Public Services

Education

Open Government Partnership Global Report

DEMOCRACY BEYOND THE BALLOT BOX

Open Government Partnership

Key points

OGP countries have shown widespread interest in education. Based on analysis of third-party data and OGP commitments, there are many strong commitments that may serve as useful models for other countries. However, despite these successes, there are also significant gaps which must continue to be addressed. These efforts offer a number of important lessons, including:

- Accountability is key to improving access and quality in education.
- Public engagement, especially at the schoollevel, is one of the most promising means of achieving accountability. A number of OGP members have strengthened parent-teacheradministrator oversight at the local level to improve school performance and value for money in terms of inputs (personnel, facilities, nutrition programs). This accountability is stronger when there are institutions, rather than one-off interventions.
- Public engagement works better when there is adequate data on the quality of school performance. The data suffers from a few gaps:
 - Emphasis on inputs without equal data on outputs;
 - Disaggregation of data at lower levels of administration (and aggregation from lower levels to higher levels); and
 - Disaggregation by gender, institution type, and level of education.



Continuing teacher training, Romania. (Photo by Flore de Préneuf, World Bank)

Transparency, participation, and accountability for learning

Reformers—such as the many government officials and civil society organizations (CSOs) using OGP to advance reforms in their countries—have a range of tools to choose from to improve learning and education. Among these tools are institutions to improve citizen engagement and education.

Much progress has been made on opening up school data, especially around access to education. However, achieving sustainable and equitable outcomes require going beyond transparency alone. It requires sustained investment in institutions that can hold decision-makers accountable and help education systems become more responsive to public needs. (See "The generalist's guide to education policy" for a general overview of education policy.)

Research shows a strong correlation between the quality of educational outcomes, the level of public data on performance, and schoolbased, multistakeholder (parents, teachers, administrators) governance. Information on performance can feed discussions, and, when tied to incentives, can help reward teachers and administrators with better outcomes.¹

There is growing evidence that accountability for learning outcomes is one of the key drivers of different levels of educational attainment within and between countries. Improving accountability can involve many approaches, including aligning pay incentives for teachers and administrators, measurement of learning, and ensuring adequate governance structures in schools and basic educator capacity that drives education quality.

Research shows that transparency without accountability has limited impact. In a number of countries with longstanding disclosure requirements on learning outcomes, data shows that these interventions work only where there is also a high level of literacy among parents or learners and additional support to teachers. In Chile, data has been collected since 1996; among poorer populations, there has been no significant effect (on school performance or parent choice), as poorer families are not aware of the data, nor are they acting on it.2 Similarly, in Liberia, publication of school-based Early Grade Reading Assessment scores did not improve school performance without intensive follow-up and teacher training.3 This shows that transparency, by itself, cannot close the performance gap.

There is growing evidence that public engagement is one of the building blocks for improved educational outcomes. "The case for accountability in education: South Africa" [later in this section] shows how stronger accountability systems, especially at the school level, can explain differences in long-term learning outcomes. In particular, it points to the positive role that parent-administrator-teacher inter-

action can play. Moreover, it requires long-standing traditions of community engagement and ensuring that those communities have the data that they need for this discussion. This points to two areas where OGP countries can invest: greater community engagement opportunities and investing in improved local level data and systems to collect that data. The following sections look at progress made by OGP countries in

these areas, as well as where there continues to be room for growth.

While there are a number of such systems being promoted in OGP, they have not yet achieved widespread use. These sections aim to help open government advocates bridge the gap between accountability and greater transparency.

GOOD TO KNOW

The generalist's guide to education policy



Education is, fundamentally, an investment in people and their capabilities. This investment pays dividends to those societies which ensure that access and quality are widespread. South Korea, for example, made significant investments in universal literacy, then secondary, then post-secondary education. As a result, it was able to sustain very rapid growth without running into severe skill constraints. Finland, Chile, Poland, and Peru have followed similar trajectories, with nationally directed improvements in education, which while at times have been inconsistent, have resulted in significant growth in both learning and economic results.

The 2018 World Development Report outlined the many benefits of better education at the individual, family, community, and society-wide levels. It provides an extensive review of the evidence and is summarized in Figure 1 on the next page.

FIGURE 1. Investment in education accrues benefits to individuals, families, communities, and society

| | INDIVIDUAL/FAMILY | COMMUNITY/SOCIETY |
|-------------|---|--|
| MONETARY | Higher probability of employmentGreater productivityHigher earningsReduced poverty | Higher productivityMore rapid economic growthPoverty reductionLong-run development |
| NONMONETARY | Better health Improved education and health of children/family Greater resilience and adaptability More engaged citizenship Better choices Greater life satisfaction | Increased social mobility Better-functioning institutions/ service delivery Higher levels of civic engagement Greater social cohesion Reduced negative externalities |

Source: WDR 2018

From universal access to learning and equality of opportunity

While the world has a significant distance to go in terms of access to education and basic literacy and numeracy, the direction of change over the last half-century has been positive.

- In Sub-Saharan Africa since 1970, the gap in the gross enrollment rate for primary education has essentially closed, as enrollments have climbed from 68% to nearly 100%. Over the same time period, South Asia has gone from 45% to near 100% as well.
- The rate of expansion of universal primary education has also accelerated, as developing countries are expanding access to basic education in less time. Zambia has expanded secondary enrollment faster than any industrialized country during an equivalent period of time.⁴
- In terms of gender equity, the share of girls in basic education is at an all-time high and, in developing countries, the ratio of girls to boys has gone from .86 to .96 since 1991.⁵ Gender parity remains elusive, however, with at least 130 million unenrolled girls worldwide.⁶

Despite strides in granting universal access to primary (ages 5-12) education, this has not been met equally with a rise in learning outcomes.⁷ For that reason, there is a need to expand education efforts from access to also include outcomes.

This global consensus is represented in a shift in language between the Millennium Development Goals, wherein Goal 2 emphasized, "Achieve Universal Primary Education," and the Sustainable Development Goal (SDG) 4, which seeks to, "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

This shift in emphasis is critical to understanding the scope of the challenge of the 21st century-addressing the severity of today's achievement gaps must mean seeking solutions which ensure the long-term success of all people. With regard to education, there are a number of barriers to positive, more sustainable outcomes:

 Inclusivity and equity: Children from poorer backgrounds, girls, indigenous people, and people with disabilities have significantly lower access to quality education. The effects of these exclusions are compounding.8 While many countries have pockets of effective education, poorer communities suffer from fewer resources, higher rates of teacher absenteeism, and management quality.9 This is a result of budgetary and public policy decisions, not only environmental factors.

- Quality: The goal of education is not only to ensure access, but to ensure learning and the development of knowledge, skills, and attitudes that allow for social mobility.
- Lifelong learning: The scope of education in the information age must go beyond primary education to cover not only secondary and university education, but to allow workers to attain new skills and knowledge following formal schooling.

SDG 4 includes the following targets:

- Universal primary and secondary education
- 2 Early childhood development and universal pre-primary education
- 3 Equal success to technical/vocational and higher education
- 4 Relevant skills for decent work

- 5 Gender equality and inclusion
- 6 Universal youth literacy
- 7 Education for sustainable development and global citizenship

This framing is a major step forward in that it does not just focus on developing countries, but rather the challenges of an increasingly globalized, interconnected, and dynamic world economy. The set of challenges and opportunities for reform, in that sense, are universal to OGP members.

There is global reference data for tracking progress on these education indicators. UNESCO's Global Education Monitoring Report (GEMR) has been designated as the lead UN agency for independently tracking progress against SDG 4 education goals. Its annual report includes a compilation of country-level education indicators and analysis as well as more in-depth research on current education issues. The GEMR provides a variety of open-access tools that can be helpful to policymakers, education officials, CSOs, and education activists who want to understand better the status of education in their countries.¹⁰

Education in OGP

OGP members have demonstrated a strong interest in education within action plans. Education is one of the most popular policy areas within OGP. At the end of 2018, 52 of 84 members with action plans have commitments on education. ("Environment and Climate" and "Health" follow with 45 members working on each respectively. "Infrastructure" and "Water" trail behind at 25 members with active commitments.)

There have been at least 160 education commitments in OGP. Between 2012 and 2017, OGP's Independent Reporting Mechanism (IRM) evaluated more than 100

education commitments from OGP action plans. (More than 55 new commitments are in the process of being reviewed.)

To date, OGP members have included a number of major education accomplishments in their action plans. The IRM findings provide insight into how well OGP commitments are meeting the promise of improving education systems. Rather than analyze all 150 commitments (which could be the focus of future analyses), it is helpful to focus on some of the commitments with stronger results. The IRM either gave these

commitments "stars", or a designation of "Major" or "Outstanding" early results. These terms indicate that the commitment either changed the way governments did business in these areas or showed transformative potential impact. They fall into four categories:

Access to education:

- Enhancing basic access to digital services:
 Denmark 2012 action plan
- Expanding basic education from 6th to 9th grade:
 Honduras 2012 action plan

Input monitoring:

- Budget monitoring: Dominican Republic 2014 action plan
- Tracking of inputs and resources: Honduras 2014,
 Buenos Aires 2017 action plans

Digitization of online records:

Putting exam and transcript material online:
 Albania's online "e-Matura" system (2012 action plan) and Colombia's online "Sí Virtual" system (2015 action plan)

· Public monitoring of outcomes:

- Systematic dissemination of access to information on school performance and health services; implementation of accountability tracking:
 Mongolia 2015 action plan
- National participatory mechanisms: Colombia (2015 action plan)

Limited commitments in public participation and accountability

Most OGP countries are using their action plans to focus on modernization (e-Government) and transparency reforms. A few commitments emphasize performance monitoring and public engagement, but when compared to the rest of OGP most are focused on publication of information.

Of 130 commitments in education, roughly 40
 (31%) aim to improve civic participation and accountability. Relatively speaking, this proportion is smaller than other sectors of OGP commitments.
 (Roughly half of all OGP commitments focus on either participation or accountability.)

- Of the 40 participation and public accountability commitments, the majority are primarily about the provision of data. These commitments contain language that implies that there will be additional public accountability and oversight, but do not specify mechanisms by which that accountability will take place. These are the most common category of commitments that have elements of public participation. Some were tied to specific expenditures or metrics of school performance, such as teacher qualification, facility construction, or subsidized school nutrition programs. (OGP action plans with these commitments include Albania, El Salvador, Guatemala, Honduras, Indonesia, Northern Macedonia, and Peru.) The release of data is laudable, but it will be stronger in cases where there is investment and cultivation of the means to activate that data.
 - Of the remaining 20 commitments, others are clearer in how they hope to promote greater civic participation, although they are not focused on elements of accountability.
 - a Digital, civic or citizenship education commitments that aim to improve public understanding of digital media and participation in civic life (Estonia, Colombia, Dominican Republic, Ireland, and Italy)
 - Publicity of teacher qualification and training (Mexico (Jalisco), Panama, and Sri Lanka)
 - c Consumer rights education (Mongolia),
 especially for persons with disabilities (Peru)
 - d Open education resources and curriculum (Argentina, Brazil, Slovak Republic, and the United States) (See "Lessons from reformers: The case for open education and open science," later in the section for a broader discussion of this issue.)

This shows that a handful of OGP members are investing in sustainable institutions for public participation and accountability in education. While there have been notable numbers of commitments to release data or modernize education systems, third-party data shows that there are a number of areas for growth, should governments continue to use their OGP action plans to improve education.



Students at Myangad Soum School in Khovd, Mongolia study in schools improved through social accountability measures. (Photo by Open Government Partnership)

Frontiers of Education and Open Government

A successful open government strategy to improving education requires a mix of approaches: (1) improving accountability on learning outcomes; (2) improving accountability on educational inputs; (3) and bolstering the data underpinning decisions, including disaggregation by gender. This section looks at the state of innovation within OGP commitments, which may point the way to stronger commitments going forward.

Community engagement and accountability for learning

Accountability for learning is complex given the range of actors involved in education. The 2017–18 global education monitoring report, *Accountability in Education: Meeting our Commitments*, lays out a framework for understanding the rights and responsibilities of these actors.¹¹ It includes the duty of governments to create mechanisms for people to

hold officials accountable, the role of school regulation in providing better results, teachers' responsibility for high-quality instruction, citizens' roles in monitoring teacher performance, parents' roles in ensuring student attendance and safe environments, and international organizations' roles in goal- and standard-setting and finance. Given this complexity, readers are referred to the report cited above for additional inspiration and ideas. The framework it provides is largely based on a synthesis of successful initiatives and innovations, rather than statistical analysis of current education accountability.

In fact, there is no internationally comparable data collected at a large scale on community engagement and accountability in education. This stands in contrast to other sectors, such as environment (which has the World Resources Institute's Environmental Democracy Index and the Yale Environmental Governance Index), water and sanitation (which has the GLAAS

database), budgets (which has the International Budget Partnership), and administrative law (which has the World Bank's Global Indicators of Regulatory Governance). This makes generalization about the state of community engagement and accountability in education difficult. What is clear, however, is that if this data is gathered, it is not systematized, public, or comparable.

In the absence of cross-regional data, there are promising hints within OGP countries. A number have used their action plans to advance public oversight, although the total number is small. Encouragingly, these members have invested in systems and institutions, rather than one-off tools to advance education accountability. Of the three commitments that received a star rating from the Independent Reporting Mechanism, two are still in process, while Mongolia's has been completed.

- Armenia (2014 action plan): This reform aimed to eliminate conflicts of interest for individuals serving on governing boards of secondary education institutions. "Parent" slots were often controlled or occupied by members of administration.¹²
 This reform is still underway. Although new rules have not yet been put into practice, the IRM finds significant progress on passage of applicable legislation.
- Mongolia (2015 action plan): This 2015 commitment aimed to ensure systematic dissemination of access to information on school performance and health services at the community level. In addition, the education system invested in training parents and community workers to begin tracking accountability. This is particularly remarkable in a country where a large percentage of students attend boarding schools and parents are seminomadic. In Khovd Province, which was part of a larger World Bank supported effort at improving social accountability, activities were particularly successful. Efforts sought to address insufficient information and access to decision-making on school governance, resource allocation, expenditure tracking, and operational planning for ten secondary schools in isolated low-income counties. Education officials and local CSOs drafted and sought approval for an action plan

- that included budget allocation for the training of monitors, CSO and parental participation in the school budget-proposal-making process, public reporting of school performance, and making school audit reports available to school councils and the public.¹³
- Tbilisi, Georgia (2017 action plan): In 2017, the
 Tbilisi government proposed legislation to allow
 the public to oversee planning and budgeting
 processes through independent monitoring
 organizations. While websites were developed
 and legislation was drafted, it did not pass due to
 the change in administrations. Development is still
 underway.

At a minimum level, OGP members might begin taking inventory of where there are functioning accountability institutions within their communities. This might include: parent-teacher-administrator institutions that support school activities; citizen-involved school management committees, which provide an accountability and advisory function; and ombudsman and advocate roles, which provide a means of representing students and parents with administrations. At an intermediate level, commitments could create incentives for administrators, teachers, and parents to develop and sustain such institutions. At more advanced levels, ongoing performance monitoring and impact evaluation can help provide the basis for tracking progress on education outcomes. Based on this information, analysis can be carried out to identify factors for successful accountability. Additionally, policies and practices can be undertaken to improve performance of these accountability institutions.

LESSONS FROM REFORMERS

The case for accountability in education: South Africa and Kenya

Education systems work better when the public has access to information, the opportunity to participate and influence decision-making, and the ability to seek answers and response from governments. To best understand this, it is helpful to look more closely at recent research from South Africa.

The Politics of Governance of Basic Education¹⁴ makes the case for better public involvement in decision-making and monitoring. Despite considerably higher education funding levels, classrooms in the Western Cape Province of South Africa had worse outcomes relative to schools with lower funding levels. In high performing schools, much of this was due to leadership of school principals. When those principals left, performance often fell. Yet, in some schools, change in leadership did not result in similar declines. Why? At a fundamental level, there was greater parent-educator participation and mutual accountability, with regular rewards for high performance and sanctions for weaker accountability. This contrast is further evident in comparing Kenya with South Africa. Kenya has a fraction of the school funding and facilities, yet has higher overall outcomes on internationally comparable tests. Again, this is due in part to the involvement of parents in educational outcomes, rewarding high-performing schools with parades and becoming concerned when schools struggle.15

It is worth dissecting the building blocks for improving learning outcomes, as well as where open government approaches can make the most difference. Individual elements include:

- Collection of data outcomes and inputs: Where possible, this data is standardized. Many countries are using the Programme for International Student Assessment, or PISA, which allows within- and cross-country comparison. While PISA has been accepted in many places, SDG4 calls for measuring learning at grades 2 and 3 which allows educators to address learning gaps earlier. This is an area still under development.
- Timely, regular publication of that data: This should be done in a way that the community can understand. Kenya, as an example, publishes and delivers all standardized data through its open data portal. In

- 2013, Code4Kenya re-used this data and now delivers it to schools.¹6

 More recently, the Kenyan National Examinations Council adopted this system, and parents can now check school performance.¹7 (See below.)
- Participatory governance and accountability: It is important that
 this be done at the school level. Mongolia is in the process of adopting
 parent-teacher associations in collaboration with the Global Partnership
 for Social Development¹⁸ and Partnership for Transparency Fund.¹⁹
- Measurement of participation in assessment, dissemination, and engagement systems.²⁰ India maintains a regular accounting of parental awareness and participation in such organizations available on its PTA website. Of course, the functioning of these areas varies widely by location, but a future step might be comparing these different functions across localities. Such work is being carried out in India and other countries through bottom-up approaches pioneered by the People's Action Learning Network, where communities independently assess and disseminate the results of monitoring learning in poorer areas.²¹

These same elements can be carried out at the policy, budgetary, and administrative levels as well.

The Kenyan National Examinations Council provides school-by-school reporting on examination performance



Source: Kenya National Examinations Council, Examination Registration System, https://www.knec-portal.ac.ke/.

Community engagement and accountability for educational inputs

OGP countries have a number of successful commitments that give the public the ability to monitor budgets, spending, and delivery of services at the school level. This is an area to continue growing both in practice and among OGP commitments. And while there is increasing consensus that learning matters as much or more than educational inputs, inputs of course still matter. Governments still need to make critical investments: teachers need the right training and skills to do their jobs well; teachers need learning materials and ongoing support to continue to hone their craft; school systems need buildings constructed; and school food programs need to ensure students receive healthy, nourishing meals.

Importantly, these commitments will be more effective when they are accompanied by strengthened accountability mechanisms. Accountability is more sustainable when the rules establish and sustain public oversight institutions with strong mandates. The U4 Anti-Corruption Resource Centre has helpfully outlined the major institutional factors which are necessary to improve the quality of administration in the sector. (See "Guidance and standards: Factors for accountability.") While some of these are internal-to-government, many contain strong elements of open government. All reforms would make clear and public the "rules of the game" for education decision-making.

Within OGP, there have been a number of public input-tracking commitments in OGP worth noting and learning from:

Anti-corruption in Brazil (2011 and 2013 action plans): Across its first two action plans, Brazil advanced four commitments to strengthen oversight of school management and resource allocation. These were the "Interactive school development plan," the "Control Panel for the Integrated Monitoring and Oversight System," the "National Program for Strengthening School Councils," and the "Generation of knowledge

and capacity-building of managers and public resources operator's partners and of councilors for social control." Together, these four commitments comprised a suite of activities to strengthen the local management of schools, established in the 1996 law on education. This includes enhancing the oversight function of school councils which include community members. In particular, they would focus on budgeting and tracking school construction. According to the most recent IRM reports, these commitments were largely complete, although many of the budgets and contracts that these councils were supposed to monitor have not yet been made public and the rate of training parents and administrators to operate councils effectively has slowed. Nonetheless, this represents a laudable long-term effort in Brazil.

- Educational Infrastructure in Buenos Aires
 (2017 action plan): According to the IRM, the
 city of Buenos Aires made a major step forward
 with its commitments to increase accountability
 and transparency in public works for education.
 The commitment centralized all data on major
 educational public works, developed a centralized
 platform to present that data, and importantly,
 established a citizen reporting mechanism to allow
 the public to ask about progress, delays, and
 concerns.
- Participation and citizen oversight in education in El Salvador (2016 action plan): The El Salvadoran government has been receiving complaints about inefficiencies with the education system, such as problems with uniform delivery, school lunches, and low teacher quality. CSOs expressed concerns that the approach to these problems had been one-off and case-by-case. As an alternative, they proposed better structures to ensure longer-term monitoring. This commitment aimed to address this by establishing monitoring mechanisms at education centers in certain parts of the country.



Political Science Professor Evans Aggrey-Darkoh lectures at University of Ghana. (Photo by Dominic Chavez, World Bank)

To date, some of the basic legal infrastructure has been established, but the final mechanisms have not been established or, in many cases, lack active membership or training. The government has carried out basic surveys of the needs of the councils where they exist, but the allocation of resources and training is still underway. The IRM recommended beginning implementation with a number of pilots.²²

Teacher and administrator hiring in Honduras (2014 action plan): Honduras committed to make the hiring of school personnel more transparent and participatory. This includes bringing in citizens to observe the performance of candidates for director-level positions and involvement of citizens in the search process. At the time of the IRM review (2016), the final hires were not yet in place due to timing challenges associated with hiring regulations. Nonetheless, the concept of involving the public for such hiring remains an important step forward. These cases highlight the potential for greater public engagement. In the future, member countries may consider investment and future commitments in OGP action plans that focus on improving transparency and accountability around these core areas:

- Infrastructure: the supply of essential learning materials (textbooks and other learning resources);
- Social supports: e.g., nutrition, uniforms, conditional cash transfers, and scholarships;
- Personnel: the number and deployment of qualified teachers and other allied support staff;
- Teacher attendance and the level of ongoing support that teachers receive to do their jobs well; and
- School performance and learning outcomes measurement for all children.²³

GUIDANCE AND STANDARDS

Factors for accountability



The U4 Anti-Corruption Resource Center outlines steps that can be taken to improve accountability within education that go well beyond open data. The list provided gives a number of reforms that can be starting points in developing OGP commitments and actions. Necessary factors for strong accountability include:

- Politically independent administrations and clear-cut management rules and procedures
- Clear standards and rules for merit-based teacher recruitment and promotion
- Clear criteria for student admissions and examinations
- Codes of conduct for monitoring compliance with rules and applying punitive measures in case of non-compliance

- · Rules on conflict of interest
- · Autonomous examination agencies
- Involvement of parents, teachers, and civil society in planning and management
- Access to information complaint mechanisms available for all interested parties (including rights for whistleblowers)
- Internal and external control of accreditation boards for private institutions



The Dominican Republic's 2016 action plan focused its education efforts on developing a digital tool, the "Educational Center Management System (SIGERD)," by which parents and guardians could obtain data on performance and supervisory processes at the school level. The Ministry of Education piloted the tool in five schools before expanding to more than 120 education centers in 18 regions of the country.

The SIGERD system includes new functionalities, such as:

- Interconnection with other educational portals in education matters, such as EDUPLAN, the registry of statistics, including performance indicators
- Search tools that allow the comparison of information between different sites within and between school districts
- A system of alerts for educational staff and parents when new information becomes available
- Monitoring data at the school level, including student attendance, schedules, grades, personnel, infrastructure, and performance indicators

At the time of evaluation, this system was functional. However, it was also password-protected and required authorization from school authorities to access performance-level information, including otherwise publicly available data. While some data may need to be protected for privacy of student records or personnel issues, other information is already publicly available or required to be so. In that sense, the system is a promising start on the road to transparency and participation, but much can be done to strengthen parent and public oversight of these education centers.



French class at Sogman primary school in Sejnane, Tunisia. (Photo by Arne Hoel, World Bank)

Transparency for accountability

Transparency fuels better accountability. Accountability institutions and incentives for better performance and efficiency are critical, but without adequate data to inform decisions, it is difficult to understand if, where, and how they are improving. This section looks at some examples of using comparable, school-level education data to improve accountability in education systems to demonstrate how future OGP action plans might contribute to service delivery improvements.

The overall state of the data for transparency can best be described as a "mosaic." There are often pockets of strong data at the local level, in pilot projects, or in one-off data collection efforts. In some cases, the national level has strong data, but it is not adequately disaggregated. This may be, in part, due to the sheer scope of the system or the number of stakeholders. In a number of countries, this may be an issue of federalism or decentralization—an issue of division of powers and responsibility between levels.

There are many commitments which deal with the collection and systematization of data. The box on the previous page discusses the experience of the country in developing a system to publish and publicize data to raise awareness among parents and administrators on how their schools are performing in serving children's needs.

Beyond individual commitments, however, it may be

critical to look at the state of education data within OGP countries. This can identify areas of future commitments to improve the state of data for better accountability and meaningful public participation around education. Following the structure of the two prior sections, this section looks at the state of data first for educational outcomes and then for inputs.

Transparency of educational outcomes

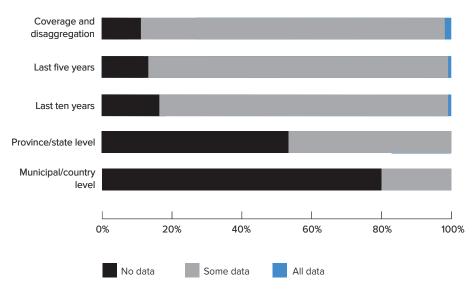
Within the education community, there are a number of vital initiatives to gather, synthesize, and use data. These initiatives (particularly, the UNESCO Institute for Statistics' Database²⁵) have strong credibility within the education community and provide a useful starting point for designing commitments. Seven such international initiatives are described in the "Guidance and Standards" information later on. The initiatives do not, however, have systematic analyses on the availability of education data across OGP countries and do not have data on subnational or time-series coverage available in national statistical systems.

To better understand educational outcomes data, this report offers a brief report on the state of data available on national statistical sites. It draws on primary-source reviews of national statistical and educational databases produced by the Web Foundation (Open

Data Barometer) and Open Data Watch (Open Data Inventory or ODIN). The value of ODIN data in particular is that it is linked to the primary source material on national statistical office (NSO) websites and covers every OGP country. Notably, it shows that there are significant gaps in current national-level data.

- Availability: The Open Data Barometer carried out a survey in 2017 of 83% of OGP countries. The findings showed that 100% of OGP countries collected data on attendance, graduation, and student performance. This does not mean, however, that the same number published that data; only 85% of countries within OGP published this data. For the 15% of OGP countries which are not publishing this data, commitments to publish this data would be a major step forward. (By contrast, Open Data Watch's "Open Data Inventory" looks at whether outcome data is available, including enrollment, completion rates, and performance on exams. This data covers 100% of OGP countries. 97% of OGP countries published some data on these three indicator sets. This finding is more optimistic than that found by Open Data Barometer.)
- Disaggregation: ODIN sees if available data is disaggregated by sex, school level, age of student, and school type (public, private, or religious).
 While over one-half disaggregated by sex, and some by school age, very few presented data disaggregated by age or type of school. Overall, less than 3% of OGP countries had disaggregated data on education outcomes (available at the national level) by all three indicators.
- Time span: Time series data is essential for tracking progress or declines in performance. Less than one-tenth of OGP countries had time-series data for most of a decade or even within the last five years.
- Decentralization: Not a single OGP country had a centralized data hub with provincial or municipallevel outcomes. This is not because the data does not exist. Rather, this is a result of the mosaic of data that is available on outcomes, sometimes available only to specific provinces or to specific localities.

FIGURE 2. Few OGP countries' NSOs link to data on education outcomes (enrollment, graduation, and exam scores)



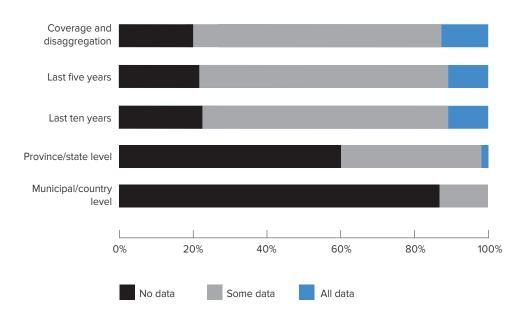
Source: Open Data Watch Open Data Inventory 2017 Indicators 3.2,3.3 (n=79)

Transparency of educational inputs

Overall, ODIN data shows that educational input data follows national statistical systems in OGP countries in roughly the same pattern as the data on educational outcomes. The data tracks the availability and coverage of the number of schools, number of teaching staff, and the annual education budget available in national statistical systems, including ministries of education.

- Availability and disaggregation: A small minority of OGP countries have all data available and disaggregated by student age groups, school levels (primary, secondary, and tertiary), and school types (public, private, and religious). Most OGP countries have some data available. For budgets, many OGP countries do not have a breakdown by type of expenditure, although most have basic top-line budgeting publicly available.
- Time span: In comparison to school outcomes, most OGP countries with basic data on schools do have the data available over the course of several years (see Figure 3, rows 2 and 3).
- **Decentralization:** Most national statistical systems surveyed do not have data available for provincial and local levels of administration (see Figure 3, rows 4 and 5 respectively).

FIGURE 3. Few OGP countries' NSOs link to data on education facilities (budgets, schools, number of teachers)



Source: Open Data Watch Open Data Inventory 2017 Indicator 2.1-2.3 (n=79)

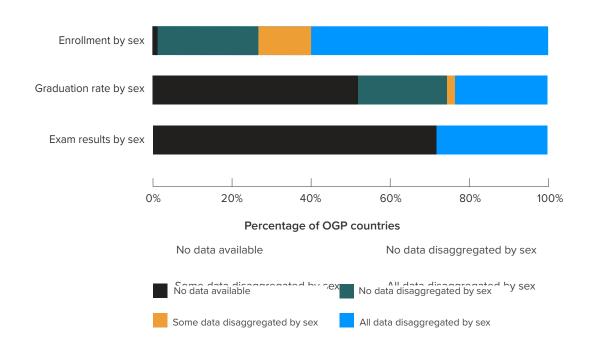
Elements of coverage

Disaggregation of data by sex and school type

Two areas are of particular interest when examining patterns of disaggregation: sex and school type. Sex is important from an equity perspective, useful in determining whether there is variation in educational outcomes. A closer look (see Figure 4) at ODIN data covering all 79 OGP countries shows that:

- Most OGP countries disaggregate enrollment figures by sex.
- Just about half of OGP countries do not publish graduation rates. Of those that do, most do disaggregate by sex. Consequently, the principle binding constraint seems to be publication overall.
- The overwhelming majority of country statistical offices do not post exam data in general. Of the minority (roughly 25%) that do, all publish sex-disaggregated data. As a consequence, for the many countries working to publish data on competency exams, it would be of great benefit to ensure that such data is sex-disaggregated from the start.

FIGURE 4. Absence of data overall is the biggest constraint to obtaining sex-disaggregated data on student outcomese

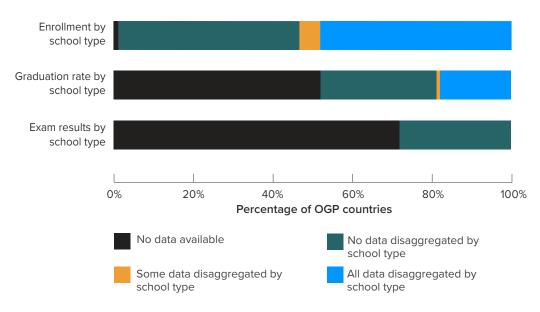


Source: Open Data Watch Open Data Inventory 2017 Indicators 3.1-3.3 (n=79)

Very few countries publish data on outcomes disaggregated by school type. School type is especially challenging in many countries, as private, charter, or religious schools may serve a significant portion of the school population, but may not report on outcomes in the same way as public schools. This may mean that parents are paying for private education that may or may not be a better value for children or that the government may be subsidizing low-performing schools (whether through vouchers, cash transfers, scholarships, grants, or subsidized educational lending). A review of ODIN data from national statistical offices shows that this is a major area for future action for many OGP governments wishing to improve educational open data. Major findings from this review include:

- Most governments publish enrollment data, but only about half track what type of school students are attending.
- Less than half publish graduation data, and of those, less than a third disaggregate graduation rates by school type.
- No OGP member currently has data on competency exams disaggregated by school type published on their national statistical organization's website.

FIGURE 5. Data on education outcomes disaggregated by school type (public, private, religious) is largely unavailable in OGP countries



Source: Open Data Watch Open Data Inventory 2017 Indicators 3.1-3.3 (n=79)

Again, OGP countries continue to show great interest in education-based reforms, and their efforts to date offer promise. Moving forward, these findings allow future commitments to be more strategic in terms of addressing the barriers to improved learning outcomes. Important takeaways when considering the focus of this work include:

- While OGP countries outperform non-OGP countries, they still have a significant amount of work to do, beginning with publishing disaggregated data (gender, level, and type of institution) and making sure that data is released on a timely periodic basis.
- 2 Educational outcome data lags well behind facilities data. That being said, both could stand to see considerable improvement.
- 3 While data may be collected, it is not yet systematically archived and made downloadable. Furthermore, much of it may remain at state and local levels, or may not be published in an open format across ministries.

GUIDANCE AND STANDARDS

Seven essential resources to support open government approaches to education

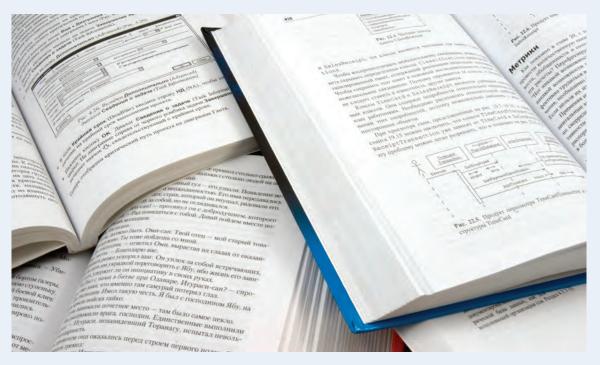
This section of the OGP Global Report touches on a fraction of the potential interventions possible to strengthen transparency, accountability, and participation in education. Within the field itself, there are a number of resources from which reformers would benefit as they develop more effective education commitments.

- 1 The UNESCO Global Education Monitoring Report publishes themed reports biennially on important issues in global education.²⁷ The 2017–18 report focused on accountability across schools. While it does not have country-by-country analysis, it does have significant case studies and examples of successful interventions to strengthen accountability.²⁸
- 2 The UNESCO International Institute for Education Planning (IIEP) works extensively with Ministries of Education to help them identify corruption risks in the education sector, and design strategies to improve transparency and accountability. It has trained more than 2,200 people on related topics and also provides technical support to countries in the process of carrying out an integrity assessment of their education sector, launching a public expenditure tracking survey, or developing a teacher code of conduct. It also manages the ETICO online resource platform, which gathers a wide variety of resources related to the ethics and corruption in education, including at higher education level.²⁹ Finally it has recently launched a new research project dedicated to open government in education.
- 3 The UNESCO Institute for Statistics collects and consolidates educational data from governments and is responsible for

- reporting on SDG4 targets and indicators at the international level.³⁰
- 4 UNICEF Multi-Indicator Cluster Surveys
 (MICS) has a number of tools and modules
 to support governments in bringing
 parents into education monitoring and
 involving them in children's education.
 Governments can seek support through
 MICS to better monitor the performance
 and governance of schools. In some cases,
 there is funding to support these efforts.³¹
- works in multiple countries and collaboratively with Ministries of Education, school leaders, teachers, and communities to use education data for decision-making. One goal of the program is to make the case for, and incentivize investments in, better quality and open data on education, and to support communities in using that data. OGP members might work with UNICEF through this program or learn from other countries that are already involved in Data Must Speak.³²
- 6 The Global Partnership for Education is a multistakeholder partnership that provides technical assistance, knowledge and innovation resources, and financial support for developing country partners to achieve their national education goals.³³ This can help OGP members better achieve their educational goals, including through open government reform and improved data.
- 7 The World Inequality Database on Education examines access to education and learning outcomes through an inequality lens. It provides user-friendly infographic tools that allow the user to select a variety of indicators and provides a visual display of the data.³⁴

GOOD TO KNOW

The case for open education and open science



Open education includes tools, resources, and practices that can be shared freely without the financial, legal, and technical barriers common to traditional educational materials.

A number of OGP countries have worked on these issues through their OGP action plans. These include Argentina (through the University of Buenos Aires), Brazil, the Slovak Republic, and the United States. The arguments for public access to these common pool resources are threefold:

- Cost: In many countries, the cost of materials is a prohibitive barrier to education.
- Currency: Open source materials can be updated more quickly than traditionally prepared curricula. This allows for current developments within each respective field to be available to educators and learners more rapidly.

• Quality: A meta-review of studies analyzing the performance of students using open educational materials found that 93% of students using open source materials performed better than peers using traditional materials.³⁵ Others have argued that more research is still required and that current studies remain inconclusive.³⁶

Beyond access to educational resources, there are strong efforts within OGP countries to make government-funded research public. One such example is legislation in the United States, the Fair Access to Science and Technology Research Act (FASTR) or H.R. 3427/S. 1701, which required US agencies with over US\$100 million annual budget to provide the public with online access to publicly funded research no later than six months after publication in a peer-reviewed journal.

Endnotes

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- ²³ For additional analysis and recommendations for improving accountability in education, see UNESCO's Global Education Monitoring 2017-18 Thematic Report "Accountability in education: meeting our commitments, available in multiple languages: https://en.unesco.org/gem-report/report/2017/accountability-education.
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- ²⁶ See http://odin.opendatawatch.com/ country pages for links to specific datasets on education in national systems databases.
- ²⁷ Available at: https://en.unesco.org/gem-report/.
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