Education procurement in the public sector

# Policy challenges and how to overcome them

### Paper prepared by Mohini Baijnath and Neil Butcher

### December 2024

# Table of contents

[Table of contents 2](#_Toc184820776)

[Summary 3](#_Toc184820777)

[Introduction 5](#_Toc184820778)

[What is public procurement? 7](#_Toc184820779)

[What principles do public procurement policies support? 9](#_Toc184820780)

[What types of educational procurement do national or state policies and processes inhibit? 12](#_Toc184820781)

[Thoughtful procurement of innovation and educational technology 12](#_Toc184820782)

[International procurement 16](#_Toc184820783)

[Straightforward procurement processes 18](#_Toc184820784)

[Key challenges associated with complex procurement policy environments 19](#_Toc184820785)

[Bureaucracy and complicated regulatory environments 19](#_Toc184820786)

[Lack of accountability 21](#_Toc184820787)

[Policies may limit or distort the supply of goods and services 23](#_Toc184820788)

[Lack of human resources capacity 24](#_Toc184820789)

[Balancing fiscal efficiency and savings with delivery 26](#_Toc184820790)

[Prioritizing processes instead of outcomes 28](#_Toc184820791)

[Conclusion: How do procurement systems need to shift to enable better spending? 29](#_Toc184820792)

[References 31](#_Toc184820793)

[Appendix One: Principles commonly found in procurement policies 35](#_Toc184820794)

[Appendix 2: Areas for capacity building for procurement specialists in government 40](#_Toc184820795)

A screenshot of a poster

Description automatically generated

# Summary



# Introduction

Public education development initiatives have often gravitated toward popular interventions such as teacher training programmes, improving infrastructure, or introducing Information and Communications Technologies (ICTs). However, these interventions frequently fall short of achieving their desired effects because they fail to resolve one of the fundamental challenges in education provision: the need to build and sustain well-functioning, straightforward public procurement processes.

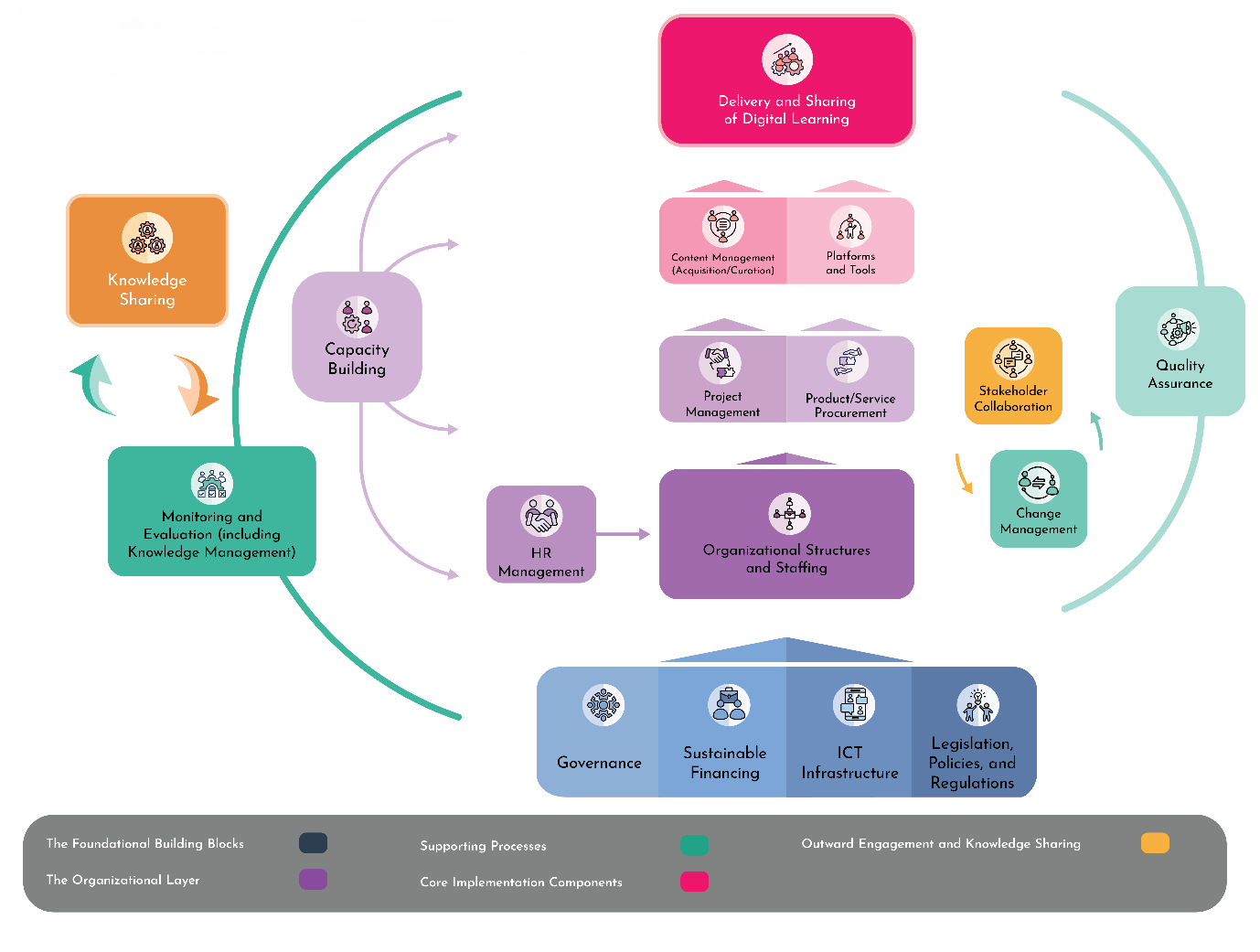
Procurement is a crucial aspect of education administration. It demonstrates the efficiency and effectiveness with which resources are allocated, the levels of transparency and accountability for those allocations, and how responsive those allocations are to the dynamic educational needs of those who operate within the system. If these systems do not function properly, the chance of most education development initiatives succeeding is significantly diminished.

One of the key measures of how well a procurement system functions is the policies that it is subject to; policies which create environments that are often not conducive to efficient expenditure. These environments will be the focus of this paper as we explore how policy and procurement system realities intermingle, making it more and more difficult to channel money into goods and services that will improve education provision.

Our interest in this topic is driven by our ongoing work in developing a framework for the Open Educational Resources (OER) Sustainability Hub.For the most part, key stakeholders within the education system still operate in silos with limited recognition of the relationships and interdependencies of the functions they fulfil and initiatives they implement. In order to fully realize the potential of OER, we argue that it is essential to view interventions within the broader ecosystem in which they operate:

By adopting an ecosystem approach, organizations can better understand and address the complexities and interdependencies involved in OER and digital learning development and implementation. This holistic perspective allows one to identify gaps, challenges, and opportunities across various domains, enabling targeted interventions to create a supportive and enabling environment for OER and digital learning initiatives.[[1]](#footnote-1)

1. The OER Sustainability Ecosystem



As the diagram above demonstrates, procurement forms an important part of the OER and digital learning ecosystem by enabling the purchase of the necessary goods, services, and works that allow organizations to implement digital learning initiatives effectively.

However, our experience has been that procurement systems are severely hindered by complexity. Our hypothesis is that these complexities stem, at least in part, from an unnecessarily complicated policy environment – a topic that we have explored in previous work.[[2]](#footnote-2) In this paper, we conduct a desktop research exercise that explores public procurement policies related to the procurement of goods, services, and works for the education sector. Through this research, we examine what types of procurement these policies support; demonstrate what types of procurement are inhibited by these policies; and argue that procurement policies make it difficult to change the way that money is spent in the education sector. Through this, we highlight that effective procurement practices demand more creative, innovative policy solutions, and provide recommendations on how to improve expenditure on procurement by maintaining essential procurement principles but allowing for flexibility in procurement processes.

## What is public procurement?

Also known as government procurement, public procurement might refer to an informal pilot or trial, a direct purchase from a single vendor, or competitive bidding process, such as a request for information (RFI), request for quotations (RFQ), or request for proposals (RFP).[[3]](#footnote-3) According to Uyarra *et al* (2014),

Public procurement refers to the acquisition of goods and services by government or public sector organizations. Public procurement is first and foremost a vehicle allowing public sector organizations to perform their functions and deliver key services effectively.[[4]](#footnote-4)

This includes the acquisition via purchase, rental, or lease, but can also refer to public-private partnerships, concessions, and other contractual agreements. Further, it can include the use of public funding for loans, grants and other types of financial assistance.[[5]](#footnote-5)

Public procurement may be viewed as a simple transaction between a government actor and a good, service, or works provider, but the *efficiency* with which government procurement systems work, and *what* is being procured, can give important clues to the impact and effectiveness of governance and policy implementation. Simone and Balasundharam (2023) explain:

Sound public procurement practices are an important determinant of the growth impact of public spending and expenditure efficiency.Public procurement processes affect how much the government pays for the inputs it buys to deliver its services, the quality-of-service delivery (i.e., the extent to which goods and services are delivered in the right quantities, with the right quality, at the right time, and in the right place), and the cost of doing business (e.g., the extent to which the economy has well-maintained economic infrastructure to support private sector activity). **Countries also use public procurement to pursue secondary objectives (including preferential objectives such as promoting SMEs) but usually at a cost in terms of expenditure efficiency and other unintended consequences that require careful monitoring.[[6]](#footnote-6)**

As noted above, effective public procurement is driven by different objectives. There are also different aspects of a procurement system that require consideration. Khan (2018) identifies four pillars of public procurement:[[7]](#footnote-7)

1. Khan’s Four Pillars of Public Procurement:[[8]](#footnote-8)

Education is among the largest sectors driving public procurement activities. Procurement within this vast and intricate system is essential for the effective operation of government services.[[9]](#footnote-9) Education procurement occurs at various levels, such as national or federal, provincial/state, local, and institutional levels, the latter occurring particularly when governments allocate funds to schools or universities. This process spans different stages of education, from early childhood development to higher education. It comprises the acquisition of a wide array of goods, services, or works. Examples include:

* EdTech;
* Infrastructure and facilities;
* Cleaning services;
* Materials like books and other educational resources;
* Services like consulting;
* Catering services;
* Energy;
* ICT and computer hardware; and
* Legal services.

There is great variability in procurement systems across country contexts. Referring to examples in the digital education ecosystem, Vidal (2023) explains that countries generally use different procurement approaches:

* **Centralized procurement strategies**: Countries including Austria, Lithuania, and Belgium centrally procure digital tools for education such as Microsoft Office 365 licences and system management tools, like student information systems.
* **Semi-centralized procurement strategies**: Involve a combination of central provision and school-level procurement with government approval. This form of procurement is popular in countries that have shared governance between central and local authorities. In Denmark, for example, municipalities select from pre-approved tools and schools need to obtain approval to use specific tools.
* **Decentralized procurement strategies**: This strategy provides schools or districts with greater autonomy in making procurement decisions. It ensures that specific needs are met but also presents obstacles regarding costs, diversity of what is procured, and consistency in provision across different contexts.[[10]](#footnote-10)

Countries might choose to adopt a combination of the aforementioned approached, depending on what is being purchased.

A procurement process might include various stages. For example, after determining their needs, a government might request bids from prospective suppliers through a request for proposals (RFP) or tender document. Next, a selection committee would evaluate these bids according to predetermined criteria and chooses a supplier. Thereafter, the parties would discuss the terms and conditions and the supplier is awarded the contract. Finally, once the contract has been signed, the procuring entity might elect to implement monitoring and evaluation systems to determine the quality of delivery and adherence to the specified conditions.[[11]](#footnote-11) Policy forms the foundational guidance for what these processes include and how they are carried out.

# What principles do public procurement policies support?

Public procurement policies generally relate to procurement across multiple government sectors. While such policies differ across countries, many contain common principles. Drawing from Khan (2018), Appendix One outlines seven principles commonly found in procurement policies around the world. These are:

* Value for money;
* Economy;
* Integrity;
* Fit for purpose;
* Efficiency;
* Transparency; and
* Fairness.

The table in Appendix One provides examples of countries whose procurement policies contain each of these principles. Even a cursory glance at this table demonstrates a common challenge; namely that, by virtue of trying to incorporate these principles, public procurement systems tend to promote complexity and rigidity. This is expressed in various ways.

Foremost is the highly detailed requirements that procuring entities and vendors need to meet. Regarding the UK’s new Procurement Act, one critic explains that contracting authorities are now required to focus on achieving value for money and enhancing public benefit, alongside a distinct obligation to consider the guidelines outlined in the national procurement policy statement. The author explains:

These changes do speak to the way in which designing and carrying out procurements under the new law could become an even more complex affair, with the need for contracting authorities to ensure that an increasing set of principles, objectives and statements – which might sometimes also seem conflicting – as well as the detailed set of obligations under the Procurement Act and related secondary legislation are taken fully into account…Indeed, there has already been some anecdotal evidence to the effect that certain contracting authorities have misconstrued the requirement to have regard to the importance of maximising public benefit when carrying out a procurement as allowing them to incorporate requirements that discriminate against third country suppliers.[[12]](#footnote-12)

Another issue is that although the intention might be to ensure value for money during procurement, introducing measures such as framework agreements[[13]](#footnote-13) in competitive bidding processes, as the UK has done, can introduce limitations in supplier choice and reduce competition over time, imposing rigidity on the system. Suppliers may find it challenging and resource-intensive to enter these agreements, and public sector organizations might face limitations in supplier choice over time.

The desire to infuse fairness, openness, and transparency in procurement processes by using policy as an instrument often creates complicated rules and regulations that can be challenging to navigate and satisfy. In the Philippines, the Government’s Procurement Policy Board efforts to promote transparency and streamlined processes have been counterbalanced by implementation challenges and corruption issues,[[14]](#footnote-14) demonstrating that policy interventions have not always been effective in achieving these goals.

Procurement policies have also been manipulated to serve other ends. One example of this is South Africa’s Broad-based Black Economic Empowerment (B-BBEE) policy and legislative framework that aims to promote transformation of the country’s legacy of racial inequality by implementing a series of socio-economic objectives that favour the majority black population.[[15]](#footnote-15) Under the framework, companies are awarded a score based on their level of empowerment and transformation in areas including ownership, management, and skills development. Those with higher scores receive preference when tendering for government tenders and contracts. Among private entities, a company can achieve a higher score if it procures goods and services from other entities with high BEE ratings. The framework also contains a preferential procurement element, where, as Norton Rose Fulbright explain:

A customer may prefer to procure from an entity with a low overall BEE score but high Black people and Black women ownership as that supplier will provide the customer with more preferential procurement points towards its own BEE score than a supplier with low Black ownership but a higher BEE score. Accordingly, one should not simply focus on a BEE score but, rather, the interplay between the level of Black ownership, BEE score, and commercial attractiveness to customers.[[16]](#footnote-16)

Lötter (2022) argues that the B-BBEE policy has been corrupted by officials appointed by the ruling party, the African National Congress (ANC), and has been used to perpetrate economic crimes.[[17]](#footnote-17) Similarly, Mathekga (2021) explains the influence of the ANC’s patronage:

*Decisions [were] made to serve the patronage networks flowing through the ANC to benefit the interests of an elite group of party officials and businessmen.[[18]](#footnote-18)*

A final consideration is that many of the common procurement principles mentioned above exist in tension or conflict with one another. For example, the greatest efficiency may not always be attainable if a procuring entity is hoping to get the most value for money. However, this tension is almost never acknowledged in the policy environment, creating blatant contradictions. This is not simply an indication of a lack of consideration that policymakers have given the policies that they create. Rather, it is a symptom of a larger problem, namely that convoluted policies lead to a loss of focus and purpose in the procurement system. One source explains:

There is growing evidence that the patchwork of procurement policies, systems and regulations accumulated over decades is not serving organizations or providers well. At the most basic level, good procurement policy is intended to ensure that contracts are awarded through a fair and open process, to meet school and state agency needs, while guarding against corruption, fraud, waste and abuse. However, the web of red tape requirements has led to a process that rarely serves anyone well.[[19]](#footnote-19)

Similarly, Scott (2022) notes:

All procurement activities are complex entanglements of the values, purposes, and contexts of multiple groups in the academy – students, teachers, technology professionals – and we are all forced to distil all of this complexity into a set of functional and commercial requirements that can be scored and weighted. These can only ever be imperfect proxies for what we are really trying to evaluate.[[20]](#footnote-20)

Indeed, basing procurement decisions on predefined criteria and policies may often fall short of addressing the needs of those for which the goods are services are being procured – the criteria being used are simply stand-ins of far more complex realities that they represent. Effective procurement policies should thus be less about achieving an ideal process and more about using those policies as an instrument to direct government’s priorities. As the next section demonstrates, governments have often lost sight of this objective.

# What types of educational procurement do national or state policies and processes inhibit?

Although policies aim to enhance public fund expenditure and manage the risks associated with purchasing decisions, the same policies may in fact hinder certain procurement processes. A key reason for this is that over time, policies and regulations can accumulate, leading to inefficiencies and legacy systems that obstruct effective procurement. In this section, we unpack the specific types of procurement that are either inhibited or complicated by policies.

## Thoughtful procurement of innovation and educational technology

The past two decades have seen a surge in digital infrastructure and device investment for learners around the world, aiming to increase access to technology such as computers, laptops, tablets, and Internet connectivity. However, evidence to date shows that while this increased investment has improved access to and use of these technologies, it had little to no positive impact on education outcomes.[[21]](#footnote-21) If this remains true today, then building digital skills and modernizing education systems is still a key educational policy objective. But where have policies gone wrong in trying to integrate digital solutions and innovation into education systems and what is the disconnect between the procurement of these goods and services, and achieving positive education outcomes?

A primary consideration may be that policies and regulations can inhibit the procurement of specific types of goods and services. For example, procuring educational technology (EdTech) can be challenging because of the wide-ranging products and services available in contrast to the specificity and often rigid nature of procurement policies. EdTech can range from hardware and software to online subscriptions and services such as software development. A government would need to distinguish between these different offerings, evaluate them, and then determine which is best suited to meet specific needs within the education system. This can be time consuming and resource intensive. It is also not clear-cut because of limited research on the outcomes of deploying different kinds of EdTech interventions. Where research does exist, it, more often than not, focuses on the Global North. Speaking about the context in the US, Owens (2014) explains:

Hardware alone has several vendors with multiple models and thousands of possible combinations available for purchase, most of which are significantly different by the time a new purchase needs to be made. Software has hundreds of potential vendors with several products, which also rapidly evolve. So how does a single purchaser, or purchasing team, keep up with the thousands of possible options every year, all the while ensuring maximization of each technology dollar? Simply put: they don’t.[[22]](#footnote-22)

Research shows, however, that most countries’ central or federal governments are only responsible for a small proportion of the digital education ecosystem, including public procurement. For the remainder, purchasing decisions are often made independently by local governments, school districts, and individual schools. Many countries do not even actively control the decentralized procurement decisions, much less set standards or limitations on the digital resources and technologies that schools can buy. Positive effects of this include greater autonomy over EdTech purchasing decisions for local governments, lower barriers to entry for small EdTech suppliers, and opportunities for procurement decisions to change based on market supply and evolving needs.[[23]](#footnote-23) Conversely however, this flexibility might mean that interoperability between different EdTech products is not prioritized or that governments might be more easily influenced to deploy EdTech that has not been comprehensively tested for efficacy.

EdTech procurement is also unique because it requires balancing stakeholder needs with policies and legislation relevant to the education sector, along with resource constraints, available infrastructure, and capacity for product or service development. Policies often fall short of accommodating these varying needs.[[24]](#footnote-24) A study by the Information and Communications Technology Council in Canada notes the importance of introducing collaborative and balanced EdTech procurement processes. The study emphasizes the value of cooperation between various regional procurement players and argues for a balance between centralized, decentralized, and divisional procurement. It proposes that combining improved budgeting techniques, multidisciplinary procurement teams, improved procurement policies, and keeping up with EdTech market advancements might all result in improved learning outcomes.[[25]](#footnote-25) This strategy emphasizes how important it is to make decisions about EdTech purchases cooperatively and systematically instead of in isolation.

An additional challenge in procuring the most suitable EdTech is that procurement decisions do not occur in a vacuum – they are subject to competing interests and influences. Carter-Rau and Olsen (2023) highlight four major influences on decisionmakers to adopt specific EdTech, focusing on low- and middle-income countries (LMICs):

* **In-country pressure for going digital:** Country presidents, parents, and other departments within the government often call for EdTech because it’s perceived as necessary for a nation to be considered a modern country.
* **Donor priorities:** Some donor organizations’ prioritization of EdTech creates a financial incentive for policymakers to adopt it (especially given that LMICs have limited education budgets). It also signals to decisionmakers that EdTech must be a valuable investment for education: If the funders like it, it must be good.
* **Signalling:** The prevalence of EdTech in wealthy education systems signals to LMIC decisionmakers that “successful” education systems are filled with EdTech, and few national leaders want to be perceived as uncommitted to building a high-quality, 21st century education system.
* **Tech company marketing:** Government decisionmakers are bombarded by marketing from EdTech companies hoping to increase market share. Many of these pitches are sophisticated and include information that looks like solid evidence for the innovation, and many decisionmakers lack the training and time to properly evaluate the companies’ claims.[[26]](#footnote-26)

The often competing and sometimes contradictory interests of several stakeholders are accompanied by limited consideration for the effectiveness of adopting or scaling the EdTech. After reviewing the research Olsen (2023) finds the following:

The rhetoric and bureaucratic processes of national- level government decisionmaking for education might appear rational, linear, and coherent, but the actual decisionmaking—constructed by way of limited time, insufficient information, political economies, and personnel turnover—is often about navigating competing, nonlinear, direct and indirect pressures.[[27]](#footnote-27)

Although Olsen’s research focuses on government decision-making for EdTech at a broader level, it highlights the context in which procurement decisions are shaped. These decisions are often influenced by preconceived notions of what is optimal and whose interests should be prioritized—typically favouring those who provide the funding and, as a result, hold the greatest decisionmaking power.

In some cases where adequate products or services do not exist to address a government’s needs, the government might opt to procure innovative solutions. In such instances, public agencies exert their purchasing power to adopt cutting-edge technologies that might already be on the market but have not been scaled for commercial use.[[28]](#footnote-28) Though many governments are driven to use innovation to better serve the public, in reality, attempts to procure innovative goods and services might be disincentivized as innovation conflicts with governments’ mandate to minimize risk and continue operations. Although it is important that governments continue to drive efficient service delivery, eschewing experimentation and iteration altogether can lead to inert systems that fail to keep pace with changing needs.[[29]](#footnote-29)

Ultimately, the focus should be on promoting innovation in general, and EdTech in particular, as a means to an end; the end being to improve teaching and learning outcomes. As Hillman (2022) explains:

Edtech oversight should be a policy priority where the assumption should not be that regulation will stifle innovation because it is a relatively new sector but that ensuring open standards exist that will drive innovation in the direction where children clearly benefit.[[30]](#footnote-30)

Promoting innovation and EdTech adoption is not synonymous with promoting good educational outcomes. This distinction often appears to be lost in procurement systems. A key mechanism to address this would be to ensure that policies that seek to improve access to digital infrastructure and equipment, or to enable EdTech procurement, are accompanied by consultations with experts, research into how they might contribute to the desired outcomes, and, capacity building for procurement specialists and other decisionmakers.[[31]](#footnote-31)

## International procurement

Foreign providers may find it difficult to compete for government contracts in the education sector if policies favour domestic procurement. This is a highly contested topic. Some contend that procurement contracts should favour local suppliers because it supports the domestic economy. However, others counter that this would restrict access to potentially novel or affordable solutions created by foreign suppliers. It also runs the risk of distorting the market by limiting the availability of different options and increasing prices.[[32]](#footnote-32)

For a long time, the international trade community has been attempting to include government procurement in multilateral trade regulations, having realized the cost inefficiencies that limited government procurement may impose on national economies. The World Trade Organization (WTO) framework houses the Agreement on Government Procurement (GPA), a plurilateral agreement that was most recently amended in 2014. This means that some, but not all, WTO members are signatories to the GPA. The legally-binding regulations at the core of the WTO GPA oblige signatories to create transparent, equitable, and open competition in government procurement procedures for the areas they have mutually agreed are covered. Despite these advancements, there is a dearth of worldwide knowledge regarding government procurement policies; specifically, there is a shortage of data on what kinds of potentially discriminatory procurement measures governments are implementing.[[33]](#footnote-33)

Though they may be beneficial, international procurement practices can be highly complex, as they include a proliferation of free trade agreements and national policies or regulations. For instance, Canada has pursued an aggressive international trade strategy since the 1990s. Canada’s public procurement system is governed by: (i) common law; (ii) international and domestic trade agreements; (iii) statutes and regulations; and (iv) administrative rules such as policies and procedures.[[34]](#footnote-34) A recent report on Canada's major public procurement laws and policies lists ten trade agreements with procurement chapters (it is not uncommon to be governed by multiple trade agreements at one time)[[35]](#footnote-35), five federal laws, and seven federal policies. Apart from the aforementioned, there are also multiple sub-national laws and regulations, including the Procurement Services Act (2003) in British Columbia, the Broader Public Sector Accountability Act (2010) in Ontario, and the Circular Economy Procurement Implementation Plan and Framework in the City of Toronto.[[36]](#footnote-36) Navigating this regulatory environment can undoubtedly burden the procurement process, and it begs the question of whether so many regulations are actually necessary or if they are creating unnecessary closure in the procurement system. As one source explains:

Some aspects of the public procurement law in Canada remain uncertain as Canadian courts have frequently demonstrated a tendency towards purposive reasoning, meaning they interpret the law to achieve a just result. This has left us with unclear and sometimes conflicting guidance in some instances.[[37]](#footnote-37)

Other interventions that have been used to promote domestic procurement include local purchasing programmes, which give preference to bidders who are operating within the purchasing jurisdiction. They are often used to contribute to the local economy and have been praised for protecting local economies. However, disadvantages include that they limit supplier competition, potentially complicate procurement processes, and disincentivize local businesses from providing the greatest value for money by limiting competition.[[38]](#footnote-38)

Similarly, Local Content Requirements (LCRs) are policy instruments that governments use to promote local production and employment. They ‘require firms to use domestically manufactured goods or domestically supplied services in order to operate in an economy’[[39]](#footnote-39) and are more formal than local purchasing programmes. LCRs have been used to promote domestic supply of goods and services, bolster job creation, and enhance domestic security. Countries like Argentina, Brazil, China, India, Indonesia, Russia, And Saudi Arabia all use LCRs. However, a chapter exploring localization measures concludes that they demonstrate few positive outcomes:

The results show that the economic impact of LCRs is limited and gener­ally negative. The policies tend to be focused on specific sectors and have little broader impact while undermining the long-run competitiveness of those sectors. By artificially increasing prices, these policies, in turn, artificially increase production, and the only way to maintain these production gains is through continued government intervention. This is not a long-term solution to employment or industry growth. A better solution with stronger domestic linkages would be to allow foreign firms to find competitive partners in the domestic economy on their own.[[40]](#footnote-40)

## Straightforward procurement processes

If governments do not consider how to meet procurement objectives while maintaining straightforward systems and policies, the result is often an unnecessary administrative burden on both vendors and procuring entities. Smaller vendors, in particular, may be discouraged from engaging in complex procurement processes because of the resources needed to follow the protocols. In a report that explores barriers to participation in local and state government procurement and contracting, with a focus on entrepreneurs of colour, Theodos, McManus, and Rajninger (2024) note:

Small businesses in particular experience barriers when starting to do business with government (as either a prime vendor or a subcontractor), as well as throughout the life cycle of a government contract, as they tend to have fewer resources and less capacity available to devote to the contracting process and struggle to compete against larger firms. For example, many contracts include insurance or bonding requirements, which are more difficult for small businesses to meet than for large firms with stronger financial capacity.[[41]](#footnote-41)

The same authors point out that an additional barrier to entry which disproportionately affects smaller vendors is a lack of clear government communication and outreach networks, thus impeding vendors’ awareness of potential opportunities.

This complexity also costs the procuring entities, particularly in terms of the extra time and money it takes to implement unnecessary policies and conduct extraneous administrative procedures. But there have been efforts to address these issues. Countries in the OECD including Chile, Estonia, and Luxembourg have sought to circumvent procurement policy complexity by establishing central purchasing bodies that can fulfil multiple functions intended for one or more contracting authorities, such as:

* Buying goods or services;
* Awarding public contracts for goods, services, or works; and
* Establishing framework agreements for goods, services, or works.

These efforts have aimed to reduce prices by using the principle of economies of scale, reducing duplication of efforts, and improving contracting processes.[[42]](#footnote-42)

|  |
| --- |
| **Box 1: The Czech Republic’s efforts to amend public procurement**  In 2012, the Czech Republic amended the 2006 Public Procurement Act (Article No. 137/2006 Coll.) with key provisions aimed at enhancing transparency, refining procurement procedures, improving tender documents, and tightening selection criteria, along with introducing additional enforcement measures. The reform aimed to encourage competitive tendering instead of direct awards. Although this was a commendable objective, the reform failed to account for the increased administrative burden it would impose on contracting authorities and overlooked the necessary preparatory steps to equip these authorities to implement the new legal requirements effectively.  Due to political pressure to fulfil the new government's anti-corruption promises, the reform was rushed, skipping the usual consultation process. It was approved quickly without valuable feedback from those responsible for applying the new laws. As a consequence, the reform was unsustainable, and within a year, many of the more burdensome amendments were rolled back.[[43]](#footnote-43) |

# 

# Key challenges associated with complex procurement policy environments

We have seen how procurement policies may inhibit innovation and how they create unnecessary complexity. In this section, we identify the key policy-related challenges within procurement systems, advocating for greater flexibility and simplicity to enhance procurement effectiveness.

## Bureaucracy and complicated regulatory environments

National or provincial education systems are large and involve many different stakeholders and interests. Changing procurement practices with buy-in from all necessary stakeholders can therefore be a challenging task.

Procurement regulations can include local, provincial, and national laws, as well as procurement policies and procedures specific to educational institutions.[[44]](#footnote-44) As we have seen, complex regulatory environments couched in bureaucracy and approval processes can result in inefficiency and can contribute to administrative burdens for both the procuring entity and the supplier. This could potentially limit them from pursuing goods and services that would optimally suit their needs. In South Africa, procurement is highly decentralized and there are approximately 80 legal instruments and accompanying regulations governing public procurement across the public sector. Similarly, in the US, Daniels (2023) explains that K-12 procurement is highly complex:

Purchasing occurs on a calendar structured around the academic calendar by necessity. Budgets are set largely by public funding allocations and subject to significant red tape, even when augmented by more local discretionary funding. Decision-making processes vary from district to district and state to state, which adds to the complexity for suppliers in working with various schools and districts.[[45]](#footnote-45)

Evidence of the impact that bureaucratic and inefficient procurement policies on education spending is difficult to find and the evidence that is available is significantly skewed toward the Global North. However, it does point to prominent challenges in education procurement. In 2014, it was reported that the Fort Worth, Texas School District spent nearly $3 million on technology and software that was neither necessary nor intended for use. In the same year, a comprehensive survey[[46]](#footnote-46) found that American cities making the largest investments in education were often those with the lowest test scores.[[47]](#footnote-47) This type of spending is both wasteful and woefully far removed from the objective of improving education outcomes. One cause of this is that the time, rules, and paperwork required to complete the procurement process in the US can be overwhelming. A 2017 report found that buying an item that costs just $50 takes up to 16 days to process (excluding fulfilment and shipment). Large purchases can take several months to procure.[[48]](#footnote-48)

The challenges that these bureaucracies pose extend into concerns about corruption and a lack of transparency. A report by the World Bank entitled *Enhancing Government Effectiveness and Transparency: The Fight Against Corruption* includes case studies related to procurement in different sectors across developing countries. The report demonstrates the balancing act that governments face in procurement – regulations and policies play a crucial role in mitigating against corruption, promoting fairness, and ensuring efficiency, but systems that become mired in a web of bureaucratic procedures might actually facilitate the misuse of public funds. The report explains:

The procurement phase may hold the highest risk of corruption.Compared with other areas of development lending, large-scale, technically elaborate infrastructure projects require more specialized contractors and consultants and more capital input, leading to complex contractual procedures throughout. The procurement phase may indeed be where this complexity creates the most entry points for corruption, and the biggest chance of rewards for misconduct. A study showed that government procurement worldwide was worth around USD9.5 trillion in 2014. Due to the size of the market, even low percentage levels of corruption account for enormous financial losses.[[49]](#footnote-49)

Though the report does not focus exclusively on education, it provides insights into the direct link between procurement policies and government spending and efficiency, which can be extrapolated to the education sector.

Providing an enabling environment for schools to procure the goods and services they need provides a viable alternative to bureaucratic, centralized regulatory environment where it is difficult to change resource allocations. This does, however, depend on whether schools have the capacity to use their autonomy effectively and constructively using mechanisms such as investing in school leadership, together with administrative and technical personnel. It also requires adequate budgeting and accounting systems, and contract management and procurement processes. Some centralized governments support this kind of capacity building in schools. For instance, the United Kingdom has introduced several initiatives to support schools with resource management and improving the efficiency of their non-staff spending. This includes the Schools’ Buying Strategy, which the Department for Education launched in 2017. Because many schools experience challenges procuring goods and services in complex market conditions, the Department for Education shares budget management tools and information aimed at financial administrators and school leaders. Schools are also able to take advantage of prices negotiated at the national level (and which benefit from economies of scale) through ‘National Deals’ framework agreements. The National Deals allow schools to benefit from savings on their existing contracts for goods and services provision, including water and electricity, software licences, and ICT.[[50]](#footnote-50)

## Lack of accountability

A lack of accountability can severely undermine public procurement systems, often resulting in elevated levels of corruption and malpractice. Looking at the South African context, van Staden, Fourie and Holtzhausen (2022) explain that the country’s procurement system faces challenges such as a lack of capacity, inadequate planning, procurement mismanagement, unethical and unlawful practices, conflicts of interest, and inadequate service delivery. The 2015 and 2016 Procurement Review Reports, released by the National Treasury, highlight other ongoing procurement issues, such as under-skilled leadership, staff shortages, and high turnover rates. While some progress was noted between the two reports, many challenges persisted.[[51]](#footnote-51) Though each of these are issues in and of themselves, the fact they have persisted points to an overall lack of accountability regarding hiring and procurement decisions, which in turn leads to a proliferation of systemic inefficiencies.

Similarly, procurement systems in the Philippines have suffered from pervasive corruption and shortcomings, which have often been tied to a lack of accountability. For example, public procurement monitoring and sanctioning responsibilities are divided among multiple agencies – the Commission on Audit (CoA), the Government Procurement Policy Board, and the Office of the Ombudsman. This fragmentation has led to bureaucratic delays and gaps, allowing corrupt practices to go unpunished. The CoA, while empowered to audit and investigate, lacks the authority to impose sanctions, relying on other agencies to take action on its findings. This has often resulted in inaction or delayed responses to procurement irregularities. Moreover, the CoA's capacity to oversee public procurement is limited, as it is tasked with multiple responsibilities beyond procurement. This led to shallow investigations that may have missed inefficient practices that technically complied with the law but were still problematic.[[52]](#footnote-52)

In other cases, policy objectives might be politically motivated or could inadvertently enable biased procurement practices. The global procurement market is valued at approximately US$13 trillion, making public procurement the number one corruption risk for governments, according to the United Nations, the World Bank, and the OECD. Misuse and waste of public resources mean that annually, billions of dollars are diverted from serving the public.[[53]](#footnote-53) Afghanistan, for example, faces extensive corruption in the procurement and supply of teaching and learning materials. Although textbooks should be issued to students free of charge, there have been reports that they are sold by government officials, teachers, and students instead, creating a shortage in classrooms. Officials from the Ministry of Education reportedly supply more textbooks to schools where they are better connected.[[54]](#footnote-54)

A lack of accountability for policy outcomes can have far-reaching budgetary implications. As Kirya (2019) explains:

The budget is the main policy instrument of the government. However, stated policy objectives and priorities often do not find expression in annual budgets. For example, even though government policy documents may pledge adherence to the goal of universal primary education, the defence sector and large infrastructure projects often receive a disproportionate share of the budget, in part because they provide more opportunity for kickbacks and pay-offs to politicians. Distortions also occur in budget revision processes: the education budget (as part of the social sector) is usually more affected by reversals of budget allocation decisions than, for example, interest payments and programmes with a high political profile.[[55]](#footnote-55)

The various issues outlined above, all of which are attributable to a lack of accountability, underscore the critical need for robust performance management mechanisms that hold procurement officials and departments accountable. Without accountability systems, procurement processes can get stuck in a cycle of mismanagement which has the potential to snowball and degrade the entire system over time. Providing incentives, such as performances bonuses, career advancement opportunities, awards, and enhanced responsibilities, can further enable the successful execution of procurement processes. Equally important is to encourage coordination and collaboration among the various agencies responsible for procurement oversight, ensuring that gaps are closed and opportunities for inefficiencies or corruption are minimized.

## Policies may limit or distort the supply of goods and services

In some instances, procurement policies can constrain the supplier pool. For example, All-of-Government contracts in New Zealand create single supply agreements for particular goods and services that are commonly procured, thereby leveraging the government's collective purchasing power. The central purchasing organization, New Zealand Government Procurement, examines the contract's viability and potential advantages before the government issues a call for bids. Participation in these contracts is free for all state and state-integrated schools.[[56]](#footnote-56) However, this narrows the pool of potential suppliers, creating barriers to entry for new or more qualified ones and potentially distorting the market.

One way to mitigate against the risks of restrictive contracting approaches is to introduce open contracting, which increases disclosure of government contracting and procurement decisions and processes. It aims to increase competition, improve public service delivery, and ensure that governments get better value for their money.[[57]](#footnote-57) Open contracting can be used in myriad areas in the education sector, including school construction, renovation, and purchases for school equipment, meals, and resources.[[58]](#footnote-58) For example, in Paraguay, a decade-long community campaign led to a considerable improvement in monetary allocations for school facilities in Ciudad del Este over three years. Over 80% of the most disadvantaged schools now receive funding, compared to less than 20% in 2015.[[59]](#footnote-59)

Open contracting can effectively change how money is spent in education by clearly delineating policy priorities, tracking actual expenditure, and providing the public with a data-driven mechanism to hold governments accountable for procurement decisions and processes.

## Lack of human resources capacity

Capacity is a key, yet often overlooked, concern in public procurement. As we have seen throughout this paper, the public sector often faces significant resource constraints, and a failure to acquire and build the necessary human resources capacity can significantly impede the provision of public services like education. A lack of capacity was found to be an issue in Uganda (see Box 2), where the following was observed with its old procurement system which has subsequently been overhauled:

Procurement knowledge and expertise at policy and operational levels were inadequate. This implies that the personnel involved were severely handicapped concerning the requisite procurement skills. Analysis had also revealed that apart from World Bank documents, the procurement system in the country lacked standard documents for use in specific contract situations. [[60]](#footnote-60)

|  |
| --- |
| **Box 2:** **An example of challenges faced with complex procurement systems is Uganda**  The Ugandan Government experienced two sources of pressure to review its public procurement system and design a restructuring plan. The first was that it realized that the old system was unable to cope with an influx in transaction demands, the increased value of procurement budgets, and the scale and complexity of procurement activities. These demands were occurring in a context that created a second source of pressure – insufficient bureaucratic accountability and transparency. In response to this, donors began applying pressure on the Government to implement corrective measures. A document by the World Trade Organization explains:  The lack of focus in the existing regulations and guidelines were giving rise to decisions, which were devoid of objectivity, accountability and transparency and resulted in a high incidence of corruption and high expenditure.[[61]](#footnote-61)  Furthermore, the document found that the Central Tender Board, which was responsible for overseeing public procurement processes, had disparate and outmoded procurement regulations and procedures. |

The case of the Office of Government Procurement (OGP) in Ireland illustrates the critical need for capacity building within procurement systems. The OGP was established in 2013 as a central purchasing body for all Irish public service procurement. As it sought to professionalize procurement practices and centralize purchasing functions – which had previously been highly fragmented, with many departments managing their own procurement functions – it faced challenges in developing leadership capabilities and maturing processes. A case study on the OGP indicated that attracting, developing and retaining talent was an issue:

The internal challenges in relation to retention, leadership and culture might simply relate to organizational growth or could be symptomatic of talent shortages, in circumstances where attracting and retaining qualified procurement practitioners presents a challenge across the EU (European Commission, 2016b). The leadership team was philosophical about the recruitment challenge because it allowed for continuous structural review and organizational flexibility: as new demands were placed on the OGP it could be reconfigured to meet them (CPO, 2016). But it was not simply a numbers game as there was an over-reliance on key people (OGP staff, 2016) and managers were reluctant to let go (OGP staff, 2016) and push autonomy to the next level (CPO, 2016), which may account for slightly lower than civil service average scores for autonomy, job skills match, and competence in the Civil Service Employee Engagement Survey 2015 (see Exhibit 12.7). [[62]](#footnote-62)

This foregrounds the importance of investing in ongoing training, leadership development, and the creation of a talent pipeline to ensure that procurement entities can not only achieve cost savings and ensure regulatory compliance but also adapt to evolving economic conditions. Strengthening capacity in these areas is essential for sustaining effective procurement systems.[[63]](#footnote-63)

Existing evidence points to the benefits of capacity building in this area. A study examining government procurement entities in Rwanda found a strong correlation between capacity building in procurement and regulatory compliance. The research assessed the effects of training, coaching, and leadership development, concluding that these interventions had a positive impact on improving procurement practices and ensuring regulatory adherence.[[64]](#footnote-64)

Ultimately, capacity building should not occur in isolation from human resource management processes. Building procurement officials’ capacity is key to ensuring that procurement systems comply with the necessary regulations and policies, but also that procurement specialists are able to meaningfully contribute to the education ecosystem in which they play an indispensable role. This involves providing the necessary training and development opportunities as well as integrating capacity building efforts with broader organizational strategies, such as succession planning and performance management. By doing so, organizations can cultivate a more resilient procurement workforce that is capable of driving sustainable improvements in procurement practices.

## Balancing fiscal efficiency and savings with delivery

Governments are driven to improve key indicators including equity and efficiency of their education systems. However, these priorities are often presented as a trade-off in terms of resource allocation – for example, introducing equity measures within an education system might include channelling resources toward disadvantaged students, which might not correlate to a corresponding increase in student achievement.[[65]](#footnote-65)

Countries face various constraints on how public money is spent. In many countries, a significant portion of initial funding for public schooling comes from the central government, predominantly through tax revenue. Sub-central levels of government generally contribute to funding a portion of their own revenue-generated funding too. In 2019 across OECD countries, 59% of public funds for non-tertiary education was derived from central governments (before intergovernmental transfers). Local authorities provided 27% of initial funding, while regional governments provided 15%.[[66]](#footnote-66) Looking at cases from around the world, there are often complex arrangements for responsibilities around education funding transfers which in many cases creates constraints on how and where money is spent:

Funding may be initially transferred between different levels of authorities and may be specified for a particular educational purpose (earmarked funding), for compulsory education (block grant) or generally allocated for use in the public sector (lump sum funding)… Depending on the type of conditions set in the initial transfer of funds, this will influence the degree of freedom that the authorities with final responsibility for allocating funds to school [sic] will have.[[67]](#footnote-67)

These arrangements are primarily designed to ensure that the system provides adequate funding for key public sectors and subsectors; however, it might also inadvertently result in undue top-down limitations on expenditure.

There are major disparities in public spending on education for students around the world. The wealthiest countries spend over $8,000 per student per year, compared to their counterparts from the poorest countries who manage just $54 per student annually.[[68]](#footnote-68) Those countries that have more public funding at their disposal understandably have significantly few constraints on what they can spend on.

Global economic conditions have also influenced governments’ spending patterns. Following the 2008 financial crisis and the COVID-19 pandemic, governments have been under increasing fiscal consolidation pressure. In response, many have introduced increasingly stringent spending reviews to implement strategic cost savings. As the OECD (2017) explains:

Rather than evaluating new policies and expenditure proposals, spending reviews are primarily designed to identify potential areas for savings in existing budget lines and recurrent expenditure, either through improved efficiency or reductions in services and transfer payments. Spending reviews may be conducted with a pre-defined savings target, as a means to set [Medium-Term Expenditure Frameworks] or to define sectoral expenditure ceilings during the budget preparation. The nature of the reviews varies considerably across countries with regards to their scope, frequency, and the types of saving measures they propose.[[69]](#footnote-69)

More than three-quarters of OECD countries indicate that they conduct spending reviews either annually or periodically, while some middle-income and emerging market economies like South Africa and Ukraine have also introduced spending reviews to measure and consolidate public expenditure. Spending review objectives and methodologies differ across countries, with some countries implementing them as a quality improvement mechanism for specific programmes and policies, while others have implemented them to manage overall expenditure or to align expenditure with governments’ priorities.[[70]](#footnote-70) Although spending reviews are important tools for fiscal consolidation and efficiency improvements, they are primarily driven by a cost saving objective. Although decisions are informed by data, they are often conducted by finance ministries or political leaders who determine the scope, timeframes, and savings targets for the reviews,[[71]](#footnote-71) thus potentially deprioritizing education spending on access or equitability indicators if they fall out of scope or are deemed to be secondary policy objectives, with cost reduction given precedence instead.

Even the available evidence regarding the impact of public procurement in general demonstrates a bias toward the topic of savings, implying that this is a key indicator in determining the overall effectiveness of a public procurement system, as outlined below:

The quality of evidence on the impact of public procurement interventions is mediocre, with reliable evidence established in multiple countries using diverse analytical methods only for selective, typically narrow tools. Although there is a range of policy tools with global policy interest and extensive implementation record, these have received little to no evaluation. As high-quality research uses different outcome measures, comparing intervention effectiveness is only possible for a very narrow outcome: savings.[[72]](#footnote-72)

Policy objectives can exist in tension with one another. In some instances, governments need to balance this by prioritizing specific characteristics or objectives over others. However, evidence suggests that there has been a consistently disproportionate focus on cost savings over other preferential objectives such as increased access or equity within education systems. In developing and augmenting the EdTech ecosystem, expenditure efficiency will, in some cases, need to be deprioritized by governments in favour of procurement processes that will have a broader impact on equity, access, and quality of education. However, we contend that procurement decisions should, where possible, be bottom-up instead of being top-down. That is, procurement decisions should stem from deep observation and on-the-ground feedback regarding the needs of the system and a focused effort to allocate resources accordingly, rather than forcing the system to conform to arbitrary cost-cutting measures.

## Prioritizing processes instead of outcomes

One of the consequences of an increasingly complex procurement policy and regulatory environment is that there are more rules to be followed, shifting the focus to fulfilling specific eligibility criteria and processes instead of seeing procurement as a means of achieving specific education outcomes. The effects of this are wide ranging.

The rules, processes, and systems that regulate public procurement have evolved over decades and new layers of policy have been added every time policymakers or practitioners identify new challenges around fraud and resource wastage. While the proliferation of policies might be seen as positive from a regulatory perspective, in practice, they can create unnecessary closure or implementation hurdles. This can be both frustrating and seemingly pointless, as it shifts the focus to the processes themselves instead of channelling resources toward addressing learners or teachers’ needs, economic conditions, and other factors.

Moreover, policies and regulations are not always updated regularly or implemented well. As the World Bank notes the following regarding EdTech provision:

In South Africa, the main guiding document for the use of technology in education has not been updated since 2004. The resulting lack of guidance about which curriculum-aligned content and software schools can buy, and how to buy it, is an obstacle to effective teaching and learning resource provision.[[73]](#footnote-73)

Thus, having a national or state government review its procurement procedures regularly is crucial to ensuring that those procedures are indeed protecting the public interest instead of reinforcing outdated procurement processes.[[74]](#footnote-74) Although compliance is a central tenet of procurement, it is not the only priority, and the need for regulation should be carefully balanced with the desire to achieve the best outcomes for the end users.

# Conclusion: How do procurement systems need to shift to enable better spending?

We have seen numerous examples of procurement systems around the world that are characterized by complexity, rigidity, inefficiencies, and a lack of accountability. These challenges make it difficult to change how money is spent on education and constrain procurement systems from fulfilling their functions optimally. There is clearly more work that needs to be done to develop procurement models that effectively support the OER and digital learning ecosystem. So, what needs to change?

Fundamentally, facilitating effective procurement practices demands more innovative and simplified spending. For example, it is more difficult to procure good materials development services than it is to buy digital textbooks. It is also very difficult to engage in collaborative co-funding of materials development with other governments. And both of the above require more sophisticated skills to do the procurement and to manage the contracts than just purchasing textbooks. This can only be addressed by employing a holistic approach to improving procurement processes.

Tackling these challenges would likely include striking a balance between outlining clear procurement principles and regulatory environments that curb corruption and opacity on the one hand, but that provide flexibility and space for innovation on the other. From a policy standpoint, governments can make several changes to better facilitate procurement process. Reforms might involve the following:

* **Develop a core set of procurement standards and principles**. These should not be ‘nice-to-have’ or ‘tick-box’ principles; they should provide a strong foundation to inform procurement policies, defensible under scrutiny, and should align with the government’s vision for the kind of education system it wants to develop.
* **Reduce policy creep by limiting the number of procurement policies and legislation, simplifying their contents, and aligning them with the core set of procurement standards and principles**. Procurement policies and regulations should be easy to understand and implement. It is much more effective to hold stakeholders accountable to a clear set of policies and regulatory procedures than it is to attempt to implement a web of overly prescriptive and sometimes contradictory rules. Policies should, to the greatest extent possible, focus on clearly defined outcomes and should be reviewed regularly to determine progress and required adjustments.
* **Build capacity of government procurement specialists and education advisors** so that they are empowered to make and implement procurement decisions (see Appendix 2 for a list of skills and competences).
* **Reduce siloed decision-making by promoting communication**. Relevant stakeholders are more likely to align on procurement decisions when they are aware of each other’s needs and processes.
* **Promote greater agility in procurement policies and regulations**. This will allow governments to respond to market conditions more effectively. Introducing mechanisms like flexible framework agreements, which allow vendors to provide their own terms, can create more sustainable and reliable procurement streams while maintaining a level of competition in the market.
* **Adopt more flexibility in government financing**. This will allow governments to plan and invest in important things that can take a long time to complete, and to pivot when necessary.
* **Develop open data systems and conduct regular expenditure analyses** to drive iterative decision making and promote accountability.
* **Implement e-procurement systems**. This can expedite procurement processes, reduce their administrative burden, promote transparency regarding expenditure, and reduce procurement costs, bureaucracy, and corruption.
* **Decentralize procurement processes** **where possible.** Allowing more decisions to be made by provinces, municipalities, and schools increases accountability for outcomes, as well as ensuring that procurement decisions are more context-specific.
* **Incentivize procurement of high-quality, innovative goods and services** by using innovation procurement and awarding contracts to providers based on the most effective and creative solutions.
* **Modify procurement policies to accommodate procurement of digital resources.** Open source and interoperable solutions should be given priority and policies should allow for the purchase of digital infrastructure and software.
* **Research and document procurement wins and shortcomings, particularly in the Global South.** A larger body of evidence on successes, challenges, and lessons learned will allow governments to provide targeted interventions to address their shortcomings. The paucity of research from Global South contexts in particular highlights a missed opportunity in the education development sector to understand the nuances of these procurement systems and systematically address challenges.
* **Implement monitoring and evaluation mechanisms for procurement policies and plans** to measure their impact on education outcomes, and identify best practices and implementation gaps.

# References

Ahmad, R.S. (2023). Procurement Challenges in Education: Identifying the Roadblocks and Solutions. LinkedIn. Retrieved from<https://www.linkedin.com/pulse/procurement-challenges-education-identifying-engr-iosh-cips-l4>

Baijnath, M. and Butcher, N. (2023). Policy Complexity and School Curricula: A case for openness in the education system. Retrieved from <https://www.nba.co.za/resource/policy-complexity-and-school-curricula-case-openness-education-system>

Bailey, J., Owens, D., Schneider, C., Vander Ark, T. and Waldron, R. (2015). Smart Series Guide to Edtech Procurement. Retrieved from <http://digitallearningnow.com/site/uploads/2014/01/Procurement-Guide-FINAL.pdf>

Carter-Rau, R. and Olsen, B. (2023). How to Improve Government Decision Making Around Edtech Innovations. The Brookings Institution. Retrieved from <https://www.brookings.edu/articles/how-to-improve-government-decisionmaking-around-edtech-innovations/>

Casier, L. (2019). Canada’s International Trade Obligations: Barrier or Opportunity for Sustainable Public Procurement?International Institute for Sustainable Development. Retrieved from<https://www.iisd.org/system/files/publications/canada-international-trade-spp.pdf>

Coulson, A.J. (2014). State Education Trends: Academic performance and spending of the past 40 years. Retrieved from <https://www.cato.org/sites/cato.org/files/pubs/pdf/pa746.pdf>

Daniels, C. (2023). An Overview of K-12 Purchasing and Procurement Processes — as well as some recommendations. Medium. Retrieved from <https://medium.com/@chuckdaniels.today/an-overview-of-k-12-purchasing-and-procurement-processes-as-well-as-some-recommendations-fd443559fe68>

Evans, R. and Glasgow, R.A. (2021). A Deep Dive into Canada’s Public Procurement Law - 2 Part Series. McCarthy Tetault. Retrieved from <https://www.mccarthy.ca/en/insights/articles/deep-dive-canadas-public-procurement-law-2-part-series>

Fazekas, M. and Blum, J.R. (2021). Improving Public Procurement Outcomes: Review of Tools and the State of the Evidence Base. World Bank. Retrieved from <https://openknowledge.worldbank.org/server/api/core/bitstreams/822b8372-d6fd-5379-95dd-a848a421da9e/content>

Flaig, D. and Stone, S.F. (2024) Localization Measures: A global perspective. In Ing, L.Y. & Grossman, G.M.(Eds), Local Content Requirements: Promises and Pitfalls, Routledge-ERIA Studies in Development Economics, ISBN 978-1-003-80691-2, Routledge, London.

Frechette, K. (2018). The Challenges of Education Procurement. Retrieved from <https://www.fairmarkit.com/blog/the-challenges-of-education-procurement>

Furnas, A. (2013). Transparency Case Study: Public Procurement in the Philippines. Sunlight Foundation. Retrieved from <https://sunlightfoundation.com/2013/10/07/case-study-public-procurement-in-the-philippines/>

Hillman, V. (2022). Edtech Procurement Matters:It Needs a Coherent Solution, Clear Governance and Market Standards. London School of Economics and Political Science, Department of Social Policy. Retrieved from <https://www.lse.ac.uk/social-policy/Assets/Documents/PDF/working-paper-series/02-22-Hillman.pdf>

<http://digitallearningnow.com/site/uploads/2014/01/Procurement-Guide-FINAL.pdf>

<https://www.oecd-ilibrary.org/sites/29dc74c4-en/index.html?itemId=/content/component/29dc74c4-en>

Innocenti, P.M., Guzzy, S.N., Lindsey, W.A., Lucas, T. and Moody, C.M. (2015). Local Preference in Public Procurement: The importance of best value analysis when government has adopted local procurement preferences. Pp. 2. Retrieved from <https://www.nigp.org/resource/position-papers/Local%20Preference%20in%20Public%20Procurement%20Position%20Paper.pdf?dl=true>

International Monetary Fund. (2022). How to Design and Institutionalize Spending Reviews. Retrieved from <https://www.imf.org/-/media/Files/Publications/HowToNotes/2022/English/HTNEA2022004.ashx>

Irish Management Institute. (2017). Case Studies on Innovation and Reform in the Irish Public Sector. Pp30. Retrieved from <https://www.reformplan.per.gov.ie/2014/downloads/files/Case%20Study%20OGP%20FINAL%2004.07.17.pdf>

Junor, P. (2023). Study Reveals Better Edtech Procurement Practices Lead to Better Learning Outcomes. Toronto Caribbean. Retrieved from <https://torontocaribbean.com/study-reveals-better-edtech-procurement-practices-lead-to-better-learning-outcomes/> [Accessed 11 December 2023].

Khan, N. (2018). Public Procurement Fundamentals: Lessons Learned from and for the Field. Emerald Publishing. Retrieved from <https://books.emeraldinsight.com/resources/pdfs/chapters/9781787546080-TYPE23-NR2.pdf>

Kirya, M. (2019). Education Sector Corruption: How to Assess It and Ways to Address It. Anti-Corruption Resource Centre. Retrieved from <https://www.u4.no/publications/education-sector-corruption-how-to-assess-it-and-ways-to-address-it.pdf>

Kotsonis, T. (2023). The UK’s Overhaul of Procurement Legislation. Retrieved from <https://www.pinsentmasons.com/out-law/analysis/uk-overhaul-procurement-legislation>

Lötter, C. (2022). Only South Africa’s Elite Benefits from Black Economic Empowerment – and COVID-19 Proved It. The Conversation. Retrieved from <https://theconversation.com/only-south-africas-elite-benefits-from-black-economic-empowerment-and-covid-19-proved-it-189596> [Accessed 6 December 2023].

Mathekga, R. (2021). The ANC's Last Decade: How the Decline of the Party Will Transform South Africa. Tafelberg: Cape Town.

Matthews, M., Rice, F. and Quan, T. (2022). *Buying Into Learning Outcomes: Educational Technology Procurement Policy and Practice in Canada*. Ottawa, ON: Information and Communications Technology Council (ICTC). Retrieved from <https://ictc-ctic.ca/sites/default/files/ictc-admin/resources/admin/buying-into-learning-outcomes.pdf>

Neil Butcher & Associates. (2024). Building Sustainable Organizational Capacities for EdTech Implementation in Government Agencies: A Concept Note.

Nestulia, V. (2021). Transforming public procurement in education: a lesson on open contracting from Ukraine. UNESCO International Institute for Educational Planning. Retrieved from<https://etico.iiep.unesco.org/en/transforming-public-procurement-education-lesson-open-contracting-ukraine>

New America. (2023). Striking Balance Between Public Procurement and Innovation: Mapping Barriers and Recommendations for Better Public Services at the State Level. Retrieved from <https://www.newamerica.org/digital-impact-governance-initiative/briefs/state-public-procurement-barriers-and-recommendations/>

Norton Rose Fulbright. (2018). Broad-Based Black Economic Empowerment – Basic Principles. Retrieved from <https://www.nortonrosefulbright.com/en-za/knowledge/publications/fe87cd48/broad-based-black-economic-empowerment--basic-principles>

Deringer, H., Erixon, F., Lamprecht, P. and van der Marel, E. (2018). The Economic Impact of Local Content Requirements: A Case Study of Heavy Vehicles. European Centre for International Political Economy. Retrieved from <https://ecipe.org/publications/the-economic-impact-of-local-content-requirements/>

OECD. (2015). Government at a Glance 2015. Pp 142. Retrieved from <https://www.oecd-ilibrary.org/docserver/gov_glance-2015-45-en.pdf?expires=1703002116&id=id&accname=guest&checksum=DDE66D96A75C4ED5BBC262433D06DCD2>

OECD. (2017). The Funding of School Education: Connecting Resources and Learning. OECD Publishing, Paris. Retrieved from <https://www.oecd-ilibrary.org/docserver/9789264276147-en.pdf?expires=1703090034&id=id&accname=guest&checksum=824EBB450E9E120AFF247E2B8EE6B436>

OECD. (2020). System Change in Slovenia: Making Public Procurement More Effective*.* Retrieved from <https://www.oecd-ilibrary.org/sites/0d83e1f9-en/index.html?itemId=/content/component/0d83e1f9-en>

OECD. (2021). Better Governance, Planning and Services in Local Self-Governments in Poland. Pp 336. Retrieved from<https://www.oecd-ilibrary.org/docserver/02aa5682-en.pdf?expires=1691784384&id=id&accname=guest&checksum=553D156CAE955A964285A6350F63C3DD>

OECD. (2022). *Value for Money in School Education: Smart Investments, Quality Outcomes, Equal Opportunities*. Retrieved from <https://www.oecd-ilibrary.org/sites/a49703cb-en/index.html?itemId=/content/component/a49703cb-en#section-d1e13284>

OECD. (nd). The Role of Government Procurement in International Trade. OECD. Retrieved from <https://www.oecd.org/trade/topics/government-procurement/>

Olsen, B. (2023). Government Decisionmaking on Education in Low- and Middle-Income Countries:Understanding the fit among innovation, scaling strategy, and broader environment. Centre for Universal Education at Brookings. Retrieved from <https://www.brookings.edu/wp-content/uploads/2023/08/Olsen-2023.pdf>

Open Contracting Partnership. (nd). Paraguay: How open data has transformed Paraguay’s public procurement. Retrieved from <https://www.open-contracting.org/impact-stories/impact-paraguay/>

Open Government Partnership. (nd). Open Contracting. Retrieved from <https://www.opengovpartnership.org/glossary/open-contracting/>

Owens, D. (2014). 21st Century EdTech Procurement. The Learning Accelerator. Retrieved from <https://learningaccelerator.org/blog/21st-century-edtech-procurement>

Patry, L. (2020). Public procurement law in Canada – An overview (2020). LXM Law LLP. Retreived from <https://lxmlaw.ca/government-procurement-bidding-and-tendering/procurement-law-canada-overview/>

Poisson, M. (2021). Open Contracting: An Illustrative Form of Open Government in Education. UNESCO. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000378372>

Rose, J. (2021). Overcoming the Challenges Facing Innovative Learning Models in K–12 Education: Lessons from Teach to One in *Rethinking K-12 Education Procurement*. Retrieved from <https://www.aei.org/wp-content/uploads/2021/02/BK-Rethinking-K12-Education-Procurement_online.pdf?x91208>

Ruiz, R.C. and Aumentado, D. (2024). From Lockdown to Traction: Building Evidence to Support Philippine Procurement Reforms. World Bank Blogs. Retrieved from <https://blogs.worldbank.org/en/governance/lockdown-traction-building-evidence-support-philippine-procurement-reforms>

Scott, A-M. (2022). Procurement AKA the Crack in Everything That Lets the Bull\*\*it In. Retrieved from <https://ammienoot.com/brain-fluff/procurement-aka-the-crack-in-everything-that-lets-the-bullshit-in/>

Shai, L., Molefinyana, C. and Quinot, G. (2019). Public Procurement in the Context of Broad-Based Black Economic Empowerment (BBBEE) in South Africa: Lessons Learned for Sustainable Public Procurement. *Public Procurement for Sustainability*, Vol. 11(24). Retrieved from<https://www.mdpi.com/2071-1050/11/24/7164>

Simone, A. and Balasundharam, V. (2023). Public Procurement in South Africa: Issues and Reform Options. International Monetary Fund. Retrieved from <https://www.elibrary.imf.org/view/journals/002/2023/195/article-A002-en.xml>

Theodos, B., McManus, S. and Rajninger, T. (2024). Removing Barriers to Participation in Local and State Government Procurement and Contracting for Entrepreneurs of Color. Community Economic Development Hub. Retrieved from <https://www.urban.org/sites/default/files/2024-04/Removing%20Barriers%20to%20Participation%20in%20Local%20and%20State%20Government%20Procurement%20and%20Contracting%20for%20Entrepreneurs%20of%20Color.pdf>

Umuhoza, Y. and Mbonimana, G. (2021). Effect of Capacity Building in Procurement and Regulatory Compliance in Rwanda: A Case of Government Procurement Entities in Rwanda (2017-2019). International Journal of Thesis Projects and Dissertations, Vol. 9(4):1-9. Retrieved from <https://www.researchpublish.com/upload/book/paperpdf-1632829652.pdf>

Uyarra, E., Edler, J.,  Garcia-Estevez, J.,  Georghiou, L. and Yeow, J. (2014). Barriers to Innovation Through Public Procurement: A Supplier Perspective. *Technovation*, Vol. 34(10): 631-645. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0166497214000388>

Van Staden, A., Fourie, D.J. and Holtzhausen, N. (2022). Development of an Accountability Framework in the Public Procurement System: Case of the emerging market. Corporate Governance and the Organizational Behaviour Review, 6(2), 71-84.

Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. OECD. Retrieved from <https://www.oecd-ilibrary.org/sites/29dc74c4-en/index.html?itemId=/content/component/29dc74c4-en>

World Bank. (2020). Enhancing Government Effectiveness and TransparencyThe Fight Against Corruption. Retrieved from <https://documents1.worldbank.org/curated/en/235541600116631094/pdf/Enhancing-Government-Effectiveness-and-Transparency-The-Fight-Against-Corruption.pdf>

World Bank. (2021). Unleashing the Power of Educational Technology in TVET Systems. Retrieved from <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/EdTech-Report-FIN2-web.pdf>

World Bank. (2023). Demographic Changes and Fiscal Constraints Threaten the Future of Education in Low-income Countries. Retrieved from <https://www.worldbank.org/en/news/feature/2023/12/12/demographic-changes-fiscal-constraints-future-education-low-income-countries-efw>

World Trade Organization. (c.2003). Public Procurement Reforms: Issues and Challenges – The case of Uganda. Pp 7. Retrieved from <https://www.wto.org/english/tratop_e/gproc_e/wkshop_tanz_jan03/ugandacase3_e.doc>

# Appendix One: Principles commonly found in procurement policies

The principles below are drawn from Khan (2018),[[75]](#footnote-75) who references definitions provided by The World Bank Policy on ‘Procurement in IPF (Investment Project Financing) and Other Operational Procurement Matters.

|  |  |  |
| --- | --- | --- |
| **Principle** | **Description** | **Case studies** |
| Fairness | Policies containing this principle use mechanisms such as competitive bidding processes or incentivizing small and medium-sized businesses to submit bids. | * **Promoting fair access of SMEs to government contracts:** A World Bank report found that approximately 43% of the 180 countries surveyed had introduced legal provisions or policies to encourage fair access of SMEs to government contracts. The report notes:   In Algeria, Côte d’Ivoire, Dominican Republic, India, and Morocco for example, procuring entities are required to ‘set aside’ around 20 percent of the total value of government contracts to SMEs. That ratio increases to 25 percent in Kenya and Angola and 40 percent in Taiwan, China. [[76]](#footnote-76)   * **Public Contracts Regulations (United Kingdom):** The UK has Public Contracts Regulations that govern the procurement process for public contracts. The regulations aim to ensure fair competition and value for money by, for example, offering framework agreements, which are pre-negotiated supplier contracts that public sector organizations can use. These agreements are established through a competitive bidding process and often include multiple suppliers. Although framework agreements can be beneficial, they present unique issues, including limitations in supplier choice, reducing competition over time, and creating complexity for suppliers who often find it difficult and resource-intensive to get into framework agreements. There are several guidelines for school procurement, together with detailed information on the Department for Education’s website on procurement procedures. There is also an extensive list of various directives, regulations, policies and guidance relating to the procurement of supplies, services and works for the public sector. |
| Transparency in the procurement process | Such policies require government actors to disclose information about contract opportunities, evaluation criteria, and contract awards. | * Public Procurement Act (Canada): In Canada, the common law regarding public procurement has developed over the past three decades or more. The key principles guiding public procurement include fairness, openness, and transparency. These rules are applicable to educational institutions that receive federal funding. Public Services and Procurement Canada (PSPC) assists federal departments and agencies by acting as the principal purchasing agent, property manager, financial manager, accountant, pay and pension administrator, integrity advisor, service provider, and linguistic authority. PSPC amended the Controlled Goods Regulations in 2015, improving clarity and transparency regarding the duties of registrants and promoting uniform interpretation among users. The Canadian Government also has a fairness monitoring programme which ‘retains and manages the services of independent fairness monitors who act as objective third parties to observe all or part of a procurement activity.’[[77]](#footnote-77) * Public Procurement Reform Law (Philippines): The Philippines’ procurement policy aims to ensure (i) transparency, (ii) competitiveness, (iii) streamlined procurement process, and (iv) civil monitoring. In theory, the Public Procurement Reform Law aligns with international best practices. However, implementation challenges have caused notable procurement weaknesses. For example, reports revealed that widespread corruption still exists, despite such policy measures. There were also reports of procurement delays. |
| Value for money and efficiency | Such policies aim to ensure that governments spend money efficiently and effectively. One mechanism used to achieve this is through economies of scale, where governments can reduce the total cost of purchases by reducing the purchasing price due to favourable prices that suppliers provide for bulk purchases. Governments can also reduce transaction costs by streamlining acquisition processes. | * The UK has various policies that promote value for money and fair competition. This includes the use of spending controls and centralized procurement through the Crown Commercial Service, which buys common goods and services once on behalf of the whole government instead of conducting multiple transactions for different departments. The Government also requires buyers to use Lean Sourcing principles, stating: ‘Your authority must complete all but the most complex procurements within 120 working days from publication of contract notice to award.’[[78]](#footnote-78) * As a key policy instrument, budgets often fall short of meeting the procurement needs of the end users. Many low- and middle-income countries highlight the need for increases in the amount and efficiency of education spending to meet national learning goals. Key sources of inefficiency include:   + Uneven distribution of resources across different spending categories (i.e. salary, non-salary recurrent, capital etc.) and levels of education (i.e. early childhood education to tertiary), resulting in inefficient resources use;   + Earmarked budget allocations limit the flexibility of funds when adjustments are required; and   + Financial allocations are not responsive to accomodate population growth and other changes in education dynamics and structure. |
| Economy | Considers factors like sustainability, quality, and life-cycle cost. It incorporates economic, environmental, and social considerations. | * Public Procurement Code (France): The Public Procurement Code applies to public procurement contracts, concessions, and public-private partnership contracts. In terms of the rules on evaluation of tenders, and in addition to price and cost criteria, contracts are awarded based on quality, with an emphasis on sustainability, such as environmental protection, social inclusion, and biodiversity. * Broad-Based Black Economic Empowerment (B-BBEE) (South Africa): B-BBEE is a policy and legislative framework that aims to promote transformation of the country’s legacy of racial inequality by implementing a series of socio-economic objectives which favour the majority black population. Under the framework, companies are awarded a score based on their level of empowerment and transformation in areas including ownership, management, and skills development. Those with higher scores receive preference when tendering for government tenders and contracts. |
| Integrity | This principle ensures that resources and authority are used for their intended purposes. It aims to prevent fraud and corruption, while promoting high ethical standards. | * **Efforts to promote integrity through rotation models (Korea and Germany)**:[[79]](#footnote-79) To maintain integrity and prevent long-term attachments between public officials and specific contacts, the Korean civil service mandates the rotation of individuals through different roles every two to three years. This rotation practice, also adopted by other civil service systems, helps reduce the risk of favouritism and ensures impartiality in public duties. The German Civil Service has a similar rotation model in its efforts to prevent corruption. |
| Fit-for-purpose | This involves aligning the intended outcomes and procurement arrangements with the project’s development objectives, considering the specific context, risk, value, and complexity of the procurement. The goal is to determine the most suitable procurement strategy to effectively meet the project’s needs. | * The UK’s Procurement Act 2023, which takes effect in 2025, Promotes a more strategic approach to procurement, emphasizing value for money and long-term impact rather than mere compliance. School buyers are encouraged to design procurement strategies that align with their specific school and trust goals while also incorporating social value considerations. |

**References**

Amblard, E., Gillet, K. and Helvig, S. (2023). Public Procurement Laws and Regulations France. Retrieved from<https://iclg.com/practice-areas/public-procurement-laws-and-regulations/france#:~:text=The%20French%20Public%20Procurement%20Code,Council%20of%2026%20February%202014>.

Department for Education. (2015). Public Procurement Policy. Retrieved from<https://www.gov.uk/guidance/public-sector-procurement-policy>

Department for Education. (2019). Buying for Schools: how to buy what you need. Retrieved from<https://www.gov.uk/guidance/buying-procedures-and-procurement-law-for-schools>

Department for Education. (2023). Guidance: Buying for schools. Retrieved from<https://www.gov.uk/guidance/buying-for-schools>

Department for Education. (nd). Find a DfE approved framework agreement for your school. Retrieved from<https://find-dfe-approved-framework.service.gov.uk/?sessionId=67f455d6-2b09-4b52-bd2e-3a7610fbedd1>

Department for Education. (nd). Public Procurement Policy. <https://www.gov.uk/guidance/public-sector-procurement-policy#procurement-policies-for-value-for-money-and-savings>

Draisey, K. (2024). Transforming Public Procurement (TPP) - How procurement will change for some schools and trusts. Department for Education Blog. Retrieved from <https://buyingforschools.blog.gov.uk/2024/01/09/transforming-public-procurement-tpp-how-procurement-will-change-for-some-schools-and-trusts/>

Government of Canada. (nd). Fairness Monitoring. Retrieved from <https://www.canada.ca/en/public-services-procurement/services/standards-oversight/fairness-monitoring.html>

Government of Canada. (nd). Interpretation Policy. Retrieved from <https://www.canada.ca/en/public-services-procurement/corporate/acts-regulations/interpretation-policy.html>

Khan, N. (2018). Public Procurement Fundamentals: Lessons learned from and for the field. Emerald Publishing. Retrieved from <https://books.emeraldinsight.com/resources/pdfs/chapters/9781787546080-TYPE23-NR2.pdf>

OECD. (2016). The Korean Public Procurement Service: Innovating for Effectiveness. OECD Public Governance Reviews. Retrieved from <https://www.oecd-ilibrary.org/governance/the-korean-public-procurement-service_9789264249431-en>

Ratunil, A.L. (2015). Procurement Process at the Department of Education Philippines, Division of Cagayan de Oro City: Looking beyond the Legal Framework. *International Association of Multidisciplinary Research - International Journal of Social Sciences,* 13(1).Retrieved from <https://www.researchgate.net/publication/304486680_Procurement_Process_at_the_Department_of_Education_Philippines_Division_of_Cagayan_de_Oro_City_Looking_beyond_the_Legal_Framework>

Shai, L., Molefinyana, C. and Quinot, G. (2019). Public Procurement in the Context of Broad-Based Black Economic Empowerment (BBBEE) in South Africa—Lessons Learned for Sustainable Public Procurement. Public Procurement for Sustainability, 11(24). Retrieved from<https://www.mdpi.com/2071-1050/11/24/7164>

World Bank. (2016). Benchmarking Public Procurement: Assessing public procurement regulatory systems in 180 economies. Retrieved from: <https://documents1.worldbank.org/curated/en/121001523554026106/Benchmarking-Public-Procurement-2017-Assessing-Public-Procurement-Regulatory-Systems-in-180-Economies.pdf>

World Bank. (2023). The Adequacy of Public Expenditure on Education and the Needs Post-COVID-19. Retrieved from <https://thedocs.worldbank.org/en/doc/9b9ecb979e36e80ed50b1f110565f06b-0200022023/original/Adequacy-Paper-Final.pdf>

# Appendix 2: Areas for capacity building for procurement specialists in government

The non-exhaustive list below highlights the range of knowledge and competences procurement specialists need to excel in their roles. Note that the list might apply to various positions within an organization’s procurement department.

|  |  |
| --- | --- |
| Area | Knowledge and competences |
| **Legal and regulatory compliance** | * National and provincial/state policies * Educational standards and regulations, including curriculum requirements * Legal knowledge including:   + Contract law   + Case law   + Competition law   + Public sector law * Risk management * Due diligence * Dispute resolution |
| **Procurement-related skills** | * Needs assessment and planning * Market analysis * Data analysis * Bid/tender evaluation * Supply chain management * Digital skills (e.g. eProcurement and IT tools) * Contract management and contract close-out * Competitive bidding processes * Trade agreements * Risk management * Strategic sourcing * Reporting and evaluation |
| **Financial** | * Cost management (e.g. evaluating cost estimates) * Approving payments * Forecasting |
| **Ethics** | * Transparent decision-making * Anti-corruption practices, including bribery prevention, addressing bid rigging, and detecting fraudulent transactions * Sustainability and social responsibility * Avoiding preferential treatment, such as nepotism and favouritism * Dealing with conflicts of interest |
| **Interpersonal** | * Communication and collaboration (including conflict resolution and mediation) * Effective negotiation techniques (e.g. cost, price, technical requirements) * Relationship management * Project management * Analytical thinking * Problem solving |

**References**

European Commission. (2020). ProcurCompEU European Competency Framework for Public Procurement Professionals. Retrieved from <https://commission.europa.eu/document/download/b75530a6-9f46-47eb-8971-ded0dc77d1b6_en?filename=procurcompeu-ecf_for_pp_en.pdf>

University of Dayton. (nd). Understanding the Role of the Government Procurement Specialist. Retrieved from <https://udayton.edu/law/government_contracting/articles/understanding_role_government_procurement_specialist.php>

Vendr. (2024). What Does a Procurement Specialist Do? And How To Become One. Retrieved from <https://www.vendr.com/blog/procurement-specialist>

1. Neil Butcher & Associates. (2025). Building Sustainable Organizational Capacities for OER Implementation and Digital Learning: A Concept Note. [↑](#footnote-ref-1)
2. See Baijnath, M. and Butcher, N. (2023). Policy Complexity and School Curricula: A case for openness in the education system. Retrieved from <https://www.nba.co.za/resource/policy-complexity-and-school-curricula-case-openness-education-system> [↑](#footnote-ref-2)
3. Matthews, M., Rice, F. and Quan, T. (2022). *Buying Into Learning Outcomes: Educational Technology Procurement Policy and Practice in Canada*. Ottawa, ON: Information and Communications Technology Council (ICTC). Retrieved from <https://ictc-ctic.ca/sites/default/files/ictc-admin/resources/admin/buying-into-learning-outcomes.pdf> [↑](#footnote-ref-3)
4. Uyarra, E., Edler, J.,  Garcia-Estevez, J.,  Georghiou, L. and Yeow, J. (2014). Barriers to Innovation Through Public Procurement: A Supplier Perspective. *Technovation*, Vol. 34(10): 631-645. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0166497214000388> [↑](#footnote-ref-4)
5. Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. OECD. Retrieved from <https://www.oecd-ilibrary.org/sites/29dc74c4-en/index.html?itemId=/content/component/29dc74c4-en> [↑](#footnote-ref-5)
6. Simone, A. and Balasundharam, V. (2023). Public Procurement in South Africa: Issues and Reform Options. International Monetary Fund. Retrieved from <https://www.elibrary.imf.org/view/journals/002/2023/195/article-A002-en.xml> [↑](#footnote-ref-6)
7. Khan, N. (2018). Public Procurement Fundamentals: Lessons Learned From and For the Field. Emerald Publishing. Retrieved from <https://books.emeraldinsight.com/resources/pdfs/chapters/9781787546080-TYPE23-NR2.pdf> [↑](#footnote-ref-7)
8. Khan, N. (2018). Public Procurement Fundamentals: Lessons learned from and for the field. Emerald Publishing Ltd. Retrieved from <https://books.emeraldinsight.com/resources/pdfs/chapters/9781787546080-TYPE23-NR2.pdf> [↑](#footnote-ref-8)
9. OECD. (2020). System Change in Slovenia: Making Public Procurement More Effective*.* Retrieved from <https://www.oecd-ilibrary.org/sites/0d83e1f9-en/index.html?itemId=/content/component/0d83e1f9-en> [↑](#footnote-ref-9)
10. Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. OECD. Retrieved from <https://www.oecd-ilibrary.org/education/oecd-digital-education-outlook-2023_29dc74c4-en> [↑](#footnote-ref-10)
11. Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. OECD. Retrieved from <https://www.oecd-ilibrary.org/docserver/29dc74c4-en.pdf?expires=1725035222&id=id&accname=guest&checksum=B4112BC32B515C4906C2FD6DECF84A11> [↑](#footnote-ref-11)
12. Kotsonis, T. (2023). The UK’s Overhaul of Procurement Legislation. Retrieved from <https://www.pinsentmasons.com/out-law/analysis/uk-overhaul-procurement-legislation> [↑](#footnote-ref-12)
13. Framework agreements represent a procurement procedure type which typically comprises two stages: in the first stage, a competitive tender takes place (typically a reverse auction) to select one or more suppliers as framework agreement winners whereby they commit to providing products within a given timeframe, price and conditions. In the second stage (the buying stage), the government agencies may buy the products from the framework agreement winners as they wish under the already set conditions in a simplified and speedier procedure (Gur et al., 2015). There may or may not be a competition at the second stage among winners of the first stage for the actual contracts (Albano & Sparro, 2010). Taken verbatim from <https://openknowledge.worldbank.org/server/api/core/bitstreams/822b8372-d6fd-5379-95dd-a848a421da9e/content> [↑](#footnote-ref-13)
14. Ruiz, R.C. and Aumentado, D. (2024). From Lockdown to Traction: Building Evidence to Support Philippine Procurement Reforms. World Bank Blogs. Retrieved from <https://blogs.worldbank.org/en/governance/lockdown-traction-building-evidence-support-philippine-procurement-reforms> [↑](#footnote-ref-14)
15. Shai, L., Molefinyana, C. and Quinot, G. (2019). Public Procurement in the Context of Broad-Based Black Economic Empowerment (BBBEE) in South Africa: Lessons Learned for Sustainable Public Procurement. *Public Procurement for Sustainability*, Vol. 11(24). Retrieved from<https://www.mdpi.com/2071-1050/11/24/7164> [↑](#footnote-ref-15)
16. Norton Rose Fulbright. (2018). Broad-Based Black Economic Empowerment – Basic Principles. Retrieved from <https://www.nortonrosefulbright.com/en-za/knowledge/publications/fe87cd48/broad-based-black-economic-empowerment--basic-principles> [↑](#footnote-ref-16)
17. Lötter, C. (2022). Only South Africa’s Elite Benefits from Black Economic Empowerment – and COVID-19 Proved It. The Conversation. Retrieved from <https://theconversation.com/only-south-africas-elite-benefits-from-black-economic-empowerment-and-covid-19-proved-it-189596> [Accessed 6 December 2023]. [↑](#footnote-ref-17)
18. Mathekga, R. (2021). The ANC's Last Decade: How the Decline of the Party Will Transform South Africa. Tafelberg: Cape Town. [↑](#footnote-ref-18)
19. Bailey, J., Owens, D., Schneider, C., Vander Ark, T. and Waldron, R. (2015). Smart Series Guide to Edtech Procurement. Retrieved from

    <http://digitallearningnow.com/site/uploads/2014/01/Procurement-Guide-FINAL.pdf> [↑](#footnote-ref-19)
20. Scott, A-M. (2022). Procurement AKA the Crack in Everything That Lets the Bull\*\*it In. Retrieved from <https://ammienoot.com/brain-fluff/procurement-aka-the-crack-in-everything-that-lets-the-bullshit-in/> [↑](#footnote-ref-20)
21. See Bulman & Fairlie (2016) and Escueta et al. (2017) in Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. OECD. Pp 301. Retrieved from <https://www.oecd-ilibrary.org/sites/29dc74c4-en/index.html?itemId=/content/component/29dc74c4-en> [↑](#footnote-ref-21)
22. Owens, D. (2014). 21st Century EdTech Procurement. The Learning Accelerator. Retrieved from <https://learningaccelerator.org/blog/21st-century-edtech-procurement> [↑](#footnote-ref-22)
23. Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. OECD. Retrieved from <https://www.oecd-ilibrary.org/sites/29dc74c4-en/index.html?itemId=/content/component/29dc74c4-en> [↑](#footnote-ref-23)
24. World Bank. (2021). Unleashing the Power of Educational Technology in TVET Systems. Retrieved from <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/EdTech-Report-FIN2-web.pdf> [↑](#footnote-ref-24)
25. Junor, P. (2023). Study Reveals Better Edtech Procurement Practices Lead to Better Learning Outcomes. Toronto Caribbean. Retrieved from <https://torontocaribbean.com/study-reveals-better-edtech-procurement-practices-lead-to-better-learning-outcomes/> [Accessed 11 December 2023]. [↑](#footnote-ref-25)
26. Carter-Rau, R. and Olsen, B. (2023). How to Improve Government Decisionmaking Around Edtech Innovations. The Brookings Institution. Retrieved from <https://www.brookings.edu/articles/how-to-improve-government-decisionmaking-around-edtech-innovations/> [↑](#footnote-ref-26)
27. Olsen, B. (2023). Government Decisionmaking on Education in Low- and Middle-Income Countries:Understanding the fit among innovation, scaling strategy, and broader environment. Centre for Universal Education at Brookings. Retrieved from <https://www.brookings.edu/wp-content/uploads/2023/08/Olsen-2023.pdf> [↑](#footnote-ref-27)
28. World Bank. (2021). Unleashing the Power of Educational Technology in TVET Systems. Retrieved from <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/EdTech-Report-FIN2-web.pdf> [↑](#footnote-ref-28)
29. New America. (2023). Striking Balance Between Public Procurement and Innovation: Mapping Barriers and Recommendations for Better Public Services at the State Level. Retrieved from <https://www.newamerica.org/digital-impact-governance-initiative/briefs/state-public-procurement-barriers-and-recommendations/> [↑](#footnote-ref-29)
30. Hillman, V. (2022). Edtech Procurement Matters:It Needs a Coherent Solution, Clear Governance and Market Standards. London School of Economics and Political Science, Department of Social Policy. Retrieved from <https://www.lse.ac.uk/social-policy/Assets/Documents/PDF/working-paper-series/02-22-Hillman.pdf> [↑](#footnote-ref-30)
31. Vidal, Q. (2023). Public Procurement: Shaping Digital Education Ecosystems in *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem.* Retrieved from

    <https://www.oecd-ilibrary.org/sites/29dc74c4-en/index.html?itemId=/content/component/29dc74c4-en> [↑](#footnote-ref-31)
32. OECD. (nd). The Role of Government Procurement in International Trade. OECD. Retrieved from <https://www.oecd.org/trade/topics/government-procurement/> [↑](#footnote-ref-32)
33. OECD. (nd). The Role of Government Procurement in International Trade. OECD. Retrieved from <https://www.oecd.org/trade/topics/government-procurement/> [↑](#footnote-ref-33)
34. Patry, L. (2020). Public procurement law in Canada – An overview (2020). LXM Law LLP. Retreived from <https://lxmlaw.ca/government-procurement-bidding-and-tendering/procurement-law-canada-overview/> [↑](#footnote-ref-34)
35. Evans, R. and Glasgow, R.A. (2021). A Deep Dive into Canada’s Public Procurement Law - 2 Part Series. McCarthy Tetault. Retrieved from <https://www.mccarthy.ca/en/insights/articles/deep-dive-canadas-public-procurement-law-2-part-series> [↑](#footnote-ref-35)
36. Casier, L. (2019). Canada’s International Trade Obligations: Barrier or Opportunity for Sustainable Public Procurement?International Institute for Sustainable Development. Retrieved from<https://www.iisd.org/system/files/publications/canada-international-trade-spp.pdf> [↑](#footnote-ref-36)
37. Patry, L. (2020). Public procurement law in Canada – An overview (2020). LXM Law LLP. Retreived from <https://lxmlaw.ca/government-procurement-bidding-and-tendering/procurement-law-canada-overview/> [↑](#footnote-ref-37)
38. Innocenti, P.M., Guzzy, S.N., Lindsey, W.A., Lucas, T. and Moody, C.M. (2015). Local Preference in Public Procurement: The importance of best value analysis when government has adopted local procurement preferences. Pp. 2. Retrieved from <https://www.nigp.org/resource/position-papers/Local%20Preference%20in%20Public%20Procurement%20Position%20Paper.pdf?dl=true> [↑](#footnote-ref-38)
39. OECD (2016:1) in Deringer, H., Erixon, F., Lamprecht, P. and van der Marel, E. (2018). The Economic Impact of Local Content Requirements: A Case Study of Heavy Vehicles. European Centre for International Political Economy. Retrieved from <https://ecipe.org/publications/the-economic-impact-of-local-content-requirements/> [↑](#footnote-ref-39)
40. Flaig, D. and Stone, S.F. Localization Measures: A global perspective. In Ing, L.Y. & Grossman, G.M.(Eds) (2024): Local Content Requirements: Promises and Pitfalls, Routledge-ERIA Studies in Development Economics, ISBN 978-1-003-80691-2, Routledge, London. [↑](#footnote-ref-40)
41. Theodos, B., McManus, S. and Rajninger, T. (2024). Removing Barriers to Participation in Local and State Government Procurement and Contracting for Entrepreneurs of Color. Community Economic Development Hub. Retrieved from <https://www.urban.org/sites/default/files/2024-04/Removing%20Barriers%20to%20Participation%20in%20Local%20and%20State%20Government%20Procurement%20and%20Contracting%20for%20Entrepreneurs%20of%20Color.pdf> [↑](#footnote-ref-41)
42. OECD. (2015). Government at a Glance 2015. Pp 142. Retrieved from <https://www.oecd-ilibrary.org/docserver/gov_glance-2015-45-en.pdf?expires=1703002116&id=id&accname=guest&checksum=DDE66D96A75C4ED5BBC262433D06DCD2> [↑](#footnote-ref-42)
43. OECD. (2021). Better Governance, Planning and Services in Local Self-Governments in Poland. Pp 336. Retrieved from<https://www.oecd-ilibrary.org/docserver/02aa5682-en.pdf?expires=1691784384&id=id&accname=guest&checksum=553D156CAE955A964285A6350F63C3DD> [↑](#footnote-ref-43)
44. Ahmad, R.S. (2023). Procurement Challenges in Education: Identifying the Roadblocks and Solutions. LinkedIn. Retrieved from<https://www.linkedin.com/pulse/procurement-challenges-education-identifying-engr-iosh-cips-l4> [↑](#footnote-ref-44)
45. Daniels, C. (2023). An Overview of K-12 Purchasing and Procurement Processes — as well as some recommendations. Medium. Retrieved from <https://medium.com/@chuckdaniels.today/an-overview-of-k-12-purchasing-and-procurement-processes-as-well-as-some-recommendations-fd443559fe68> [↑](#footnote-ref-45)
46. See <https://www.cato.org/sites/cato.org/files/pubs/pdf/pa746.pdf> [↑](#footnote-ref-46)
47. Frechette, K. (2018). The Challenges of Education Procurement. Retrieved from <https://www.fairmarkit.com/blog/the-challenges-of-education-procurement> [↑](#footnote-ref-47)
48. Council of the Great City of Schools (2017) in Frechette, K. (2018). The Challenges of Education Procurement. Retrieved from <https://www.fairmarkit.com/blog/the-challenges-of-education-procurement> [↑](#footnote-ref-48)
49. World Bank. (2020). Enhancing Government Effectiveness and TransparencyThe Fight Against Corruption. Retrieved from <https://documents1.worldbank.org/curated/en/235541600116631094/pdf/Enhancing-Government-Effectiveness-and-Transparency-The-Fight-Against-Corruption.pdf> [↑](#footnote-ref-49)
50. OECD. (2022). Governing and Distributing School Funding: Effectively Connecting Resources and Learning in*Value for Money in School Education: Smart Investments, Quality Outcomes, Equal Opportunities*. Retrieved from <https://read.oecd-ilibrary.org/education/value-for-money-in-school-education_a479a655-en#page1> [↑](#footnote-ref-50)
51. Van Staden, A., Fourie, D.J. and Holtzhausen, N. (2022). Development of an accountability framework in the public procurement system: Case of the emerging market. Corporate Governance and the Organizational Behaviour Review, 6(2), 71-84. [↑](#footnote-ref-51)
52. Furnas, A. (2013). Transparency Case Study: Public Procurement in the Philippines. Sunlight Foundation. Retrieved from <https://sunlightfoundation.com/2013/10/07/case-study-public-procurement-in-the-philippines/> [↑](#footnote-ref-52)
53. Nestulia, V. (2021). Transforming public procurement in education: a lesson on open contracting from Ukraine. UNESCO International Institute for Educational Planning. Retrieved from<https://etico.iiep.unesco.org/en/transforming-public-procurement-education-lesson-open-contracting-ukraine> [↑](#footnote-ref-53)
54. Kirya, M. (2019). Education Sector Corruption: How to Assess It and Ways to Address It. Anti-Corruption Resource Centre. Retrieved from <https://www.u4.no/publications/education-sector-corruption-how-to-assess-it-and-ways-to-address-it.pdf> [↑](#footnote-ref-54)
55. Kirya, M. (2019). Education Sector Corruption: How to Assess It and Ways to Address It. Anti-Corruption Resource Centre. Retrieved from <https://www.u4.no/publications/education-sector-corruption-how-to-assess-it-and-ways-to-address-it.pdf> [↑](#footnote-ref-55)
56. OECD. (2020). System Change in Slovenia: Making Public Procurement More Effective*.* Retrieved from <https://www.oecd-ilibrary.org/sites/0d83e1f9-en/index.html?itemId=/content/component/0d83e1f9-en> [↑](#footnote-ref-56)
57. Open Government Partnership. (nd). Open Contracting. Retrieved from <https://www.opengovpartnership.org/glossary/open-contracting/> [↑](#footnote-ref-57)
58. Poisson, M. (2021). Open Contracting: An Illustrative Form of Open Government in Education. UNESCO. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000378372> [↑](#footnote-ref-58)
59. Open Contracting Partnership. (nd). Paraguay: How open data has transformed Paraguay’s public procurement. Retrieved from <https://www.open-contracting.org/impact-stories/impact-paraguay/> [↑](#footnote-ref-59)
60. World Trade Organization. (c.2003). Public Procurement Reforms: Issues and Challenges – The case of Uganda. Pp 7. Retrieved from <https://www.wto.org/english/tratop_e/gproc_e/wkshop_tanz_jan03/ugandacase3_e.doc> [↑](#footnote-ref-60)
61. World Trade Organization. (c.2003). Public Procurement Reforms: Issues and Challenges – The case of Uganda. Retrieved from <https://www.wto.org/english/tratop_e/gproc_e/wkshop_tanz_jan03/ugandacase3_e.doc> [↑](#footnote-ref-61)
62. Irish Management Institute. (2017). Case Studies on Innovation and Reform in the Irish Public Sector. Pp30. Retrieved from <https://www.reformplan.per.gov.ie/2014/downloads/files/Case%20Study%20OGP%20FINAL%2004.07.17.pdf> [↑](#footnote-ref-62)
63. Irish Management Institute. (2017). Case Studies on Innovation and Reform in the Irish Public Sector. Retrieved from <https://www.reformplan.per.gov.ie/2014/downloads/files/Case%20Study%20OGP%20FINAL%2004.07.17.pdf> [↑](#footnote-ref-63)
64. Umuhoza, Y. and Mbonimana, G. (2021). Effect of Capacity Building in Procurement and Regulatory Compliance in Rwanda: A Case of Government Procurement Entities in Rwanda (2017-2019). International Journal of Thesis Projects and Dissertations, Vol. 9(4):1-9. Retrieved from <https://www.researchpublish.com/upload/book/paperpdf-1632829652.pdf> [↑](#footnote-ref-64)
65. OECD. (2022). Using school funding to achieve both efficiency and equity in education in*Value for Money in School Education: Smart Investments, Quality Outcomes, Equal Opportunities*. Retrieved from <https://www.oecd-ilibrary.org/sites/a49703cb-en/index.html?itemId=/content/component/a49703cb-en#section-d1e13284> [↑](#footnote-ref-65)
66. OECD. (2022). Governing and Distributing School Funding: Effectively Connecting Resources and Learning in*Value for Money in School Education: Smart Investments, Quality Outcomes, Equal Opportunities*. Retrieved from <https://read.oecd-ilibrary.org/education/value-for-money-in-school-education_a479a655-en#page1> [↑](#footnote-ref-66)
67. OECD. (2017). The Funding of School Education: Connecting Resources and Learning. OECD Publishing, Paris. Retrieved from <https://www.oecd-ilibrary.org/docserver/9789264276147-en.pdf?expires=1703090034&id=id&accname=guest&checksum=824EBB450E9E120AFF247E2B8EE6B436> [↑](#footnote-ref-67)
68. World Bank. (2023). Demographic Changes and Fiscal Constraints Threaten the Future of Education in Low-income Countries. Retrieved from <https://www.worldbank.org/en/news/feature/2023/12/12/demographic-changes-fiscal-constraints-future-education-low-income-countries-efw> [↑](#footnote-ref-68)
69. OECD. (2017). The Funding of School Education: Connecting Resources and Learning. OECD Publishing, Paris. Retrieved from <https://www.oecd-ilibrary.org/docserver/9789264276147-en.pdf?expires=1703090034&id=id&accname=guest&checksum=824EBB450E9E120AFF247E2B8EE6B436> [↑](#footnote-ref-69)
70. International Monetary Fund. (2022). How to Design and Institutionalize Spending Reviews. Retrieved from <https://www.imf.org/-/media/Files/Publications/HowToNotes/2022/English/HTNEA2022004.ashx> [↑](#footnote-ref-70)
71. OECD. (2017). The Funding of School Education: Connecting Resources and Learning. OECD Publishing, Paris. Retrieved from <https://www.oecd-ilibrary.org/docserver/9789264276147-en.pdf?expires=1703090034&id=id&accname=guest&checksum=824EBB450E9E120AFF247E2B8EE6B436> [↑](#footnote-ref-71)
72. Fazekas, M. and Blum, J.R. (2021). Improving Public Procurement Outcomes: Review of Tools and the State of the Evidence Base. World Bank. Retrieved from <https://openknowledge.worldbank.org/server/api/core/bitstreams/822b8372-d6fd-5379-95dd-a848a421da9e/content> [↑](#footnote-ref-72)
73. World Bank. (2021). Unleashing the Power of Educational Technology in TVET Systems. Retrieved from <https://thedocs.worldbank.org/en/doc/61714f214ed04bcd6e9623ad0e215897-0400012021/related/EdTech-Report-FIN2-web.pdf> [↑](#footnote-ref-73)
74. Rose, J. (2021). Overcoming the Challenges Facing Innovative Learning Models in K–12 Education: Lessons from Teach to One in *Rethinking K-12 Education Procurement*. Retrieved from <https://www.aei.org/wp-content/uploads/2021/02/BK-Rethinking-K12-Education-Procurement_online.pdf?x91208> [↑](#footnote-ref-74)
75. Khan, N. (2018). Public Procurement Fundamentals: Lessons Learned From and For the Field. Emerald Publishing. Retrieved from <https://books.emeraldinsight.com/resources/pdfs/chapters/9781787546080-TYPE23-NR2.pdf> [↑](#footnote-ref-75)
76. <https://documents1.worldbank.org/curated/en/121001523554026106/Benchmarking-Public-Procurement-2017-Assessing-Public-Procurement-Regulatory-Systems-in-180-Economies.pdf> [↑](#footnote-ref-76)
77. Government of Canada. (nd). Fairness Monitoring. Retrieved from <https://www.canada.ca/en/public-services-procurement/services/standards-oversight/fairness-monitoring.html> [↑](#footnote-ref-77)
78. See <https://www.gov.uk/guidance/public-sector-procurement-policy#procurement-policies-for-value-for-money-and-savings> [↑](#footnote-ref-78)
79. OECD. (2016). The Korean Public Procurement Service: Innovating for Effectiveness. OECD Public Governance Reviews. Retrieved from <https://www.oecd-ilibrary.org/governance/the-korean-public-procurement-service_9789264249431-en> [↑](#footnote-ref-79)