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Clarifying concepts and mapping
initiatives

Ethics and Corruption in Education

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This study was prepared under the supervision of Muriel Poisson, Programme Specialist at IIEP and Task Manager of the Institute's programme on Ethics and Corruption in Education.

Presentation of the series:
Ethics and Corruption in Education

Studies conducted over the last two decades have emphasized the negative impact of corruption on the economic, social, and political development of countries. Corruption increases transaction costs, reduces the efficiency of public services, distorts the decision-making process, and undermines social values. Moreover, corruption tends to contribute to the reinforcement of inequities by placing a disproportionate economic burden on the poor and limiting their access to public services. As a consequence, fighting corruption has become a major concern for policy-makers and actors involved in development.

A quick review of the literature highlights a number of global and sectoral attempts to tackle the issue of corruption. However, it appears that the education sector has not received adequate attention from national education authorities and donors, despite numerous grounds for prioritizing the challenge of combating corruption in education:

- Public sector reforms aimed at improving governance and limiting corruption-related phenomena cannot produce significant results unless adequate attention is paid to the education sector, as in most countries this constitutes the largest or second-largest public sector in both human and financial terms.

- Any attempt to 'ensure inclusive and quality education for all and promote lifelong learning' (Sustainable Development Goal 4) will be undermined if problems related to corruption, which have severe implications for the efficient use of resources and quality of education and school performance, are not properly addressed.

- Lack of integrity and unethical behaviour within the education sector are inconsistent with one of the primary aims of education: to produce 'good citizens' respectful of the law, human rights, and equity. They are

also incompatible with any strategy that considers education as a principal means of fighting corruption.

In this context, the UNESCO International Institute for Educational Planning (IIEP) launched in 2001 a comprehensive research and capacity-building programme entitled 'Ethics and Corruption in Education'. Corruption is here defined as the systematic use of public office for private benefit that results in a reduction in the quality or availability of public goods and services. The main objective of this programme is to improve decision-making and the management of education systems by integrating transparency and anti-corruption concerns into methodologies of planning and administration of education.

The programme includes publications on topics such as formula funding of schools; decentralization and corruption; transparency in pro-poor education incentives; the adverse effects of private supplementary tutoring; the design and effective use of teacher codes of conduct; transparency in the book chain; and academic integrity. It also includes tools to help countries develop methodologies for assessing corruption in education, such as public expenditure tracking surveys or integrity assessments. More recently, it has paid specific attention to public access to information in education, with two new research projects devoted to open school data and open government in education.

Related resources are available on ETICO (http://etico.iiep.unesco.org), a dynamic clearing house for all information and activities related to transparency and accountability issues in education.

Jacques Hallak, Former IIEP Director,
and Muriel Poisson, IIEP Programme Specialist

Foreword

Open government emerged about a decade ago and has gained momentum over the last few years, likely as a result of recent advances in information technology. It is based on the assumption that the rapid development of new technologies, combined with pressure for more transparent and accountable governments, will push countries to explore innovative approaches to sharing information with the public and consulting citizens and engaging them in education service delivery. Moreover, by helping to redefine citizen–government boundaries, it is believed that open government can help improve transparency and accountability in the management of public sectors (including the education sector) and, beyond that, the overall public administration culture.

The Organisation for Economic Co-operation and Development defines open government as transparency of government actions, accessibility of government services and information, and responsiveness of government to new ideas, demands, and needs. The Open Government Partnership identifies three major principles underlying this concept: information transparency, public engagement, and accountability. For its part, the European Commission emphasizes the principles of transparency, collaboration, and participation, building on open data, open services, and open decisions. Finally, the World Bank defines open government on the basis of the principles of transparency, citizen engagement and participation, and responsiveness.

A cursory review suggests a dearth of literature on open government in the education sector and a lack of systematic identification of practical experiences within this framework. Moreover, there is no uniformity among definitions of 'open government' in the education sector and an absence of clarity regarding the various domains of open government observed in the educational field. There is also a growing need to evaluate the impact of the increasing number of open government initiatives developed across the

education sector worldwide, and to analyse and draw lessons from the challenges and barriers associated with their implementation in order to allow them to achieve their full potential.

The challenge facing educational planners is huge – to pay due attention to open government concerns at each step of the policy and planning cycle. Each step in this cycle allows for varying degrees of citizen input and participation: during the first stage citizens can help identify the problem and discuss possible policy options; then during policy implementation they can monitor whether the policy is being implemented as planned, detect weaknesses and shortcomings, and contribute to the identification of solutions. However, citizens can also contribute actively to the evaluation of education policies and programmes through social audits, thereby complementing other more formal systems of 'checks and balances to hold governments to account for their education commitments' (UIS, 2018).

In this context, IIEP has decided to launch a new research project entitled 'Open government in education: Learning from experience' as part of its 2018–21 Medium-Term Strategy. Open government is understood here as the opening up of government data, processes, decisions, and control mechanisms to public involvement and scrutiny, with a view to ensuring inclusive and equitable quality education. It calls for renewed government–citizen interaction and relies on the principles of transparency, citizen engagement, and participation, as well as government responsiveness. IIEP's project aims to promote more responsive, effective, and innovative educational planning with a focus on citizen involvement. Its specific aims are as follows:

• to help formulate an understanding of what is meant by open government in the education sector;
• to explore perceptions of open government approaches in education among all major stakeholders;
• to establish a list of criteria that maximize the successful implementation of open government initiatives in education;
• to evaluate the impact of open government initiatives specifically as they relate to the aims set out in Sustainable Development Goal 4;

- to provide recommendations to education decision-makers and planners on how to make informed decisions about the design and implementation of open government policies in education.

This research contends that all three principles of open government – transparency, accountability, and citizen engagement – are pivotal to achieving Sustainable Development Goal 4. Open school data enable the public to verify that their governments spend money in a fair manner, which maximizes opportunities for marginalized populations to access education. Open procurement can deepen the level of transparency and accountability in education contract management, therefore ensuring that procured items (school equipment, textbooks, etc.) actually reach their beneficiaries. Open policy and planning promote the involvement of minorities in the formulation of policy, thereby ensuring that policies and curricula are more diverse and inclusive. Lastly, social audits, as a form of community monitoring, can help ensure that school resources are used in the correct manner.

In 2018, IIEP undertook exploratory work to better formulate what is meant by open government in the education sector, and to document and assess early, innovative initiatives developed in that field. On this basis, in 2019 the Institute began eight case studies to illustrate the diversity of open government initiatives in education. Each case will prioritize one of the following aspects of open government: open policies, open budgets, open contracting, social audits, and crowdsourcing. The cases will combine the following data collection methods: the gathering of contextual information using secondary data related to the programmes/initiatives under review, a qualitative inquiry with semi-structured interviews, focus-group discussions, participatory observation, and a large-scale quantitative inquiry involving the distribution of 250 questionnaires to school actors using a multi-level stratified sampling method. In addition IIEP designed a global survey to review existing open government initiatives in education worldwide, to be completed in 2020.

This first publication under this project represents an attempt to clarify the conceptual confusion around the term 'open government' and to formulate a working definition for the field of education. It also reviews the

'theory of change' that links open government and corruption, and conducts an initial mapping of promising and innovative initiatives of open government in education. On the basis of a conceptual and empirical overview, it provides empirical frameworks for further research and draft policy recommendations. The publication builds on academic sources, reports from international organizations, and the work of renowned non-governmental organizations in the field. It also provides a conceptual basis for the development of IIEP's new research devoted to the topic.

IIEP would like to thank the authors, Oksana Huss and Oleksandra Keudel, for their valuable contributions.

Muriel Poisson

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Abbreviations

ACARA	Australian Curriculum, Assessment and Reporting Authority
API	application programming interface
CCE	Colombia Compra Eficiente (procurement monitoring agency)
COGES	Comités de gestion des établissements scolaires (school committees in Niger)
CPI	Corruption Perceptions Index
CSO	civil society organization
EDUCO	Programme for Education with Community Participation, El Salvador
EU	European Union
FONACIDE	National Public Investment and Development Fund, Paraguay
G&PA	government and public administration
GCSE	General Certificate of Secondary Education
ICT	information and communications technology
IIEP	UNESCO International Institute for Educational Planning
NGO	non-governmental organization
NYCSCA	New York City School Construction Authority
OECD	Organisation for Economic Co-operation and Development
OG	open government
OGP	Open Government Partnership
PBNYC	Participatory Budgeting New York City
PETS	Public Expenditure Tracking Surveys
PNE	National Education Plan, Brazil
QSDS	Quantitative Service Delivery Surveys

SBM	school-based management
SIC	Superintendency for Industry and Commerce, Colombia
SOA	service-oriented architecture
SRC	school report card
SSA	Sarva Shiksha Abhiyan (Education for All), India
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
VEC	village education committee

Executive summary

Although the idea of open government (OG) is increasingly met with in countries around the world, there has been no systematized overview of OG implementation in the education sector. This study seeks to fill this gap by answering the following question: *How does open government affect the education sector?* It pays specific attention to the role of local governments and the active use of new technologies for citizen participation.

An analysis of definitions shows that, at its core, open government consists of three interwoven components: transparency, citizen participation and collaboration, and accountability and responsiveness. Open government is often used as an umbrella term for different mechanisms applied to fulfil the functions of transparency, citizen participation, and accountability. It is also a dynamic process that serves as a tool to reach predefined targets. Any impact evaluation of open government depends on the interests of the main stakeholders defined at the beginning of the process. Major risks and challenges to the success of open government increase if the development of separate components, especially transparency in the form of open data, becomes the main or sole objective. Instead, the attainment of transparency, participation, and accountability are all essential outcomes for achieving the longer-term impacts of a successful OG process.

Open government is defined in this study as a principal-centred process of governance aimed at creating public value in a partnership between public authorities and citizens. The term 'partnership' includes citizen participation and collaboration, which is impossible without meaningful transparency and is only effective under conditions where accountability and government responsiveness are in place. 'Public value', as the long-term objective of open government, implies that concrete stakeholders, as a group of beneficiaries among the general public, must be identified at the beginning of the process. The interests and needs of the main stakeholders define the nature of the desired public value at the end of the OG process, as well as the value-generating mechanisms required to reach it. Open government in education

is a process of governance, based on the principle of 'the best interests of the child', that aims to ensure inclusive, equitable, high-quality education for all through partnership between the main stakeholders in the education system.

The mapping of OG dimensions across six world regions has demonstrated that, in education, national policy-making remains key, with subnational and local-level initiatives gaining momentum. Analysis of the mapped cases suggests that the choice of OG dimensions and targeted OG principles is context specific: in countries with occasional corruption, open government is mostly used to gather information about stakeholders' needs relevant to education, while in countries with systemic corruption, participatory initiatives often target the implementation of a policy or the monitoring thereof. Although socio-economic factors may determine opportunities and barriers for relevant stakeholders (e.g. parents, teachers, suppliers of education-related services, and school administrations) in terms of participation in open government, actual participation is increased by targeted awareness-raising and capacity-building efforts. Collaboration between governments and civil society organizations (CSOs) is critical to ensuring stakeholder mobilization and the implementation of OG mechanisms.

Introduction

The concept of open government is increasingly applied in public policy around the world. However, there is as yet no systematized overview of OG implementation in the education sector, including its advantages and possible risks. To fill this gap, this publication seeks to answer the following question: *How does open government affect the education sector?* Specific attention is paid to the role of cities and local governments in this regard, as well as the active development of new technologies.

The task of this publication is fourfold: first, it reviews the literature in order to clarify the conceptual confusion around the term 'open government' and provide a working definition. This working definition is then applied to open government in the education sector. Second, it elaborates a 'theory of change' that links open government and corruption. Third, it maps out and assesses the specific contextual characteristics of 34 diverse and recent OG initiatives in education worldwide. And fourth, on the basis of this conceptual and empirical overview, it provides analytical tools and empirical frameworks for further research.

The publication draws on academic sources, documents, and reports of international organizations and international programmes, as well as the work of renowned non-governmental organizations (NGOs) in the field. In particular, the conceptual overview of the term 'open government' has been elaborated on the basis of definitions by the Council of Europe, the European Union (EU), the Organisation for Economic Co-operation and Development (OECD), the Open Government Partnership (OGP), the United States of America (USA), and the World Bank. Critical analysis of the core OG principles and objectives – transparency, participation and collaboration, and accountability and responsiveness – was conducted, based on academic research and recent literature reviews on open government. Then, based on this critical approach to OG conceptualization, the research team developed a working model of the OG process (*Chapters 2–5*), which was applied to the

empirical analysis of open government in the education sector. Analysis of empirical cases was undertaken using a method of comparison, with specific attention paid to case context, short- and medium-term objectives, and impact.

The mapping of empirical cases employed maximum variation sampling to cover all theoretical dimensions of open government and to identify the widest possible range of OG mechanisms in education, while covering as many world regions as possible. Preference was given to recent cases (2010 or later), while some older cases were included for the purposes of reference. Research sources included state-of-the-art reports and case studies on transparency, participation, and accountability in education from international organizations, such as the OECD and the United Nations Educational, Scientific and Cultural Organization (UNESCO), case studies and reports from CSOs specializing in OG mechanisms, and scholarly articles incorporating experimental impact assessments of OG initiatives. The mapping resulted in the identification of 34 cases in 26 countries from 6 world regions. While the majority of these cases occur at the national level, the process also worked to identify city and subnational cases.

The procedure used for case selection sought to obtain a wide theoretical variation,[1] taking into account the following constraints. First, owing to the language capacities of the authors, only sources in English, German, French, Spanish, and Ukrainian were considered. Second, the majority of recent cases did not usually contain assessments of medium-term goals and impacts, and thus were included to describe trends in open government in education but could not be used to assess their effectiveness. Third, once maximum theoretical variation was achieved, the search for cases ceased, thus some cases of OG mechanisms known to the reader may not be covered here. Despite these constraints, the case mapping provides a useful overview of trends in open government in education and allows preliminary conclusions to be drawn about related opportunities and obstacles in the education sector.

The publication consists of three sections: the first presents a critical reflection on available OG definitions (*Chapters 1–3)*; the following section

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1. Theoretical framework from which to explore possible variations in experience and results.

explores the operationalization of the OG concept (*Chapters 4–6*); and the last section consists of an empirical analysis of OG cases in the education sector (*Chapters 7* and *8*).

Chapter 1 provides a historic overview of open government with a view to reflecting on current innovations and future trends.

Chapter 2 is dedicated to OG core principles. Specifically, it defines three OG pillars – transparency, citizen participation and collaboration, and accountability and responsiveness – including their functions and mechanisms, and an assessment of risks and challenges.

Chapter 3 elaborates OG dimensions in line with government functions and discusses different stages of OG objectives.

Chapter 4 elaborates a theory of change for OG implementation in two different contexts: where corruption is an exception and where corruption is the norm in governance. *Chapters 5* and *6* provide the link between theory and empirical case analysis, and list particularities of open government in the education sector and further contextual specifics.

Chapter 7 structures the results of mapping OG initiatives in education based on OG dimensions, links them to the theoretical functions of participation, and identifies the stage of policy cycle at which these initiatives occur. The chapter ends with an example of the application of a working definition of open government to a case of open contracting for a school feeding programme in Bogotá (Colombia).

Chapter 8 continues with the context-specific analysis of major patterns in open government in education, highlighting how diverging preferences for particular OG mechanisms exist in two distinct contexts of corruption. The chapter also reviews short- and medium-term outcomes of OG initiatives in the education sector and their impact.

The final chapter of the publication lists the main conclusions.

Chapter 1
Open government: Old concept, new dynamics

The current wave of interest in open government is by no means new – the idea of transparency and citizen participation developed decades ago. However, analysis of historic trends enables the identification of some innovations in recent developments.

In general, the concept of open government reflects two main components: transparency and citizen participation. The meaning of these concepts has varied throughout history, while shifting debates about why transparency and citizen participation are needed have influenced the implementation of transparency and participation policies.

1.1 A historic perspective on transparency and citizen participation

Although modern notions of transparency and participation date back to the 18th and 19th centuries (Mansuri and Rao, 2013: 3), the critical and active discussion around their necessity and implementation became more practical in nature during the 1950s, especially in the USA. In the context of post-war opacity, journalists and newspaper editors became the main source of pressure for greater openness on the part of the government. A 1953 report, commissioned by the American Society of Newspaper Editors, entitled 'The people's right to know: Legal access to public records and proceedings', paved the way for *The Open Government Principle: Applying the Right to Know under the Constitution* (Parks, 1957) and the 1967 Freedom of Information Act (Yu and Robinson, 2012: 184 ff.). Against this background, the concept of open government emerged as 'a synonym for public access to previously undisclosed government information' (Yu and Robinson, 2012: 186). The main objective for opening access to public

information was fostering government accountability and responsibility to act in the public interest.

The discussion around citizen participation evolved in parallel to developments in the concept and practice of governmental transparency. The context for citizen participation was the perceived crisis of democracy. David Hart (1972) discussed citizen participation in the early 1970s as one of two possible solutions to the crisis of democratic institutions in the USA. One possibility was to strengthen representative democracy; the other was to replace it with participatory democracy. The author focused on the objective of citizen participation, which aims to enable better services for relevant 'client publics'.[2]

In 1969, Sherry R. Arnstein substantiated the need for 'participation of the governed' as 'the cornerstone of democracy' (Arnstein, 1969: 216). She discussed participation as an opportunity for 'powerless' groups to challenge inequity and injustice. Accordingly, Arnstein defines participation as 'the redistribution of power that enables the "have-not citizens," presently excluded from the political and economic processes, to be deliberately included in the future' (Arnstein, 1969: 216). Importantly, she highlights the 'critical difference' between an 'empty ritual of participation' that allows power holders to claim that all sides were considered and to maintain the status quo and 'real power to affect the outcome of the process' (Arnstein 1969: 216). To clarify this crucial difference, Arnstein developed 'the ladder of citizen participation', which identifies eight grades of citizen empowerment ranging from non-participation (manipulation and therapy) to information and consultation (allowing 'have-nots' to hear and have a voice), all the way to the highest degree of citizen power (achieved through partnership, delegated power, and citizen control). Arnstein's ladder combines the concepts of transparency and citizen participation and shows that access to public information is only an intermediate stage to reaching a partnership between citizens and government.

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2.   Customers of a non-business organization who 'consume' its goods or services (www.businessdictionary.com).

1.2 Citizen participation in early education planning

Owing to its immediate relevance for citizens, the education sector appears to be an experimental field for citizen participation, especially at the local level. Koopman and Isbister link increasing citizen participation in school affairs after the Second World War to the increase in wealth, greater interest in schools, population mobility, and the rise in mass media communication. The authors note that education is 'a matter of great public concern', and therefore should be planned by all members of the community (1958: 425). For educators, the aim of participation in the form of citizen committees is to foresee the educational needs of the community and to control planning. Another approach – the so-called community school approach – assumes that citizens will become a part of continuous efforts to improve schools and will gain a strong sense of ownership. The authors suggest that citizens need to participate in fields that encompass the general role and nature of educational institutions, the content of curricula, and polices related to personnel.

Marlyn Gittell (1972) traces the history of citizen participation in shaping educational policies in American public schools to early 1900, and the new wave of immigration and expanding school populations. Historically, the aim of participation was twofold: first, to bring curricula innovation to school programmes in order to adapt to the challenges of immigration; and second, to increase the level of professionalism in a school system that was plagued by patronage. Gittell argues that '[q]uality public education without the involvement and participation of the consumers is a contradiction in terms' (1972: 684). The article raises the issue of conflict between community participation and professional governance of the field, which is still relevant in the current literature. It also states that communities need greater control over educational institutions in order to achieve a proper balance between professionalism and public participation in the policy process.

In the early 1970s, international organizations also began to explore participatory planning in education. In a paper published by the UNESCO International Institute for Educational Planning (IIEP), Grassie (1974) provided a theoretical framework for the decision-making process in the

education sector, taking into consideration citizen participation. According to Grassie, the aim of participatory planning is to obtain feedback from citizens about their interests and needs, so that administrators can deliver their services accordingly. This planning approach allows administrators to study the needs of clients and to forward them to policy-makers in the form of suggestions and ideas for new policies.

> Participation, persuasion, decision, implementation, evaluation – these constitute the continuous cycle of processes by means of which an organization is able to provide a continually improving service to its clientèle. The clientèle is not usually one body with a common view of its needs but, more often, consists of a multiplicity of groups each with its own peculiar view of what is required and of priorities. It is the difficult task of the policy-maker, thereafter, to decide 'who gets what and when' (Grassie, 1974: 11).

This paper provides a clear indication that the education policy planning and feedback process is organized around the principal–agent concept, whereby citizens are the principal, and the government represents an agent that is elected or appointed to provide a public service to citizens.

Around the same time, a document on participatory planning produced by the OECD noted that 'the idea of participatory planning for education is emerging as a central and unifying concept' (Beresford, 1974: 13). The stated purpose of participatory planning is to tackle the challenges that traditional institutional boundaries face. According to the author, these challenges include changing the perception of children and youth and rethinking the relationship between education and society. New perceptions emerging as part of increasing demand for education worldwide entail 'loosening up the usual time, space and place boundaries for education' (Beresford, 1974: 13). In this context, participatory planning activities are deemed to influence policy-making and the actual implementation of programmes, with a view to disseminating innovation developments, or the demand for them, in education.

An early example of a study of participatory planning beyond OECD countries examines school mapping in the Lok Jumbish project, India (Govinda, 1999). The technique of school mapping, initially developed in

France in the early 1960s, empowered local communities in India to 'decide on the location of future schools and means to be allocated at the institutional level' (Govinda, 1999: 13). This project highlights the importance of the process as much as the product:

> The important thing is that the community and parents feel responsible for its preparation and are committed to its implementation. This is necessary to break the cultural blockages which are responsible for continuously low enrolment (Govinda, 1999: 17).

The villagers carried out the planning process themselves, an approach that shifted the focus from the supply of provisions to the demand for services. While traditional school mapping has functioned as a tool for centralized decision-making, the Lok Jumbish project transformed this technique into a tool for decentralized decision-making (Govinda, 1999: 152).

1.3 The role of information and communications technologies

The rapid development of information and communications technologies (ICTs) in the 1990s significantly influenced the concept of open government (Wirtz and Birkmeyer, 2015: 391), in particular through its closeness to the ideas of open data (Yu and Robinson, 2012) and e-government (Linders, 2012). Widespread access to the internet worldwide massively improved options for sharing, analysing, and using timely governmental data for public use and coordinated participation activities (Kossow and Dykes, 2018*a*). In terms of data sharing, governments can now provide timely information (e.g. live broadcasting of voting procedures) and information in the form of big data for public use. Analytics of big data provided by tax authorities and procurement data, in combination with data about bidding companies (e.g. identifying the beneficiary owner of a company), can uncover corruption, provide evidence of fraud, and make public expenditures more efficient (e.g. Dávid-Barrett, 2017).

In addition, the digitalization and automation of public services (e-government) both increase government efficiency in the delivery of public services and decrease corruption risks by reducing face-to-face interactions

between citizens and public servants. Blockchain and bitcoin technologies currently represent the most disruptive digital innovations, with significant potential to improve transparency and the accountability of public services if the associated risks are properly managed (Kossow and Dykes, 2018*b*). In addition, social media and electronic tools such as e-petitions or complaint mechanisms enable the consolidation and coordination of activities by a broad range of citizens to represent collective interests to public authorities.

Against this backdrop of technological developments, 'the adjective "open" has become a powerful, compact prefix that captures information technologies' transformative potential to enhance the availability and usefulness of information' (Yu and Robinson, 2012: 187). However, recent years have seen an increase in critical voices targeting the extensive use of OG data. As Yu and Robinson note, the term 'open' has blurred the distinction between the technologies of open data and the politics of open government (2012: 193). The authors point out that open government and open data can each exist independently of the other: government can be transparent without new technologies and can also provide open data on neutral politics and remain 'deeply opaque and unaccountable' (Yu and Robinson, 2012: 181). In fact, this is a discussion about the paradox of transparency, where superficial commitments to open data are used as a façade to avoid government accountability (Weinstein and Goldstein, 2012).

As a response to these critics, a recent wave of academic literature and analyses by international organizations has focused primarily on the qualitative preparation and usability of available data. According to the OECD,

> as the global maturity of open data has grown, so has the awareness of *the need to foster a culture of value creation and problem-solving approaches*. These can help target efforts to release valuable data for re-use, and prioritise improved government rather than aiming simply to provide more data. *The concept of 'publish with purpose' is what best represents this new emerging discussion* (OECD, 2018*a*: 15).

In other words, there has been a shift from ICT-based open data and e-government as a goal, to the understanding of technology as a possible tool for problem-solving.

1.4 Current developments

From the USA to the international development agenda

In remarks on the history of participatory development, Mansuri and Rao (2013) highlight the central role of the USA in spreading the concept of open government worldwide. During the 1950s and 1960s, the United States Agency for International Development (USAID) funded and promoted cooperative institutions, community-based development, and decentralization. In the 1970s, the focus of policy shifted to large-scale investment in agricultural and industrial growth; however, by the mid-1980s activists and scholars had attacked this approach as inherently disempowering and biased against the interests of the poor. These critiques in combination with the intellectual contributions of economists such as Ostrom (1990) in favour of bottom-up and deliberative development led to renewed interest among donors and governments in community-based development, decentralization, and participation (Mansuri and Rao, 2013: 3). As a result, from the early 1990s international organizations began to actively fund participatory approaches.

From a focus on (representative) democracy to the quality of public services

In the post-war period, open government and citizen participation targeted mainly the shortcomings of representative democracy (e.g. by giving a voice to marginalized groups and reducing patronage in education). Associated projects in the 1990s, however, indicate a shift towards targeting the ineffectiveness of public administration as the main driver. Owing to rapid social, economic, and technological developments in the late 20th century, governments appeared 'increasingly out of step with a changing society which had new and different expectations' (OECD, 2005: 10). Such new expectations made governments more performance focused, while the key

principles of accountability and public focus (instead of private interest) retained their importance (OECD, 2005: 11–12).

As an example, Fung and Wright analysed innovations in empowered participatory governance in the early 1990s as a response to the ineffectiveness of mechanisms of political representation (2003: 5). They studied five early experiments in empowered participatory governance: neighbourhood governance councils in Chicago; the Wisconsin Regional Training Partnership; Habitat Conservation Planning under the Endangered Species Act; the participatory budget of Porto Alegre, Brazil; and *panchayat* reforms in West Bengal and Kerala, India. On the basis of their empirical findings (2003: 15–16), the authors highlighted three general principles fundamental to all these experiments: (i) practical orientation with a focus on specific, tangible problems; (ii) bottom-up participation with the involvement of ordinary people affected by these problems and the officials close to them; and (iii) the deliberative development of solutions to these problems. The authors also identified three institutional objectives for empowered participatory governance: effective problem-solving, equity, and broad and deep participation.

From new public management to the partnership paradigm

The development of the public administration discipline influenced the discussion about the nature of the relationship between public administration and citizens. Early literature on participation from the 1960s until the 1990s indicates that citizens were treated as customers and the aim of participation was to collect information about their needs. This idea of client–agent relations between the public administration and citizens is inherent to the concept of new public management (NPM). Early projects in the 1990s, however, reflect a shift towards partnership relations between public administrations and citizens (Linders, 2012; Vigoda, 2002), and the concept of participation changed accordingly. While the NPM approach focuses on the importance of involvement and consultation with citizens in order to learn about their needs, the partnership paradigm goes much further, with government and the public administration relying on the expertise of citizens and their engagement in policy-making.

Future trends in open government policy

Scholars and experts of the Transparency and Accountability Initiative[3] have provided an intermediate assessment of OG activities since the late 1990s, allowing for the identification of future trends and providing suggestions for further improvements. On the basis of this assessment, they highlight a 'second-generation' approach to the implementation of transparency and accountability as core principles of open government. A comparison between the first and second generation is provided in *Table 1*.

Table 1.   Future trends in policy analysis relevant to open government

Characteristics of first-generation efforts to implement transparency and accountability	Characteristics of second-generation efforts to implement transparency and accountability
Inadequate attention to particularities of local contexts	Deeper understanding of local contexts
Short-term projects	Longer-term, more iterative, 'organic' engagements
Blanket assumption regarding the value of transparency	Greater focus on how transparency translates into accountability
Fascination with technological tools, treating them as ends in themselves	Viewing technological tools as means, not ends; experimenting with multiple tools
Act first, learn later	Greater attention to accumulating and applying learning
Tactical aims that only target and remove symptoms of the problem	Strategic approaches that aim to resolve the core problem
Small-scale, fragmented efforts	Building larger movements and coalitions

Source: Carothers (2016: 40).

In summary, the historic analysis of transparency and citizen participation has identified changes in the meaning, objectives, tools, and geography of the OG concept. These changes are summarized in *Table 2*.

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3.   The Transparency and Accountability Initiative is a group of funders committed to working towards a world where citizens are informed and empowered; governments are open and responsive; and collective action advances the public good (www.transparency-initiative.org/).

Table 2. **Summarizing historic developments and identifying current tendencies**

	Post-war period	Current developments (since the late 1990s)
Meaning	• Open government as a narrow concept focused on access to public information • Citizen participation developed as a separate idea	• Open government as a broad and complex concept that combines transparency, participation, and collaboration as minimum requirements • Most definitions also include accountability and/or responsiveness as a third component
Objectives	Respond to the shortcomings of (representative) democracy	Respond to the shortcomings of democracy (corruption, low trust, bad governance) *and* to the ineffectiveness of public services
Tools	Physical access to documents (transparency) and face-to-face participation	Use of ICT-driven open data and e-government in addition to face-to-face participation
Interaction: government & public administration (G&PA) and citizens	From citizens as voters and G&PA as trustees to citizens as clients/ customers and G&PA as the manager	Citizens and G&PA as partners
Geography	US-centred paradigm	International/global paradigm

Source: Authors.

Chapter 2
Conceptualizing open government:
Definitions, mechanisms, (dys-)functionalities

The aim of this chapter is threefold: first, to review existing documentation and academic literature on the concept of open government; second, to identify core components and main mechanisms for the implementation of open government; and third, to discuss risks and unintended impacts that OG mechanisms might hide.

2.1 Defining open government

Open government can mean different things depending on the stakeholder perspective. A recent OECD report on open government indicates that only half of analysed countries (35 OECD member states and 18 other countries) with an OG strategy introduced and used an official governmental definition, while 30 per cent created their own definition and 21 per cent of governments adopted one from external sources (2016: 1). The most widespread and recent definitions of open government used by international organizations and some governments are summarized in *Table 3*. An overview of international OG definitions is presented in more detail in *Annex 1*.

This overview reaffirms the diversity of definitions. Nevertheless, it is possible to identify core characteristics and principles common to the concept of open government. First, most definitions consider open government to be a governance process rather than an aspect of the status quo. For instance, the World Bank defines open government as 'citizen-centric governance, with openness as a central pillar' (World Bank, 2015), while the OECD definition refers to 'a culture of governance' (OECD, 2017: 1). Second, open government is a collective term that encompasses several interdependent components. For instance, the Congress of Local and Regional Authorities of the Council of

Europe[4] states that open government is 'an umbrella term for a wide range of practices' (Galster, 2018: 7). Similarly, the US Memorandum on Transparency defines open government as 'a system' of transparency, public participation, and collaboration (White House, 2009: 4685). Third, all definitions have two components in common – transparency and engagement of citizens. However, there are slight variations with regard to the third component and the strategic objectives of open government.

The Congress of Local and Regional Authorities and the OECD differentiate between open government and the concept of an 'open state' (Galster, 2018: 7; OECD, 2017: 1). While open government refers to the relations between government, public administrations, and citizens, the open state concept extends open government to initiatives that target other powerful institutions, such as parliament, the judiciary, and independent public institutions. At any rate, both concepts are closely interwoven.

2.2 Transparency

Transparency describes 'the extent to which government makes available the data and documents the public needs in order to assess government action and exercise voice in decision making' (Harrison *et al.*, 2012: 87). For the most part, definitions of transparency correspond to requirements regarding the publication of data. For example, the European Commission in a recent report states that 'transparency refers to disclosing relevant documents and other information on government decision making and government activity to the general public in a way that is relevant, accessible, timely, and accurate' (Bremers and Deleu, 2016: 11; see also: Bauhr and Grimes, 2017: 433 ff.; De Ferranti *et al.*, 2009: 7; Orszag, 2009: 2; White House, 2009: 1). The European Commission report elaborates further:

> *Relevant and accessible* implies that information should be comprehensible, in an appropriate format (for reuse) and tailored to the specific need of

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4. The Congress of Local and Regional Authorities is an institution of the Council of Europe, responsible for strengthening local and regional democracy in its 47 member states and assessing the application of the European Charter of Local Self-Government. The Congress is made up of two chambers: the Chamber of Local Authorities and the Chamber of Regions. It has 324 representatives and 324 substitutes, all appointed for four years, representing over 200,000 local and regional authorities in the Council of Europe's member states. For more information see the website: www.coe.int/en/web/congress/home.

different audiences. *Timely and accurately* indicates that information should allow relevant stakeholders the necessary time to analyse, evaluate and engage into collaboration. The information should be up-to-date, accurate, and complete (Bremers and Deleu, 2016: 11).

Table 3.   Open government definitions

Sources	Definition	Components/activities for implementation
Congress of Local and Regional Authorities of the Council of Europe Report CG35(2018)14final 'Transparency and open government' (Galster, 2018) *Strategy on innovation and good governance at local level* (Council of Europe, 2007: 2–3)	Open government is an umbrella term for a wide range of practices that further three key principles. These practices include open data initiatives, access to information laws, political rights, whistleblower protections, and public consultation and engagement processes, among many others. Open governance/open state: these concepts extend open government to include initiatives that target other institutions (e.g. business, parliament, legal systems, etc.).	**Transparency**: access to information • open data • records management **Participation**: • civic space • civic engagement • whistleblower protection **Accountability**: • audits • codes of ethics • scrutiny
EU *Towards faster implementation and uptake of open government. Final report.* (Bremers and Deleu, 2016)	Open government refers to a process whereby public administrations break down existing silos, opening up and sharing assets (making data, services, and decisions open), enabling collaboration on public service design and delivery, and increasing participative forms of policy-making.	**Open engagement** **Open services** **Open assets**

Sources	Definition	Components/activities for implementation
OECD *Open government: The global context and the way forward* (OECD, 2016) *Recommendation of the Council on Open Government* (OECD, 2017) *Modernising government: The way forward* (OECD, 2005)	A government is open when it follows the principles of transparency, accountability, and participation. Open government is a culture of governance that promotes the principles of transparency, integrity, accountability, and stakeholder participation in support of democracy and inclusive growth. Definition from 2005: open government implies transparency of government actions, accessibility of government services and information, and responsiveness of government to new ideas, demands, and needs.	**Stakeholder participation:** all the ways in which stakeholders can be involved in the policy cycle and in service design and delivery, including: • information, • consultation, • engagement.
OGP *Open Government Declaration* (OGP, 2011) *What's in the OGP subnational action plans?* (OGP, 2017)	Open government involves: • increasing the availability of information about governmental activities; • supporting civic participation; • implementing the highest standards of professional integrity in public administration; • increasing access to new technologies for openness and accountability.	**OGP subnational action plans** seek to implement the core principles in four complementary fields: • civic participation, • public service delivery, • marginalized communities, • technology and innovation.

Sources	Definition	Components/activities for implementation
USA *Transparency and Open Government*, 74 Fed. Reg. 4685 (White House, 2009) *Open Government Directive*, White House (Orszag, 2009)	Open government is defined as a system of transparency (information disclosure, soliciting public feedback), public participation (increased opportunities to participate in policy-making), and collaboration (the use of innovative tools, methods, and systems to facilitate cooperation among government departments, and with non-profit organizations, businesses, and individuals in the private sector).	**Transparency** **Participation** **Collaboration**
World Bank *Open government*. Brief (World Bank, 2015) *Open government impact and outcomes: Mapping the landscape of ongoing research* (World Bank, 2016)	Open government means increased transparency, citizen participation, and collaboration between government and citizens. Citizen-centric governance, with openness as a central pillar, improves the use of public resources, facilitates inclusive decision-making processes, and increases trust between governments and citizens. Governments that are more open are better positioned to act effectively and efficiently, to foster private sector growth, and to respond to the true needs of all citizens.	**Transparency** **Citizen engagement and participation** **Responsiveness**

Source: Authors.

Box 1.   Legislative framework for transparency in education in Australia

Since the publication of the Australian Commonwealth Freedom of Information Act in 1982, the Australian public has increasingly come to expect transparency of official information. Further legislation, the Education Act 2013, and the national Education Regulation 2013 specify the information that should be provided about each school. This information is collected by the Australian Curriculum, Assessment and Reporting Authority (ACARA), which was established by the ACARA Act 2008, and includes school profiles and locations, results of the National Assessment Program, school finances, school attendance data across all jurisdictions, and reports on progress of the school system towards Australia's educational goals. ACARA also manages the 'My School' online portal where school profiles, assessment results, and school finances are published in an easy-to-understand format, offering an opportunity for parents to track school performance and compare schools.

Source: Rabinowitz (2018: 16).

Transparency is usually defined in terms of the functions that it fulfils. Analysis of the concept of transparency in the documents and literature on open government reveals that it is crucial to identify the purposes and stakeholders for which information has to be disclosed (see Bauhr and Grimes, 2017; Harrison *et al.*, 2012; Linders and Wilson, 2011). It is possible to identify three ways in which transparency is useful in the context of open government: supporting accountability, enabling citizen engagement (deliberation), and fostering social and economic development (public re-use).

Functions of transparency

Supporting accountability

The first and most widespread way in which transparency can prove useful is to hold decision-makers accountable. This links closely to the idea of transparency as an anti-corruption measure. According to Linders and Wilson,

> [d]eliberate publication of government information in venues and formats that invite review help foster trust and accountability, create a more informed citizenry, and reduce scope for corruption and misinformation (2011: 267).

While Linders and Wilson support the idea that transparency is a positive indicator of accountability (2011: 267), Bauhr and Grimes (2014, 2017) show that transparency refers only to certain components of accountability. Accountability requires three components: first, an agent provides – routinely or on demand – an account to principals regarding activities related to a specific domain; second, the agent justifies or explains decisions; and third, the principal has the authority and the means to sanction the agent effectively (Bauhr and Grimes, 2017: 434; Lindberg, 2013: 209). Transparency is relevant only to the first two components, while the third requires mechanisms of answerability or sanctioning.

Deliberation

Another useful function of transparency is deliberation. According to Hansson, Belkacem, and Ekenberg,

> [t]he underlying assumption in a deliberative process is that if we acquire an informed understanding, we, as a collective, will be able to take an informed rational decision by weighing pros and cons and by predicting the consequences of different actions. ... *Deliberation in the open government setting thus means forms of collective decisions and information production to enable collaboration and innovation* (2015: 545).

Deliberation in this sense does not imply that transparency necessarily leads to citizen participation; instead it means that citizen participation is impossible without the availability of information at the input stage of the political process (Bauhr and Grimes, 2017: 434). In order to participate extensively and meaningfully in the decision-making process, the public needs to understand the workings of their government (see Heller, 2015). The central function of transparency here is to provide citizens with all the information (e.g. open law-making and policy-making, open contracting, open budgets, etc.) necessary to enable their participation.

Public re-use

Finally, transparency for public re-use is grounded in the idea that information maintained by the government is a national asset with social and economic

value and should be made publicly accessible to the maximum extent possible (O'Reilly, 2011: 14). According to Linders and Wilson,

> [p]ublic reuse of government data is anticipated to provide economic and social value to spur growth, promote a knowledge economy, and help the public help itself. Such efforts are also seen as a potential cost-saver by enabling the public to develop alternative service delivery channels based on government data but developed, delivered, and financed by nongovernmental actors (2011: 267).

The public re-use function reflects a shift of focus from exclusively democratic values to economic and social values that transparency can foster. From this perspective, citizens are perceived as partners rather than customers in the delivery of public services (Linders, 2012: 446). This is what Linders defines as 'citizen coproduction' (2012).

Bauhr and Grimes highlight *predictability* as an important function of transparency (2017: 434). Predictability is a necessary precondition to lower risks in market transactions (Bauhr and Grimes, 2017; Stiglitz, 2002). The information regarding rules and regulations, as well as the implications of failing to comply with rules and regulations, fulfil the function of predictability. However, Linders and Wilson point out the risk of unequal access to relevant data for different market participants. In particular, if transparency is provided by means of ICT, it excludes 'those on the wrong side of the digital divide', which can lead to unintended favouritism (Linders and Wilson, 2011: 267). As with accountability and deliberation, the mechanisms of answerability, impartial control, and sanctioning must be in place for transparency to fulfil its function of public re-use.

Mechanisms of transparency

In practice, implementation of the transparency principle employs four mechanisms: open data, access to information, disclosure, and records management.

The concept of **open data** is defined by Baena Olabe *et al.* as 'initiatives which facilitate the free and proactive release of large volumes of information held in government databases in formats and under conditions that permit

re-use' (Baena Olabe *et al.*, 2013: para. 53). The International Open Data Charter (2015) outlines six principles for how to publish data: open by default, timely and comprehensive, accessible and useable, comparable and interoperable, for improved governance and citizen engagement, and for inclusive development and innovation. The concept of open data is relevant to all three functions of transparency. It is also a precondition for further dimensions of open government, such as open contracting, open budgeting, and social audits, as well as open policy-making (see *Chapter 3.1*). For example, open data on government procurement was used to foster supplier competition and better quality of meals through open contracting under the Bogotá School Feeding Programme (see *Chapter 7.4* for more details).

Access to information is a legal right for citizens. Information requested from governments must be provided unless it falls under a specific

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Box 2.   Indonesia: Moving to open school data on the government and civil society side

In 2015, a government-led school report card (SRC) system, 'Sekolah Kita' ('My School'), was launched online by the Ministry of Education and Culture of Indonesia. The website contains data of all private and public schools from kindergartens to upper secondary school levels, covering school accreditation and teacher certification, information on student and teacher numbers, lists of academic and non-academic achievements, and conditions of classrooms and other facilities. The data are used by parents and other stakeholders to choose schools based on their reputation, although complaint forms available on the website are not well used. According to the requirements of the Indonesian education management information system and school funding regulations, the data are updated at least once per semester. Failure by individual schools to update their data may result in funding being withheld.

In parallel to this platform, an initiative by a CSO, Transparency International Indonesia, has been in place since 2014. This platform contains fewer data and is updated less regularly but functions as a powerful feedback instrument for stakeholders, both online and offline.

Both students and parents appreciate the online platforms because they feel more confident in giving feedback to school administrations online than in person.

Source: Felicia (2018).

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exemption in law (Galster, 2018: 11). The right of access to information is often enacted by freedom of information legislation. Access to information is relevant to all three functions of transparency.

Disclosure is the act of routinely publishing certain information, sometimes required by law. Disclosure can support anti-corruption measures by requiring the routine publication of assets and declarations of conflicts of interest, among others (OECD, 2011). Disclosure is of primary importance to ensuring accountability.

Records management refers to the efficient and systematic control of the creation, use, and maintenance of all information, including records, to properly support an organization (OGP, n.d.*b*). Good records management ensures that information is accessible, authentic, comprehensive, and reliable, and therefore underpins both access to information and open data (Galster, 2018: 11).

Risks and challenges

The trend towards increasing transparency, especially by means of ICTs, is associated in the literature with a number of risks.

Wrong focus: Despite the rhetoric about transparency, accountability, participation, and collaboration, for all practical purposes open government focuses on transparency, while ignoring fundamental democratic issues regarding participation and collaboration (Carothers and Brechenmacher, 2014; Hansson, Belkacem, and Ekenberg, 2015). For example, open government in relation to e-government has been criticized for its focus on improving government services, and for not exploring the transformation of government as a whole towards a more participatory form of democracy (Hansson, Belkacem, and Ekenberg, 2015). Another critique highlights the strong focus on technological solutions, rather than adapting organizational practices, policy, and culture (Zhang, Puron-Cid, and Gil-Garcia, 2015). Transparency without accountability in a context of endemic corruption can be counterproductive; it leads to frustration and may demobilize civic

activism (Bauhr and Grimes, 2014; Bauhr, Grimes, and Harring, 2010; Galster, 2018; Rumbul, Parsons, and Bramley, 2018).

Security issues: The lack of balance between public access, national security, and privacy has also been critiqued (Hansson, Belkacem, and Ekenberg, 2015: 547; Linders and Wilson, 2011: 265). Too much transparency can undermine security (Linders and Wilson, 2011: 266); for example, Khan (2018) refers to the risks of disclosing the location of schools in Pakistan.

Disadvantaging marginalized groups in society: Transparency by means of ICTs can deepen the gap between the rich and the poor, by increasing the marginalization of those who have no access to ICTs or lack the know-how to use them (Linders and Wilson, 2011: 265).

Interpretation challenge: Some authors highlight the challenge of data interpretation (Fung, 2013). According to Hansson et al., 'it is not enough to release data. Without the right tools and understanding to interpret it, data are not very useful' (Hansson, Belkacem, and Ekenberg, 2015: 547).

2.3 Citizen participation and collaboration

Public engagement means broadly that 'the public can influence the workings of their government by engaging in governmental policy processes and service delivery programs' (Heller, 2015). Some OG definitions, including those from the US Government (Orszag, 2009; White House, 2009) and the European Commission (Bremers and Deleu, 2016), refer to two terms – (citizen) participation and collaboration – as separate principles of open government. Linders and Wilson elaborate the difference between the two as follows:

> Collaboration differs from participation in two regards. First, collaboration requires significant (if not equal) power sharing (partnering), whereas with participation opportunities the government maintains full decision-making powers. Second, collaboration, as defined in the OGD [Open Government Directive], has an implicit link to organized entities (corporations, nonprofits, etc.) rather than individuals. Improved collaboration can occur

both externally with nongovernmental entities and internally within the government (2011: 268).

The OECD combines both terms and refers to 'stakeholder participation' as 'all the ways in which stakeholders can be involved in the policy cycle and in-service design and delivery', including information, consultation, and engagement (OECD, 2017: 2).

At the heart of public engagement in the context of open government lies the concept of 'citizen coproduction' (Johnston, 2010; Johnston and Hansen, 2011; Linders, 2012). This concept indicates a change of paradigm in government–citizen relations: citizen coproduction means that government treats the public not as customers, but as partners. In other words, the role of the citizens expands from passive consumption of public services 'to one of active involvement to jointly tackle social problems' (Linders, 2012: 446). Such a change of paradigm became possible owing to the use of ICTs over the past two decades. According to Linders,

> [w]hereas coproduction in the past was constrained by the limited ability of government to effectively coordinate citizen actions and the difficulty of ordinary citizens to self-organize, the advent of the Internet's unique many-to-many interactivity and of ubiquitous communications promises to enable coproduction on an unprecedented scale (2012: 446).

Functions of public engagement

Citizen participation in its various forms fulfils different functions. Each function reflects a different level of government–citizen relations, which enables differentiation between 'empty ritual participation' and 'real power to affect the outcome of the process' (Arnstein, 1969: 216). Based on the original 'ladder of citizen participation' developed by Arnstein, the International Association for Public Participation today identifies five levels of participation (IAP2, n.d.):

1. **Inform**: to provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities, and/or solutions;

2. **Consult**: to obtain public feedback on analysis, alternatives, and/or decisions;
3. **Involve**: to work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered;
4. **Collaborate**: to partner with the public on each aspect of the decisions including the development of alternatives and the identification of the preferred solution; and
5. **Empower**: to place final decision-making in the hands of the public.

Critical researchers argue, however, that more participation is not always better (Fung, 2006; Harrison *et al.*, 2012). Fung, for instance, argues that 'there may indeed be contexts in which public empowerment is highly desirable, but there are certainly others in which a consultative role is more appropriate for members of the public than full "citizen control"' (Fung, 2006: 67). Harrison *et al.* point out that the context – especially the characteristics of the policy process – and the goals of public engagement should form the basis for decisions about the design and implementation of functions and mechanisms of participation (2012: 88).

Mechanisms of public engagement

The literature differentiates between several terms that reflect different levels of public engagement:

Citizen engagement entails creating opportunities for citizens to actively contribute to government decision-making and agenda-setting processes (Linders and Wilson, 2011: 267).

Citizen sourcing involves tapping the talent and inventiveness of the public by sharing data and other inputs to enable citizens to construct ideas and solutions to public/government problems (Linders and Wilson, 2011: 268).

Collaborative service delivery means enabling citizens and partner organizations to participate in the design and delivery of services to improve

their quality and responsiveness by opening government to contributions from the community (Linders and Wilson, 2011: 268).

Intra-governmental partnering requires collaboratively constructing government-wide solutions, improving intra-agency and inter-agency collaboration, promoting knowledge sharing, and disseminating best practices to improve government efficiency and effectiveness (Linders and Wilson, 2011: 268).

Methods

Since the core idea of public engagement is to increase the influence of citizens in the policy-making process, it is useful to capture different methods of public engagement in line with each phase of the policy cycle. The Congress of Local and Regional Authorities of the Council of Europe provides such an overview (*Table 4*).

Table 4.   Methods of citizen participation at different stages of the policy cycle

Policy stage	Examples of methods*	
Agenda setting	Citizens' initiatives Deliberative forums Participatory budgeting	Petition Visioning
Policy formation	Citizen panels Crowdsourcing Deliberative forums	Focus groups Opinion polling
Decision-making	Citizens' assemblies Citizens' juries Consensus conferences	Public consultation Referenda
Implementation	Co-commissioning Co-production	Service co-design User panels
Monitoring and evaluation	Citizen report cards Community score cards	Complaint mechanisms Surveys

Source: Galster (2018: 18).
Note: * These and further methods are described on the website of the NGO Involve under 'Methods', available at: www.involve.org.uk/resources/methods.

Risks and challenges

The literature pays attention to several challenges associated with citizen participation and collaboration.

Limitations on the scope of deliberative decision and action: Some nominal participation may legitimize questionable actions of powerholders without fulfilling the proper, democratic functions of participation (Arnstein, 1969; Fung, 2006). Furthermore, Fung and Wright (2003: 33) argue that 'powerful participants may engage in "forum-shopping" strategies in which they utilize deliberative institutions only when it suits them'. As a result, the institution of public engagement can be misused for rent-seeking by well-informed or interested parties.

Citizens' apathy and lack of sustainable engagement: Hansson, Belkacem, and Ekenberg state that 'means to participate do not equal motivation' (2015: 547). According to Fung and Wright (2003), 'empowered participation may demand unrealistically high levels of popular commitment, especially in contemporary climates of civic and political disengagement. Finally, these experiments may enjoy initial successes but may be difficult to sustain over the long term'.

Box 3.   Citizen sourcing of issues in education in Medellín, Colombia

Sapiencia, the funding body of the Higher Education Agency of Medellín, has used the city's co-creation platform 'MiMedellín Co-creación Ciudadana' to engage prospective students in setting policy priorities for higher education funding. The Agency has identified several problems in need of a solution and asked visitors to the platform to rank them in order of urgency. The MiMedellín platform forms part of the city's strategy to foster scientific and technological innovation, which was introduced in 2009 by the Mayor's office in cooperation with public enterprises and coordinated by the Ruta N 'Medellín Centre of Business and Innovation'.

Source: Tercanli and Meerman, 2017.

Heterogenous interests of the public: The 'public' is not homogeneous, but rather a diversified group with different interests, preferences, and abilities. This heterogeneity implies the risk that separate groups of

participants may not aggregate their preferences into a coherent whole (Hansson, Belkacem, and Ekenberg, 2015; Harrison *et al.*, 2012).

Imbalances in the use of civic technologies: Rumbul provides evidence that older, affluent, white men create a dominant group that uses civic technologies (Rumbul, 2015). Reliance on the responses of a small segment of engaged population can distort the government's perception of public needs and public attitudes as well as decrease legitimacy (Rumbul, 2015; Williamson and Eisen, 2016).

Disproportion and unfounded expectations in partnerships between public authorities and citizens (Linders and Wilson, 2011: 266 ff.): Public–private partnerships frequently suffer from unclear divisions of labour and poorly defined roles and responsibilities. Diffusion of responsibility and conflicting demands often place stress on the partnership and constrain effectiveness. Furthermore, government's vast size and burdensome regulations can make it an intimidating partner. At the same time, citizens as volunteering partners may lack the capacity for planning and the resources for sustainable engagement.

2.4 Accountability and responsiveness

Accountability broadly means that the public can hold government to account for its decisions and actions (i.e. its policy and service delivery performance) (Galster, 2018; Heller, 2015). Mendel *et al.* state that:

> Public power thus needs to be organised in a way which ensures that the people can demand answers from and, if needed, indicate displeasure with or even sanction the government (2014: 2).

Lindberg notes that 'accountability is closely associated with authority though not necessarily political authority' (Lindberg, 2013: 208). In other words, accountability must be backed up by power to demand an accounting. This is where the difference between accountability and integrity is crucial: while accountability functions in line with the principle that 'the more strictly we are watched, the better we behave' (Bentham quoted in Lindberg, 2013: 208), integrity means doing the right thing when no one is watching.

The availability of control is thus crucial to providing accountability, while integrity is rather an intrinsic norm.

The responsibilities of a government with regard to accountability can be analytically divided into two dimensions: enforcement/sanctioning and answerability (Bauhr and Grimes, 2017; Mendel *et al.*, 2014). Enforcement implies the presence of sanctions and mechanisms by which the obtained information can become an effective means to ensure responsibility on the part of the state for its decisions and actions. There are several ways to enforce accountability,[5] including horizontal (intra-governmental) and vertical (electoral) (Bauhr and Grimes, 2017; Mendel *et al.*, 2014). The horizontal approach encompasses 'a web of institutional relationships' that enforce accountability (Mendel *et al.*, 2014: 3). These institutions are often referred to as checks and balances in democracies. For instance, the principle of rule of law and an independent judiciary or parliamentary oversight of the executive are mechanisms of horizontal accountability. Independent institutions, such as anti-corruption commissions, human rights commissions, ombudsmen, information commissions, and judicial commissions, are also examples of horizontal accountability (Mendel *et al.*, 2014: 4). Vertical or electoral accountability can be ensured through direct and indirect mechanisms. Elections are the direct means whereby citizens enforce their preferences for government (*political accountability*). Public pressure through media and monitoring of the government through civil society networks are indirect forms of vertical (*reputational*) accountability.

Another dimension of accountability is *answerability* – 'the obligation of state actors to provide information and an explanation to the public about their activities' (Mendel *et al.*, 2014: 1). Within this dimension, accountability closely overlaps with transparency, although transparency in terms of open data goes beyond the function of answerability (see *Chapter 2.2* on the functions of transparency).

While answerability provides the link between accountability and transparency, responsiveness provides the link between accountability and

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5. For an overview of other forms of accountability, see Lindberg, 2013.

Box 4.   Horizontal and vertical accountability in education

In education, accountability reflects social and cultural prerequisites and is often context dependent (see *Chapters 6.2* and *8.1* for a theoretical discussion and examples, respectively). However, some general trends are evident.

Manifestations of horizontal accountability include legal/regulatory and performance-based approaches. With the legal/regulatory approach, disciplinary action may follow if independent auditing bodies uncover violations of educational regulations upon inspection of education providers (from schools to ministries). With the performance-based approach, information on educational processes, outputs, and outcomes is used to provide sanctions or rewards, usually within the confines of the responsible ministry.

Approaches to vertical accountability range from the electoral through to the market-based and professional to the social. Electoral approaches provide the option for citizens to punish political actors with withdrawal from office in the event of failures in educational systems. Market-based accountability mostly targets schools: given the choice, parents may withdraw their children from underperforming schools once school data become available. Professional accountability mostly targets teachers and school principals and is based on peer pressure. Finally, social accountability operates through the pressure of organized citizen groups and CSOs and targets education providers (from ministries to schools).

Source: UNESCO (2017*a*: 7).

Box 5.   Codes of conduct in secondary and higher education

Codes of ethical conduct for teaching and administrative staff, as well as for students at universities, are being developed in an increasing number of countries. Although the content of these codes varies greatly between countries and across levels of education, they usually cover areas such as admission, examination, management of teaching staff and student relations, evaluation and certification, and management of financial resources. Codes may be introduced by responsible education authorities (e.g. ministries of education in Bangladesh, India, and Nepal), independent bodies, such as in Hong Kong, by professional associations of teachers as in the province of Ontario in Canada, or by individual education institutions as in the case of Washington and Lee University (Virginia, USA).

Codes of conduct should include clear guidelines and expectations, as well as procedures to be followed and sanctions to be taken in cases of violations. In developing and adopting a code of ethics, it is crucial to involve all relevant stakeholders to ensure ownership and thus increase the chances of subsequent compliance.

Source: van Nuland and Poisson (2009); Poisson (2009).

citizen participation. **Responsiveness** – the positive reaction of agents to the wishes and interests of the principals – is often considered as an integral part of vertical accountability (Lindberg, 2013: 216). Research shows that responsiveness increases the probability of further citizen participation (Sjoberg, Mellon, and Peixoto, 2015), while lack of responsiveness decreases trust and confidence of citizens in participation mechanisms (Rumbul and Shaw, 2017). The OECD (2005) identifies government responsiveness as a core characteristic of open government, next to transparency and accessibility.

Box 6.   Summary: Conceptualizing open government principles

Transparency refers to *relevant*, *accessible*, *timely*, and *accurate* data that government makes *available to the public* in order to assess government action (*accountability*), exercise a voice in decision-making (*deliberation*), and unlock social and economic value (*public re-use*).

Mechanisms of transparency:

Open data: large volumes of information stored in databases in formats for electronic re-use.

Access to information: the right of citizens to request information.

Disclosure: the routine publication of assets and declarations of conflict of interest.

Records management: mechanism to ensure data are accessible, authentic, comprehensive, and reliable.

Public engagement: *informing*, *consulting*, *involving*, *collaborating*, and *empowering* the public, while the utility of different levels depends on the specifics of the policy process.

Mechanisms of public engagement:

> **Participation**
> **Citizen engagement**: citizens contribute to government decision-making processes.
> **Citizen sourcing**: government taps public ideas and talents to develop concepts and solutions.

Collaboration

Collaborative service delivery: partner organizations collaborate in the design and delivery of services to improve their quality.

Intra-governmental partnering: collaborative construction of government-wide solutions, improving intra-agency and inter-agency collaboration, and promoting knowledge sharing.

Accountability:

Answerability
The obligation of the state to provide information and an explanation to the public about its activities; overlaps with transparency.

Enforcement
The existence of sanctions and mechanisms to ensure the responsibility of the state for its decisions and actions; overlaps with public engagement.

Horizontal (intra-governmental)
An institutionalized system of checks and balances; the principle of rule of law; independent institutions (e.g. ombudsmen).

Vertical (electoral)
Elections as a direct mechanism; public pressure through media and monitoring as an indirect mechanism.

Responsiveness
Positive reaction on the part of agents to the wishes and interests of the principals.

Mechanisms of accountability: (social) audits, codes of conduct and codes of ethics, scrutiny.

Source: Authors.

World Bank analysts include responsiveness as the third principle of open government, after transparency and participation and collaboration. According to the World Bank (2016: 5), 'responsiveness includes government-led reforms or institutions that have the force of law and/or the potential to impose consequences for government entities and officials who fail to comply'.

Mechanisms of accountability

The Congress of Local and Regional Authorities of the Council of Europe elaborates four mechanisms of accountability as foundational elements of open government:

Audit, both internal and external, is critical to ensuring that public money is appropriately collected, managed and spent by local government.

Social audits are conducted by civil society in a locality through accessing information from government, engaging citizens and reviewing the situation on the ground. Social audits are most effective when they are supported by and feed into official audit institutions.

Codes of ethics outline what is expected of public servants and provide an important basis for challenging malpractice and corruption in government. Codes of ethics need to be underpinned by clear procedures for complaints, review and sanctions.

Scrutiny of the executive functions of local government by elected representatives is an important cornerstone of democratic governance. It helps to ensure that decision makers are responsive and accountable to residents for their decisions; scrutiny by elected representatives is further supplemented by scrutiny by residents, civil society and the media. As with auditing, this can take place through local government structures (e.g. town hall meetings, evidence sessions, shadow citizens' committees), or independently of it (Galster, 2018: 13).

In conclusion, the fundamental principles of open government (i.e. transparency, public engagement, and accountability), are closely interwoven and function only if all three are present. A short summary of the functions, mechanisms, and risks associated with open government is provided in *Box 6*.

Chapter 3
Dimensions and objectives
of open government

3.1 Dimensions of open government

While the literature identifies transparency, citizen participation and collaboration, and accountability and responsiveness as closely interwoven principles of open government, it is the dimensions of open government that enable the application of these principles to concrete initiatives.

The European Commission's open governance framework

The European Commission (Bremers and Deleu, 2016) defines three core aspects of open government: open engagement, open services, and open assets (see *Figure 1*). The collective aim of these core aspects is to open up policy-making, public services, and government assets. Each aspect is more or less related to the respective principals – the groups targeted by each initiative for engagement (e.g. citizens and users/civil society and business/private sector/social partners).

The core aspects are defined as follows:

Open engagement entails opening up the processes for public policy making to the whole of society, including civil society, businesses, labor unions, individual citizens. Open processes for policy making entail better informing society of ongoing policy initiatives, conducting public consultations of policy initiatives, and even allowing the whole of society to actively participate and propose ideas for future public policy.

Open services refers to digital public services that can be re-used by other public administrations or eventually by third parties in order to provide value-added services via a mechanism of service composition. Open services necessitate a proper design of digital public services. The design principles

of service-oriented architecture (SOA)[6] can prove useful: modular, decomposed services, interoperability through an application programming interface (API), and loose coupling.

Open assets can be defined as government data, software, specifications and frameworks that are open so that anyone can freely access, use, modify, and redistribute its content with no or limited restrictions such as commercial-use or financial charges (Bremers and Deleu, 2016: 11).

Figure 1.   Open governance framework
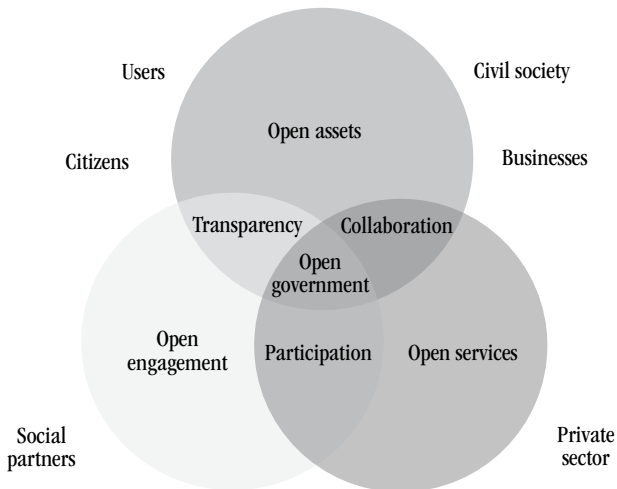
Source: Bremers and Deleu (2016: 10).

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6.   SOA is a style of software design. SOA enables developers to make distinct software units accessible over a network to other users, allowing them to combine and re-use the production of applications. These services and their corresponding consumers communicate with each other by passing data in a well-defined, shared format, or by coordinating an activity between two or more services. This principle is also known as 'loose coupling'. For more information on SOA, see Bell 2008, 2010., as well as https://en.wikipedia.org/wiki/Service-oriented_architecture.

Open government principles according to government functions

Another approach to identifying the main dimensions of open government is to structure them in line with the four functions of government: budgeting, contracting, policy-making, and service delivery. Using this approach, the dimensions of open government are open budgets, open contracting, open policies, and open innovation and social audits. Each dimension is summarized in *Table 5* below, adapted from the Congress of Local and Regional Authorities.

Glossary

Open budgeting is a 'budget accountability system [consisting of three components]: public availability of budget information; opportunities for the public to participate in the budget process; and the role and effectiveness of formal oversight institutions, including the legislature and the national audit office' (IBP, 2017). Hence, this category includes social audits of the budget and participatory budgeting. This understanding is also in line with the OGP guidance on budgets, where social audits and participatory budgeting are seen as advanced forms of open government relating to the budget (OGP, 2014: 53–54).

Open contracting is a combination of *information* related to procurement (developing a framework for a transparent and equitable contracting process, recognizing the right of the public to access public contracting information, and routinely disclosing core classes of documents and data about public contracting) and *participation of the public* at different stages of the procurement process (creating mechanisms for participation at all stages of contracting, and building and sustaining the capacity of stakeholders to disclose, understand, monitor, and act upon contracting information) (OCP/WBI, 2013: 3). According to the OGP, open contracting

> covers the entire process, including formation, award, execution, performance and completion of public contracts, and the full range of contract types, from basic procurement to joint ventures, licenses and production sharing agreements. Open contracting practices can be implemented at all levels of government and can apply to all public contracting, including contracts funded by combinations of public, private and donor sources (OGP, 2014: 271).

Table 5. Open government dimensions by government function and open government principles

Government function: OG dimension	OG principles		
	Transparency	**Participation and collaboration**	**Accountability and responsiveness**
Budgeting: **open budgeting**	**Open budgets:** the public have access to information on how government collects and spends public funds.	**Participatory budgeting:** the public are involved in influencing or deciding how a public budget is spent.	**Social audits of the budget:** the public can hold decision-makers accountable for the allocation and spending of public money.
Contracting: **open contracting**	The public have access to information on the full contracting cycle, including planning, tender, awarding of contracts, and implementation.	The public are involved in planning, awarding, and/or evaluating the implementation of government contracts.	The public can hold decision-makers accountable for how goods and services are commissioned and procured.
Policy-making: **open policy-making**	The public have access to information on how policy is made and by whom.	The public are involved in informing, making, implementing, and evaluating policies.	The public can hold decision-makers accountable for how they make policies and what they achieve.
Service delivery: **open innovation** **and social audits**	The public have access to information on their rights and entitlements and on the governance, funding, and performance of public services.	The public are involved in designing, commissioning, delivering, and evaluating public services.	The public can hold decision-makers accountable for the quality and accessibility of public services.

Source: Adapted from Galster (2018: 14).

Open policy(-making) describes an approach whereby public officials look for ways to engage citizens at each step of a policy process. It is included in the OGP guide as an advanced step of citizen engagement:

> Among other things, it requires a much more open approach to policy making, whereby: a shared understanding of the issue in question is developed between relevant stakeholders (including citizens); possible policy solutions are developed with relevant stakeholders (including citizens), and collaborative solutions are sought; policy decisions are informed by the views and expertise of a broad range of stakeholders (including citizens), and the reasoning and evidence base for a decision is open to all; the implementation of a policy decision is informed by, and conducted in partnership with, relevant stakeholders (including citizens); the impact of a policy decision [is] properly evaluated, including by those it affects (OGP, 2014: 67).

Open innovation is a blurred category that refers to the way of thinking and internal culture of public administrations, emphasizing not only citizen participation but also science and business. It may be understood as a way to envision possibilities for public service in terms of participation culture, technology, goals, embracing scientific findings, and so on.

Social audits

allow citizens receiving a specific service to examine and cross-check the information the service provider makes available against information collected from users of the service. This form of monitoring can cover all aspects of the service delivery process, such as funds allocated, materials procured, and people enrolled. The audit results are typically shared with all interested and concerned stakeholders through public gatherings, which are generally attended by users of the services as well as public officials involved in management of the service delivery unit. ... The core of the social audit approach is to involve the entire affected group or community in the process. In most cases, the members carrying out the social audits are volunteers who are directly affected by the program, and these volunteers are generally trained in the social audit process by a civil society organization (OGP, 2014: 308).

Examples of types of social audit include Community Score Cards and Citizen Report Cards (OGP, 2014: 208), both of which function as tools to combat petty and administrative corruption.

Box 7.   Variety of social audits in education: Report cards and social audits of budgets

In 2000, Transparency International Bangladesh conducted a report card survey across a representative sample of primary schools and their respective districts. The survey targeted both the immediate providers and recipients of education services, including government primary education offices and primary school teachers, as well as students and their guardians. Through the use of questionnaires, individual interviews, and focus groups, this participatory diagnostic tool was able to systematically identify mismanagement and corruption in the primary education sector. The findings of the report card survey were then used to bring corruption issues to the attention of the government, resulting in appropriate anti-corruption measures.

In India, a local grass-roots group in Rajasthan began to cross-check reported information with government records in the 1990s, thereby initiating social audits of budgets. In 2011, social audits became a mandatory part of the governmental programme Sarva Shiksha Abhiyan (SSA), which is working to achieve Education for All targets. Facilitated by CSOs, social audits involve communities, local governments (*panchayat*), and school management committees in scrutinizing reported SSA expenditures and cross-checking them with actual expenditures in the localities. Findings from this process are reported at public hearings where public officials have to respond. Despite delays in launching social audits owing to the lack of capacity building for social audit participants, in 2015 a number of effective social audits of schools were conducted by CSOs in partnership with the National Commission for Protection of Child Rights (NCPCR) and the Ministry of Women and Child Development.

In Bangladesh and India, it soon became apparent that social audits necessitate considerable investment in infrastructure and the capacities of participants, and require the endorsement of a government to be effective.

Source: For Bangladesh, see Karim (2004); for India, see Kapur, Sahgal, and Choudhary (2014).

3.2 Objectives of open government

The analysis of core aspects of open government shows that their operationalization – how and by which mechanisms they are implemented – depends closely on the end goal of the OG initiative in question. Since open government appears to be a fuzzy concept – an umbrella term that unites

different meanings and indicates a governance process rather than an aspect of the status quo – defining the objective helps to achieve operationalization of these core aspects.

Documented objectives

The documented overview on open government highlights four sets of objectives (see also *Annex 1*):

Improving the quality of democracy: The Congress of Local and Regional Authorities indicates that open government can help achieve 12 principles of good governance adopted by the Council of Europe (Council of Europe, n.d.). In this regard, the European Commission refers to 'more transparent functioning of government' and 'better policy making via enhanced participation' (Bremers and Deleu, 2016: 19).

A critical literature review on open government and democracy conducted by Hansson, Belkacem, and Ekenberg (2015) indicates three ways that open government can contribute positively to the quality of democracy: ensuring *understanding,* providing a *deliberative* process, and securing equal *representation* in decision-making. However, their research shows that, in practice, the dominant OG discourse emphasizes *understanding* but barely touches upon *deliberation* and *representation*.

Decreasing corruption and building trust: Both the Congress of Local and Regional Authorities and the OECD recognize that open government is critical to building citizen trust and is a key contributor to achieving success in the field of public sector integrity and anti-corruption (Galster, 2018; OECD, 2017). The explicit links between open government, decreasing corruption, and increasing trust are elaborated in the 'theory of change' (see *Chapter 4*).

Improving the quality of governmental services: This objective includes the increased effectiveness, efficiency, and efficacy of public services. Electronic governance or e-government plays an important role in attaining a high quality of governmental services. Additionally, the use of civic capacity in the form of citizen expertise and engagement improves the evidence base for policy-making and reduces implementation costs for governments.

Creating social and economic added value for citizens: Most institutions that promote open government ideas emphasize that open government fosters private sector growth (World Bank, 2015) and contributes to all major socio-economic targets (OECD, 2016, 2017). This is mainly a result of the predictability function provided by open data and the public re-use function of transparency.

Public value

Practical challenges to establishing OG objectives have led to the increasing popularity of the term 'public value' in the academic literature (e.g. Harrison *et al.*, 2012; Luna-Reyes and Chun, 2012; Wirtz and Birkmeyer, 2015; Zhang, Puron-Cid, and Gil-Garcia, 2015). In their contributions to this discussion, these authors argue that transparency, participation, and collaboration should not in themselves constitute the end or objective of administrative action. Instead, they are a means to create public value – a term, coined by Moore (2000), that reflects the public interest. Part of public value is derived from the direct usefulness of the benefits that authorities produce for citizens; another part is derived from the fairness and equity of their production and distribution, and from meeting citizens' requirements for properly ordered and productive public institutions (Harrison *et al.,* 2012: 90).

Ultimately, whether a government action creates public value is a collective judgement made by citizens. However, there is no single and objective perspective on the value of public good: citizens include multiple stakeholders with different interests and, as such, there is no homogenous 'public' or 'interest'. To address this heterogeneity, Harrison *et al.* (2012: 90) list seven basic types of public value: economic, political, social, strategic, quality of life, ideological, and stewardship.[7] Aspects of open government such as transparency, participation, and collaboration, as well as efficiency, effectiveness, and intrinsic enhancement, are not goals; they represent mechanisms – how a government programme is expected to produce one or more public values. These are 'value-generating mechanisms' (Harrison

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7.   *Stewardship* as a type of public value refers to 'impacts on the public's view of government officials as faithful stewards or guardians of the value of the government in terms of public trust, integrity, and legitimacy' (Harrison *et al*., 2012: 91).

et al., 2012: 91). The choice of the appropriate mechanism depends on the type of public value to which a particular stakeholder aspires.

Open government results chain

Objectives are central for the assessment of OG projects. The classical model in effectiveness research is useful here to better differentiate between public value as an objective and as a value-generating mechanism. The model foresees three levels of measurement (Ulbert, 2013): *output* covers immediate effects such as the establishment of structures and rules and the specification of goals and tasks; *outcome* encompasses more far-reaching effects such as compliance (behavioural change) and implementation; and *impact* represents a contribution to problem-solving. The World Bank assessment of open government relies on this model (World Bank, 2016). In addition, World Bank analysts differentiate between short- and medium-term outcomes (*Figure 2*). When applying this model to open government, they apply the following definitions:

> Open government **outputs** include measures of efficacy and the extent to which the reform or initiative worked as intended. Outputs are largely within the control of the government or civil society organization implementing the OG reform or intervention. …

> **Outcomes** include both short- and medium-term effects of a particular reform or intervention …. In the short term, OG outcomes include the degree to which outputs actually lead to greater transparency, citizen engagement, and government responsiveness …. In the medium term, OG outcomes include the degree to which an intervention or reform leads to greater governmental accountability and effectiveness. …

> In some cases, greater accountability may lead to social, economic, or environmental change …. [Such long-term OG] effects (both positive and negative) are considered as '**impact**'. Assessing the impact of open government is far more elusive than measuring outputs or outcomes (World Bank, 2016: 5 ff.).

The analysis of different OG objectives reveals two lessons for further operationalization of the OG process. First, it is crucial to be clear about who

are the main subjects of the OG initiative and to identify objectives from the stakeholder's perspective, rather than from that of an undifferentiated public. Second, it is crucial to differentiate between the objectives (outcomes and impact) that open government has to fulfil in terms of problem-solving and value-generating mechanisms, such as e-government, open data, or open policy-making.

Figure 2.   Open government results chain

Open government results chain			
OUTPUTS Did the intervention or reform work as intended?	**SHORT-TERM OUTCOMES** Did the intervention or reform lead to greater transparency, citizen engagement/ participation, or responsiveness?	**MEDIUM-TERM OUTCOMES** Did the intervention or reform lead to greater governmental accountability and effectiveness?	**IMPACT** Did the intervention lead to improved social, economic, or environmental conditions?
Law implemented, intervention carried out successfully	More information publicly available, enhanced public engagement with officials	Improved service delivery, reduced corruption, discipline of public employees	Improved health, education, economic indicators
Illustrative outputs, outcomes, and impacts			

Source: World Bank (2016: 7).

Chapter 4
'Theory of change': Why and how does open government influence corruption?

The United Nations Convention against Corruption provides the legal foundation for transparency and citizen participation in anti-corruption efforts (see Chapter II, especially Article 13[1]:

> Each State Party shall take appropriate measures, within its means and in accordance with fundamental principles of its domestic law, to promote the active participation of individuals and groups outside the public sector, such as civil society, non-governmental organizations and community-based organizations, in the prevention of and the fight against corruption and to raise public awareness regarding the existence, causes and gravity of and the threat posed by corruption. This participation should be strengthened by such measures as:
>
> a) Enhancing the transparency of and promoting the contribution of the public to decision-making processes;
>
> b) Ensuring that the public has effective access to information;
>
> c) Undertaking public information activities that contribute to non-tolerance of corruption, as well as public education programmes, including school and university curricula;
>
> d) Respecting, promoting and protecting the freedom to seek, receive, publish and disseminate information concerning corruption (United Nations, 2003: 15).

Accordingly, fostering transparency and citizen participation have become an integral part of national and international anti-corruption programmes.

A recent review of theoretical and empirical literature examining the impact of open government (Williamson and Eisen, 2016) reveals six features common to successful OG reforms. Williamson and Eisen summarize these features in a series of questions: (i) Have the proponents identified the specific

principals[8] (e.g. segments of the public, civil society, media, and other stakeholders) that the OG initiative is intended to benefit? (ii) Is the information revealed by the initiative important to the principals? (iii) Is the information accessible and has it been publicized among the principals? (iv) Can the principals respond meaningfully as individuals? (v) Are governmental agents supportive of the reform effort? (vi) Can the principals coordinate among themselves to change the incentives of their governmental agents? In successful OG projects, the answer to the first three question was yes, while at least one out of questions (iv) to (vi) also received a positive response (*Table 6*).

Table 6.   Steps to a successful open government initiative

A successful open government initiative ...				
MUST				
Identify the principals	AND	Ensure the information is important	AND	Ensure the information is accessible and publicized
and answer YES to ONE of the following questions				
Can the principals respond meaningfully as individuals?	OR	Are officials supportive of reform?	OR	Can the principals coordinate to change their agents' incentives?
RESULT: Improved public services, broader and deeper participation, reduced corruption, budgetary savings				

Source: Adapted from Williamson and Eisen (2016: 2).

A positive answer to the first three questions without a positive statement to any of the following three questions can lead to a 'transparency paradox'.

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8.   The term 'principal' relates here to the principal–agent theory, elaborated in *Chapter 4.1*, and refers to citizens who entrust public officials through direct elections or indirect appointments with a mandate to provide public services and administer public resources.

4.1 Corruption as a principal–agent problem

In theory, the assumption about the positive influence of transparency on the level of corruption results from the principal–agent theory (Klitgaard, 1988; Rose-Ackerman, 1978), which reflects the hierarchical relation between subordinates and superiors in public and private organizations. According to the principal–agent theory, corrupt transactions occur in the interactions between the 'principal' – citizens who entrust public officials through direct elections or indirect appointments with a mandate to provide public services and administer public resources – and 'agents' – elected or appointed public officials.[9] An agent will engage in corruption if, according to calculations, the benefits from corrupt action outweigh the costs (e.g. punishment). Information asymmetry is the main precondition for corruption, because the principal is unable to perfectly monitor the actions of the agent, thereby granting the agent some discretion to pursue their own interests. These assumptions provide the basic ingredients of corruption:

> Illicit behavior flourishes when agents have monopoly power over clients, when agents have great discretion, and when accountability of agents to the principal is weak (Klitgaard, 1988: 75).

For example, in the context of education, Klitgaard's corruption formula (corruption = monopoly power + discretion by officials - accountability) provides an explanation for corruption in university accreditation. The main factors for corruption in this field arise from a lack of competition among providers and the power monopoly exerted by rectors over accreditation procedures (Hallak and Poisson, 2007: 65).

Accordingly, transparency, which enables the principal to exert control over the agent, functions as a crucial tool for avoiding information asymmetry, reducing discretion, and revealing or preventing corruption. Control of formal authorities can punish public officials (*horizontal accountability*), but

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9. Robert Klitgaard (1988) differentiates between three groups of actors in his explanatory model for corruption: elected political authority as a 'principal', appointed bureaucrats and public servants as an 'agent', and citizens as a 'client'. However, to avoid conceptual confusion, this text applies the second order principal–agent model, where 'principal' means citizens and 'agent' encompasses both elected and appointed public authorities.

public control can also foster accountability through transparency (*vertical accountability*). Control, including the possibility of formal sanctions and rewards, is not the only leverage mechanism of transparency, however. Availability of information reinforces a market for better decision-making among actors and creates (political) competition, which functions as an additional incentive for public officials to avoid corruption in order to provide better public services (Cheng and Moses, 2016: 25 ff.).

Major critiques of the principal–agent theoretical approach to corruption point out that its explanatory power is limited in societies with endemic corruption owing to the lack of an 'honest' principal willing or able to control the agent (e.g. Andvig and Fjeldstad, 2001: 89 ff.; Persson, Rothstein, and Teorell, 2013: 450 ff.). This critique leads to alternative explanations of corruption as a collective action problem.

4.2 Corruption as a collective action problem

When planning OG implementation, it is important to be aware of a contextual difference with regard to corruption: whether corruption is an exception (Context A) or the norm (Context B) (*Table 7*). The point of departure for analytic differentiation is to identify the central 'norm' of governance with regard to the distribution of public goods (Mungiu-Pippidi, 2015: 15). In Context A, the ideal type of governance is ethical universalism, where public goods are distributed impartially and corruption is an exception. Alternatively, Context B describes a state in which public goods are distributed on the basis of particularism and can be expropriated by the most powerful actors at nearly unlimited discretion. In this context, access to resources is limited for ordinary citizens (North *et al.*, 2007; North, Wallis, and Weingast, 2009).

Similarly, Cartier-Bresson described Context B as 'social exchange corruption' based on corruption networks: 'the corruption network allows for illegal transactions based on mercantile relationships of competition, hierarchy (obedience), and solidarity (confidence)' (1997: 440). Here, corruption can manifest itself through patron–client relations in the form of

a vertical network, or through a horizontal network, connecting decision-makers beyond their public offices (Stefes, 2003: 123). In contrast to occasional corruption, as evidenced in Context A, corruption in Context B demonstrates a kind of stability, which rests on a peculiar mix of asymmetrical power and solidarity and implicit and actual coercion, as well as an emphasis on mutual benefits and voluntarism (Roniger and Güneş-Ayata, 1994: 4, cited in: Stefes, 2006: 19).

Table 7.   Governance context of corruption practices

Features of ideal types of governance regimes	Context A	Context B
	Corruption as an exception	Corruption as the norm
Definition	Individual behaviour in which public authority is abused, resulting in undue private profit	Social practice where particularism (and not ethical universalism) informs the majority of government transactions, resulting in widespread nepotism and discrimination
Observable	Corruption is invisible, and whistleblowing is necessary to bring it to light	Corruption is visible through overt behaviour and flawed processes, as well as outcomes/consequences (undue wealth)
Public–private separation	Enshrined as the norm. Access is allowed and is transparent, with exchanges between both sides	Fused. Permeable border with patrimonialism the norm and conflict of interest ubiquitous (one person belongs to both sides at the same time)
Problem-solving approach	Principal–agent (restore control)	Collective action

Source: Based on Mungiu-Pippidi (2015).

In Context B, society is only rarely able to make a difference to its own advantage, owing to particularism among officials. Officials in this context are usually reluctant to engage in reform, are not responsive, and are often dependent on powerful economic actors, whereas citizens have little leverage regarding the actions of their agents. It is in this context that transparency

can have negative unintended consequences and citizen participation can result in frustration due to lack of responsiveness (Bauhr and Grimes, 2014, 2017; Bauhr, Grimes, and Harring, 2010).

4.3 Implementing open government when corruption is a collective action problem

The main problem in Context B is less concerned with transparency and much more with responsiveness and accountability. In line with the model of successful OG initiatives produced by Williamson and Eisen (2016), countries with consolidated democracy principles can ensure the reaction of the agents by means of an independent judiciary, a free press, and fair elections. There are, however, many more countries with a corrupt equilibrium where these conditions are not a given, and citizens as a principal have very little leverage over elected and appointed agents. The crucial question, here, is whether and how open government can shift the preferences of government representatives.

According to Williamson and Eisen, citizens can overcome the collective action problem under three conditions (2016: 14): political agency, quorum, and group efficacy. These conditions also correspond to the idea of Hansson *et al.* regarding *deliberation* and *representation* through open government (Hansson, Belkacem, and Ekenberg, 2015).

Political agency implies that an individual must believe that he or she can and should participate in the political sphere. Williamson and Eisen state that 'simply informing citizens of their nominal points of authority over local public service providers' can increase engagement and improve public services (2016). According to a research experiment in India, informing community members about school oversight committees in which they could participate and the assessment tools available to measure their children's learning had a positive influence on teachers' attendance and student benefits (Pandey *et al.*, 2007; Pandey, Goyal, and Sundararaman, 2009).

Quorum implies confidence at the individual level that others will participate in sufficient numbers to ensure an impact. This assurance is

particularly important when participants face the risk of punishment. Hansson, Belkacem, and Ekenberg (2015: 549) argue in this regard that 'the individual does not have the power' in relation to *deliberation*. Fung (2013: 208) comes to a similar conclusion that 'professionals and organizations often constitute the most important users of public disclosures', rather than individuals. Another article by Cornford *et al.* (2013) that questions the ability of local communities to interpret open data comes to the conclusion that a quorum can be provided when local groups of interest connect to global networks in order to obtain ideas for data interpretation.

An effectiveness study of school committees in public schools in Indonesia reveals, for instance, that 'measures that foster outside ties between the school committee and other parties, linkage and election, lead to greater engagement by education stakeholders and in turn to learning' (Pradhan *et al.*, 2014: 124). Thus, increased community support was crucial for the effectiveness of the school committees, while the availability of grants and training demonstrated only limited effects. The authors note, however, that raising learning outcomes was contingent on the community electing the committee, as well as on the support of a powerful community institution. For instance, the involvement of the village council in planning activities 'provided the legitimacy needed to ensure that actions that could improve learning were implemented' (Pradhan *et al.*, 2014: 125).

Group efficacy means that an individual must believe that if the group acts, meaningful change will occur. Communication and research about so-called 'islands' of integrity is useful to support group efficacy. In addition, setting initial indicators for the success and failure of an initiative will allow for objective measurement and enable group efficacy to be approached in an unbiased manner.

Chapter 5
Operationalizing open government

5.1 A working definition of open government

Based on the critical approach to conceptualization presented above, this section elaborates and operationalizes a working definition of open government (see *Figure 3*).

The term 'partnership' in the definition includes citizen participation and collaboration. These are impossible without meaningful transparency and are only effective when government accountability and responsiveness are in place. Accordingly, the core OG principles are conceptualized as short-term outcomes necessary to reach public value as a long-term goal.

As the objective of open government, public value implies a need to identify concrete stakeholders as a group of beneficiaries among the general public at the beginning of the OG process. Beneficiaries as the 'principal' define the type of public value that will derive from the OG process (e.g. economic, political, social, strategic, quality of life, ideological, stewardship).

5.2 The specifics of open government in education: A sectoral approach

Stakeholders in the education sector

The main focus of this study is formal education that is institutionalized, intentional, and planned through public and recognized private institutions (OECD, 2018*b*: 24). UNESCO (2017*a*) refers to several groups of stakeholders relevant for open government in education: governments, schools, teachers, parents, students, international organizations, and the private sector. All these stakeholders have different interests with

regard to public value potentially generated by open government. These divergent interests give rise to the particularities of open government in the education sector:

1. **Children and young adults** (pupils and students): A particularity of the education sector is that education is considered not as a service for children and young adults, but as a human right (García Reyes, 2018: 17 ff,). Principle 7 of the UN Declaration of the Rights of the Child states that:

    The child is entitled to receive education, which shall be free and compulsory, at least in the elementary stages. He shall be given an education which will promote his general culture and enable him, on a basis of equal opportunity, to develop his abilities, his individual judgement, and his sense of moral and social responsibility, and to become a useful member of society (United Nations, 1959).

    Accordingly, the central objective of open government with regard to children is to provide equal access to education and secure its proper quality, independent of social, ethnic, or gender background (García Reyes, 2018: 17 ff.).

2. **Parents and relevant associations**: Children are restricted in their agency and are accordingly dependent on their parents. The UN Declaration states that

    the best interests of the child shall be the guiding principle of those responsible for his education and guidance; that responsibility lies in the first place with his parents (United Nations, 1959: Principle 7).

    As representatives of their children, parents are important stakeholders in the education sector, and as such are entitled to ensure that the service provided by the education system is in the best interests of their children. However, it is important to take into consideration the different social backgrounds of parents, as 'a middle-class paradigm of parent engagement' is not feasible in all cases (US Department of Education, 2013: 30 ff.). In order to provide equity in education, schools also

Figure 3. Working definition of open government

> **Open government** is a principal-centred **process of governance** aimed at creating public value in a partnership between public authorities and citizens

Beneficiaries ⇓ Objectives	OG dimensions as value-generating mechanisms: Open governmental data, open budgeting, open contracting, open policy-making, open innovation, social audits, etc.		Results
Input	**Output** (short term)	**Outcome** (medium term)	**Impact**
Step 1: Identify **stakeholders** for the partnership, including an assessment of their skills (know-how) and possibilities with regard to open government

Step 2: Define the type of public value as an **objective**

Step 3: Define appropriate **value-generating mechanisms,** including an assessment of the specific context | **Transparency**: Open data Access to information Disclosure Records management

Accountability: Audit (internal, external, social) Scrutiny (horizontal and vertical) Code of ethics and code of conduct (instruments of integrity) | **Citizen participation**: Citizen engagement Citizen sourcing

Collaboration: Collaborative service delivery Intra-governmental partnering

Responsiveness: Ombudsman offices Grievance redress and complaint mechanisms | **Improved public services:** Effectiveness Efficiency Efficacy

Public re-use: Economic and social added value

Good governance: Decreasing corruption Increasing public trust | **Public value:** Economic Political Social Strategic Quality of life Ideological Stewardship |

Source: Authors.

depend on the feedback and engagement of lower-class families, and participation mechanisms have to be designed accordingly.

3.   **Providers of educational services** (schools and teachers): The principle of the best interests of the child is the central guideline for education providers. Upholding this principle requires responsiveness and collaboration with parents and children. At the same time, providers of education services are actors, implementing educational planning and a policy framework developed by decision-makers. Their involvement is crucial to ensuring the feasibility of education planning. For this purpose, OG mechanisms of collaboration can be particularly useful.

4.   **Government and public administrations** (G&PAs), including both national and local public authorities: The responsibility of government is to ensure 'inclusive, equitable, high-quality education for all' (UNESCO, 2017*a*: 19). Open government can help fulfil this responsibility in several ways, for example, in educational planning, which is the result of the interplay of many different agencies. According to García Reyes,

> OG in education helps governments to monitor their progress, to reach important goals, to identify areas that need to be prioritized, and to receive relevant feedback from citizens about the actions that need to be taken to improve education (García Reyes, 2018: 18).

On the one hand, education is 'a collective responsibility' (UNESCO, 2017*a*: 6) that requires the involvement of national, local, and school-level actors. As an issue of great concern to people, it also has a strong local dimension. Accordingly, participation functions as a useful mechanism to generate interest among different stakeholders. However, education policy is highly centralized in most countries, which restricts the capacity of local authorities and the actions of providers of education services. As a result, collaboration in the form of intra-governmental partnering and collaborative service delivery function as important mechanisms to generate public value through open government. For instance, the US Equity and Excellence Commission suggests that:

> Regionalization – whether it is the sharing of administrative and other costs and capacities among districts, the creation of larger districts or the effective

use of technology – may allow districts to provide educational services in a more cost-effective and efficient manner and allow them to invest their limited resources in improved teaching and learning opportunities (US Department of Education, 2013: 36).

5. **Private sector:** A recent UNESCO *Global Education Monitoring Report* showed that the involvement of the private sector in education has increased rapidly, creating 'a global education industry'. While private– public partnerships in the education sector are crucial for competitiveness at the national and the individual level in a disruptive global economy, critical voices have raised concerns about the 'prioritization of profitability over learning, well-being and education as a public good' (UNESCO, 2017*a*: 107). Accordingly, OG mechanisms such as open contracting and public audits can be useful to ensure accountability and improve the deliverables of public–private partnerships.

6. **International organizations/programmes:** The topic of education is a high priority for international organizations, international programmes such as the Global Partnership for Education, and international NGOs such as the Center for Global Education at Asia Society or the Global Cities Education Network. The OGP has a specific section dedicated to education, and education is mentioned in many OGP national action plans (e.g. those of Estonia, Indonesia, Moldova, Mongolia, and Slovakia), as well as in some subnational action plans (e.g. Kigoma-Ujiji in Tanzania; OGP, 2018). Both international organizations and programmes play an important role in elaborating guidance and relevant recommendations for education systems, including on corruption-related issues, developing integrity assessments, and providing funding to support community participation in education, among others.

Counteracting corruption by means of open government in the education sector

According to Hallak and Poisson (2007: 55), corruption undermines the principle of 'education for all' in several ways:

> [Corruption] tends to reduce the resources available for education, to limit access to education (particularly for the most disadvantaged groups), to

deteriorate the quality of education, and to increase social inequalities. Moreover, in a longer-term perspective, corruption entails a misallocation of talents and the propagation of a 'culture of corruption'.

The analysis of corruption in the education sector on the website Curbing Corruption provides an extensive overview of major corruption risks in education, based on a synthesis from other typologies (*Figure 4*).[10]

Figure 4.   Corruption risks in education

POLICY	FINANCE AND CONTROL	AT SCHOOLS – DIRECT
1. Misdirection of education budgets	14. Leakage of central education budgets	26. Payment to obtain a place
2. Misallocation to agencies, projects	15. Leakage of new project allocations	27. Payment to get good grades
3. Overambitious curriculum	16. Theft/control of education assets	28. Payment to receive exam results
TEACHERS	17. Bribes to auditors and monitors	29. Payment for exam certificates
4. Teacher recruitment	**AT SCHOOLS – INDIRECT**	30. Payment for exam questions
5. Teacher promotion, posts, exit	18. Accepting high absence levels	31. Payment for others to do the exam
6. Licences and authorizations	19. Teachers bribe for good postings	32. Payment from discriminated students
7. Allocation of teacher allowances	20. Schools used for private purposes	33. Requiring use of certain textbooks
8. Teacher training (TT): selection	21. Theft of school budgets	34. Duress payment for private tutoring
9. TT: grading, exams, graduation	22. Theft of locally raised funds	35. Duress to work for free for teachers
PROCUREMENT	23. High prices for meals, uniforms	36. Teacher requiring sexual favours
10. Textbook printing and distribution	24. School food, repair, maintenance	
11. Infrastructure contracts	25. Resources allocated by politicians to favoured schools	
12. School repair and maintenance		
13. Improper contract management		

Source: Kaplan and Pyman (n.d.); MEC (2017: 16).

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10. For a further overview of major opportunities for corruption by area of educational planning/management, see Hallak and Poisson (2007: 63–64). The overview of corruption typology in higher education is available at: https://curbingcorruption.com/sector/higher-education.

Hallak and Poisson (2007) and Poisson (2010) provide evidence from different parts of the world that corruption can be eliminated in many of the above areas. This is particularly the case for

> finance in general as well as specific financial allocations (scholarships, grants to schools, etc.); the construction and renovation of school buildings; equipment, supplies, and school services (textbooks, meals, bussing, boarding facilities, etc.); personnel (especially teachers) management and behavior; information systems; pupil selection (exams, admissions to university, etc.); and quality assurance and accreditation of educational institutions (Poisson, 2010: 23).

Poisson underlines the value of the 'virtuous triangle' in anti-corruption – an approach that involves concerted action on three main fronts:

> the development of transparent regulation systems and standards, building management capacity, and greater public ownership of administrative and financial processes (Poisson, 2010: 23).

The authors further emphasize that measures taken in isolation will not prove effective in counteracting corruption, and that an integrated approach is needed (Hallak and Poisson, 2007; Poisson, 2010).

The three fronts embody the concept of open government as they address transparency, citizen participation for greater ownership, and accountability – both horizontal and vertical (see *Figure 5*). Open government allows corruption to be tackled in both contexts – where corruption is an exception and horizontal accountability is in place (Context A), and where corruption is the norm and the institutions responsible for scrutiny are either corrupt or politicized or not available (Context B). In Context A, where horizontal accountability is institutionalized and scrutiny works well, open government will focus on medium-term outcomes such as improved public services and public re-use by means of needs analysis. In Context B, where corruption is the norm, the task of value-generating OG mechanisms is to create vertical scrutiny and improve horizontal scrutiny, with the aim of fostering good governance in the education system. The empirical evidence for this assumption is elaborated in *Chapter 8*.

5.3 Operationalizing open government in the education sector: Working definition, tools, and objectives

Working definition

Transparency has a threefold function. First, transparency of standards and procedures creates a market for competition between education providers and teachers in the form of ranking, but also in the field of contracting for education in the form of open data. Fair and open market competition is an important incentive for the improvement of public services. Second, open data and big data analysis enable better assessment of education infrastructure, with a view to providing an appropriate number of schools in line with demographic developments. Third, transparency acts as the foundation for the vertical and horizontal accountability of public administrations and providers of education services. The functions of citizen participation include assessment of needs, especially with regard to children. In addition, the participation of teachers in education planning allows for local, context-related feasibility checks of education planning. Public participation and intra-governmental collaboration are thus indispensable to the mechanisms of vertical and horizontal accountability.

Open government tools in education

Figure 5 lists several value-generating mechanisms of open government in the sector of education. The list of OG tools in education is not exhaustive and individual tools can be created upon specific demand and depending on the local context. However, some mechanisms are especially common in education. These include the following:

- **School report cards (SRCs)** 'typically refer to the aggregation of education information at the school level [and are used to] inform the general public about school performance, so as to enable stakeholders to more effectively hold schools and districts accountable for education quality' (Cheng and Moses, 2016: 20).

- **School portals** may be viewed as a variation of SRCs, the implementation of which can range from non-interactive online pages with basic school information (digital 'notice boards') to comprehensive online systems based on open data.
- **School committees** are usually understood as 'autonomous bodies providing a place for societal participation in education and creating conditions for transparency and accountability' (Vernez, Karam, and Marshall, 2012: 8). The composition of membership may vary between parent-only, parent–teacher, and parent–teacher–community. The mandate of school committees varies across countries and may range from the management of teachers and funds to functioning as a consultative body.
- **Social audits or community monitoring** describe 'a process through which citizens (facilitated by NGOs) scrutinize government-reported expenditures and other records and cross-check them against actual expenditures' (Kapur, Sahgal, and Choudhary, 2014: 155). In education, this process is sometimes linked to SRCs, with certain information for SRCs sourced directly from communities.
- **Public Expenditure Tracking Surveys (PETS)** and **Quantitative Service Delivery Surveys (QSDS)** ensure horizontal scrutiny and enable the measurement of corrupt practices in the education sector. PETS track non-salary expenditure from the central ministry of education level to the school level and aim to calculate leakage rates (Poisson, 2010: 5). QSDS collect quantitative data on the efficiency of public spending and the different aspects of service delivery, usually represented by schools in the education sector (e.g. teacher absenteeism) (Poisson, 2010: 6).

Examples of the implementation and impacts of these tools are presented in the case studies in *Chapters 7* and *8*.

Figure 5. Working definition of open government in education

Open government in education is a process of governance based on the principle of 'the best interests of the child', to ensure inclusive, equitable, and high-quality education for all through partnership between the main stakeholders in the education system.

Beneficiaries / Objectives — Input	OG dimensions and tools as value-generating mechanisms — Output (short term)	Results — Outcome (medium term)	Impact — Public value
Stakeholders: Children and young adults; Parents and relevant associations; Providers of education services; G&PA; Private sector; International organizations and programmes	**Transparency** (of standards and procedures): Open data; School portals; SRCs; Open budgeting; Open contracting; Open parliamentary committees on education	**Improved public services:** Effectiveness; Efficiency; Efficacy	**Public value**
	Citizen participation and collaboration (in educational planning): School committees, local education councils; Participatory/decentralized educational planning; Participatory budgeting; E-tools for school assessment (e.g. Checkmyschool, 'Improve Your School', mobile phone panel); Citizens' assessment cards; Social audit framework for education	**Public re-use:** Economic and social added value: e.g. better distribution of resources, e.g. appropriate number of schools, teachers, sport places are distributed upon request; High quality of learning; Pupils have good access to relevant learning resources, receive appropriate day care (e.g. quality of food in the school).	=> Principle 'Best interests of the child': Equal access to education; Education equity; High quality of education
	Accountability and responsiveness: Horizontal scrutiny (control of the executive by other political institutions): e.g. PETS, QSDS, audits; Vertical scrutiny (monitoring by civil society and the media): e.g. report cards, external public audits; Codes of conduct (for public authorities, providers of education services, pupils, and students)	**Good governance:** Decreasing corruption in education; Increasing public trust in education systems; Fostering academic integrity	

Source: Authors.

Open government impact in education

Figure 5 lists equal access to education, education equity, and quality as the main objectives of open government in the education sector. These long-term objectives derive from the main stakeholders – children and students – whose rights to equal, equitable, and high-quality education are considered to be human rights and are captured by the UN Sustainable Development Goals (Goal 4, 'Quality Education'). In order to estimate the success of OG initiatives, it is necessary to operationalize the main impact criteria.

UNESCO defines the difference between education equality and equity as follows:

> Equity and equality are contested terms, used differently by different people. Following Jacob and Holsinger (2008: 4) we define *equality* as 'the state of being equal in terms of quantity, rank, status, value or degree', while *equity* 'considers the social justice ramifications of education in relation to the fairness, justness and impartiality of its distribution at all levels or educational sub-sectors'. We take equity to mean that a *distribution* is fair or justified. Equity involves a normative judgement of a distribution, but how people make that judgement will vary (UIS, 2018: 17).

Although assessment of the impact criteria for education may vary around the world, the recent UNESCO *Handbook on Measuring Equity in Education* (2018) develops common ground for cross-national assessments and serves as a manual for operationalization: 'It provides a conceptual framework for measuring equality in learning; offers methodological guidance on how to calculate and interpret indicators; and investigates the extent to which measuring equity in learning has been integrated into country policies, national planning and data collection and analysis' (UIS, 2018: 13). *Figure 6* shows how open government can accommodate the principle of the 'best interest of the child'.

Figure 6.   Open government in education, based on the principle of the best interests of the child (PBIC)

Vertical accountability and responsiveness

Collaboration and horizontal accountability

G&PA

Inclusiveness

Quality

PBIC

Children and parents, parent associations

Equity

Providers of educational services

Citizen participation and collaboration
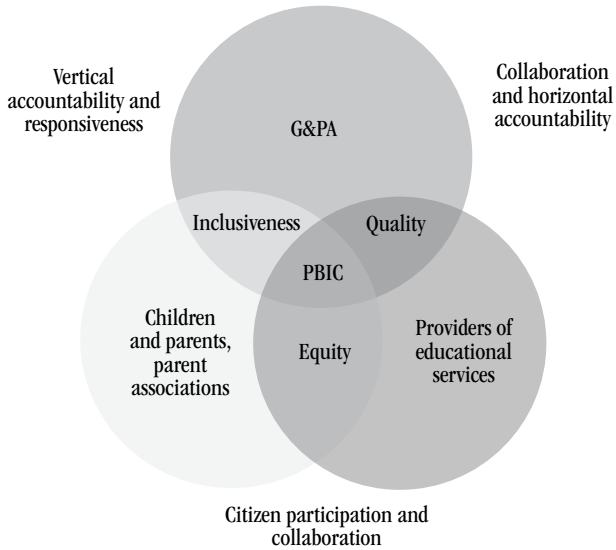
Source: Authors.

Chapter 6
Local governance and a contextual approach to open government

This chapter focuses on local and contextual approaches to open government. It begins by exploring the advantages and obstacles of the local approach to open government, with specific implications for the education sector. It then highlights the specific role of the political and administrative context for OG implementation in education.

6.1 The local governance approach to open government

The global trend towards local open government

In 2016, the OGP launched the Subnational Government Pilot Program consisting of 15 'pioneer' subnational governments who signed the Open Government Subnational Declaration (OGP, 2016) and initiated OGP subnational action plans (OGP, 2017). The main justification for extending OGP to the local level is as follows:

> Local governments are closer to the people and their work has a more direct impact on citizens' everyday lives than national level governments. With increased populations in urban areas come increasing demands for services and the need for more effective and responsive local level governments. (OGP, n.d.*a*)

The Congress of Local and Regional Authorities of the Council of Europe has incorporated the concept of open government into its agenda and recently adopted Resolution 435 (2018) on Transparency and Open Government (Galster, 2018). The Congress recognizes open government as a priority action to prevent corruption and to promote ethics in public administration at local and regional levels.

In addition, the OECD pledged in its recent report on open government data to focus on local governments (OECD, 2018*a*: 215 ff.). The report refers to several studies which show that

> [o]pen data ecosystems are often more vibrant at the city and/or municipal level. Local authorities have more means and opportunities to identify and engage communities of data re-users. Local authorities are generally closer to citizens, offer more direct services to citizens and work in areas that have an immediate impact on citizens. They are therefore more likely to be used to developing services that are of interest to citizens (OECD, 2018*a*: 215–216).

Finally, the Declaration of Local Open Government Principles requires cities to share best practices and software and other resources with other government entities, as well as to 'create a legal framework that will institutionalize the principles of transparency, participation, and collaboration into the culture and work of city government' (Open Government Initiative, n.d.).

Rationale and challenges for open government at the local level of governance

The trend to foster OG principles at the local level is substantiated by theoretical and empirical studies and international documents.

The controversial influence of decentralization

The idea that decentralization is a useful tool for counteracting corruption has been highly disputed in the academic literature. The theoretical foundation for the positive effect of decentralization on counteracting corruption dates back to Klitgaard's corruption formula (see *Chapter 4.1*). However, an assessment by the World Bank (Mansuri and Rao, 2013: 121 ff.) shows that, in practice, decentralization can have negative effects and reinforce corruption by increasing the opportunities for its occurrence. The authors of the report conclude that the implementation of OG principles, in particular citizen participation and audits, and high levels of media exposure are critical for decentralization to have a positive effect on counteracting corruption.

Financial decentralization is particularly important for implementing OG tools for citizen participation such as participatory budgeting. As the research on participatory budgeting in Central and Eastern European Countries shows, 'limited financial autonomy of the local governments and the prevailing political culture (combined with weak civil society) are likely to constitute the main challenges to implementing participatory budgeting' (Krenjova and Raudla, 2013: 18).

Proximity to citizens

Several researchers substantiate the importance of open government at the local level, highlighting governments' proximity both to citizens and the point of delivery of services (Lipovsek, 2016; Robinson and Heller, 2015; Rumbul and Shaw, 2017). According to Robinson and Heller (2015), local governments, in particular, face major challenges in terms of delivery of basic social services to citizens. Despite the significant authority and financial resources at their disposal to provide public services, especially in federal and decentralized systems, coordination of policy-making, as well as the fragmentation and overlap of the judiciary with other levels of government, can represent serious obstacles. However, Robinson and Heller (2015) also note that OG approaches such as making data available in the public domain and enhancing transparency in decision-making can address and mitigate some of these problems.

Advantages and challenges of high-tech cities

The Declaration of Local Open Government Principles states that the development of new technologies and an increasingly connected and engaged population have increased pressure on cities and municipalities to commit to the core principles of open government (Open Government Initiative, n.d.). Such commitments also underpin the increasing trend for *open cities* and *smart cities*. While the term 'open city' encompasses social concepts of transparency, participation, and accountability, the term 'smart city' is used 'in a context of data re-use for economic purposes aimed at

making citizens' lives easier by providing them with data-driven services' (Granickas, 2015: 4).

The re-use of open data for economic and social purposes not only faces the challenge of data publication, but also the challenge of proper data interpretation. As research on OG data in England shows, local communities in particular have encountered problems with correctly using open data. The integration of local communities into a network of wider global interests can help to overcome such problems and create more innovative 'interpretative' environments (Cornford *et al.*, 2013).

Municipalities are becoming the main administrative units to introduce 'civic technology'[11] – NGO-led digital initiatives designed to bridge the gap between citizens and institutions (Rumbul and Shaw, 2017: 1). Research on five cases of successful implementation of civic technology in US cities concluded that

> incremental digital integration and the development of online tools for, and within, [municipal] government, provides fertile ground for increasing citizen engagement and improving service and policy making itself, reducing complexity and increasing usability (Rumbul and Shaw, 2017: 14).

At the same time, the analysis shed light on potential challenges to the use of civic technologies. The main obstacle resulting in negative, unintended impacts is lack of responsiveness on the part of government:

> If the interactions produced through civic tech tools do not produce responses, citizens are likely to lose confidence in digital tools and refrain from using them in the future, returning communications to individualised email, in-person or phone interactions that ultimately are more expensive for government to provide (Rumbul and Shaw, 2017: 13).

To achieve positive outcomes, civic tech tools need ongoing development support in order to remain relevant to users. Any digital tools that become unusable owing to poor maintenance are likely to reduce the

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11.   A 'civic tech(nology) tool' is defined as an 'online software function, located on a single website or mobile app, which is implemented to improve the experience of citizens through increasing opportunities for the public to participate in governmental decision-making or service delivery' (Rumbul and Shaw, 2017: 5).

confidence that citizens have in their effectiveness and the commitment of the responsible public body (Rumbul and Shaw 2017: 13).

Another challenge for civic tech is to overcome the digital divide. The analysis showed that 'without sufficient outreach, digital services will reach only those who are already comfortable with technology' (Rumbul and Shaw 2017: 13), in spite of the fact that the initial idea of civic tech was to encourage otherwise passive citizens to participate.

Another trend common to large cities is the *use of social media* as an interactive platform between municipal government and citizens. Increasing use of social media allows for two-way interaction between citizens and authorities, whereas previous online opportunities such as survey and comment forms were restricted to one-way citizen feedback. Research on the 75 largest US cities by Mossberger, Wu, and Crawford (2013) shows that between 2011 and 2013 adoption of social networks by municipal governments increased six times over. Indicators for interactivity between citizens and municipal authorities also increased over this period. Another research project in the Netherlands shows how social media enables citizens to create Communities of Public Service Support. These virtual communities of citizens constitute an important supplement to formal forms of public service (Meijer, Grimmelikhuijsen, and Brandsma, 2012: 21). They are especially important for urban areas, where personal networks, such as family and friends, are not as dense as in rural areas.

A number of critical voices stress, however, that 'if two-way interaction between citizens and local authorities is to occur on social networks, participation online will require time and management by government' (Mossberger, Wu, and Crawford, 2013: 356).

6.2 An overview of contextual factors for open government

The theoretical analysis in this study (see especially *Chapter 4*), as well as the empirical survey of mapped cases (see *Chapter 7*), suggests that *structural and contextual factors*, such as the political system and socio-economic

development at the national and subnational level, impact opportunities for the introduction of OG initiatives and determine their effectiveness and efficiency. The most important factors are as follows:

- The specific **context of corruption** where corruption is an exception (Context A) or the norm (Context B) plays an important role in the design and implementation of OG processes for several reasons. Firstly, a high level of corruption correlates with a low level of trust, which hinders citizen participation and collaboration (Charron and Rothstein, 2018; Habibov, Afandi, and Cheung, 2017). Secondly, in Context B, corruption undermines horizontal accountability owing to clientelism and patronage in political institutions. In other words, the system of checks and balances is undermined, which hinders efforts towards both transparency and participation. For this reason, the short-term objectives of the OG process in Context B are expected to have a stronger focus on vertical accountability and differ from those in Context A, where horizontal accountability is in place. In order to operationalize the context of corruption for further analysis, Transparency International's Corruption Perceptions Index (CPI) is applied (Transparency International, 2018).[12] Countries that score higher than 50 points on the CPI are assigned to Context A, while those scoring lower than 40 points are included in Context B.

- **Decentralization** (in unitary or federal states) may be more conducive to introducing OG dimensions that require community participation. Decentralization usually means that local governments have more resources and authority. This leads to the assumption that local communities have greater incentives to monitor the usage of public funds and assess the quality of provided public services. In turn, powerful local self-governance, if on board, can foster citizen

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12. The CPI is often criticized for its methodological shortcomings. The main shortcoming is that the Index does not present an objective measurement of corruption but instead reflects perceptions of corruption. Corruption perception is, however, more relevant for correlations between corruption and trust, as well as corruption and accountability, than objective measures of corruption (see, for example, ideas about 'power of expectation' in Hale, 2015).

participation and reinforce the OG process, thereby also contributing to national governance.

- **Socio-economic conditions** influence OG initiatives. While economic conditions define the resources at a government's disposal for experiments with open government, social conditions may have an ambiguous impact on citizens' willingness and capacity to participate in OG initiatives. As such, low literacy and internet penetration rates may make (digital) open data initiatives obsolete. Conversely, high literacy rates among the population and relative wealth may reduce barriers for participation. At the same time, opposite cases have also been identified, where disadvantaged communities had more interest in participatory tools than urban elites (e.g. Roy and Miah, 2018). The impact of socio-economic factors is often mitigated by awareness-raising and capacity-building efforts.

- **Political factors**, such as coups and elections, usually cancel out or reduce OG efforts, whereas the ideological orientations of incumbent governments may, in some cases, facilitate faster adoption of participatory approaches to policy-making, as was the case of the Workers' Party in Brazil's Porto Alegre (Heller, 2001) and a socialist regional leadership in Poitou-Charentes, France (Talpin and Zobel, 2011).

- Ongoing **development aid and democratization programmes** from international donors (in the identified cases, mostly the World Bank) can provide necessary technical support and resources for open government in education. They may also hinder progress if the local context is not considered (e.g. Beichelt *et al.*, 2014).

- **Civil society strength and sustainability** serve as a foundation for successful OG initiatives, largely because citizens with experiences in associational life are more likely to be active in OG initiatives, specifically in education.

The above list of factors is not exhaustive, and the combination of several structural and contextual factors is often crucial for the result. For instance, some factors (e.g. socio-economic conditions) indicate an ambiguous impact on open government in different contexts. For these reasons, further empirical research and critical assessment of these factors in OG projects is necessary.

Chapter 7
Mapping initiatives conducted in the education sector

The mapping exercise utilized maximum variation sampling in order to identify the widest possible range of applications of open government in education, and to cover all theoretical dimensions and as many world regions as possible. For the same reason, no time frame for cases was set, although preference was given to the most recent cases (since 2010). Sources for the cases consisted of: state-of-the-art reports and case studies on transparency, participation, and accountability in education from international organizations (IIEP, the OECD, the OGP, UNESCO, and the World Bank); case studies and reports from CSOs (e.g. G-Watch, Inclusive Cities Observatory, the International Initiative for Impact Evaluation, the Open Contracting Partnership, the OPENCities Project of the British Council, and the Open Data Impact project); scholarly articles incorporating impact assessments of OG initiatives (e.g. the *Journal of the European Economic Association*, the *Journal of Public Economics*, and the *American Economic Journal: Economic Policy*); and Campbell Systematic Reviews, a database containing policy impact assessments.

The sampling procedure identified 34 cases of OG initiatives in 26 countries across 6 world regions. The East Asia and Pacific region was represented by one case from Australia, one from Indonesia, and four from the Philippines (including a case in the Autonomous Region of Muslim Mindanao). In Europe, the study identified one case each in France (Poitou-Charentes), Germany (Moers), Lithuania, Moldova, Slovenia (Kranjska Gora), Ukraine (Lviv), and the United Kingdom of Great Britain and Northern Ireland (UK). In Latin America and the Caribbean, there were individual cases in Colombia (Bogotá), El Salvador, Mexico, Paraguay (Ciudad del Este), and Peru, and two cases in Brazil. North America was

represented by one case from Canada (Alberta) and four cases from the USA (New York City and the state of Virginia). In South Asia, there were individual cases in India, Nepal, and Pakistan. Finally, in sub-Saharan Africa, there were single cases in Ghana, Niger, Kenya, and Uganda, and two cases in Tanzania. For an overview of the cases and their sources, see *Annex 3*.

The depth of analysis of the sampled cases varies in the original sources. For some cases, impact analysis studies using scientific methods such as randomized controlled experiments are available. Other cases consist of mere descriptions of actions taken and may be considered anecdotal evidence at best. Both types of case sources were considered. While descriptive and analytical literature were used to capture trends in relation to what is being done with reference to open government in education, cases with impact assessment were used to understand the challenges and enablers of OG initiatives in a more systematic manner. The identified cases are not equal in their focus on education: while some represent initiatives exclusively for the purposes of improving various educational processes and outcomes (e.g. school-based management [SBM] initiatives and social audit platforms), in other cases education is merely one of several targeted sectors in a general OG strategy (e.g. open contracting or participatory budgeting at the city level). Finally, identifying purely city-level cases constituted a challenge for this publication, as the majority of education systems are highly centralized. It was thus deemed more relevant to analyse local implementation of nationwide initiatives. Along with six city-level initiatives, the overview therefore covers five cases at the subnational unit level (state or province in federal systems such as Australia, India, or the USA, or cases of municipal action connected to national programmes, such as the case in Moldova), while the remaining cases (23) refer to the national level.

Most of the identified projects have transparency as their primary target (13 projects), followed by accountability (11 projects) and participation (11 projects). Often, projects target at least two OG components, with the most frequent combinations being accountability and participation (six cases), followed by a combination of transparency and accountability (four projects) and participation and transparency (one project). The fact that accountability

of government to citizens often accompanies two other components suggests that practitioners see it as a critical outcome of OG initiatives, as identified in *Table 8*. At the same time, the surveyed cases demonstrate that achieving direct accountability as a component and as a medium-term outcome of open government is often challenging, owing to structural factors and citizens' capacities.

Table 8. **Open government principles aligned with government functions, and project examples**

Government function	Transparency	Participation and collaboration	Accountability and responsiveness
Budgeting => Open budgeting	**Open budget:** public access to information on collecting and spending public funds	**Participatory budgeting:** public involvement in/ influences spending decisions	**Social audit of budget:** the public can hold decision-makers accountable for spending decisions
Project examples	New York City Comptroller's portal (USA), Ciudad del Este school funding (Paraguay), information on school transfers in the local media (Uganda)	Particpatory Budgeting New York City (PBNYC) (USA), School District participatory budgeting Poitou-Charentes (France), Kranjska Gora youth participatory budget (Slovenia), Lviv participatory budget (Ukraine)	
Contracting => Open contracting	Public have access to information on the full contracting cycle	The public are involved in one or more stages of contracting cycles	The public can hold decision-makers accountable for contracting decisions
Project examples	New York City open data portal (USA)	Textbook procurement (Philippines), school meals procurement (Bogotá, Colombia)	
Policy-making => open policy-making	Public have access to information on how policy is made, and by whom	The public are involved in informing, making, implementing, and evaluating policies	The public can hold decision-makers accountable for how they make policies and what they achieve

Government function	Transparency	Participation and collaboration	Accountability and responsiveness
Project examples	Open parliamentary committees' hearings on education (Ghana)	Lithuania 2030, decennial National Education Plan (Brazil), Minister's Youth Council (Alberta, Canada)	
Service delivery => open innovation and social audits	The public have access to information on their rights and entitlements, and the governance, funding, and performance of public services	The public are involved in designing, commissioning, delivering, and evaluating public services	The public can hold decision-makers accountable for the quality and accessibility of public services
Project examples	My School (Australia), Virginia SRCs (USA),* SRCs in Punjab (Pakistan), OpenARMM (Philippines), General Certificate of Secondary Education (GSCE) Guide (UK), info-campaign for standardized testing (Peru), Kigoma Ujiji transparency in education platform (Tanzania)	My School** (Moldova), monitoring of school buildings (Philippines), collaborative open data school project (Moers, Germany)	Checkmyschool (Philippines), school committees (Indonesia, Kenya, Niger), village education committees (India), EDUCO (El Salvador's Community-Managed School Program), mobile phone panel (Tanzania), Improve Your School (Mexico), extension of the national Basic Education Development Index (Sao Paulo, Brazil), social audit committees (Nepal)

Source: Authors.

Notes: * This case targets the accountability of schools but is not linked to citizen assessment. Therefore, in terms of citizen participation this initiative refers only to transparency. ** This case targets accountability at the school level; however, since there are no sanctions for not performing on budgets or for low scores on participatory report cards, there is no working mechanism for citizens to ensure that schools adhere to quality standards. At the same time, the project helped to increase community and local self-governance bodies' engagement in school matters.

7.1 Open government dimensions in education

The identified projects represent the whole range of OG dimensions. This enables preliminary conclusions to be drawn about specific dimensions. The identified cases relating to *open budgets* in Uganda (1995–2000) and Ghana (2012)[13] demonstrate two different national approaches to reaching citizens: the first involves publishing information on school transfers through local media; the second consists of the opening of parliamentary education committees to citizens. Four other cases are illustrative of a more participatory approach to open budgets. The case of Kranjska Gora (Slovenia) demonstrated a local approach with a focus on youth participatory budgets (https://obcina.kranjska-gora.si/dogodek/165559). Although not focused on education, most of the projects pitched on the platform concern informal education. The case of Lviv (Ukraine), although, again, not specifically focused on education, demonstrated that in the absence of infrastructure funding, schools and kindergartens can become the most active users of participatory budgeting.

The most informative cases are those of participatory budgeting in New York City (PBNYC, USA) and School District Participatory Budgeting in the region of Poitou-Charentes (France). The former is an initiative of several City Council members that offers their constituencies greater input in the spending of discretionary budgeting. Education in public schools is just one of several primary areas of responsibility at the city level, but it is the sector that receives the most focus in PBNYC. The Poitou-Charentes participatory budgeting process, on the other hand, was launched as a regional initiative specifically for public schools. Both initiatives have experienced high participation rates among their respective constituencies.

Open data can take the form of an independent instrument (data portal) or may function as part of other OG initiatives. For example, open data on government procurement in Bogotá (Colombia) have been used to introduce an open contracting process, while in Australia open data exists

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13. Ghana, however, does not score well on the overall open budget criteria (IBP, 2017); therefore, this case is illustrative of the approach but should not be considered a best practice.

as a product in its own right – 'My School', which provides access to school funding and performance data. Open data are an essential element of the open contracting process, as illustrated by the case of New York City. The city's ordinance envisages the publication of administration procurement plans at least five months in advance. This is done with splits by departments and agencies on the open data portal (NYC Open Data, 2018), a process that allows vendors to make plans for the bidding process. Additionally, the NYC Comptroller's portal also functions as an open data tool offering datasets with information on spending, payroll, and contracts split by agencies including the Department of Education.[14] Re-use, as a key feature of open data, is evident in two further cases. In Ceudad del Este (Paraguay), a local NGO was able to track funding for the renovation of school infrastructure faster and more efficiently than before. In the UK, a media outlet and an NGO created the GCSE Guide as a user-friendly database for school comparison, based on existing open data on school performance and funding, to ease school selection for parents.

Open contracting has been used for the procurement of school meals (in Bogotá, Colombia) and textbooks (Philippines) with a view to increasing the trust of business and citizens and improving service provision. In both cases, low product quality paired with high government spending prompted the introduction of open contracting initiatives, while implementation rested with the government in Bogotá (see *Chapter 7.3* for details) and relied heavily on an NGO (G-Watch) in the Philippines.

Social audits have been used in Mexico ('Improve Your School'),[15] the Philippines ('Checkmyschool'), Moldova ('My School'), and Tanzania, to tackle misappropriation of school funds and teacher absenteeism via community reporting to central education authorities or the school administration. In Tanzania, a panel of citizens was selected to report on the quality of public services, including schools, over two years using mobile phones issued to them for the project. No information on the impact of this one-time initiative is available. The remainder of the initiatives are based on

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14. Available at: www.checkbooknyc.com/contracts_landing/yeartype/B/year/117/status/A/agency/18?expandBottomContURL=/panel_html/contract_transactions/contract_details/magid/2279704/status/A/doctype/MA1.

15. Through the online portal www.mejoratuescuela.org.

Box 8.   Participatory budgeting in New York City (PBNYC) (2012)

PBNYC was launched as a joint initiative of four New York City Council members and some 40+ community-based CSOs in 2012 to ensure more transparency and inclusiveness in disbursing discretionary funds for the four district representatives in the City Council to the value of USD 5.6 million. Eligible projects are those involving physical improvements in neighbourhoods not exceeding USD 35,000 in costs and having at least five years of 'useful life'. By 2018, USD 206 million had been allocated to 706 projects through the PBNYC. This participatory budgeting initiative does not directly target the education sector, but the majority of the projects fall within the scope of the New York City School Construction Authority (NYCSCA) and involve school building renovation, sanitation, and technological upgrades.

The PBNYC is characterized by an emphasis on communication with and the inclusion of populations who usually do not engage with authorities and are not politically active. These groups include poor citizens, non-citizens, non-English speakers, people of colour, women, and those who have never voted before. The participation rate among members of disadvantaged groups is higher than the proportion of those groups in their respective districts, suggesting a high level of engagement among traditionally marginalized groups. Such engagement is, at least in part, due to efforts undertaken by the City Council members' staff, who specifically targeted these groups by personally inviting them to participatory budgeting meetings and holding participatory budgeting meetings and voting in easily reachable locations. As a result, some 2,000 people participated in community meetings over one cycle and some 6,000 people voted.

PBNYC may be assessed from two perspectives. On the one hand, its participatory nature contributed to the communities' social capital as citizens learned joint problem-solving and additional skills such as public speaking and project management. The process also contributed to increasing the accountability of City Council members, as more participants now know their representatives personally and feel more secure in addressing their concerns to them. On the other hand, tangible results in terms of project implementation are yet to be seen. The majority of implemented projects date as far back as the 2012–13 participatory budgeting cycle, and approximately 90 per cent of NYCSCA projects have yet to be implemented.

Source: Kasdan and Cattell (2013); Lerner (2018).

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the development of an online platform for aggregating, collecting, and presenting data (see *Table 9* and *Annex 4* for a detailed overview). Since 2011, the 'Checkmyschool' online platform has published information from the Ministry of Education on intended school improvements and provides

a report form for parents to verify actual work done. The platform was positively received by local schools owing to its inclusive nature and resulted in the greater involvement of provincial and municipal legislators in the fiscal management of education funds. Some anecdotal evidence on improvement in nutrition and situation with school funds is available.

The Moldovan portal 'My School' contains information on school budget analysis and the results of participatory report cards, but only for schools selected to participate in the larger project (which also includes public hearings on school budgets and participatory report cards). Although ostensibly a national project, the portal triggers local action. In Ungheni, the District Council allocated MDL 40,000 to co-finance priorities identified during public hearings for each beneficiary school, while at Falestii Noi the Mayor promised city funds to support repair of the school's heating system – a need identified during public hearings on the school budget.

Open innovation has not been used as a term in the surveyed cases. Despite this, various innovative ways of enhancing the participation of new (previously left-behind) stakeholders in school-based management have been captured. Efforts to empower parents have been taken in El Salvador (EDUCO), Indonesia, India (SSA or 'Education for All'), Niger (COGES school committees), and Kenya (Extra Teacher Programme in Western Province) to tackle the relative superiority of teachers' authority over parents, which hinders teacher accountability. These cases are illustrative of the diverse instruments of parental empowerment, some of which have adverse effects on teacher–parent relations.

In El Salvador, parent-led school boards were entrusted with power over teacher employment. Although this contributed to the improvement of learning outcomes, it disadvantaged teachers in such schools in terms of social protection and career opportunities – and ultimately, teacher unions were able to abolish this programme. In Niger, school committees consisting of parents were given grants (the only form of cash inflow to schools aside from school fees) and the discretion to decide on their usage, with options ranging from infrastructure improvement to teacher salaries. Again, this created power asymmetry vis-à-vis teachers. In many cases, school

Table 9.   Overview of online platforms among surveyed cases

Country	Platform	Time	Decision-making level	Targeted OG component	Targeted level of participation	Phase of policy cycle	Open data	Social audit	Source
Australia	'My School', www.myschool.edu.au	2010–	National	Transparency Accountability	Inform	Evaluation	Mostly yes (some specific data on request)	No	Rabinowitz (2018)
Mexico	'Mejora tu Escuela' (Improve Your School), www.mejoratuescuela.org	2013–	National	Accountability Transparency	Involve	Implementation and monitoring	Mostly no (16% of datasets qualify)	Yes	Young and Verhulst (2016)
Moldova	'Şcoala Mea' (My School), scoalamea.md	2014–	National	Accountability participation (de-facto)	Involve	Implementation and monitoring	No	Yes	Toderas (2015); Vlad (2016)
Pakistan	SRC in Punjab Province, pesrp.edu.pk/home#distranking	2013–	Provincial	Transparency	Inform	Implementation and monitoring	No	No	Khan (2018)
Philippines	'Checkmyschool', www.checkmyschool.org	2011–	National	Accountability	Consult	Evaluation	No	Yes	Parafina (2018)
USA	Virginia SRC, schoolquality.virginia.gov	1997–	State	Accountability Transparency (de-facto)	Inform	Policy implementation and monitoring	Yes	No	Cheng and Moses (2016: 48)

Source: Authors.

committees were not able to secure buy-in from teachers regarding investment decisions, which resulted in conflict.[16] In Kenyan Western Province, parents were empowered to hire contract teachers, but had no discretion over centrally appointed teachers. Although hiring additional teachers reduced the workload of tenured teachers, the impact was lower in schools where parent–teacher committees were trained to monitor teacher performance.

In Indonesia, on the other hand, school committees consisting of teachers and parents were linked through a formal memorandum on joint actions with an emphasis on powerful local (village) self-governance. This agreement ensured collaboration rather than confrontation among members and, ultimately, contributed to positive learning outcomes.

The case of India demonstrates diversity in terms of the use of opportunities by local school management organizations. For example, Andhra Pradesh was the only state out of 11 surveyed where all VECs made use of the opportunity provided by SSA to appoint teachers. In Chandigarh, Madhya Pradesh, and Rajasthan less than 10 per cent of VECs did so. VECs in Assam took advantage of all the provided opportunities, except teacher appointment, while in Madhya Pradesh take-up was low, except in terms of improving enrolment. Improving enrolment and infrastructure maintenance were the most widely used opportunities across all states surveyed, rather than utilizing opportunities to make teacher appointments (PEO, 2010).

Crowdsourcing policy ideas has been a feature of **open policy** cases, as identified in Brazil and Canada. Brazil's decennial National Education Plan (Plano Nacional de Educação or PNE), developed in 1997 (with a second round in 2007–10), included inputs from CSOs and educational experts. As part of this process, the Ministry of Education circulated a reference document, which was then amended through a public consultation process and endorsed by the National Education Conference. Subsequently, the document underwent a vote by the Chamber of Deputies. The process was time-consuming and resource-intensive, and was subject to the political situation (having already been delayed due to elections). In Canada, at the

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16. Since the programme was abolished following a coup; the available results are taken from short-term assessments.

provincial level, the case of the Minister's Youth Council in Alberta is informative. Every year, a group of approximately 30 secondary and high school students participates in consultations with the Minister of Education on the curriculum, school fees, and other issues.

Box 9.   'Improve Your School', Mexico (2013)

Mexico, a country with one of the highest levels of expenditure on education among OECD countries, demonstrated poor achievement levels in a 2012 Programme for International Student Assessment (PISA) study. At the same time, 78 per cent of Mexican parents expressed satisfaction with the education of their children. The root causes of this mismatch between expenditure on education and the perceived and actual quality of education were deemed to be a lack of information on the side of parents and corruption. To tackle both issues, the Mexican Institute for Competitiveness (IMCO) with support from the Omidyar Network launched the 'Mejora tu Escuela' ('Improve Your School') online platform. As a part of the country's OGP commitments, the platform uses open data from the Ministry of Education on teacher numbers and school locations, web-scraping, data from other governmental authorities, and built-in parent feedback forms to construct 25+ databases, which are available for download.

Using these data, parents are able to compare schools by referencing standardized test results with 2013 census data on schools (infrastructure, number of students and teachers, location). The portal also has a feedback feature that allows users to grade schools, report problems, and search for solutions to problems.

The platform has also become a powerful tool against corruption in education. By using and matching existing data to parental feedback, IMCO was able to issue corruption reports that uncovered misappropriation of funds for non-existent schools and 'ghost teachers'. Even prior to the public release of this report, 10 states launched independent audits of their education systems' funding, while teacher payrolls were moved from the state to the federal level. There were also cases of teachers being fired due to absenteeism following reports made through the platform, while in general parents felt more empowered to communicate with teachers when they had more information. A number of school principals also reacted positively towards the platform, claiming that prior to its creation they were unaware of funding to which they were entitled.

Source: Young and Verhulst (2016).

7.2 Open government and functions of participation[17]

The surveyed cases suggest that each OG dimension may be associated with more than one function of participation. This implies that for the same umbrella term for an OG dimension, different designs can yield different opportunities for decision-making by citizens. For instance, *open budgets* (Ghana, Uganda) and *open data* (Australia) cases only provide information in the hope that citizens will demand accountability from schools and local education officials on the use of funds and the quality of services. Conversely, *participatory budgeting* in New York City and Poitou-Charentes offer deliberation opportunities that empower citizens to provide their priorities and decide on concrete projects to be implemented by the authorities.

Open contracting has been able to trigger both the consulting and collaborating functions of participation. In the case of Bogotá, businesses were consulted prior to the re-design of a purchasing and bidding process, and some of the insights thus gathered led to the split of the procurement process between food and services supply. In the case of textbook procurement, the Ministry of Education of the Philippines collaborated with civil society on amending the procurement process and implemented many of its recommendations.

Social audits can trigger the consulting function of participation (reporting on the quality of services via 'Checkmyschool' [Philippines] or through participatory report cards ['My School' in Moldova] and the mobile phone panel in Tanzania) and involve citizens in policy implementation (school monitoring in the Philippines).

Open innovation focuses on ways to empower previously disadvantaged stakeholders within existing SBM arrangements. The most promising innovation within these cases resulted from linking school committees to more powerful local actors. This approach lent more authority to school

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17. The following levels of participation are defined in accordance with the modified 'ladder of participation' (Arnstein, 1969), with the next level offering more decision-making power to citizens than the previous one: informing, consulting, involving, collaborating, and empowering (see *Chapter 2.3*). A similar categorization is found in OECD (2016: 150).

committees in comparison to the usual support tools, and is illustrated by an Indonesian case where school committee members are elected democratically by the community and linked to village councils through joint planning of efforts at the village level to improve teaching and learning. In Peru, to counter teachers' opposition to standardized testing, the government launched a radio information campaign with mini soap operas to explain the value of this approach to citizens, with a focus on parents. The public support generated by the campaign offset the opposition from teachers.

In El Salvador (EDUCO programme) and Kenya, parents were empowered by being awarded hiring and firing capacity over contract teachers. In both cases, this provoked significant opposition from tenured teachers and powerful teacher unions. This in turn contributed to the abolition of EDUCO in 2010 and resulted in significant alterations to the initial design of the contract teacher programme in Kenya, with the addition of the promise of a tenure track for contract teachers upon their hiring (thereby removing a powerful incentive for teacher effort). In India, two experimental studies have found that interventions such as increasing awareness among VECs of their capacities and engaging parents in assessing their children's school performance result in only minor improvements in learning outcomes at best. Contrary to expectations, reading skills most improved in cases where volunteers provided outside-of-school training for village children. Engagement of VECs also had a minor impact on improving some aspects of school performance, such as decreasing absenteeism among male teachers from upper castes. At the same time, increased awareness among parents of VECs did not result in their increased involvement in school management, which, at least in part, may be explained by the perceived superiority of teachers, as government employees (often from a higher caste), over parents, especially in poor and educationally problematic states (Banerjee *et al.*, 2010).

The **open policy** case of the National Education Plan in Brazil, despite its broad coverage, allowed involved experts and civil society only to amend the reference document prepared by the government. The case study materials did not yield information about any prior consultation or joint drafting of the strategy (UNESCO, 2017*b*; Pandey, Goyal, and Sundararaman, 2011).

7.3   Open government dimensions and the policy cycle

This section summarizes surveyed cases based on their OG dimension and usage in the policy cycle. As open government aims to make governments more responsive to their citizens, analysis of the stages in the policy process of an OG initiative may help clarify how these initiatives are able to capture citizens' needs and interests as a basis for accountability.

According to Young and Quinn (2002: 12), the policy cycle consists of the following phases: (i) problem definition/agenda setting, (ii) constructing the policy alternatives/policy formulation, (iii) choice of solution/selection of preferred policy option, (iv) policy design, (v) policy implementation and monitoring, and (vi) evaluation. The opportunities for citizens to communicate their interest and have their needs considered as part of the policy process are usually greater during stages i to iii. During stage iv, governments tend to work with experts (if they engage with stakeholders at all), while stages v and vi may provide opportunities for citizens to report on how the policy affects them or how they perceive its effects.

While not all OG initiatives may be clearly assigned to a policy cycle, the identified cases document particularly active applications of OG dimensions during the two final stages of the policy cycle: *implementation* and monitoring, and *evaluation*. These two stages are often blurred within a respective OG dimension. For example, data portals with centralized information on schools often contain data about disbursed and received government funds (implementation) and feedback tools for parents to report on the quality of education and school facilities (evaluation). To date, only the cases of Brazil's National Education Plan and PBNYC engaged stakeholders at the stage of *choice of policy solutions*, while the school meal purchasing case in Bogotá engaged stakeholders during the *problem definition* stage. The case of participatory budgeting in Poitou-Charentes provides an example of the *policy design* stage, with citizens involved in developing an additional 'social justice' criterion for the selection of projects to be funded.

Box 10.   Poitou-Charentes region school participatory budgeting (2005–14)

In 2004, following the victory of a socialist candidate for the post of president of the region, a participatory budgeting process was launched for all 93 public schools in Poitou-Charentes. The process envisaged the allocation of 10 per cent of the region's school budget through a two-step participatory process involving citizens – including previously excluded groups such as pupils and technical staff. During the first round of meetings at the beginning of a school year, the school community brainstormed and formulated ideas for the improvement of school well-being and the purchase of equipment (construction and complete renovation projects were not eligible for participatory budgeting). During the second round of meetings the participants voted on the nominated projects. Between the two rounds, project ideas were verified for eligibility and feasibility by a dedicated team, the Participatory Democracy Department. In 2011, a citizen committee consisting of 1,000 people enhanced the participatory budgeting process with 'social justice' criteria to ensure that the neediest schools received funding.

The participatory budgeting process resonated within the population. Each meeting gathered from 20 to 600 people depending on the size of the school community, with 24,000 people participating in total. With a participation rate of 15 per cent of invitees, the participatory budgeting process was the most attended in Europe. The process also experienced an increase in participation among pupils, rising from 66 per cent in 2005 to 87 per cent in 2007–08. The resources allocated and used for the participatory budgeting process were as follows:

• The budget for projects was around EUR 10 million annually in 2005–10 and EUR 5 million annually in 2011–14.
• The budget for technical staff was approximately EUR 150,000/year.
• The cap on each individual project was EUR 150,000, which on average enabled three selected projects to be funded (180 projects in 2010).

Structural and political factors contributed to the emergence of this inclusive process. First, following the 2003 constitutional amendment, French regions received additional autonomy and responsibilities in the education sector, whereby ca. 25 per cent of the Poitou-Charentes budget was allocated to that end.. Furthermore, socialist candidate Ségolène Royal and two other members of her campaign team were inspired by the participatory budgeting process in Porto Alegre and built their election campaign around ideas of participatory democracy. This promise secured them votes in a usually conservative region in 2005 and in 2010, thus suggesting that ideas of participatory democracy may be conducive to political capital.

In 2011, a new wave of reform in the French regions centralized education management once more. In 2014–16, the merger of Poitou-Charentes and two other regions produced a larger region, Nouvelle-Aquitaine, for which it was not possible to identify participatory tools in education management. The lack of continuity of the participatory budgeting process after the regions' merger may be explained by three factors. First, the process faced resistance from school management personnel who felt threatened by the loss of authority in the face of inclusive decision-making. Thus, teacher unions were not supportive. Second, the process was not institutionalized due to the very limited legislative ability of the regions, so its functioning depended heavily on the political will and preferences of the incumbent regional presidency. Finally, the cost of the project was covered by the region with the support of EU funds, thus the funding priorities changed after the 2015 election cycle and the regional merger.

Source: Hammo and Fletcher (2017); OECD (2009); Participatory Budgeting Project (n.d.); Talpin and Zobel (2011); Constitutional Law No. 2003-276, 28 March 2003, on the decentralized organization of the Republic.

One of the reasons for including citizens during the later stages of the policy process may be that communities, especially in remote areas, constitute the only resource available to governments for monitoring their policies, especially in developing countries. Conversely, for these communities, being engaged in monitoring governments' policies may be one of the few opportunities to have a voice, and in the case of the education system, increase their authority vis-à-vis teachers. Thus, monitoring programmes appear to be beneficial for both governments and local communities. At the same time, engaging stakeholders during the earlier stages of policy process, such as in the open contracting case of Bogotá, is beneficial for governments as well as stakeholders, but requires high capacity on the part of those stakeholders.

7.4 Open contracting and the Bogotá School Feeding Programme: An example of an open government process

In Bogotá (Colombia), 800,000 schoolchildren between the ages of 4 and 18 receive their most nutritious meal of the day at school, paid for by a USD 170 million programme implemented city-wide each year. However, Colombian school meals programmes are plagued by inefficiency and even

corruption: the open bidding procedures are dominated by one bidder, leading to inflated prices for school meals compared to the market. Public schools are forced to accept such conditions to avoid interruptions in the supply of meals, although the food quality is low. Colombia's public procurement agency, Colombia Compra Eficiente (CCE), and the Ministry of Education set out to eliminate these malpractices and found enthusiastic support within Bogotá's Secretariat for Education for a new open contracting process.

Beneficiaries of the new OG initiative were identified, notably suppliers of food and delivery services, and parents and schools (the clients). To tackle the problem of a virtual monopoly on meal provision, the initiative focused on suppliers. The first step was to identify non-participating suppliers. Step 2 saw OG initiators set, as an objective of public value, timely provision of fresh and nutritious meals to schools at market prices. Step 3 focused on the use of an open contracting process, based on an existing open procurement data portal, as a public value-generating mechanism.

The short-term outcomes of the open contracting process involved transparency and participation targeted at suppliers. As a manifestation of the participatory dimension of open government, suppliers were asked about obstacles to their participation in the open bidding procedure. Among the obstacles, it was reported that the awarding of joint food production and delivery contracts, and concerns about bureaucratic procedures and corruption risks, worked to exclude specialized food suppliers. Open data on previous governmental procurement of food permitted the identification of average prices, which were then compared to the prices of the Bogotá School Feeding Programme. This resulted in the uncovering of contracts with extremely inflated prices as well as suppliers who often engaged in price fixing. Bogotá is also the site of a successful intra-governmental partnership that brings together two national-level agencies (the Ministry of Education and CCE) and one city-level agency (Secretariat for Education).

Mapping initiatives conducted in the education sector

Figure 7. The open contracting process within the Bogotá School Feeding Programme, according to the working definition of open government

Beneficiaries Objectives	OG dimensions and tools as value-generating mechanisms: Open governmental data and open contracting		Result	Impact
Input	**Output** (short-term)	**Outcome** (medium-term)	**Impact**
Step 1: Identify **stakeholders**: large food suppliers that do not participate in bidding **Step 2**: Define the type of public value as an **objective**: fresh, timely school meals at market prices **Step 3**: Define appropriate **value-generating mechanisms**: open contracting	**Transparency:** Open data on government procurement (CCE) **Accountability:** • Internal audit of contracts by CCE • Social accountability via media attention to price	**Citizen participation and collaboration:** • Supplier engagement • Supplier sourcing • Intra-governmental partnering **Responsiveness** : Officials are supportive of reform: the change was initiated by governmental agencies (CCE, Ministry of Education, and Bogotá Education Secretariat)	**Improved public services:** *Effectiveness*: larger choice of suppliers enables choice of higher quality for each food item *Efficiency*: quadrupled number of suppliers; 10–15% of savings on cost of food **Public re-use:** Feedback platform for parents on quality of school meals **Good governance:** Uncovered price fixing; owing to the open process, more companies dare to participate in bidding	**Public value:** 98% of standard in quality of school meals

Source: Authors.

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As a medium-term outcome, the open contracting process resulted in improved school meals services in several dimensions. First, the contracting process was separated into food supply and food delivery, thereby cutting out intermediaries who previously charged service fees for undertaking both tasks. This change resulted in efficiency gains, with annual savings of 10–15 per cent on programme costs due to increased competition as the number of suppliers quadrupled. Second, framework contracts with several suppliers of one food item established capped prices for a year, and purchase order bidding took place between these suppliers as needed. This increased effectiveness: owing to the reduction in suppliers' bargaining power, the education secretariat could select suppliers to ensure higher quality of food. The open contracting process also resulted in public re-use of procurement and meals data. Several NGOs developed an online tool that publishes the daily meals served in schools and includes a feedback mechanism for parents to complain in the event that meals do not meet the required standard. Finally, the new process uncovered price fixing among a few fruit suppliers, making possible gains in good governance. An investigation undertaken by a competitive oversight agency, the Superintendency for Industry and Commerce (SIC), resulted in charges being brought against those companies.

Finally, the case of open contracting in Bogotá had a significant impact. According to the national assessment, the subsequent quality of school meals in Bogotá reached 98 per cent of the established standard (see *Figure* 7).

Chapter 8
Analysis of major context-specific patterns in open government in education

This chapter analyses OG principles, dimensions, and mechanisms with reference to the specific contexts of corruption in which they are embedded. It bases its analysis on two contexts, referred to earlier: 'Context A' describes countries where corruption is generally considered an exception within a functioning public sector; 'Context B' describes countries where corruption, including embezzlement of public funds and nepotism, is endemic within the public sector and has its roots in domestic societies. This chapter measures the context of corruption using Transparency International's CPI (2018): countries that score higher than 50 points on the CPI belong to Context A, while those that score lower than 40 points belong to Context B (see *Annex 2*).

Out of the surveyed cases, the following eight countries belong to Context A: Australia, Canada, France, Germany, Lithuania, Slovenia, the UK, and the USA. Brazil, Colombia, El Salvador, Ghana, India, Indonesia, Kenya, Mexico, Moldova, Nepal, Niger, Pakistan, Peru, Paraguay, the Philippines, Tanzania, Uganda, and Ukraine are referred to as Context B countries.

8.1 Targeted principles and primary mechanisms of open government

As noted earlier, Context A is conducive to internal and horizontal accountability of the education system (see *Chapter 5.2*). Internal ministerial processes are aligned to ensure accountability within the structures of the respective ministry, parliamentary oversight executes meaningful control over the ministry of education, and a functioning and independent judiciary can resolve conflicts within the domain of the rule of law. Under such a system, there may not be a need for additional public control, as this would duplicate the functions of existing accountability mechanisms. This point is illustrated

by the case of Australia, where policy officers stated that no discussions were held with school principals on school performance based upon the online portal 'My School', and by the state of Virginia, where sanctions for low performance of schools were issued directly by educational officials to schools without any link to citizen engagement. Hence, accountability does not seem to be the major targeted outcome of open government in contexts where corruption is an exception (indeed, as *Table 10* demonstrates, none of the cases in Context A target 'Accountability').

Context B, on the contrary, disables many internal control mechanisms and substantially weakens horizontal accountability (Reinikka and Svensson, 2005: 5). By engaging in corrupt practices within and beyond their sectors (whether through the embezzlement of funds or the employment of relatives), public officials and educators remove any incentives for internal oversight. Moreover, in countries with endemic corruption, parliamentary and judiciary branches of power tend to be involved in corrupt networks (Fisun, 2012; Johnston, 2014), which complicates horizontal accountability. This point is illustrated by the numerous cases of participatory monitoring of textbook delivery, teacher attendance, school construction, and quality of school meals which prevail among the surveyed cases in Context B countries (including the Philippines' textbook procurement process, the mobile phone panel in Tanzania, and school committees in provinces of India, Indonesia, and Kenya). Thus, OG initiatives aim to increase the accountability of public authorities via some form of external control or monitoring, such as through social audits (see the cases under Context B for the OG principle of 'Accountability' in *Table 10*).

While Context A is conducive to accountability in the educational sector, its systems of accountability function within the structures of representative democracy. Representative democracy, however, has been critiqued by citizens and academics alike for its lack of responsiveness (Alonso, 2015; Canovan, 1999; Foa and Mounk, 2017; Follesdal and Hix, 2006; Tormey, 2014), such that countries have started looking for new ways to collect information on citizens' needs and demands between elections (Quittkat, 2013). This may explain why, among the reviewed cases, the most powerful initiatives that gather data on interests and needs from (school)

communities come from developed democracies (Canada, France, and the USA). Indeed, both participatory budgeting processes focus on the inclusion of previously marginalized groups (pupils and parents in Poitou-Charentes and various types of minorities in New York City) in order to collect meaningful information on the needs and demands of the targeted populations. In Alberta (Canada), inputs from secondary and high school pupils feed into policy-relevant decisions via the formal Education Minister's Youth Council. At the same time, lack of existing accountability mechanisms in Context B cases may explain why they predominantly deal with the monitoring of educational policy implementation.

To summarize, governments in Context A countries usually possess the capacity to implement and control implementation of their decisions, while governments in Context B countries lack this capacity, for reasons including systemic corruption, and need external support. At the same time, the larger political issue of democratic legitimacy in Context A forces governments to look for tools to increase input from citizens. As a result of the interplay of these two conditions, Context A becomes more conducive to OG initiatives that communicate citizen interests, while in Context B, OG initiatives are more focused on controlling and evaluating the implementation of a government's education policy. *Table 10* summarizes the clustering of cases based on their focus in the policy cycle and context-specific preferences categorized by a relevant OG principle.

8.2   Short-term outcomes of open government

Transparency

In both Contexts A and B, initiatives targeting transparency are active during the policy implementation phase (see 'Transparency' in *Table 10*), publishing data on school performance and (sometimes) governmental spending. In Context A, the primary goal of such initiatives seems to be allowing parents to make informed choices regarding school selection (e.g. the 'My School' portal in Australia and the GCSE Guide in the UK). Two other cases of transparency in policy implementation exemplify this approach: the Virginia SRC system and São Paolo's extension of the national standard progress evaluation system.

Table 10. Context-specific features of surveyed cases and initiatives and focus in the policy cycle

Focus in the policy cycle: *communication of interests/policy implementation*	Short-term outcomes	Context A (corruption as an exception) CPI > 50	Context B (corruption as the norm) CPI <=40
Communication of interests: needs and demands of clients (children and parents) or suppliers	Participation	**Participatory budgeting** with a strong **deliberative component** and large budgets, focus on the inclusion of **marginalized groups** (Poitou-Charentes, France; New York City, USA) Crowdsourcing (Lithuania)	**Policy sourcing** from relatively **privileged groups** (suppliers, experts) (Colombia, Brazil) Participatory budgeting with **weak deliberation** (Ukraine, Moldova)
Policy implementation: teacher and pupil attendance, school infrastructure, services, (e.g. meals, textbooks), learning achievement	Transparency	**Open data** portals (Australia, Virginia and New York City [US]) Data re-use (UK)	Cases of **transparency of information** on school performance (Moldova, Pakistan, Peru, São Paulo [Brazil], Tanzania, Uganda) Data re-use (Paraguay)
	Participation	Usage of open data in the school curriculum (Moers, Germany)	**Social audits with a strong participatory component**, including offline and online channels (Philippines)
	Accountability	No cases found	Usage of information from online tools against the embezzlement of funds and teachers' absenteeism at the policy level (Mexico) **Tackling accountability of individual teachers by empowering SBM institutions** (EDUCO (El Salvador), [El Salvador], VECs [India], Extra Teacher Programme [Kenya]) Allocation of funds by government based on social audits of schools (Nepal)

Source: Authors.

In both cases, accountability is not linked to the dissemination of information to a wider public or the participation of citizens, and instead relies on internal mechanisms. In Virginia, negative results of school assessments (obtained via standardized tests and using the Department of Education's own data collection process) may lead to loss of accreditation for a school. In São Paolo, teacher bonuses are linked to the school's progress towards the city's educational targets.

The primary goal for Context B (and the secondary goal for Context A cases) is supplying information to the public in the hope that parents or wider civil society will hold individual schools or the ministry of education to account. Conversely, in the Punjab province of Pakistan, while SRCs are collected and published online and displayed in schools, there seem to be no apparent consequences for low-performing schools. Somewhat differently from these cases, in the UK a media outlet (*The Guardian*) and an NGO re-used open data on school funding and learning achievement to rank schools and visualize the results in an easy-to-understand format. Only anecdotal evidence exists, however, to indicate that parents used this tool to choose schools for their children (market-based accountability).

Participation in the communication of interests

Logically, the short-term outcome of OG initiatives directed at the communication of interests would be participation – in both contexts. At the same time, cases may be differentiated by the profiles of participants and the magnitude of their participation (see 'Communication of interests' in *Table 10*). While in Alberta (Canada), Lithuania, New York City (USA), Poitou-Charentes (France), and Slovenia (Context A), participatory mechanisms for policy formulation (e.g. participatory budgets and forums in the case of Lithuania, and the Minister's Youth Council in Alberta) are directed at 'average' community members (e.g. teachers, parents, and pupils), in Brazil and Colombia (Context B), the audience for participation is professionals. In Bogotá input was sought from retailers and food producers, and in Brazil from educational experts and, to a lesser extent, teachers. In the case of Moldova, input was sought from community members, but only at the school level. The case of participatory budgeting in Lviv (Ukraine,

Context B) is particularly notable. Using the online voting platform (at home or at public service centres), some 72,000 citizens (12 per cent of the Lviv population with voting rights) voted for citizen-driven projects, most of which concerned school and kindergarten infrastructure. This process, however, was influenced by the specificity of the context. Unlike France or the USA, some members of the City Council authored winning projects and exerted pressure on voters through organized voting at public service centres and influenced parents to vote.

Participation in policy implementation

Cases that include citizen participation in monitoring policy implementation are mostly relevant for the Context B countries (see 'Participation' in the 'Policy implementation' section of *Table 10*). In contexts of systemic corruption, the participation of citizens may be used as an external monitoring tool when there is no state capacity to conduct independent monitoring. Another consideration is that as final users, citizens will be in a better position to assess the quality of services. Examples of such initiatives include: 'Checkmyschool', the National Textbook Delivery Programme and school-building monitoring from the Philippines, and the mobile phone user panel on quality of services in Tanzania.

Accountability

Cases that demonstrate opportunities for accountability with regard to the implementation of educational policy are all drawn from Context B. Although examples are often related to the school level through various manifestations of SBM, there is also room for accountability at the policy level. At the school level, accountability is often implemented by linking school committees' monitoring of teacher attendance to teacher salaries or even retention. In the case of the Kenyan school committees and El Salvador's EDUCO programme, parent-led school committees were able to hire and dismiss non-civil servant teachers ('contract teachers'). In the case of Nepal, social audits of schools – conducted annually by the school auditing committee and consisting of representatives and nominees of a

parent–teacher association, a community leader, a teacher, and two pupil representatives – have had an impact on the distribution of school budgets by the District Education Officer.

At the policy level, the case of the 'Improve Your School' online platform in Mexico is informative. Built by an NGO, the platform enables users to compare available open data on budget allocation against schools with open data on electricity connections and reports from citizens on the actual number of teachers in schools and the availability of schools and facilities. The resulting report uncovered several thousand 'ghost teachers' and 'online schools' in locations with no access to electricity, among other cases of corruption. As a result of media attention, the Ministry of Education revised its policy on teacher salaries, and school principals acquired greater leverage to ensure that local authorities transfer the intended budgets to their schools.

8.3 Medium-term outcomes of open government

The analysis of medium-term outcomes of surveyed OG initiatives consists of assessing whether an initiative resulted in improved public service (effectiveness and efficiency), economic and social added value (public re-use and results for community engagement), and/or good governance (increased trust in government and reduction in corruption [risks]). It is important to note that in some of the cases the literature focuses solely on how the intervention worked and/or its impact (e.g. the educational attainment of pupils in schools involved in OG experiments), while only a small number of case descriptions deal with the full logical chain of OG initiatives (see *Figure 3*). A full list of cases and their outcomes (or an indication that no outcomes were available) is provided in *Annex 5*. Excerpts from cases that did produce outcomes are presented in *Table 11* and *Table 12*. The following analysis structures outcomes based on the context-specific logic of OG dimensions.

Context A

Table 11 shows that that transparency initiatives in Context A (where corruption is an exception) mostly result in market-based accountability.

Once they have information on school performance, parents can make informed decisions on the choice of school for their children. Furthermore, surveyed cases in Australia and the UK indicate that open data is being re-used by members of the civil society to create social added value. For example, the 'My School' platform helped an NGO charity link the neediest schools with a local supermarket chain, which provided support to tutor indigenous pupils. Similarly, open data in the UK facilitated the creation of a school database to enable parents to select schools in their neighbourhood on the basis of educational attainment.

The initiatives that focused on communicating citizens' interests through participation all achieved their main goal. In Poitou-Charentes, participation by pupils in the school budgeting process reached 87 per cent, while in New York City the 6,000 participants included members of ethnic, gender, and language groups usually under-represented during the voting process. The case of New York City also showed how participation enabled citizens to connect with their peers, as well as with their political representatives, thereby improving the chances of policy-making in the public interest. The case survey did not report any data on the outcomes of the Minister's Youth Council in Alberta (Canada). Accordingly, this rare example of the institutionalization of pupils' involvement in policy-making in the form of a consulting body deserves further investigation.

Context B

Table 12 shows the medium-term outcomes of selected OG initiatives in Context B (where corruption is the norm). Only a few participatory initiatives targeted communication of interests in Context B. The case of the Bogotá School Feeding Programme (see *Figure 7*) is illustrative of the importance of intra-governmental cooperation and commitment in ensuring a meaningful participatory approach to creating an OG tool (open contracting). In this case, the mid-term outcomes are clearly positive: as well as savings for the city budget and increased quality of suppliers due to competition, the city administration managed to win the trust of the business community as more reputable market players entered the bidding process.

Table 11. Outcomes of selected OG initiatives in Context A (corruption as an exception)

	Improved public service		Economic and social added value		Good governance
	Improvement in government efficiency	**Improvement in government effectiveness**	**Public re-use**	**Community results**	**Trust**
Australia 'My School' website	More information became available for the fairer distribution of resources	No outcome for horizontal accountability	Identification of charity recipients	Conversations were initiated among school principals and parents	School principals more openly and accurately share information on educational attainment, but some perceived increased competition between schools and increased information to parents as negative
France Poitou-Charentes region School District Participatory Budgeting	Modernization of the regional administration, reinforcing transversality and dialogue between departments and accelerating decision-making processes	Faster response to users' expectations; in 2011, concerns about distribution inequality resulted in people-elaborated social justice criteria to make sure the neediest schools benefit		Increased participation of pupils from 66% in 2005 to 87% in 2007–08 (OECD, 2009)	In some cases, there was strong opposition on the part of head-teachers and teacher unions who felt that their authority was being undermined. Other schools reported better collaboration between government and community stakeholders

	Improved public service		Economic and social added value		Good governance
	Improvement in government efficiency	**Improvement in government effectiveness**	**Public re-use**	**Community results**	**Trust**
USA PBNYC		The NYCSCA has implemented ca. 50 projects since 2012, with ca. 400 projects pending (largest amount in both categories). Speed is not satisfactory (slow)		The involvement of non-voters: including youth, immigrants, non-English speakers (e.g. Bangladeshi community), and low-income, racially/ethnically diverse participants. Participants established social ties to other community members via joint work on projects	Better relations with City Council members, and citizens felt more comfortable contacting government

Source: Authors.

Table 12. Outcomes of selected open government initiatives in Context B (corruption as the norm)

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	**Improvement in government efficiency (resources)**	**Improvement in government effectiveness (goals)**	**Public re-use**	**Community results**	**Trust**	**Reduction of corruption risks**
Parent-empowerment initiatives in **El Salvador** (EDUCO), **Kenya** (Extra Teacher Programme), **India** (VECs), and school committees (**Indonesia, Niger**). **Indonesia:** linkage with village councils	Short-term, higher expenses than non-SBM, but long-term equalization of student advancement costs; nuanced increase in teacher attendance (e.g. 'problematic' groups increase effort).	Controversial: SBM mitigates the adverse effects of parallel-funded teacher programmes (Kenya), but there is no impact if parents lack authority/ associational experience (Niger).		Increased participation of community members. More meetings take place with more members present BUT: their participation varies according to socio-economic and literacy indicators.	Conflict between parents and teachers (parents feel disempowered or disadvantaged compared to tenure-track teachers – EDUCO, Extra Teacher Programme), except in one-teacher schools. Importance of the legitimacy of SBM-committees through elections (Indonesia).	Kenya: SBM schools hired less relatives of tenure-track teachers for the Extra Teacher Programme.
Mexico Improve Your School	Better use of resources for teacher salaries. Parents used the platform to prove cases of absenteeism, resulting in the firing of teachers.			Anecdotal: parents feel more empowered vis-à-vis teachers when they have access to information.	Competent school principals benefited from knowing about schools' and parents' engagement.	Data made possible publication of the corruption report. Ten states initiated audits, and teacher payrolls are now being funded by the federal government instead of state governments.

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
Paraguay Ciudad del Este municipality use of open data to monitor school funding	Prior to the open data portal, such studies cost USD 2 600 for the NGO and took 8 months. In 2017, the study took 2 weeks and cost USD 200–300.		Open data on school funding is used by an NGO to monitor local funds.			There seems to be a lack of follow-up on the part of government to end impunity when information on the mismanagement of funds becomes available.
Philippines National Textbook Delivery Programme	Savings of USD 1.4 million, reduction in the average cost of textbooks by 40%, bidding time reduction from 24 to 12 months (G-Watch, 2015)	Improvement in the quality of textbooks (suppliers were concerned with not getting the bid the following year if the reported quality was poor).		Community participation in monitoring textbook delivery fostered by local NGOs.	Order No. 59, 'Institutionalising NGO and Private Sector Participation in the Department's Procurement Process', institutionalized state–society collaboration.	Complaint mechanism ensured that low-quality providers would not be invited to submit bids next time.
Ukraine Lviv Participatory Budget	Half of the projects from 2016 were not implemented in 2017 (although they ought to have been).	Participatory budgeting was designed to attract community space-related/creative projects, but due to school engagement, these are mostly infrastructure-related.		The abundance of school and kindergarten infrastructure projects caused tensions between these projects and 'non-education' projects.	Some City Council members authored projects and mobilized voters. This gave rise to the negative perception that they were motivated by political gain.	Multiple cases of organized voting pressure exerted on parents and teachers were observed (signs of corruption/fraud at elections).

Source: Authors.

Conversely, the mid-term outcomes in the case of the Lviv participatory budget (Ukraine) are less positive. While it enjoyed a high level of citizen participation, instances of unfair voting and political rent-seeking came to the fore during the third year of the initiative. In particular, the absence of restrictions on the 'authors' of initiatives enabled schools (as legal entities) and members of the City Council to submit projects. Participation by members of the City Council as authors was criticized as inappropriate, on the grounds that the participatory budget process was being exploited for political gain. Participants in the open budget and some commentators also criticized schools and kindergartens for mobilizing votes from stakeholders (including by exerting pressure on parents).

Where cases targeted transparency to increase accountability during policy implementation, only a few reports were able to confirm that the respective tools were used by parents and civil society as intended. Such cases include open data on funding from the National Public Investment and Development Fund (FONACIDE) in Paraguay and the publication of information on governmental school transfers in local media in Uganda. In this regard, the case of Uganda is exemplary. Following the publication of information on school transfers in local media, parental indignation ensured that the proportion of school transfers that were received as intended increased from 12 per cent (baseline) to 80 per cent (post-intervention). The case of the Municipality Ciudad del Este in Paraguay is an example of an NGO re-using open data on school funding priorities to verify whether these priorities have been implemented as planned. Owing to the use of open data on funding from FONACIDE, the NGO spent 10 times less for their monitoring study than before the release of the open data platform.

In Context B, low government capacity is exacerbated by low public trust in authorities. Thus, engaging citizens may be a way to improve state–society relations. Some of the surveyed participation-focused initiatives in Context B demonstrate that engaging citizens in monitoring policy implementation may indeed be conducive to improvements in the quality of governance as a mid-term outcome. The example of the Philippines' textbook procurement and school building programme is illustrative in this

regard: citizen participation not only helped to tackle corrupt practices in procurement and construction and monitor the quality of final products (schools and textbooks), but also resulted in the institutionalization of public participation in these two processes. Such institutionalization is indicative of increasing trust between the government and civil society.

Accountability-focused initiatives that involved the empowerment of parents – notably, SBM projects – had conflicting mid-term outcomes. Radical empowerment of parents in El Salvador (EDUCO) and Kenya (Extra Teacher Programme), or of mixed parent–teacher school committees (India and Indonesia), had positive effects on the quality of teaching (reduced absenteeism and an increase in effort among affected teachers). The logic behind such interventions was to allow parents to manage a special category of teachers ('extra teachers' or 'contract teachers') who lacked the benefits of a civil servant (tenure, pension, career prospects), but had to perform to a certain standard in order for parents to prolong their contracts. In fewer cases, school committees could exert some control over teachers' salaries. However, in all the surveyed cases (except one-teacher schools), such empowerment of parents was negatively perceived by teachers as an attempt to lower their authority and infringe on their labour rights. The effectiveness of these initiatives was further reduced when parents had a lower educational level and social status than teachers, which led to conflicts or to teachers ignoring school committees. Some case studies (e.g. India and Niger) demonstrated that parents often lacked the knowledge to make meaningful decisions to increase teaching quality and instead focused on tangible improvements to infrastructure.

In summary, empowering parents at the expense of teachers resulted in small, short-term improvements to teacher effort, but had a lasting negative effect on teacher–parent relations. This led to the discontinuation or considerable reformulation of SBM programmes as soon as this became politically viable (see the cases of El Salvador and Kenya, for example).

Table 13. Summary of the recorded impacts of surveyed open government initiatives

Initiative	Impact
India VECs (control over teacher attendance)	2005–06: no improvement in school performance, or parental involvement in schools, but some improvement occurred in reading skills due to volunteer work 2006–09: improvement in learning outcomes in maths, but not in language (due to teaching skills and maybe too little time)
Bogotá School Feeding Programme Open contracting	Quality of meals reached 98% of the set government standard (one of the highest in Colombia)
Indonesia School committees: elections of members, connecting school committees to village councils (linkage)	Linkage and linkage plus elections improved learning outcomes to a greater extent than block grants and training. In-kind contributions did not improve learning outcomes. Raising awareness of committees (via elections) did not result in better learning outcomes, and increasing financial support did not result in improvement
Kenya Extra Teacher Programme, Western Province (with and without school committees – SBM/non-SBM)	Increase in pupils' performance (standardized tests took place after the programme finished in November 2006)
El Salvador EDUCO	389 000 schoolchildren who would otherwise have been out of school received basic and elementary education (during 2004–09, high school education was also included in the programme)

Source: Authors.

8.4 Impacts of open government initiatives

Following the working definition of open government provided under Chapter 5, attention was paid to any evidence of the impact of the surveyed cases on public value related to education, such as learning outcomes and nutrition (as a part of ensuring equal opportunities for educational attainment for poor pupils). Surprisingly, very few of the case sources described attained long-lasting impacts (see *Table 13*).

To summarize, the short- and medium-term outcomes of OG initiatives are affected by the corruption context in which they are embedded. In countries with systemic corruption, initiatives that render the policy implementation process open to public scrutiny, or empower new stakeholders at the school level, are prevalent. In some cases, positive impact on some learning indicators have been observed. In general, the public administration works well where open government aims to source needs and ideas from education stakeholders or to publicize information to induce market-based accountability.

Conclusion

The aim of this publication is to help close the knowledge gap relating to the following question: *How does open government affect the education sector?* To answer this question, the review first presents a systematic analysis of diverse OG definitions in order to clarify the conceptual confusion around the term 'open government', and then provides a working definition of open government in general and for the education sector in particular. Thereafter, the review maps out and assesses the contextual specifics of 34 diverse and recent OG initiatives in education worldwide.

An analysis of definitions demonstrates that, at its core, open government consists of three interwoven components: *transparency, citizen participation and collaboration,* and *accountability and responsiveness.* Open government is often used as an umbrella term for different mechanisms that are applied to fulfil the functions of transparency, citizen participation, and accountability. It is also a dynamic process that serves as a tool to reach pre-determined targets. Any impact evaluation therefore depends on the interests of the main stakeholders defined at the beginning of the OG process. Risks and challenges to the success of open government arise if the development of separate OG components, especially transparency in the form of open data, becomes the sole objective. Any successful OG process thus relies on the short-term outcomes of transparency, participation, and accountability in order to achieve long-term impacts.

In this review, open government is conceptualized as a principal-centred process of governance that aims to create public value through partnership between public authorities and citizens. The term 'partnership' is defined here as including citizen participation and collaboration, which are impossible without meaningful transparency and are only effective under conditions where accountability and government responsiveness are in place. 'Public value', as the main objective of open government, implies that a group of beneficiaries from among the general public must be identified at the

beginning of the OG process. The long-term objectives are then set, taking into account the needs of the major stakeholders. On the basis of these objectives and an analysis of stakeholders (including their skills and possibilities for cooperation), the process selects the appropriate OG mechanisms and necessary components and dimensions to generate public value. According to the working definition, open government in education is a process of governance, based on the principle of 'the best interests of the child', that aims to ensure inclusive, equitable, high-quality education for all through partnerships between the main stakeholders in the education system.

Mapping of OG dimensions across six world regions has demonstrated that the national level remains the most relevant for policy-making in the education sector. At the same time, subnational and city-level initiatives have become increasingly popular, with some initiatives operating as extensions of national programmes, while others are developed specifically for subnational units. The analysis of the mapped cases suggests that the choice of OG dimensions and targeted principles is context-specific. In countries with occasional corruption, open government is mostly used to meet stakeholders' education-related needs; however, in countries with systemic corruption, participatory initiatives often target the implementation or monitoring of a policy.

While OG planning involves governments, NGOs, grass-roots CSOs, local self-government, business, international donors, and affected groups (who may not be organized), the most complex and sustainable projects are led by governments, even if they are designed and promoted by NGOs (as is the case in the Philippines and El Salvador). This is reflective of the high level of centralization in the educational sector. However, in the most successful cases, collaboration between governments and CSOs is critical to ensure stakeholder mobilization and the implementation of participatory tools, such as social audits and SBM.

Although socio-economic factors may determine opportunities and barriers to participation in open government for relevant stakeholders (parents, teachers, suppliers of education-related services, school administrations), actual growth in participation can be linked to targeted

awareness-raising and capacity-building efforts, not just for recipients, but also for providers of school services and local education officials.

The design of OG initiatives is crucial. Most OG initiatives target at least two of the OG principles, and the most successful cases illustrate the importance of all three OG principles working in concert to achieve the desired policy outcome and impact. At the design stage, it is vital to make sure that initiatives that link accountability to the empowerment of previously weak actors (usually parents vis-à-vis teachers in SBM) do not undermine the authority of previously powerful education stakeholders. This is because perceived loss of authority may lead to conflict instead of cooperation and, as in the case of El Salvador, contribute to the closure of programmes.

Open government initiatives able to demonstrate impact shared several characteristics in common. First, they involved all relevant stakeholders at the design stage. Second, appropriate material resources were allocated for the management of the OG process. Third, they understood that the skills of both government officials and OG recipients needed to be adequate to comprehend the complexity of the tools involved. The proficiency of government officials in handling open data is particularly decisive in ensuring buy-in from local officials. Therefore, it is crucial to incorporate digital skills and open policy (soft) skills into the training curriculum for public officials (OECD, 2018*c*). Similarly, training is necessary to ensure the digital and communication proficiency of recipients of OG initiatives – both as a part of school education (as the case of Moers suggests) and as a part of the OG process (as in the case of committee members in the PBNYC project who worked on project conceptualization).

Further research is needed in two areas. First, there is a need for additional investigation of the relationship between the empowerment of marginalized groups and trust among education stakeholders. Conflicts and mutual distrust may taint the good intentions of OG initiatives if incumbent powerful groups (teachers or central governments) perceive the empowerment of marginalized groups as weakening their current position. Second, further research is needed to measure and understand the impact of open government on learning results – the ultimate public value of

education. How do more transparency, accountability, and participation translate into better knowledge and skills of students? Does open government help to prepare students for the new demands of the job market? As open government is a resource- and time-intensive process, investing in the right tools to achieve the intended impact is crucial.

Annex 1. Open government definitions

Sources	Definition	Core principles/characteristics	Objective	Components/activities for implementation
Congress of Local and Regional Authorities of the Council of Europe Report CG35(2018)14final *Transparency and open government* (Galster, 2018) *Strategy on innovation and good governance at local level* (Council of Europe, 2007: 2–3)	Open government is an umbrella term for a wide range of practices that further three key principles, including open data initiatives, access to information laws, political rights, whistleblower protections, public consultation, and engagement processes, among many others. Open governance/open state are concepts that extend open government to include initiatives that target other institutions (e.g. business, parliament, legal systems).	Transparency Participation Accountability	Better decision-making Greater public trust Reduced corruption More effective services Fulfilling 12 principles of good governance (Council of Europe 2007: 2) 1. Fair Conduct of Elections, Representation and Participation, to ensure real possibilities for all citizens to have their say in local public affairs; 2. Responsiveness, to ensure that the local authority meets the legitimate expectations and needs of citizens; 3. Efficiency and Effectiveness, to ensure that objectives are met while making the best use of resources;	**Transparency:** **1. Access to information** is the legal right for citizens to request information from their government, which must be provided unless it falls under a specific exemption in law. **2. Open data** is content generated by new technologies to be freely used, modified, and shared by anyone for any purpose. The six principles of the Open Data Charter for the release of data are: open by default, timely and comprehensive, accessible and useable, comparable and interoperable, for improved governance and citizen engagement, and for inclusive development and innovation. **3. Records management** ensures that information is accessible, authentic, comprehensive, and reliable, and therefore underpins both access to information and open data.

Sources	Definition	Core principles/ characteristics	Objective	Components/activities for implementation
			4. Openness and Transparency, to ensure public access to information and facilitate understanding of how local public affairs are conducted; 5. Rule of Law, to ensure fairness, impartiality, and predictability; 6. Ethical Conduct, to ensure that the public interest is put before private ones; 7. Competence and Capacity, to ensure that local representatives and officials are well able to carry out their duties; 8. Innovation and Openness to Change, to ensure that benefit is derived from new solutions and good practices;	**Participation:** **1. Civic space** is the freedom and means for individuals and organized groups to speak, access information, associate, organize, and participate in public decision-making **2. Civic engagement** refers to proactive engagement by government with citizens, civil society, and other stakeholder groups at any stage of the policy cycle. It includes informing, consulting, involving, collaborating with, and empowering citizens. **3. Whistleblower protection** relates to the protection of concerned individuals who raise an alarm to stop wrongdoings that place fellow human beings at risk. Their actions provide an opportunity to strengthen accountability and bolster the fight against corruption and mismanagement, both in the public and private sectors.

Sources	Definition	Core principles/ characteristics	Objective	Components/activities for implementation
			9. Sustainability and Long-term Orientation, to take the interests of future generations into account; 10. Sound Financial Management, to ensure prudent and productive use of public funds; 11. Human Rights, Cultural Diversity and Social Cohesion, to ensure that all citizens are protected and respected and that no one is either discriminated against or excluded; 12. Accountability, to ensure that local representatives and officials take responsibility and are held responsible for their actions.	**Accountability:** **1. Audits**, both internal and external, are critical to ensuring that public money is appropriately collected, managed, and spent by local government. *Social audits* are conducted by civil society in localities by accessing information from government, engaging with citizens, and reviewing the situation on the ground. **2. Codes of ethics** outline what is expected of public servants and provide an important basis for challenging malpractice and corruption in government. Codes of ethics need to be underpinned by clear procedures for complaints, review, and sanctions. **3. Scrutiny** ensures that decision-makers are responsive and accountable to residents for their decisions. Scrutiny by elected representatives is further supplemented by scrutiny by residents, civil society, and the media.

Sources	Definition	Core principles/characteristics	Objective	Components/activities for implementation
EU *Towards faster implementation and uptake of open government: Final report.* (Bremers and Deleu, 2016)	Open government refers to public administrations breaking down existing silos; opening up and sharing assets; and making data, services, and decisions open; enabling collaboration on public service design and delivery; increasing participative forms of policy-making.	Transparency Collaboration Participation	More transparent functioning of government; Better policy-making via enhanced participation; Better (digital) public services via enhanced collaboration; Unlocking the economic potential of government assets; Supporting the overall updating of open government.	**Open engagement** involves opening up the processes for public policy-making to the whole of society, including civil society, businesses, labour unions, and individual citizens. Open processes for policy-making entail better informing society of ongoing policy initiatives, conducting public consultations of policy initiatives, and allowing the whole of society to actively participate and propose ideas for future public policy. **Open services** are digital public services that can be re-used by other public administrations or eventually by third parties in order to provide value-added services via a mechanism of service composition. Open services necessitate the proper design of digital public services. The design principles of SOA can prove useful in this regard. They include: modular, decomposed services, interoperability through an API, and loose coupling.

Sources	Definition	Core principles/ characteristics	Objective	Components/activities for implementation
OECD *Open government: The global context and the way forward.* (OECD, 2016) Recommendation of the Council on Open Government. (OECD, 2017) *Modernising government: The way forward* (OECD, 2005)	2016: Open government is a culture of governance that promotes the principles of transparency, integrity, accountability, and stakeholder participation in support of democracy and inclusive growth. Open State defines a situation when the executive, legislature, judiciary, independent public institutions, and all levels of government – recognizing their respective roles, prerogatives, and overall independence according to their existing legal and institutional frameworks – collaborate, exploit synergies, and share good practices and lessons learned among themselves and with other stakeholders to promote transparency, integrity, accountability, and	Transparency Integrity Accountability Stakeholder participation Three characteristics appear to be most relevant when describing a government as open, namely: **Transparency** – that its actions, and the individuals responsible for those actions, will be exposed to public scrutiny and challenge; **Accessibility** – that its services and information on its activities will be readily accessible to citizens; **Responsiveness** – that it will be responsive to new ideas, demands, and needs.	Open government: • Builds citizen trust; • Contributes to achieving different policy outcomes in diverse domains, including: public sector integrity and anti-corruption, public sector modernization, civic freedom, digital government, public procurement, public sector innovation, public financial management, and human resource management; • Contributes to all major socio-economic targets. Stakeholder participation: • Increases government accountability; • Broadens citizens' empowerment and influence on decisions;	**Open assets** consist of government data, software, specifications, and frameworks that are open with a view to enabling anyone to freely access, use, modify, and redistribute the content with no or limited restrictions such as commercial use or financial charges. **Stakeholder participation** refers to all the ways in which stakeholders can be involved in the policy cycle and in service design and delivery. These include: **Information** – an initial level of participation characterized by a one-way relationship in which the government produces and delivers information to stakeholders. It covers both on-demand provision of information and 'proactive' measures by the government to disseminate information. **Consultation** – a more advanced level of participation that entails a two-way relationship in which stakeholders provide feedback to the government and vice-versa. It is based on a prior definition of the issue for which views are being sought and requires

Sources	Definition	Core principles/ characteristics	Objective	Components/activities for implementation
	stakeholder participation, in support of democracy and inclusive growth. 2005: Open government means transparency of government actions, accessibility of government services and information, and the responsiveness of government to new ideas, demands, and needs.		• Builds civic capacity; • Improves the evidence base for policy-making; • Reduces implementation costs; • Taps wider networks for innovation in policy-making and service delivery.	the provision of relevant information, in addition to feedback on the outcomes of the process. **Engagement** – when stakeholders are given the opportunity and the necessary resources (e.g. information, data, and digital tools) to collaborate during all phases of the policy cycle and in service design and delivery.
OGP *Open government declaration* (OGP, 2011) *What's in the OGP subnational action plans?* (OGP, 2017)	Open government involves: • Increasing the availability of information about governmental activities; • Supporting civic participation; • Implementing the highest standards of professional integrity in public administration. • Increasing access to new technologies for openness and accountability.	Transparency Participation Accountability Increased access to new technologies	Meet people's demand for: • More openness in government; • Greater civic participation in public affairs; • More transparent, responsive, accountable, and effective governments.	Open government is implemented through Action Plans. **OGP subnational action plans** seek implementation of the core principles in four complementary fields: **1. Civic participation** mobilizes citizens to engage in a dialogue on policies and provides input and monitoring that lead to more responsive, innovative, and effective governance. **2. Public service delivery** consists of policies, systems, and measures to improve the quality and efficiency of public service delivery in sectors such as education, health, water, and security.

Sources	Definition	Core principles/ characteristics	Objective	Components/activities for implementation
				3. Marginalized communities involves fostering the inclusion of typically excluded populations in governing and decision-making. **4. Technology and innovation** embraces the importance of providing citizens with open access to technology, the role of new technologies in driving innovation, and the importance of increasing the capacity of citizens to use technology.
USA Memorandum on Transparency and Open Government, from 21 January 2009, 74 Fed. Reg. 15 (White House, 2009) 'Open Government Directive: Memorandum for the Heads of Executive Departments and Agencies.' White House, 8 December 2009 (Orszag, 2009)	Open government is defined as a system of transparency (information disclosure, soliciting public feedback), public participation (increased opportunities to participate in policy-making), and collaboration (the use of innovative tools, methods, and systems to facilitate cooperation among government departments, and with non-profit organizations, businesses, and individuals in the private sector).	Transparency Public participation Collaboration	**Transparency** promotes accountability by providing the public with information about what the government is doing. **Participation** allows members of the public to contribute ideas and expertise so that their government can make policies with the benefit of information which is widely dispersed in society. **Collaboration** improves the effectiveness of government by encouraging partnerships and cooperation within the Federal Government, across levels of government, and between the government and private institutions.	**Transparency** necessitates timely information disclosure in forms that the public can readily find and use, the use of new technologies to place information about government operations and decisions online and readily available to the public, and the soliciting of public feedback to identify information of greatest use to the public. **Participation** entails creating increased opportunities for citizens to participate in policy-making and to provide their government with the benefits of their collective expertise and information.

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Sources	Definition	Core principles/ characteristics	Objective	Components/activities for implementation
				Collaboration involves using innovative tools, methods, and systems to facilitate cooperation among government departments and agencies, and with non-profit organizations, businesses, and individuals in the private sector.
World Bank *Open government.* Brief (World Bank, 2015) *Open government impact and outcomes: Mapping the landscape of ongoing research.* (World Bank, 2016)	Citizen-centric governance, with openness as a central pillar	Transparency Citizen engagement and participation Responsiveness	Improving the use of public resources. Facilitating inclusive decision-making processes. Increasing trust between governments and citizens. Governments that are more open are better positioned to act effectively and efficiently, to foster private sector growth, and to respond to the true needs of all citizens.	**Transparency:** • Access to information laws • Open data portals • Open contracting • Budget transparency portals **Citizen engagement and participation:** • Social accountability mechanisms • Beneficiary feedback mechanisms • Citizen consultations • PETSs **Responsiveness:** • Accountability institutions • Ombuds offices • Supreme audit institutions • Grievance redress mechanisms

Annex 2. Corruptions Perception Index (CPI) of countries represented in the surveyed cases

Country	CPI score 2017	CPI score 2016	CPI score 2015	CPI score 2014	CPI score 2013	CPI score 2012
Canada	82	82	83	81	81	84
UK	82	81	81	78	76	74
Germany	81	81	81	79	78	79
Australia	77	79	79	80	81	85
USA	75	74	76	74	73	73
France	70	69	70	69	71	71
Slovenia	61	61	60	58	57	61
Lithuania	59	59	59	58	57	54
Ghana	40	43	47	48	46	45
India	40	40	38	38	36	36
Argentina	39	36	32	34	34	35
Brazil	37	40	38	43	42	43
Colombia	37	37	37	37	36	36
Indonesia	37	37	36	34	32	32
Peru	37	35	36	38	38	38
Tanzania	36	32	30	31	33	35
Philippines	34	35	35	38	36	34
El Salvador	33	36	39	39	38	38
Niger	33	35	34	35	34	33
Pakistan	32	32	30	29	28	27
Nepal	31	29	27	29	31	27
Moldova	31	30	33	35	35	36
Ukraine	30	29	27	26	25	26
Mexico	29	30	31	35	34	34
Paraguay	29	30	27	24	24	25
Kenya	28	26	25	25	27	27
Uganda	26	25	25	26	26	29

Source: Transparency International (2018).

Annex 3. Overview of the cases identified through an extensive review of the literature (including sources)

Region	Country	Initiative	Time frame	Subnational	OG dimension	OG function	Policy cycle stage	Source
East Asia Pacific	Australia	My School website	2010–	No	Open data	Inform	Implementation and monitoring	Rabinowitz (2018)
	Indonesia	School committees, treatment checks	2007–08	Yes	Open innovation	Empower	Implementation and monitoring	Pradhan *et al.* (2014)
	Philippines	Checkmyschool online platform	2011–	No	Social audit	Consult	Evaluation	Parafina (2018)
	Philippines	National Textbook Delivery Programme	2002	No	Open contracting	Collaborate	Implementation and monitoring	G-Watch (2015: 3); OGP (2014: 292)
	Philippines	School-building monitoring	2005–11	No	Social audit	Involve	Evaluation	(Aceron, 2013)
	Philippines	'OpenARMM' Improving Schools in the Autonomous Region of Muslim Mindanao	2015–	Yes	Open data	Inform	Implementation and monitoring	Custer *et al.* (2016: 42)
Europe and Central Asia	France	Poitou-Charentes region School District Participatory Budgeting process	2005–14	Yes	Open budget	Collaborate	Policy design	OECD (2009: 53); Participatory Budgeting Project (n.d.); Talpin and Zobel (2011)
	Germany	Collaborative open data school project in Moers, North-Rhein Westphalia	2013–	Yes	Open data	Involve	Implementation and monitoring	European Data Portal (n.d.)
	Lithuania	Lithuania 2030	2015	No	Open policy	Collaborate	Constructing policy alternatives	OECD (2016: 183)

Region	Country	Initiative	Time frame	Subnational	OG dimension	OG function	Policy cycle stage	Source
Europe and Central Asia	Moldova	Şcoala Mea (My School)	2014–	No, but with local consequences	Social audit	Involve	Implementation and monitoring	Toderaş (2015); Vlad (2016)
	Slovenia	Kranjska Gora, youth participatory budget, https://obcina.kranjska-gora.si/dogodek/165559	2018	Yes	Open budget	Collaborate	Policy design	Rabič, Miklaužič, and Miklič (2017)
	Ukraine	Lviv participatory budget (strong focus on schools/kindergartens)	2016–	Yes	Open budget	Empower	Constructing policy alternatives	Krasovska (2017); Martyniv (2017)
	UK	GSCE guide (school database by learning outcomes and funding; joint project of *The Guardian* and the NGO 'Open Public Services Network'	2012–14	No	Open data	Inform	Implementation and monitoring	Adams (2013)
	Brazil	São Paulo, extension of the national Basic Education Development Index	2007–	Yes	(Elements of) social audit	Involve	Implementation and monitoring	Cheng and Moses (2016: 36)
	Brazil	Decennial National Education Plan (PNE)	1997–	No	Open policy	Involve	Choice of solution/ preferred policy option	UNESCO (2017*b*: 28)
Latin America and the Caribbean	Colombia	Bogotá School Feeding Programme, open contracting	2015–	Yes	Open contracting	Consult	Problem definition/ agenda setting	Brown and Neumann (2018)
	El Salvador	EDUCO (Community-Managed Schools Programme – ACE: Community Education Associations)	1990–2010	No	Open innovation	Empower	Implementation and monitoring	UNESCO, (2017*b*: 57–58); Florez *et al.* (2015)
	Mexico	Improve Your School	2013–	No	Social audit	N/A (activity is not initiated by government)	Policy implementation and monitoring	Young and Verhulst (2016)

Region	Country	Initiative	Time frame	Subnational	OG dimension	OG function	Policy cycle stage	Source
Latin America and the Caribbean	Paraguay	Ciudad del Este municipality (use of open data to monitor school funding)	2017	Yes	Open data	Inform	Policy implementation and monitoring	Brown and Neumann (2017)
	Peru	Standardized testing, promotion of parental awareness	2006	No	N/A	Inform	Evaluation	OGP (2014: 311)
	Canada	Minister's Youth Council (Alberta province)	2009–	Yes	Open policy	Involve	N/A	Student Engagement Team (n.d.); Alberta Government (2018: 29)
	USA	PBNYC	2012–	Yes	Open budget	Empower	Problem definition/ agenda setting	Kasdan and Cattell (2013); Lerner (2018)
North America	USA	New York City Open Data Portal	2011–	Yes	Open contracting	Inform	Implementation and monitoring	NYC Open Data (2018); Sunlight Foundation and Open Contracting Partnership (2016: 19)
	USA	New York City Comptroller's Portal	Ongoing	Yes	Open data	Inform	Implementation and monitoring	New York City Comptroller's Portal[18]
	USA	Virginia SRC	1997–	Yes	Open data	Inform	Policy implementation and monitoring	Cheng and Moses (2016: 48)

18. Available at: www.openbooknewyork.com.

Region	Country	Initiative	Time frame	Subnational	OG dimension	OG function	Policy cycle stage	Source
South Asia	India	VEC, parent–teacher association, school development and management committee within SSA	2001– (2006–09 trial with info campaign; 2005–06 trial in Uttar Pradesh)	Yes	Open innovation	Empower	Implementation and monitoring	(Pandey, Goyal, and Sundararaman (2011) for 2006–09; PEO (2010); Banerjee *et al.* (2010) for 2005–06
	Nepal	Social audits, assessment in the districts of Kaski, Dolakha, and Nawalparasi	2008–09	Yes	Social audit	Empower	Implementation and monitoring	Kafle, Patel, and Agarwal (2012)
	Pakistan	SRC in Punjab Province	2013–	Yes	Open data	Inform	Implementation and monitoring	Khan (2018)
Sub-Saharan Africa	Ghana	Open committee hearings	2012	No	Open budget	Inform	Evaluation	UNESCO (2017*b*: 30)
	Kenya	Extra Teacher Programme, Western Province	2005–06	Yes	Open innovation	N/A (activity is not initiated by government)	Implementation and monitoring	Duflo, Dupas, and Kremer (2015)
	Niger	School committee COGES grants	2007–09	No, but with local consequences	Open innovation	Empower	Implementation and monitoring	Beasley and Huillery (2015)
	Tanzania	Mobile phone panel	2013	No	Social audit	Consult	Evaluation	OGP (2014: 308); Twaweza (2016)
	Tanzania	Kigoma-Ujiji transparency in education platform	2016	Yes	Open data	Inform	Evaluation	OGP (2017: 17, 2018)
	Uganda	School transfer information in local media	1995–2001	No	Open budget	Inform	Policy implementation and monitoring	Moynihan (2007)

Annex 4. Details of online portals with school data

Country	Platform	Purpose	Information	Enabling factors (structure and context)	Challenges	Results
Australia	'My School', www.myschool. edu.au	To provide parents, and state and territorial authorities with access to comparable information on school performance.	Information on school attendance by pupils, income (Australian and state government funding, parental contributions), capital expenditure, and data on students' academic performance in National Assessment Program – Literacy and Numeracy (NAPLAN) tests – a mechanism to compare students' performance with schools serving similar student populations (Index of Community Socio-Educational Advantage [ICSEA]).	A set of public information regulations: Australian Commonwealth Freedom of Information Act; the Education Act 2013; the national Education Regulation 2013; and the Australian Curriculum, Assessment and Reporting Authority Act 2008 (ACARA Act). Responsibility for school education rests within state and territorial authorities.	The process partially duplicated internal accountability between school principals and District Education Offices.	There are no consequences for direct accountability of school principals to Education Offices (this passes via ministerial chain). However, there are positive consequences for market accountability, with parents consulting school performance on 'My School' before choosing a school. Some principals became more open about sharing information, while others perceived competition for parents' school choice as negative.
Mexico	'Mejora tu Escuela' (Improve Your School), www. mejoratuescuela.org	To draw attention to the discrepancy between the amount of education funding (one of the highest among OECD members) and poor education quality due to mismanagement and corruption (embezzlement of funds for teacher salaries and school	Community-focused content: information on intended school transfers from the federal government, results of educational attainment (test scores), quantity of teachers and admin staff, comparison of schools by these criteria, and school location. No information	The OGP Action Plan for Mexico created opportunities for the CSO to collaborate with the Ministry of Education. Active media and parents engendered accountability via public pressure rather than official mechanisms.	The CSO-launched initiative does not entail direct accountability mechanisms. The powerful teacher trade union Sindicato Nacional de Trabajadores de la Educación influences policy, having almost veto power (UNESCO, 2017a: 25).	Data enabled the production of the corruption report. Prior to its public release, 10 states initiated audits, and teacher payrolls are now being funded by the federal government instead of state governments. 'Ghost schools' and 'ghost teachers' were identified

Country	Platform	Purpose	Information	Enabling factors (structure and context)	Challenges	Results
		development by education officials and managers at federal, state, and local levels).	is available on the budget of individual schools. Offers the opportunity to report on issues with transparency and fund management, and provides suggestions for community solutions in this regard. **Policy-focused content:** reports on discrepancies in funding and policy analysis.			and funds redistributed accordingly. Progressive principals are supportive of the initiative, because they are now aware of incoming school transfers. Anecdotal evidence suggests that parents felt empowered vis-à-vis principals and teachers owing to information, and some cases of fired teachers due to absenteeism were reported.
Moldova	'Şcoala Mea' (My School), http:// scoalamea.md	Increase the accountability of individual schools to school communities within the framework of school education reform. The online portal is envisaged as a transparency tool within the wider accountability process. It forms part of a CSO-led and World Bank-funded project that includes the organization of public hearings for school budgets, independent budget analysis for schools, and participatory cards for school stakeholders. Schools apply to be selected for the programme.	School profiles containing budget analysis and the results of participatory cards.	Education Strategy 2020 + new Education Code (foresees accountability as joint decision-making between school administration and the school community).	Public hearings on school budgets were met with resistance by school managers. The implementing organization lacked knowledge of the work of the education sector; while the Ministry of Education was engaged only as a partner. This led on occasion to resistance and miscommunication within Ministry structures.	**Municipal responses:** In Ungheni district, the Council allocated MDL 40 000 to each beneficiary school to co-finance priorities identified during public hearings. At the public hearing held at the gymnasium from Falesti Noi, the mayor promised to contribute to the repair of the heating system of the school. **Community results:** after one year among participating schools (40), greater trust of school managers among communities was observed and communities

Country	Platform	Purpose	Information	Enabling factors (structure and context)	Challenges	Results
						became more involved (e.g. through in-kind contributions for extracurricular activities). **Structural results:** the emergence of a central and accessible open data system on school education (albeit not covering 100% of public schools).
Pakistan	SRC in Punjab Province, http:// pesrp.edu.pk/ home#distranking	Increase the accountability of schools within the Punjab province and the internal structures of the Department of Education, and ensure higher transparency towards parents.	The website contains aggregated data for schools at the district level, including: student gender, enrolment by presence, enrolment by gender, results of national and provincial proficiency tests, and schools' non-salary budget (but no information on spending). Data are updated semi-annually. Offline report cards are available for each school in the form of a poster that schools are encouraged to display publicly.	The Punjab Education Sector Reform Programme (PESRP). Specialized monitoring department – the Programme Monitoring and Implementation Unit – sends its own personnel to monitor schools and collect data on a monthly basis.	There are no consequences attached to the results of the report cards and to the requirement to publish them at schools; therefore, this process has not brought tangible improvement to schools' performance.	Report cards are available for each of the 54,000 schools in 36 districts offline, while aggregated data are available for each district online. There is no evidence of governmental action on the results of SRCs.

Country	Platform	Purpose	Information	Enabling factors (structure and context)	Challenges	Results
Philippines	'Checkmyschool', www.checkmyschool.org/	The portal is a part of a wider move to tackle corruption and mismanagement within the public school system and to increase the quality of education. It uses participatory monitoring to validate the delivery of government educational services, report on issues, and offer solutions that communities can take themselves.	Information on governmental transfers to schools, meal plans, and planned textbook arrivals. The portal contains feedback forms to report on failures in infrastructure or mismanagement of funds.	Wider reforms in education sector to tackle corruption and citizens' generally high readiness to participate in community engagement, which simplifies the finding of volunteers to monitor the situation at schools.	Not specified.	Detailed analyses were not identified, but anecdotal evidence points to improvements in nutrition and school infrastructure due to increased parental monitoring and feedback to the Ministry of Education.
USA	Virginia SRC, http://schoolquality.virginia.gov	Increase the quality of school education in the state and adherence to the federal requirements for school accreditation.	Information on enrolment, on-time graduation rates, results of proficiency tests, the student–teacher ratio, and per-pupil spending – per state, division, and individual school.	Federal requirement for accreditation and attention paid by the Virginia General Assembly to the education sector.	Not specified.	There are direct consequences connected to the results of the report cards: failure to comply with state and federal requirements leads to a loss of accreditation and requires the school to inform parents about its actions to regain accreditation.

Annex 5. Summary table of available information on the medium-term outcomes of the OG initiatives identified

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
Context A						
Australia 'My School' website	More information became available for the fairer distribution of resources.	The tool seems not to influence internal accountability.	Parents make more informed choices; the tool launched conversations among parents, community stakeholder groups, and teachers and school leaders; information on the neediest schools made engaging non-government donors easier (e.g. a local food chain supported tutoring for indigenous pupils).	Principals more openly and accurately share information on educational attainment, but some perceived increased competition between schools and increased information to parents as negative.		

Canada Minister's Youth Council (Alberta)

Potentially, more responsive curriculum and legislation, but no data are available on how student engagement affected these areas or how empowered the students felt. This area deserves further research.

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
France Poitou-Charentes region School District participatory budgeting process	Modernization of the regional administration, reinforcing transversality and dialogue between departments and accelerating decision-making processes.	Faster response to users' expectations. In 2011, concerns about distribution inequality resulted in the elaboration of social justice criteria to ensure that the neediest schools benefit.		Increased participation of pupils from 66% in 2005 to 87% in 2007–08 (OECD, 2009).	Strong opposition of head-teachers and trade unions who felt that their authority was being undermined.	
Germany Collaborative open data school project in Moers, North Rhine-Westphalia				Students reportedly learned more about their government.		
Lithuania 2030	No data on outcomes.					
Slovenia Kranjska Gora, youth participatory budget, https://obcina.kranjska-gora.si/dogodek/165559	No data on outcomes.					

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
UK GCSE open data re-use case		Anecdotal evidence that parents can make more informed school choices.	Existing open data on school performance and funding available on the governmental portal was re-used by the media (*The Guardian*) and NGO 'Open Public Services Network' to create a database for comparing school performance, progress, and pro-pupil spending.			
USA PBNYC	The NYCSCA has implemented ca. 50 projects since 2012, with ca. 400 projects pending. Speed is not satisfactory (slow).			The involvement of non-voters, including; youth, immigrants, non-English speakers (e.g. Bangladeshi community), and low-income, racially/ ethnically diverse participants. Participants established social ties to other community members via joint work on projects.	Better relations with City Council members, and citizens felt more comfortable contacting their government.	
USA New York City Open Data Portal	No data on outcomes.					

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
USA New York City Controller's Portal	No data on outcomes.					
USA Virginia SRC	No data on outcomes.					
Context B						
Brazil São Paulo, extension of the national Basic Education Development Index	No data on outcomes.					
Brazil Decennial National Education Plan (PNE)		Target budget for education increased from 7% to 10% GDP for 2014–23.		Some amendments from civil society were not supported.		
Colombia Bogotá School Feeding Programme, open contracting	Savings of 10–15% were made owing to cuts in intermediaries.	Better choice of suppliers due to framework contracts.	Using open data which became available due to open contracting, CSOs developed software to allow parents to monitor school menus and submit complaints.		More trust in government from the business community (more companies dared to participate in bidding).	Cartel arrangements were uncovered among fruit suppliers (SIC investigation of price-fixing in fruit tenders).

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
El Salvador EDUCO	The per-student cost was 25% higher than in non-EDUCO schools, but over 20 years the student advancement costs equalized with non-EDUCO schools.		The programme was negatively perceived by teachers, because they were not included in teacher transfer, career advancement, and pension systems. Parents felt empowered, but since the programme's closure in 2010, they have observed an increase in teacher absenteeism which it has not been within their power to reduce.		Parental empowerment and teacher dissatisfaction with the programme's benefits contributed to reduced trust between teachers and parents.	
Ghana Open education committee hearings					62% of citizens report some or a significant level of trust in committees' effectiveness.	Anecdotal: petty corruption is uncovered.
India VECs (control over teacher attendance)	Increase in attendance of civil servant teachers: in Madhya Pradesh +17% from 64%, in Uttar Pradesh +23% from 61%. No impact in Karnataka.	The most problematic teacher group – male civil service teachers from upper castes – saw the highest increase in engagement.		More active committees (more meetings, more members at meetings, school inspections). However, increase in participation varied by caste, gender, and position in the school committee: chair members of the committees became more involved than parent members, and committee members from upper castes reported more participation than those from lower castes.		

Medium-term outcomes	Improved public service		Economic and social added value			Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks	
Indonesia School committees: election of members, connecting school committees to village councils (linkage)	Linkage and linkage plus elections are more cost-effective than elections alone. Teacher hours increased by one hour per week for linkage plus election interventions.			Elections and linkage plus elections increased community engagement.	'Engaging the more powerful village council leads to concrete actions on the ground and increases the legitimacy of the cosponsored initiatives.' (Pradhan *et al.*, 2014: 109).		
Kenya Extra Teacher Programme, Western Province (with and without school committee – SBM/non-SBM)	50% decrease in class size due to extra teachers.	Although the number of civil servant teachers fell due to the provision of extra teachers, in SBM schools this reduction was halved (as extra teachers were not used to substitute for civil servant teachers).				Hiring of extra teachers: non-SBM schools were more likely to hire relatives of civil servant teachers than SBM schools (statistically non-significant). In SBM schools, there was no sign that school committees hired weaker relatives or let teachers' relatives get away with lower effort.	

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Medium-term outcomes	Improved public service		Economic and social added value			Good governance
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
Mexico Improve Your School	Better use of resources for teacher salaries: parents used the platform to prove cases of absenteeism, resulting in the firing of teachers.			Anecdotal: parents felt more empowered vis-à-vis teachers when they had access to information.	Competent principals benefited from knowing about schools' and parents' engagement.	Data made possible the publication of the corruption report. Ten states initiated audits, and teacher payrolls are now being funded by the federal government instead of state governments.
Moldova Şcoala Mea (My School)	The project contributed to the consolidation of the unitary national system for open data in education by facilitating the process of diversifying existing types of data and improving access to information.	The Ministry of Education acknowledged recommendations for improvements in its open data handling.		Public hearings on school budgets were met with resistance from school managers; however, after one year among participating schools (40) there was evidence of greater trust between school managers and communities, and communities were more involved (e.g. through in-kind contributions for extracurricular activities).		
Nepal Social audits (Kaski, Dolakha, Nawalparasi districts)	No data on outcomes.					

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
Niger School committees COGES grants		Teacher attendance decreased slightly (due to a lack of education and association experience, while parents lacked authority over teachers and knowledge of how school works). Attendance increased among first-graders.		Grants increased parent participation, but parents were more likely to invest in infrastructure than learning materials and/or teacher support. This led to conflict between teachers and parents except in one-teacher schools.	The empowerment of parents resulted in the disengagement of teachers owing to conflictual relations. Only in single-teacher schools did investments support an increase in teacher attendance.	
Pakistan SRC in Punjab Province		There were no clear consequences for accountability based on SRC results embedded in the process. As a result, there were no significant changes in school performance.				
Paraguay Ciudad del Este municipality use of open data to monitor school funding	Prior to the open data portal, such studies cost USD 2 600 for the NGO and took 8 months. In 2017, the study took 2 weeks and cost USD 200–300.			The case is an example of public re-use of governmental open data.		There seems to be a lack of follow-up on the part of government to end impunity when information on the mismanagement of funds becomes available.

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Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
Peru Standardized testing soap opera		Parental support helped to overcome teachers' opposition to standardized testing.				
Philippines Checkmyschool		There is anecdotal evidence of improvement in nutrition and the state of school buildings.				
Philippines National Textbook Delivery Programme	Savings of USD 1.4 million, a reduction in the average cost of textbooks by 40%, and a reduction in bidding time from 24 to 12 months (G-Watch, 2015).	Improvement in the quality of textbooks (suppliers were concerned with not getting the bid the following year if the reported quality was poor).		Community participation in monitoring textbook delivery fostered by local NGOs.	Order No. 59, 'Institutionalising NGO and Private Sector Participation in the Department's Procurement Process', institutionalized state–society collaboration.	
Philippines School-building monitoring		Construction of schools focuses on areas with acute need.		Anecdotal: nationwide mobilization and capacity building of communities to check on school-building projects in their schools.	Initiative adopted as the community-based monitoring component of the Department's Regular School Building Programme.	Focus on corruption prevention, but no estimation of actual results is given.

Medium-term outcomes	Improved public service		Economic and social added value		Good governance	
Country Initiative	Improvement in government efficiency (resources)	Improvement in government effectiveness (goals)	Public re-use	Community results	Trust	Reduction of corruption risks
Philippines OpenARMM: Improving Schools in the Autonomous Region of Muslim Mindanao		Only 100 of ca. 2,000 schools in the region were geotagged.		Civil society has not been involved properly owing to a lack of commitment on the part of government to data collection.		
Tanzania Mobile phone panel	No data on outcomes.					
Tanzania Kigoma-Ujiji transparency in education platform	No data on outcomes.					
Uganda School transfers info in local media		Test scores and school enrolment rose following an increase in funds (Reinikka and Svensson, 2005).				80% of funds reached schools as intended (although 20% is still embezzled).

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Ukraine Lviv Participatory Budget	Half of the projects from 2016 were not implemented in 2017.	The Participatory Budget was designed to attract community space-related/creative projects, but due to school engagement, these are mostly infrastructure-related (participatory budgeting is seen as a way to compensate for funds lacking from the city administration).		The abundance of school and kindergarten infrastructure projects caused tensions between these projects and 'non-education' projects (this spurred discussion as to whether there should be a separate category for education projects).	Some City Council members authored projects and mobilized voters. This gave rise to the perception that they were motivated by political gain. There is an ongoing discussion as to whether they should be allowed to submit projects.		Multiple cases of organized voting pressure exerted on parents and teachers were observed (signs of corruption/fraud at elections).

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About the book

Although the concept of open government (OG) is increasingly applied in public policy around the world, there is as yet no systematized overview of OG implementation in the education sector, its advantages, and the possible risks.

In order to fill this gap, this book clarifies the conceptual confusion around the term 'open government' and provides a working definition for the education sector. It elaborates a theory of change for OG implementation in two different contexts: where corruption is an exception, and where corruption is the norm in governance. It then maps out and assesses the characteristics of 34 recent OG initiatives conducted in the educational field worldwide.

The book highlights that in countries with occasional corruption, OG is mostly used to meet stakeholders' education-related needs, but that in countries with systemic corruption, participatory initiatives often target the implementation or monitoring of a given policy. It concludes with some practical recommendations for IIEP's new research on 'Open Government in Education: Learning from Experience', launched as part of its 2018–2021 Medium Term Strategy.

About the authors

Oksana Huss is a researcher at Leiden University, Netherlands, and co-founder of the Interdisciplinary Corruption Research Network. She obtained her PhD on political corruption in hybrid regimes at the Institute for Development and Peace, University of Duisburg-Essen, Germany. She provides her expertise on open government and theories of corruption to think tanks, universities, and international organizations.

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