zambia, the richest 20% spend between 0.5% and 1.7% of GDP.

Public education is often not free. About one third of household expenditure in low- and middle-income countries comes from households with children in public schools. Households with children in private schools account for about 80% of spending in Guatemala and Pakistan; households with children in public schools account for about 60% of spending in China and Kenya. In rural areas of the United Republic of Tanzania, more than three quarters of families view primary school contributions as mandatory, noting that children could be punished if contributions are delayed. In Australia, parental contributions exacerbate inequality between schools.

Private supplementary tuition is a major cost for many households. In China, households allocated about one third of their total education expenditure to costs outside school in 2017, ranging from 17% of rural households to 42% of urban households. In Egypt, as a share of average expenditure per capita, among students in general secondary education, those from the richest quintile of households spent 51% on private lessons and the poorest 29%. In Myanmar, tutoring represented 42% of total household education spending.

Private providers rely on household out-of-pocket expenditure. Most private secondary schools receive at least 80% of their revenue from fees in 28 out of 51 upper-middle- and high-income education systems. In low- and lower-income countries, poor parents employ a variety of strategies to cope with private school expenses. Globally, one in six families saves to pay school fees, while about 8% of households also borrow. In Haiti, Kenya, the Philippines and Uganda, 30% of households or more borrow for school fees.

Private school funding has been substantially affected by COVID-19. The pandemic affected private schools, especially those relying on school fees. Nigeria launched a stimulus package with low-interest loans to pay private school teachers. In Ghana, private schools received support as part of a general programme for small and medium-sized enterprises. Viet Nam expanded cash transfer programmes to cover private school teachers. In Panama, 35% to 40% of parents could not pay monthly fee instalments. In Ecuador, public school enrolment was up by 6.5%, or 120,000 students, who moved from private schools.

The use of aid for funding private education is debated. Out of an education portfolio of almost US$1.2 billion, the International Finance Corporation allocated 15% to private school chains but froze its investment in fee-charging private schools in 2019, following pressure from civil society organizations. The Global Partnership for Education developed a private-sector strategy but opposition during its negotiation led to a clause prohibiting use of its funds to support for-profit provision of core education services.

Donors are experimenting with public–private partnerships. Cash-strapped governments have raised private capital to improve and expand public education infrastructure in Egypt, the Philippines and South Africa. Some donors have looked into using their funds as a catalyst to raise financing through such partnerships. But there is concern that governments that can design, implement and regulate partnerships could do better using public procurement to achieve their objectives.

The financial contribution of philanthropic and corporate activities in education is small. Despite perceptions that the amount philanthropic foundations spend on education is growing, it remains relatively insignificant. Systematic analyses of philanthropic giving by 143 foundations in the Network of Foundations Working for Development, an initiative of the Organisation for Economic Co-operation and Development (OECD), estimate that education received US$2.1 billion over the three years from 2013 to 2015. This was equivalent to 9% of all philanthropic giving.

INFLUENCE

Arguments regarding efficiency, innovation and equity are at the core of debates on the role of non-state actors in education. The debates are often characterized by acrimony and mistrust as two very different views of the world clash. Various actor groups try to influence public opinion and education policy for or against a stronger role for non-state actors. Their tools are advocacy and lobbying networks, research, and funding, which is often associated with sales of goods and services. In this competition of political ideas and economic interests, where actors use legitimate and illegitimate means to make their point of view prevail, the challenge is to maintain the transparency and integrity of the public education policy process and keep vested interests at bay.

Most actor groups do not hold a uniform position on non-state providers in education. Civil society organizations are often critical, voicing concern over privatization and commodification in education and arguing that education must remain under democratic control. Yet even within a rights-based movement, such as the Global Campaign for Education, members hold more nuanced views influenced by the reality in their countries. In a survey of members carried out for this report, 43% expressed a negative view of for-profit provision but 12% were supportive; on public–private partnerships, the shares were 41% and 20%, with the rest expressing a mixed view.

Global advocacy networks have framed privatization and commercialization as threats to the right to education. This perspective is expressed in the Abidjan Principles on the human rights obligations of states to provide public education and to regulate private involvement in education. In 2018, 10 Kenyan citizens lodged a complaint with the Compliance Advisor Ombudsman, the independent accountability mechanism for the International Finance Corporation (IFC), alleging that Bridge International Academies, a for-profit chain, was violating curriculum, health and safety and labour standards. In 2020, the IFC froze investment in school chains while the World Bank's Independent Evaluation Group launched an evaluation of investment in private schools.

Uncritical support and resources from many international organizations to non-state providers influence agendas. Among pathways through which the World Bank influences policymaking is a module on private-sector engagement, considered one of the 13 most important policy areas for promoting learning under the Systems Approach for Better Education Results. It has recommended private provision expansion in 9 of 10 countries. The UNICEF-hosted Education Outcomes Fund attracts impact investors to results-based financing projects, although these do not have a good track record in education. Organizations that have benefited from international support include Ark, which has expanded from operating public schools in England (United Kingdom) to advising on and helping implement public–private partnerships in countries including Liberia and South Africa.

Foundations' positions differ on the role they think non-state actors should play in education. The varied motivations of corporate and philanthropic foundations make them hard to classify as a group. Often, foundations are criticized for trying to influence policy in particular directions. The philanthropic Lemann Foundation helped introduce national learning standards in Brazil after multiple consultations.

Teacher unions have been at the forefront of advocacy efforts to support public education. Unions have effectively exposed attempts to undermine public education through unwarranted commercialization and outsourcing of public services. Education International, a federation of teacher unions, has been questioning whether the extensive use of public–private partnerships in Latin America, for instance in Costa Rica and the Dominican Republic, is to the detriment of public institutions serving the same purposes. But on some occasions, union tactics have been criticized for undermining efforts to strengthen public education.

Businesses frame their advocacy on education reform in human capital terms. The Japan Business Federation, like powerful economic lobbies around the world, has issued education policy recommendations that appeal for modernization and 21st century skills. Some have criticized the recommendations as contrasting with employers' hiring and training practices. The Global Business Coalition for Education calls on its members' expertise, leadership and resources to give political prominence to education. Critics counter that the best support to public education would be to engage genuinely with campaigns against tax avoidance and evasion. Concerns have also been expressed about how education technology firms, which use marketing techniques to sell governments products in ways that do not align with the public good, intensified their efforts during the COVID-19 crisis and the shift to remote learning.

EARLY CHILDHOOD CARE AND EDUCATION

Non-state actors lead care and education services for children under 3. In 33 high-income countries, private institutions accounted for 57% of total enrolment in 2018. In Australia, Ireland, the Netherlands, New Zealand and the United Kingdom, the for-profit private sector is mainly responsible. In Germany, 73% of enrolment was in private institutions in 2017 but only 3% of providers were for-profit. In 33 middle-income countries, non-state actors accounted for 46% of enrolment of children under 3, ranging from close to zero in the Russian Federation to 100% in Turkey. Only a few countries, including El Salvador, have shifted towards greater state provision. Latin American countries, including Colombia, Guatemala and Peru, have embraced small-scale, community-based childcare programmes. Employer-based provision, relatively common in richer countries, is only gradually emerging in poorer countries. A key challenge is that formal sector employment accounts for only 30% of employment in low- and middle-income countries.

Non-state actors are more prominent in pre-primary than in basic education. Between 2000 and 2019, the share of private institutions in total pre-primary education enrolment increased from 28.5% to 37%, reaching 55% in Eastern and South-eastern Asia. In China, under the 'walking on two legs' policy, the share of private institutions increased from 31% to 57%. In Viet Nam, the share of private enrolment fell from 60% in 2003 to 12% in 2014. Shares range from less than 1% in Eastern European countries, including Ukraine, to more than 95% in the Caribbean (e.g. Antigua and Barbuda) and the Pacific, where provision tends to be either community-based (e.g. Vanuatu) or linked to religious missions (e.g. Samoa). Northern Africa and Western Asia, led by Algeria and Egypt, is the region that recorded the largest drop in the share of private institutions in pre-primary education enrolment, from 53% in 2000 to 36% in 2019. By contrast, between 2000 and 2018, the share of private institutions increased in Israel from 5% to 36% and in Kuwait from 26% to 45%.

The cost of non-state pre-primary provision can be too high for the poorest. Household surveys show that administrative data underestimated the share of non-state enrolment in six of seven sub-Saharan African countries by 20 percentage points, on average. Non-state provision has mainly addressed demand in urban areas, where such services tend to be more commonly available, and from richer households, which can afford them. As a share of annual household consumption, private pre-primary education accounts for 6% for the richest and 17% for the poorest in Ghana; the equivalents in Ethiopia are 4% and 21%.

Non-state provision challenges governance and regulation. The multiplicity of non-state actors makes governance complex. Cambodia has separate regulations and decrees for community preschools. In Sri Lanka, absence of a multisector regulatory framework means the scope of work of several ministries (education, health, and women and child affairs) and provincial councils overlaps. In Lagos, Nigeria, the probability that the state education ministry would inspect a private preschool was higher if they charged high fees (68%) than if they charged low fees (48%). In Nairobi, Kenya, community schools are inspected more often than religious, charity or for-profit schools.

The quality of non-state providers is highly variable. In many low- and middle-income countries, private educators tend to be less prepared and have fewer professional development opportunities than public-sector peers. Only 8% of private but 75% of public kindergarten teachers do the Ghana Education Service's training programme, as there are no minimum requirements for private teachers. The use of English as medium of instruction in non-state preschools, as in Brazil, is an example of tension between developmentally appropriate curricula and popular perceptions of quality.

Few low- and middle-income countries have quality assurance procedures that go beyond administrative requirements. In Jamaica, where provision is mainly in non-state hands, the education ministry requires qualified inspectors; other staff make monthly monitoring site visits based on 12 national standards that include interactions and relationships among children, teachers, parents, caregivers and community members. The Philippines monitors national standards and competencies through the government-validated Philippine Early Childhood Development Checklist.

Non-state actors innovate and advocate for ECCE. Historically, committed educationists worked outside or at the margins of the formal public education system to pursue their vision of child-centred learning. Academic researchers have drawn attention to early childhood education programmes' long-term effectiveness, encouraging public authorities to scale up such programmes. Non-state actors advocate for excluded children, working with mothers in penitentiaries in Chile, poor working parents in the Philippines and children in institutions in Romania. Organizations such as the Bernard van Leer Foundation, the Aga Khan Foundation

and the Open Society Foundations have mobilized ECCE support and advocacy.

TERTIARY EDUCATION

Nearly all countries ensure tertiary education provision through a combination of state and non-state actors. About 33% of tertiary students are enrolled in private institutions globally, with the highest shares in Central and Southern Asia and Latin America and the Caribbean. Growth in non-state provision responds to a variety of demands. Religion- or culture-oriented institutions are linked to history and tradition, fulfilling demand for 'different' education. Elite institutions arise in response to demand for 'better' education, often from the more affluent. Finally, smaller, non-denominational institutions have recently surged in response to demand for 'more' tertiary education, especially in the context of tight public budgets.

Non-state institutions have implications for system quality. Smaller fee-charging institutions tend to offer only a few fields of study, mostly vocationally oriented. In India, about 40% of private colleges offer only one field, generally education. Academic staff of non-state institutions are less likely to be full time – less than 20% are in Senegal – and they are often moonlighting professors from public institutions. In Malaysia, moonlighting can reach 80% of staff in smaller and newer non-state institutions. Profit orientation creates additional quality challenges related to market concentration and prioritization of returns over academic improvement.

Non-state provision raises equity concerns. In upper-middle-income countries, a greater share of non-state actors in total enrolment is associated with greater inequality in attendance. In Uruguay, over 75% of the student body in non-state institutions comes from the richest quintile, compared with less than 40% in public ones. Still, non-state institutions can help provide access to groups at risk of exclusion. In Saudi Arabia, they have expanded access for women by offering female-only courses, while in Malaysia they provide access to ethnic Chinese and Indians barred from public institutions by ethnic quotas. Nevertheless, such separate provision can pose a risk to social cohesion.

Regulatory frameworks tend to reflect government views of non-state actors. Strict regulations are associated with mistrust, while more favourable views of non-state actors can facilitate accreditation, monitoring and even public funding. In some countries, for-profit institutions are subject to stricter guidelines – they can be outlawed entirely, as in Argentina and Chile, or face restrictions on budget allocation, such as the 10% cap on return to investment in the Philippines. Overall, quality assurance mechanisms have helped countries close institutions engaged in deceptive business practices or providing low-quality services. In 2017, Pakistan's Higher Education Commission identified 153 illegal institutions operating in the country. But resources to accredit and monitor non-state institutions are often lacking.

Equity-promoting regulations are less common than administrative rules. Quotas or special admission criteria designed to improve disadvantaged groups' access to tertiary education do not always extend to non-state providers. When do they apply, as in India, it is usually only for institutions that receive public funding. Exceptions include obliging non-state institutions to provide grants or scholarships to some students, as in Bolivia and Ecuador, and capping student fees, as in Azerbaijan and Kenya.

Financing modalities of non-state institutions have significant quality and equity implications. Most non-state institutions, especially those that are smaller and non-elite, rely heavily on fees for their funding. But governments also help finance non-state institutions in most countries. Some academic staff are subsidized as civil servants in Indonesia, and a special fund is available to non-state institutions in Thailand. Access to public funds can help improve non-state provision by encouraging research initiatives or, if conditional, pushing institutions to meet quality or equity standards.

Households have taken on a larger share of tertiary education funding, increasing the need for both state and non-state support. Governments may offer targeted fee subsidies to non-state institutions, as in Brazil and Chile, or subsidize student loan programmes, available in over 70 countries to all tertiary students. Non-state actors help households cover costs through scholarships paid for by companies, foundations, NGOs and philanthropists, as well as by providing student loans or income-share agreements.

Non-state actors help finance institutions beyond fees. Common mechanisms include engaging in market activities such as offering land leases, commercializing products and services, and raising capital through loans and bonds. By mid-2020, bond issuance by universities worldwide had reached US$11.4 billion, more than double the amount in 2019. Donors and philanthropists also represent an important non-fee source of revenue for institutions, accounting for over half the total raised by tertiary institutions in the United States in 2020.

Non-state actors influence tertiary education through various channels. Some mechanisms, such as research partnerships, lobbying, businesslike governance reforms and advocacy, can help increase transparency and strengthen the sector. Others, such as sizeable donations from for-profit institutions to politicians (e.g. in Brazil and the United States), may lead to undue influence on policymaking and undermine institutional autonomy.

TECHNICAL, VOCATIONAL AND ADULT EDUCATION

Non-state actors have helped expand technical and vocational education provision. Worldwide, 38.5% of students in post-secondary, non-tertiary education opted for private institutions in 2019. In OECD countries, 44% of students in short-cycle tertiary vocational programmes were enrolled in private institutions. Cooperation with non-state actors has aimed to make technical and vocational education and training (TVET) systems more responsive to labour market demands and boost their capacity and resources, even in countries with consolidated public TVET systems. In other contexts, non-state actors have complemented vocational education provision through traditional procurement, autonomous training initiatives and public–private partnerships, mostly coordinated by the state. In poorer countries, non-state actors provide more equitable access to TVET for disadvantaged groups.

Employers engage in formal and informal apprenticeships. The International Labour Organization School-to-Work Transition Survey found that less than 1 in 5 of 15- to 35-year-old participants in 33 countries did at least one apprenticeship as part of their education. Low participation in low-income countries may be linked to informality of labour markets and training systems. If not adequately regulated and recognized, the incentives linked to apprenticeship can be eroded. Intermediary organizations can facilitate dialogue with employers, improve learning and ensure the right match, especially in countries without a solid apprenticeship tradition.

Continuing skills development is mostly provided by private employers. While formal TVET is mainly targeted at occupations at risk of being automated, reskilling and upskilling occur outside traditional education. Non-formal and employer-sponsored training prevails; what is on offer is directly related to the firm's size. Results from the World Bank's STEP Skills Measurement Program show that employers prefer on-the-job training to external programmes provided by formal public or private providers.

Participatory governance in skills development systems is challenging. TVET systems remain mainly centralized. National qualification frameworks in more than 150 countries aim to make TVET governance more participatory and fit for purpose, although improving skills' transparency and relevance remains a priority for public authorities. TVET systems' effectiveness is hampered by partially implemented quality assurance mechanisms. Interactions between the private and education sectors tend to focus on skills identification rather than curriculum development. Skills systems that cope well with economic change are those relying on tripartite approaches, engaging social and economic actors. Knowledge-oriented public–private partnerships through sector skills councils have been set up to improve understanding of labour market needs.

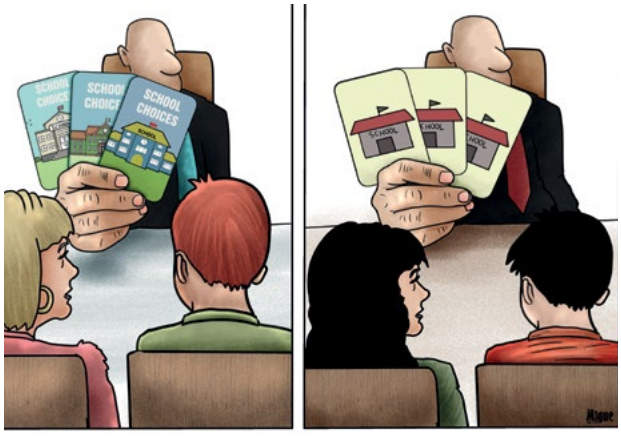
Skills development systems rely on state and non-state funding. In addition to direct government allocations, TVET systems seek to diversify funding through earmarked training levies or funds involving firms. Non-state actors have also been directly involved through competitive procurement, but with mixed results. Employers are encouraged to provide training through levy-grant programmes. Still, firms underinvest in training, as the incentive for it is consistently lower than the incentive to draw required skills directly from the labour market. Governments provide incentives to individuals by covering direct or indirect training costs through individual learning accounts or entitlements.

Non-governmental and community organizations dominate adult programmes. Through community learning centres, literacy programmes and the like, NGOs and civil society organizations reach out to vulnerable groups of adults traditionally excluded from formal education. In some cases, governments rely on their services to deliver national adult literacy and second chance programmes; in other contexts, such groups have challenged the state's adult education provision, notably in Latin America, e.g. promoting non-dominant languages in adult literacy; in yet other contexts, they are influenced by donor priorities. Their engagement in development of government policies remains limited, although in western and central Africa, the faire-faire decentralization and outsourcing strategy has led to positive results, with the state supervising and distributing resources while non-state actors are in charge of provision.

The private sector has expanded its role in adult education, especially in language learning. Private companies may engage in adult education through community development, often as part of corporate social responsibility initiatives or information and communication technology provision.

The growing relevance of language learning and assessment has attracted for-profit firms. Around 40% of English learners in Argentina and Peru study with private language institutions. Mobile-assisted language learning is also spreading, but its effectiveness is debated.

RECOMMENDATIONS



Far from a simple public vs private dichotomy, there is a variety of non-state school types. Moreover, the role of non-state actors extends well beyond provision of schooling to many other interventions at various education levels and through multiple channels of influence. The question for policymakers is not just whether non-state involvement in education meets agreed standards of quality, but also how non-state actors help or hinder efforts to ensure equity and inclusion in education.

Two strategic directions, relating to funding and provision, stand out in relation to governments' task of protecting and fulfilling the right to education. First, governments pledged in 2015 that all children and young people would have free, publicly funded access to a year of pre-primary and 12 years of primary and secondary education. However, with one in three countries devoting less than 4% of GDP and 15% of total public spending to education, many do not match this commitment with the required funding. Second, governments need to decide how strong a role they will play in delivering and managing education. Their perspectives vis-à-vis school choice and non-state actors vary widely.

Various non-state actors have become more visible in many aspects of education. Businesses make choices about whether education is a lucrative activity and how to market their goods and services, but also to whom they are answerable: just shareholders or others as well? NGOs and civil society organizations choose priorities and decide how to address them: Should they fill gaps or advocate for the state to do so? Foundations also set priorities and choose how to influence society and how closely to work with education systems. Teachers and their organizations make choices that can strengthen or erode trust in public education systems.

The report's rallying call – Who chooses? Who loses? – is an invitation for policymakers to question relationships with non-state actors in terms of fundamental choices: between freedom of choice and equity; between encouraging initiative (i.e. improving quality anywhere in the system) and setting standards (i.e. improving quality for all learners); between population groups of differing means and needs; between their immediate commitments (i.e. 12 years of free education under SDG 4) and those that are to be progressively realized (e.g. post-secondary education); and between education and other social sectors.

With these thoughts in mind, the following recommendations were framed to help #RighttheRules to ensure that equity in education is protected

in financing, quality, governance, innovation and policymaking. The aim is to harness the contributions non-state actors can make to deliver education of quality without sacrificing equality. Mobilizing this potential could also challenge governments to purposefully address low quality and inequality in public provision. The recommendations are primarily aimed at governments, which need to provide clear answers to five core questions from an equity and inclusion perspective. However, they are also meant to be used as an advocacy tool by all education actors committed to supporting progress towards SDG 4. As such, the recommendations call on all actors, state and non-state alike, to play #RightbytheRules.

1. DOES THE FINANCING OF EDUCATION FAVOUR SOME LEARNERS AND EXCLUDE OTHERS?

Fulfil the commitment to make 1 year of pre-primary and 12 years of primary and secondary education free – but publicly financed need not mean publicly provided if equity can be ensured

Governments should make education of good quality free at the point of access. They need to ensure that households do not pay for education goods and services that their countries have committed to make available free of charge.

Governments need to monitor out-of-pocket education spending, using household income and expenditure surveys. They often turn their eyes away from less well documented costs that increase inequality.

All providers, state and non-state, must offer the same conditions to students. A commitment for education to be publicly funded does not mean all education must be publicly provided. But all education institutions should be treated as part of a single system with common rules, financial support and oversight mechanisms.

Any attempts to diversify provision should be designed in a way that ensures equity. Contracting out public school management, subsidizing private schools' operational costs or providing funding to households to attend the school of their choice can easily end up benefiting learners who are well off.

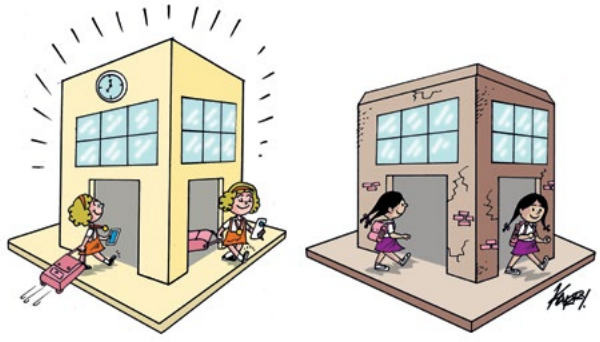
Schools should not select students. Countries are committed to non-discrimination in education, a principle that must be reflected in school admission policies. Moreover, the right of families and students to choose schools should not exacerbate inequality.

Non-state providers funded by the state should not charge any fees. While all countries should aim to ensure that pre-primary, primary and secondary education are free, many are far from this ideal. Even government-dependent private institutions charge fees.

Profit making is inconsistent with the commitment to guarantee free pre-primary, primary and secondary education. Regulating or banning profit making can be used to address school choice policies that exacerbate inequality.

2. DO ALL LEARNERS RECEIVE THE QUALITY OF EDUCATION THEY ARE ENTITLED TO, OR ARE SOME SHORT-CHANGED?

Establish quality standards that apply to all state and non-state education institutions



Governments need to establish quality standards that apply to all education institutions. Quality standards, covering not just inputs but also results, protect those who have the most to lose. They should also cover safety and inclusion. They should relate to where schools are and help them improve. Their achievement should be assessed for each school, state or non-state, and publicly reported.

Teachers should be valued as professionals in all schools. Teacher qualifications and professional development opportunities should not vary by provider. Segmented teacher labour markets and wide inequality in teacher pay and conditions are strong signs of a malfunctioning education system. Governments need to gradually address all the root causes of such imbalances.

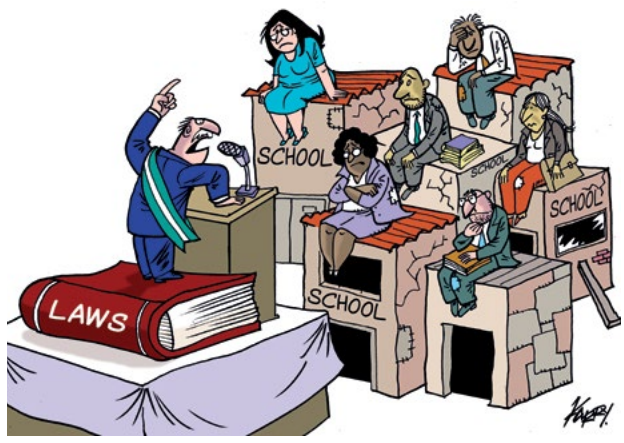
Quality assurance mechanisms need to be in place to monitor and enforce standards. Government oversight through school inspections, evaluations and learning assessments should be common, regardless of provider. These mechanisms should take state implementation capacity into account.

Countries need stronger quality assurance processes in technical, vocational and tertiary education. As governments subsidize individuals or contract with companies to promote training, they need to protect the most disadvantaged, who are vulnerable to fraud. For-profit universities have come under scrutiny for offering education at the lowest end of the quality spectrum and engaging in malpractice.

Governments need to prevent private supplementary tuition from having a negative impact on system quality and equity. Policy responses vary from tutor teaching permit requirements to online registers for better oversight. Bans are also an option but may lead to informal markets. The priority should be on addressing root causes, such as low teacher pay and high-stakes final examinations.

3. ARE REGULATIONS EFFECTIVE AND FEASIBLE OR DO THEY HAVE UNINTENDED CONSEQUENCES THAT HARM DISADVANTAGED LEARNERS?

Establish common monitoring and support processes that apply to all state and non-state education institutions



Governments need a clear vision and framework of how they want to engage non-state actors and communicate this vision through regulations. Regulations should focus not on administrative details and unrealistic input standards but on education processes and results and be periodically reviewed and adjusted in a transparent and participatory way, with input invited from state and non-state schools.

Education providers should always be regulated as education entities by education authorities and never just as commercial entities by market regulators. Some providers are regulated as businesses in early childhood care and education, private supplementary tuition and vocational training. Similarly, other providers are supervised by ministries of social protection or by religious authorities.

Regulations need to be simple, transparent and efficient. The paradox is that regulatory capacity is lowest where the need for it, and the potential for corruption, is highest. Where capacity to monitor and enforce impractical rules is lacking, regulations become irrelevant and counterproductive.

Governments need to be honest about the causes of the phenomenon they want to regulate. Monitoring and support processes should be common, showing that governments care for all children's education, irrespective of the school type they attend. Governments also need to build a relationship of trust with non-state providers, communicating the right incentives for them to run their schools effectively.

4. ARE GOOD IDEAS FOR EDUCATION NURTURED OR STIFLED?

Facilitate the spread of innovation through the education system for the common good

Policymakers should be able to identify innovation and to give good ideas time and space to develop. Nobody has a monopoly on good ideas. Education is a social endeavour and a complex system. The challenge for policymakers is to encourage innovation, especially when the general public is likely to prefer conformity over experimentation.

The government should work in partnership with all actors to build an education system that works for all, prioritizing a consultative approach. A culture of trust needs to be built to promote innovation. Creating conditions and offering platforms for multiple actors to interact and cooperate can help the public education system benefit from different views and sources of expertise to remain relevant.

To start with, governments need to nurture innovation in the public education system. They need to convey the message that they are committed to excellence. They should monitor learning and its determinants, evaluate where good practices are taking place, provide resources enabling practitioners to exchange experiences, pilot good ideas and scale them up.

Governments should also look for lessons from non-state actors. Autonomous, contextualized and flexible approaches to teaching and learning,, especially as regards marginalized learners, can generate new insights, which governments should benefit from, while acknowledging that low capacity prevents them from properly monitoring and evaluating state schools, let alone non-state schools.

The government's role is to create the right environment to produce innovation. Education should not be seen as a market where education 'producers' outcompete other providers. Instead, new ideas need to be shared, tested and, if proven, adopted, with the state helping them spread through the education system and non-state actors volunteering them for the common good rather than economic motives.

5. ARE ALL VOICES GIVEN EQUAL OPPORTUNITIES TO SHAPE THE PUBLIC DEBATE IN EDUCATION?

Maintain the transparency and integrity of the public education policy process so as to block vested interests

Policymakers need to take into account insights and perspectives from all stakeholders. But just as policymakers should be open to multiple voices, it is also essential for communications with public officials about education legislation, policy and regulation to be transparent. Some actors may be working to increase their market share or political power rather than for the public good.

Governments need to monitor and safeguard against lobbying by vested interests to prevent it from unduly influencing public policy. To maintain trust in public policy processes, a range of measures to promote transparency can be applied, depending on capacity, including freedom of information acts promoting disclosure of donations to political parties and meetings with senior government officials, and rules against government officials who leave office taking positions from which they could derive private benefit and against lobbyists and their sponsors taking public office. These recommendations also apply to international organizations, all of which need a clear policy of engaging with non-state actors that prioritizes equity and inclusion.

Monitoring education in the Sustainable Development Goals

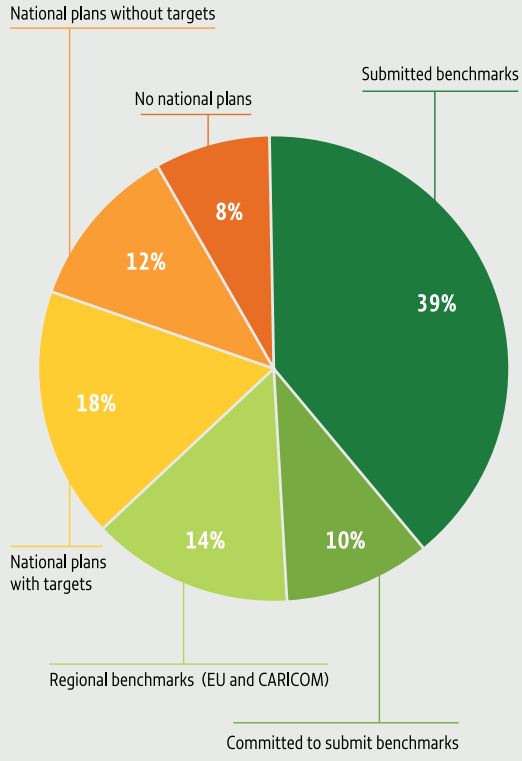
As the midpoint nears for achieving the 2030 Agenda for Sustainable Development, there have been important advances in the monitoring framework development and the targets countries have set. However, the COVID-19 pandemic has presented major setbacks in both respects. Not only are the standard tools used to monitor progress in education affected, but the targets themselves may have to be reconsidered.

COUNTRIES HAVE SUBMITTED NATIONAL SDG 4 BENCHMARKS

The Education 2030 Framework for Action called on countries to establish 'appropriate intermediate benchmarks (e.g. for 2020 and 2025)' for SDG 4 indicators to capture the contribution each country would be prepared to make to the global agenda, given their initial conditions. The UNESCO Institute for Statistics (UIS) and GEM Report teams have worked to mobilize the international community in that direction. Following a selection of seven SDG 4 indicators for benchmarking in 2019 and a recommendation of the Global Education Meeting Declaration in October 2020 to 'accelerate the progress and propose relevant and realistic benchmarks of key SDG 4 indicators', countries were invited to submit national benchmark values by October 2021 for 2025 and 2030. Values were submitted by 39% of countries. Another 10% committed to do so, while an additional 14% are European Union and Caribbean Community members with regional benchmarks (**Figure 3**).

The information on baseline values and submitted national benchmark values for 2025 and 2030 now features in the Global Education Observatory, a new gateway to education-related data. The UIS and GEM Report will release a baseline report analysing the results of this process in early 2022. The report will highlight where countries, regions and the world aim to be. A process will be outlined to help countries develop education targets where these are still missing but also, where relevant, to reflect the potential effect of COVID-19 in national benchmarks as data emerge.

FIGURE 3:
Two in three countries have participated in the SDG 4 benchmark-setting process
Proportion of countries by status of submission of national SDG 4 benchmarks by October 2021



Sources: UIS and GEM Report teams.
EU = European Union; CARICOM = Caribbean Community

COVID-19

COVID-19 HAS AFFECTED THE PROSPECTS OF ACHIEVING SDG 4 AND THE MEANS OF MONITORING PROGRESS

COVID-19 is the most serious crisis to have ever hit all the world's education systems at once. Schools were closed for 28% of days and partially closed for 26% of days between March 2020 and October 2021. The peak was reached in April 2020 (95%). Between September 2020 and August 2021, schools were closed or partially closed for half of school days (**Figure 4**). Many countries classified their schools as partially open even when most were closed.

Official SDG 4 statistics, in most cases, are for 2019 and reflect the situation prior to the pandemic. A UIS assessment of 129 education ministry planning units between June and September 2020 found that two thirds had to delay data collection or postpone it to the following school year as they experienced either a moderate or a severe effect on their ability to meet reporting requirements. Survey administration was also severely affected during the pandemic.

Some large household survey programmes switched to phone surveys. But more than 25 surveys planned or already under way in 2020 faced fieldwork delays. Results will have to carefully take into account when exactly the fieldwork was conducted and whether nearby schools were open at the time. In addition, learning assessments were affected. For instance, the 2021 round of the Programme for International Student Assessment was postponed by a year.

The multiplicity of sources, coupled with differences in methodologies, samples, timing and contexts, means the task of assembling a narrative around the impact of COVID-19 remains challenging. In the absence of administrative data, surveys in Ethiopia, Ghana and Senegal provide preliminary evidence that children are returning to school upon reopening, although a rise in repetition rates may mean that dropout has simply been postponed.

The two main concerns are the effect of the disruption on learning and the unequal distribution of negative learning and other effects on more disadvantaged learners.

Globally only one in three children, and one in six of the poorest children, had access to the internet. Thus the most effective of available distance learning modalities excluded the vast majority of learners, and efforts to expand such modalities would be to the detriment of equity in the short to medium term. The use of mobile learning apps, which received much media attention, was the least common remote learning approach in a survey of six sub-Saharan African countries, used by no more than 17% of children in Nigeria and 12% in Ethiopia and by barely any in Burkina Faso, Malawi, Mali and Uganda.

Effects on learning will depend on school closures' duration, remote learning modality and the extent of support to students, all of which varied greatly between and within countries. Most studies have been conducted in high-income countries. Averaging over seven countries, learning losses were equivalent to 30% of a school year for mathematics and 35% for reading, on average, if schools were closed for eight weeks. But in France, results in reading and mathematics improved among grade 6 students.

There is clear evidence that effects differ by socioeconomic status. In the United States, analysis of grade 3 to 8 students' examination pass rates in 12 states showed that moving from in-person to fully hybrid or virtual mode exacerbated the negative impact by an average of 10 percentage points in mathematics and 4 percentage points in English. The switch to fully hybrid or virtual mode lowered pass rates by 4 percentage points for a district with no Black or Hispanic students but by 9 percentage points for a district with a 50% Black and Hispanic student population.

There is a dearth of direct learning assessments in low- and middle-income countries. In São Paulo, Brazil, secondary school students learned only 27.5% of what they would have learned in school had there been no pandemic; students whose schools reopened suffered a lower learning loss. In Colombia, students performed five points below the previous year, which represents about one quarter of a school year. In South Africa, grade 2 and 4 students lost between 57% and 81% of a year of reading skills in 2020, relative to their pre-pandemic peers.

The *Annual Status of Education Report* citizen-led assessments in South Asia show that learning levels have declined in the early grades. In rural Karnataka state, India, the percentage of those able to read a grade 2 text fell among students of all grades but the decline was worst among grade 4 students (from 33% to 18%) between 2018 and 2020. In Pakistan, a survey of 16 districts found similar learning losses in foundational skills in grades 1 and 3 but not in grade 5.

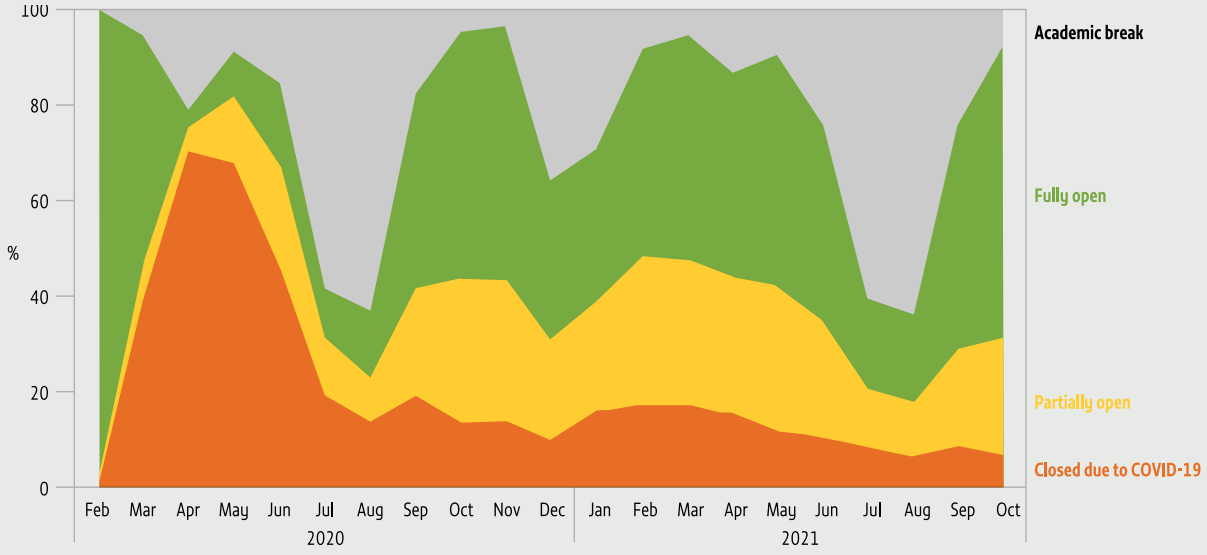
This disparate evidence, when combined, confirms that school closures had a negative impact on student learning. If loss is defined in terms of the SDG 4 minimum proficiency level, the impact may be greater in middle-income countries than in low-income countries, where initial levels were very low, or in high-income countries, where schools stayed closed for shorter periods and students had more access to online learning. Still, many aspects remain unknown, including whether learning levels will bounce back or COVID-19 will have a long-term impact on learning.

To mitigate the consequences, countries have extended or adjusted the academic year and have prioritized certain areas of the curriculum or certain skills. Two thirds of countries reported implementing remedial measures in primary and secondary education. In the Philippines, the Department of Education issued guidelines for six-week remedial classes aimed at students who scored below 75% on year-end tests. The National Tutoring Programme in England (United Kingdom) supports 15-hour tutoring courses for up to 6 million disadvantaged students.

The pandemic has also posed unprecedented challenges to **teachers**. School closures found many teachers unprepared for the move to remote learning, uncertain about their role and unfamiliar with the technology. In a survey of over 20,000 teachers in 165 countries, 39% stated that their physical, mental and emotional well-being had suffered during the pandemic. On the other hand, 50% of respondents stated that they felt more enthusiastic about their vocation. The crisis has raised questions over shifts needed in the content of teacher education. Beyond technological knowledge, teachers need to respond to new social-emotional and academic needs of students.

Education for **sustainable development** and **global citizenship** is a response to the challenges of a planet that is increasingly interconnected but whose future is at stake. Yet COVID-19 has revealed education systems' failures to pursue the ideals of solidarity and multilateralism, and growing inequality within and between countries raises moral concerns. The world has witnessed many responses in the opposite direction, from vaccine

FIGURE 4:
Over 20 months, schools were at least partially closed for 55% of days
Proportion of days by school opening status, by month, February 2020 to October 2021



Source: UIS (2021c).

nationalism to xenophobic policies and the spread of discriminatory beliefs. COVID-19 has also put health literacy at the centre of attention.

The net effect of school closures and reopenings on infection dynamics at the societal level remains inconclusive. But minimizing infection risk in **learning environments** is possible through measures ranging from masking, distancing and handwashing to discouraging the sharing of objects and disinfecting touched surfaces frequently. Low-tech solutions for improved ventilation include using outdoor spaces and opening windows, where seasonally appropriate. Less than 10% of low-income countries reported having enough basic measures such as sufficient soap, clean water, masks, and sanitation and hygiene facilities to assure the safety of all learners and staff; the share of high-income countries was 96%.

Some evidence is emerging that the pandemic and its aftermath will have squeezed education **financing** through a combination of reduced government revenue and increased demands from other sectors. Data collected by the UIS for 71 countries suggest that the median education share in total spending decreased from 14.1% in 2019 to 13.5% in 2021.

In **early childhood education**, even where remote learning was available, challenges included a lack of teacher training, adapting remote learning for young children, monitoring and assessing child development and dealing with disadvantaged home environments with insufficient support. The closure of facilities and limited interactions deprived children of social and cognitive stimulation beyond their homes.

Technical and vocational education and training suffered as up to 80% of programmes focus on practical and soft skills, which should be acquired in person. Preparing teachers has been a major issue, as they lack capacity to deliver distance learning, while their standard education programmes were disrupted. It is important to use multiple approaches and not rely solely on high-tech solutions to deliver distance learning. At the same time, there are examples of resilience where training continues to support highly affected sectors.

There was more experience of remote learning in **tertiary education** than in other education levels. In a survey of 53 countries, 3 reported switching fully to online higher education, 19 had primarily online modalities and 28 used a hybrid approach of remote and face-to-face learning. Middle-income countries, from Colombia to Egypt and from China to the Russian Federation, developed online platforms. But in a survey of sub-Saharan African students, only 39% were enrolled in institutions offering remote learning options. In EU countries, 41% of students who worked during their studies lost their jobs, 29% temporarily and 12% permanently.

Popular anglophone international student destinations, such as Australia, New Zealand, the United Kingdom and the United States, experienced decreased inbound **student mobility**. With up to a third of students in Australia being international, this put higher education institutions in serious financial jeopardy. Students and graduates were stranded in host countries when they were expecting to return to their home countries.

Adult literacy and numeracy skills are crucial for health literacy and effective vaccination campaigns and must form an integral part of public emergency responses and reconstruction plans. In India, women who participated in an adult literacy programme had higher COVID-19 knowledge than their illiterate counterparts. Numeracy was the most consistent predictor of decreased susceptibility to misinformation about COVID-19. Yet even before the pandemic, distance education was an unpopular mode of delivery for initial literacy programmes. In Brazil, a regulation clarified that classes corresponding to the primary curriculum had to be delivered in person.

TARGET 4.1. PRIMARY AND SECONDARY EDUCATION

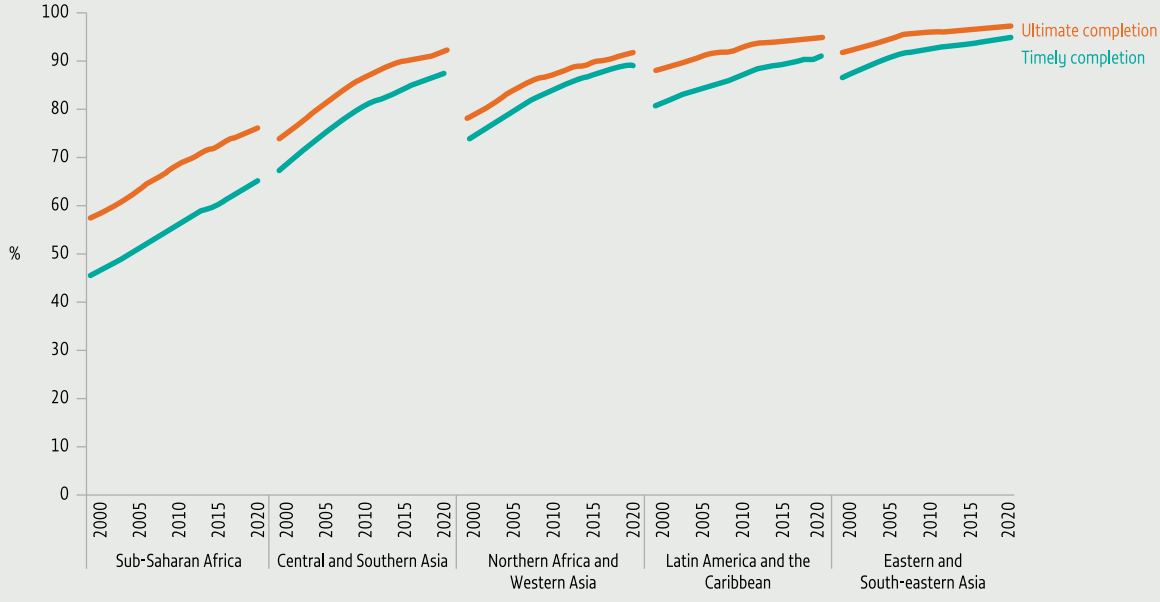
Before the pandemic, 260 million children, adolescents and youth of primary and secondary school age were out of school. The figure had barely budged in a decade. A collaborative project between the GEM Report and the UIS is under way to integrate and triangulate administrative and household survey sources, fill gaps in the administrative data and develop a coherent time series. This builds on GEM Report team work consolidating multiple sources to estimate the completion rate. A new website, VIEW (www.education-estimates.org), makes the approach more accessible to countries. Primary completion rates are approaching or exceeding 90% in all regions except sub-Saharan Africa, where only two of three children complete primary school, although the rate increases from 65% to 76% if those who reached the last grade very late are included (**Figure 5**). In sub-Saharan Africa, 23% of children in primary school and 31% of adolescents in lower secondary school are significantly over-age, explaining why the region has the largest gap between timely and ultimate completion rates.

In the global set of countries covered by the Trends in International Mathematics and Science Study (TIMSS), the average annual growth between 2015 and 2019 in the share of students achieving a minimum level of proficiency was 0.3 percentage points at grade 4 and 0.5 percentage points at grade 8. Countries exceeding these averages included Chile, where the share grew from 41% in 2003 to 57% in 2011 and 70% in 2019, i.e. its growth rate was at least three times faster than the average. Elsewhere, as in Jordan and Romania, there was little or no growth. Reaching the last 10% is proving challenging even in well-resourced settings. In the United States, 86% of students achieved the TIMSS low international benchmark in 1995 and 87% in 2019; in New Zealand, the share declined steadily from 89% in 1995 to 82% in 2019.

TARGET 4.2. EARLY CHILDHOOD

Data on the Early Childhood Development Index for children aged 36 to 59 months suggest that the wealth gap mostly stagnated or increased. The methodology of this indicator, which captures the percentage of young children developmentally on track in health, learning and psychosocial well-being, has been thoroughly updated. Learning starts in the home. In 2012–19, 62% of children were engaged in four activities or more by an adult in the household in a set of low- and middle-income countries. The percentage was below 20% in the Gambia, Sierra Leone and Togo. An important constraint on stimulating

FIGURE 5:
The indicator of timely school completion significantly underestimates how many children ultimately end up completing school, especially in sub-Saharan Africa
Completion rate and ultimate completion, by region, 2000–20



Source: GEM Report team analysis of household survey data.

activities such as joint reading is the availability of books. On average, less than a quarter of children under 5 had at least three books at home. In half the countries, less than 1 in 10 children do; in 8 countries in sub-Saharan Africa, less than 1% of children do.

The right to education begins at birth. By the time a child reaches age 3, 90% of its brain is developed. Participation of children under 3 in early childhood care and education programmes tends to be limited, though it reaches over 20% for ages 0 to 1 and over 60% for age 2 in several middle- and high-income countries. Even in high-income countries, access to early childhood care and education is still very much dependent on socioeconomic background. In France and Ireland, the difference in participation between 0- to 2-year-olds in poor and rich households is over 50 percentage points. Globally, 75% of children were enrolled in pre-primary education one year before the official primary entry age in the school year ending in 2020. The adjusted net enrolment rate was half as high in low-income countries (45%) as in high-income countries (91%).

TARGET 4.3. TECHNICAL, VOCATIONAL, TERTIARY AND ADULT EDUCATION

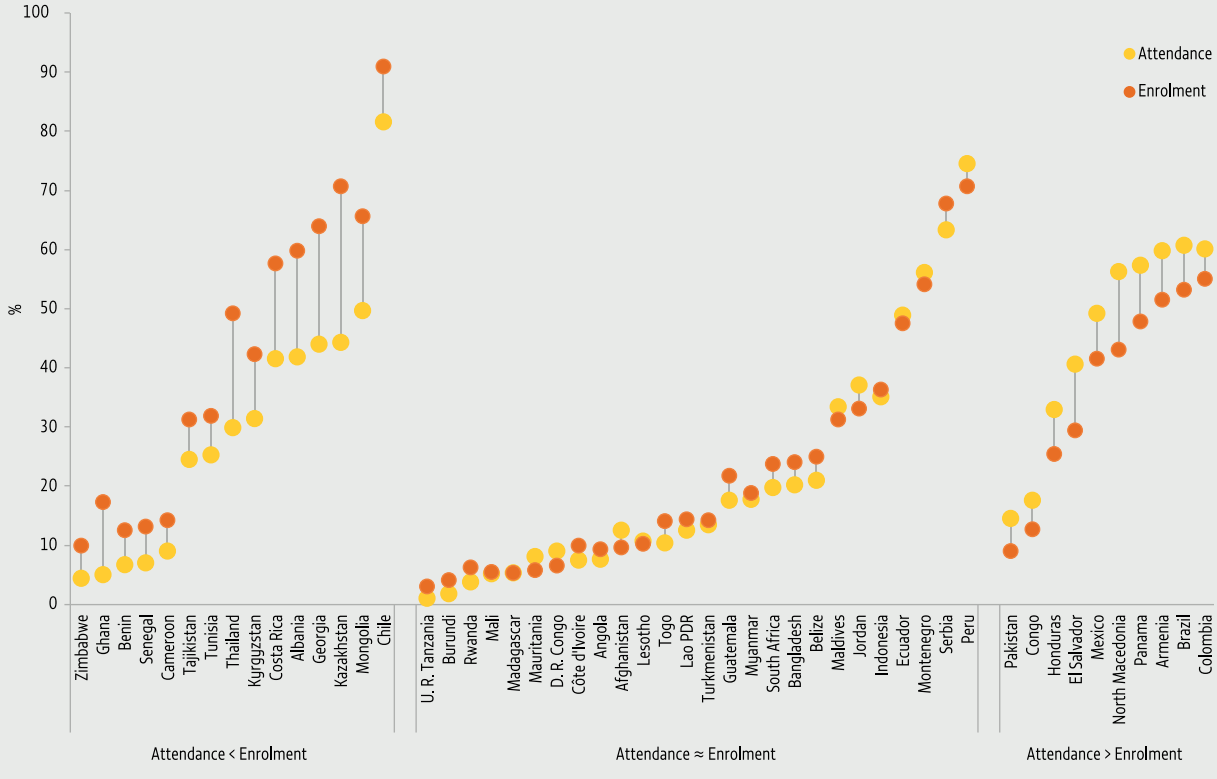
TVET remains underfunded and often neglected in many countries, although countries including Armenia, Brazil, Burundi, Costa Rica, Indonesia and Uruguay have substantially increased participation rates in the past 15 years. Vocational secondary schooling may not seem an attractive option if, unlike a general secondary certificate, no vocational diploma offers the option of continuing directly into tertiary education, as is the case in a quarter of countries. By contrast, in 30% of countries, all vocational secondary school graduates enjoy direct access to tertiary education.

The global gross enrolment ratio for tertiary education was 39%, continuing a steady average growth of around one percentage point per year since 2000. These administrative data do not always agree with survey data on attendance (**Figure 6**). Enrolment may underestimate attendance if many students attend

FIGURE 6:

Tertiary education enrolment data may overestimate or underestimate actual attendance

Gross attendance and enrolment ratios in tertiary education, 2015–19



Source: UIS database.

institutions that are not counted in official statistics because they lack recognition or accreditation. Conversely, enrolment may overestimate attendance if many students are enrolled only nominally, especially where tuition is free and student status comes with subsidized services. Also, administrative data relate to the nominal age range of five years immediately following the upper secondary graduation age, but tertiary study at higher ages is common, especially in sub-Saharan Africa.

Affordability of tertiary education from a lifetime perspective does not make such education affordable upfront. The economic case for cost sharing in tertiary education depends crucially on prospective entrants not facing credit constraints. Student loans of various kinds are available in over 70 countries and have grown into a trillion-dollar market. In many countries, the proportion of borrowers' income required to repay student loans is excessive, especially for the least well-off graduates. More promising policy reform has involved a shift from the widely used time-based repayment loans to income-contingent loans.

In most high-income countries, employers are the single biggest provider of adult education and training, highlighting the need for policies to target individuals who are outside the labour market. Even for those employed, time to pursue training may be as important as sponsorship, showing the need for public interventions in the form of education leave programmes. Longitudinal data from six high-income countries show that adult education is a recurrent pursuit for a significant minority, especially among the more educated.

TARGET 4.4. SKILLS FOR WORK

In only 10 of 91 countries with data do a majority of adults report having at least 5 of 9 information and communication technology (ICT) skills monitored for global comparisons. In around half the countries, a majority of adults possess no skills. In most low- and middle-income countries, few young people who have not completed at least lower secondary school possess any ICT skills. In Iraq, the Lao People's Democratic Republic and Sierra Leone, even the most educated average fewer than two of the nine skills. Access to devices and the internet represents another obstacle: Even among 20- to 24-year-olds, 98% of women and 90% of men in Chad reported never having used the internet; the respective shares were 61% and 63% in the Lao People's Democratic Republic and 36% and 31% in Tunisia.

Computational thinking is being included in national curricula. Finland has made algorithmic thinking and programming compulsory from grade 1 as a cross-curricular activity. In a review of eight high-income countries in 2018, students who more frequently used ICT in school for school-related tasks did not necessarily score higher than their peers, and students with programming experience were not necessarily able to transfer those skills to non-programming environments.

Financial literacy is a key skill for livelihoods in modern economies and for adult life in general, but not everyone has the opportunity to learn crucial financial concepts at school. The 2018 Programme for International Student Assessment included an optional financial literacy module, which was used by 20 participating education systems. Girls were less likely to report classroom activities related to financial topics in all participating countries, despite the fact that financial education is usually included in mathematics, generally a non-elective subject.

TARGET 4.5. EQUITY

Gender inequality remains a key concern, even if understanding the wide range of challenges at different levels and in different places requires nuance. Upper secondary education is the level where adolescent girls may be severely disadvantaged (e.g. in Benin, Chad and Niger) but also likely to enjoy an advantage and a rapid shift in conditions to their favour. This is happening in a wide range of countries, including those that are furthest from achieving SDG 4 relative to their peers in specific regions, including Cambodia, Congo, the Gambia, Ghana, Malawi and Rwanda.

Wealth, which tends to be measured at the household level, does not always capture child-specific deprivation. In several countries, 10% of deprived children are in the richest households and over 30% of children in the poorest households are not deprived. The level of child deprivation can be an additional strong predictor of education outcomes.

Significant numbers of children attend schools controlled by non-state armed groups. These groups have numerous reasons for choosing to provide education, whether through direct control, selective interventions, e.g. in the curriculum, or letting existing providers continue to operate. Education is among the most prized services demanded by civilians; failure to provide it can lead to resentment.

There are challenges of linguistic diversity in education. In western and central African countries, including Chad, the Gambia and Togo, no more than 5% of children aged 7 to 14 speak the language of instruction at home. An approach combining language of instruction policy with linguistic data sources, school-age population estimates and enrolment rates suggested that 37% of children in low- and middle-income countries learned in a language other than their home language: 27% spoke a minority written language and 10% a less common language, each with relatively few speakers.

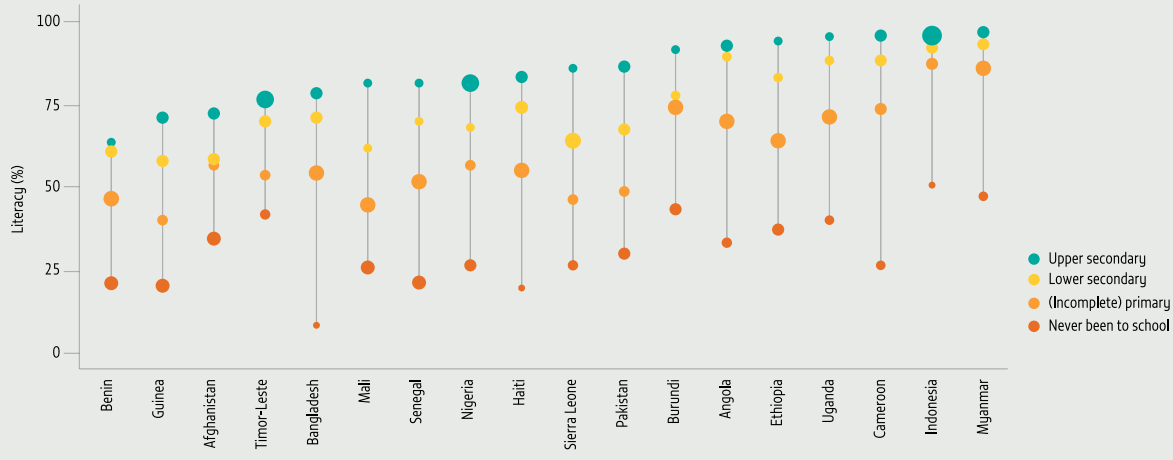
TARGET 4.6. ADULT LITERACY

Globally, among adults aged 15 and above, 83% of women and 90% of men are literate, in terms of a binary categorization of literacy – a seven percentage point gap. More than one in four young women are illiterate in sub-Saharan Africa, where female youth literacy rates have increased by less than one percentage point per year. Globally, a decline since 1999 in the number of illiterate women in Eastern and South-eastern Asia has been almost offset by an increase in sub-Saharan Africa. In addition, an assumption that all secondary school leavers are literate means the true literacy level has previously been overestimated. Almost half of lower secondary completers in 18 countries with recent survey data do not reach the basic level of literacy, defined as being able to read a simple sentence (**Figure 7**).

The converse fact, that no schooling does not equal illiteracy, highlights the importance of acquiring literacy outside school. In relation to the estimated illiterate population, adult enrolment in non-formal ISCED 1 programmes is 1% or less in Bolivia, Honduras, Mozambique, Qatar and Suriname, 2% in Bahrain and Peru, 3% in Colombia and Thailand, 4% in Saudi Arabia and 8% in the Dominican Republic.

Data even on simple numeracy skills are scarce. A proxy measure of basic numeracy can be calculated as the percentage stating their age correctly, which reflects the ability to work with simple, low integers. While most, even the poorest, cross this threshold, this measure is suitable for examining historical numeracy trends.

FIGURE 7:
Even secondary school leavers cannot be assumed to have acquired literacy
Literacy rate in the age group 20 to 24, by school attainment, selected countries, 2015–19



Note: The size of the dot is proportional to the size of the population at each attainment level.
Source: GEM Report team analysis of DHS data.

An analysis of household survey and population census data allows the numeracy of cohorts born between the 1960s and 2010s to be traced for 42 sub-Saharan African countries. Improvements over time have been marginal and not sustained among the poorest. The overall increase in numeracy in Africa was due almost entirely to rising school participation.

TARGET 4.7. SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP

Target 4.7 goes further than the rest of the SDG 4 agenda in addressing what learners need to learn in order to reach the transformational ambitions of SDG 4. The share of schools providing life skills–based HIV and sexuality education is frequently low, especially at the primary level, e.g. 2.5% of primary schools in Burkina Faso and 6% in Niger. Yet the revised UN International Technical Guidance on Sexuality Education recommends covering puberty and menstruation before learners experience them, i.e. for ages 9 to 12. UNESCO's Sexuality Education Review and Assessment Tool underlies a recent global progress report on comprehensive sexuality education. Among 24 countries, only 3 are assessed as providing 'advanced' curriculum content on sexual and reproductive health for ages 9 to 12, and 5 countries as having 'established' content.

The 2016 International Civic and Citizenship Education Study in 23 upper-middle- and high-income countries found that the percentage of students with adequate understanding of issues related to global citizenship ranged from around 40% in the Dominican Republic, Latvia and the Netherlands to almost 70% in Croatia, the Republic of Korea and Sweden. The 2019 TIMSS showed that only about 30% of students reached proficiency in knowledge of environmental science. Climate change education aims to help populations understand, address, mitigate and adapt to the impact of climate change. A new series of country profiles on climate change communication and education by the GEM Report and the Monitoring and Evaluating Climate Communication and Education project offers a comparative perspective. The first set of 20 country profiles covers all regions and country income groups. A second set of up to 50 profiles is scheduled to be published in 2022. Initial analysis suggests that a climate change focus was found in only 40% of national education laws and 45% of education sector plans or strategies.

TARGET 4.A. EDUCATION FACILITIES AND LEARNING ENVIRONMENTS

Learning of good quality cannot take place if the environment is unsuitable, much less if it threatens children's well-being. The Safe Schools Declaration, an intergovernmental political commitment to protect students, teachers, schools and universities from attack during times of armed conflict, has now been endorsed by 112 states. Evidence continues to grow that corporal punishment not only violates children's rights, but also affects education outcomes. Corporal punishment is now fully banned in schools in 156 countries.

School may be the only place some children have access to water, sanitation and hygiene facilities. In Liberia, few households have hygiene facilities that meet the basic international standard, but 69% of schools do. However, small schools, primarily located in remote and rural areas, can reasonably be assumed to be less likely to meet infrastructure quality criteria than large schools. In Cabo Verde, 22% of primary schools in 2018 lacked basic handwashing facilities. However, the smallest 22% of primary schools accounted for only 2% of primary enrolment. Globally, the share of children attending schools without basic facilities is therefore likely significantly lower than the share of schools.

Beyond physical facilities, other aspects such as the organization of school calendars – from distribution of instruction days across weeks and years to the duration and organization of the school day itself – can have important consequences for the quality and equity of education systems. Many countries' school calendar structure is due more to the influence of colonial history than seasons, and is poorly aligned with local agricultural cycles. School starting times also matter. In addition to allowing more sleep time, a later start appears to align better with adolescents' circadian rhythm, with peak alertness in the late morning and evening.

TARGET 4.B. SCHOLARSHIPS

Overall aid to support student mobility rose by 30% between 2015 and 2019, from US$3.4 billion to US$4.4 billion. Total scholarship aid to low-income countries doubled from 2015 to 2019, exceeding growth in tertiary enrolment. But taking both low- and middle-income countries into account, the number

of outbound students far outpaced the growth in scholarship aid. On average, per international student, less scholarship aid was available in 2019 than in 2006. The uneven data available suggest that the aim of substantial expansion in scholarships by 2020 has not been met. But donors are now likely to provide scholarships to more developing countries than in 2015, and, more importantly, recipient countries are less likely to be dependent on one or two key donors.

The concept of 'brain drain', where scholarship alumni do not return to their countries of origin, is being replaced by a more sophisticated understanding of 'brain circulation'. Recent estimates suggest that return migration represents a significant part of migration flows to sub-Saharan Africa and Latin America, and that these migrants are more educated, on average. Some countries recognize that even highly skilled nationals who will not return in the foreseeable future represent an asset if properly engaged. Out of 22 Latin American and Caribbean countries analysed for the Emigrant Policies Index, 8 maintain formal brain circulation networks. An earlier mapping of diaspora policies of 35 countries, representing all world regions, income levels and government types, found that two thirds maintained scientific networks of some kind and half imposed return obligations for students sent abroad on scholarships.

TARGET 4.C. TEACHERS

Reported data indicate that sub-Saharan Africa is the region with the lowest percentage of teachers meeting national standards: 57% in pre-primary (vs 83% in Latin America and the Caribbean), 67% in primary (vs 85% in Northern Africa and Western Asia) and 61% in secondary education (vs 78% in Central and Southern Asia). Hence, pupil/trained teacher ratios are almost twice as high in sub-Saharan Africa as the global average, despite a little improvement since 2015.

Even qualified teachers may not be qualified for the specific subject they teach. Teaching out of field is prevalent in much of the world. In at least 40 education systems that participated in the 2018 Teaching and Learning International Survey, over 10% of lower secondary school science teachers had received no formal education or training in the subject. The same is true for mathematics teachers. In Georgia and Saudi Arabia, less than 60% of science and mathematics teachers have received training in their subjects as part of their formal education. Out-of-field teaching raises equity concerns, as not everyone is equally likely to be, or to be taught by, an out-of-field teacher, which is often more common in rural locations and schools serving less advantaged students.

New UIS estimates on the teacher salary indicator, which examines how teachers fare relative to other professions requiring a comparable level of qualification, show that average differences between teachers at different education levels within the same country are generally small compared with differences between countries. In high-income countries, where most evidence comes from, teachers tend to be paid less well than comparable professionals in other sectors (**Figure 8**).

The teacher salary indicator is meant to be a proxy for teacher motivation. But many more factors affect motivation, as recent analysis of considerable teacher absenteeism in eight eastern and southern African countries suggests. Even according to teacher self-reports, the share of those absent from school at least once a week ranges from less than 10% in Kenya and Rwanda to nearly 30% in South Sudan. Teachers say they are absent on health (62%) and family grounds (35%), followed by weather (especially heavy rain and excessive heat), official business and transport issues.

EDUCATION IN THE OTHER SDGS

Access to energy at home can play a significant role in allowing children to participate in education activities. Bhutan's rural electrification programme helped reduce fuelwood use and led to 0.8 more years of schooling, with stronger effects for girls than boys. Access to energy in schools can help improve the learning environment and expand access to learning resources. The Energy Sector Management Assistance Program found that 72% of schools in Kenya, but only 22% in Ethiopia, had access to the national public grid. Roads help alleviate poverty and promote economic and social development, including education outcomes. In the Colombian department of Antioquia, improved rural roads were associated with improved education performance for rural students.

In the race to achieve the SDGs by 2030, there has been laudable progress in improving renewable energy technology, supported by major investment in the transition to solar and wind power. There is

also growing awareness of the need to consume and produce sustainably. However, improvement in areas of goals that are not as market oriented – e.g. equitable access to clean cooking technology, expertise on renewables, financial assistance to the least developed countries for capacity building, diverse and equitable workforce development – has been marked by struggle. Education supports the achievement of sustainability objectives. Education institutions need to improve students' understanding of energy and other sustainability challenges. Public awareness can contribute to broader social change. Professional capacity development needs to take place at an unprecedented pace to support the green transition.

FINANCE

According to the latest data, which do not reflect the impact of the pandemic, public education spending was equal to 4.4% of GDP and 14.1% of total public spending. Of the 151 countries with data for 2014–19, 48 countries, or 32%, missed both benchmarks of 4% of GDP and 15% of government spending on education set out in the Education 2030 Framework for Action. Public education spending was 3.5% of GDP and 16% of government spending in low-income countries, compared with 4.7% of GDP and 12% of government spending in high-income countries.

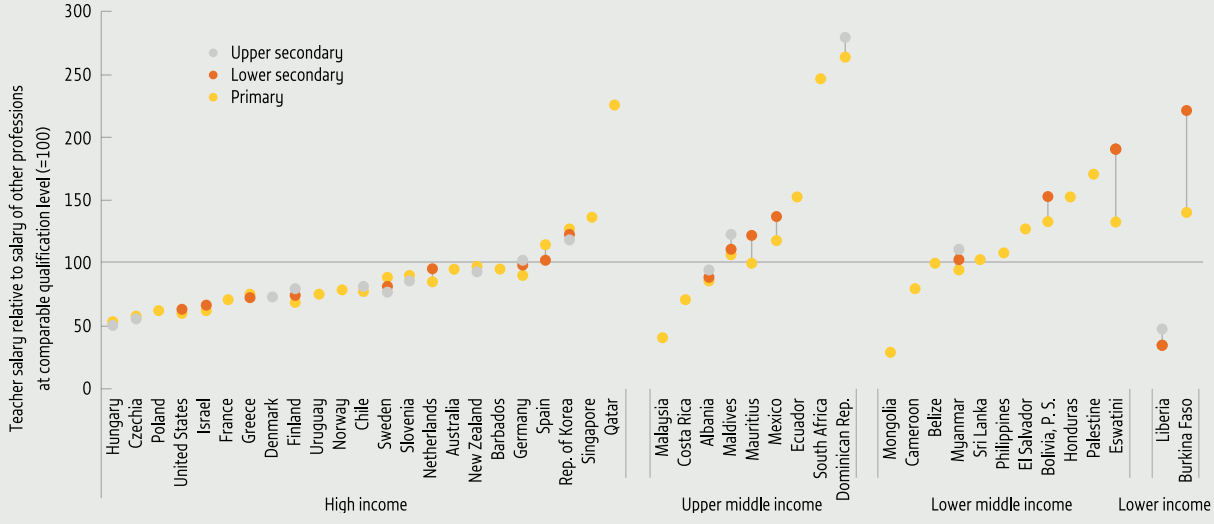
Aid to education remained stagnant at US$15.3 billion in 2019. Aid to basic education decreased by US$504 million relative to 2018, while aid to secondary education increased by US$203 million, reaching 20% of total aid, up from 12% in 2005. However, the balance is likely to return to basic education's favour when the 2020 aid data are released, as the Global Partnership for Education disbursed a record US$1 billion in 2020 to address the consequences of COVID-19.

Among 75 countries for which data were available for 2014–19, household expenditure was 0.1% of GDP in high-income countries, 0.8% in middle-income countries and 3.3% in low-income countries.

FIGURE 8:

Relative to other professionals, teachers tend to earn relatively lower salaries in high-income but higher salaries in some low- and middle-income countries

Average teacher salary relative to other professions requiring a comparable level of qualification, latest year available in 2015–19



Source: UIS database.

Non-state actors in education:

WHO CHOOSES? WHO LOSES?

Non-state actors' role extends beyond provision of schooling to interventions at various education levels and influence spheres. Alongside its review of progress towards SDG 4, including emerging evidence on the COVID-19 pandemic's impact, the 2021/2 *Global Education Monitoring Report* urges governments to see all institutions, students and teachers as part of a single system. Standards, information, incentives and accountability should help governments protect, respect and fulfil the right to education of all, without turning their eyes away from privilege or exploitation. Publicly funded education does not have to be publicly provided but disparity in education processes, student outcomes and teacher working conditions must be addressed. Efficiency and innovation, rather than being commercial secrets, should be diffused and practised by all. To that end, transparency and integrity in the public education policy process need to be maintained to block vested interests.

The report's rallying call – Who chooses? Who loses? – Invites policymakers to question relationships with non-state actors in terms of fundamental choices: between equity and freedom of choice; between encouraging initiative and setting standards; between groups of varying means and needs; between immediate commitments under SDG 4 and those to be progressively realized (e.g. post-secondary education); and between education and other social sectors.

Supporting the fifth *Global Education Monitoring Report* are two online tools: PEER, a policy dialogue resource describing non-state activity and regulations in the world's education systems; and VIEW, a new website consolidating sources and providing new completion rate estimates over time.

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4 QUALITY EDUCATION

Sustainable Development Goals