INTRODUCTION

Children are in school, but not learning the basics.

More funding is needed to tackle ‘the learning crisis’, but trends show that more money does not lead to more learning.

If we keep going as we are, then there’s no hope of meeting SDG4.

This was the fairly depressing narrative circulated in the boardrooms and inboxes of global education aid architecture back in 2016. After the high of agreeing on ambitious global education goals at the World Education Summit in Incheon in 2015 (a more sector-specific roadmap to the global 2030 Sustainable Development Goals), focus turned to the task of achieving these goals. It was becoming clear that something would need to be done differently, but there was no consensus on what. A small group of people representing different organisations across the global education aid architecture started to explore systems thinking as a way to build understanding at the country level of why learning levels were so low.

Some of these were people already attracted to systems thinking and who saw system diagnostics as a tangible entry point for introducing this thinking into the education sector. Others were interested in trying...
something new. Over the course of the following three years, this group met irregularly in the margins of other global education conferences, each time reflecting on a new think-piece, report or process that their organisation had been involved with.¹ In April 2021, representatives of four of the organisations the most involved in this process spoke at the annual conference of the Comparative International Education Society and reflected on the value of systems thinking in their work. This chapter summarises what they said during that panel.² Thus, this chapter offers a curated perspective of global education aid actors who have self-selected as being interested in systems thinking. It highlights some of their incentives, challenges and reflections on the value of thinking about education as a system.

BACKGROUND

These global aid actors start from an instrumentalist view of education systems: the one major purpose of these systems is seen as enabling children to learn so that they can go on to lead productive lives, with all the associated correlations for other markers of health, rights and prosperity. They also recognise that every actor within a particular system – be that a national education sector, a classroom, a network of teachers or the global aid architecture – will have different and likely plural definitions of what a successful outcome from education is (i.e., it may not be ‘learning outcomes’ for all or at least the same definition of a learning outcome). It is also important to be clear that their perspective is one of ‘outside in’: they are a part of the global education system. When they talk about supporting change in national education systems, they can identify a lever or nudge movement within a system.

On a scale of expert to sceptic, most of these actors have put themselves somewhere left of the middle and self-identify as ‘enthusiasts’ regarding systems thinking. They have been trained in various disciplines: economics, political science, ethnography and history. As they explain, they came to ‘systems thinking’ as literature at various points

¹ These included a debate panel at the 2018 Building Evidence in Education workshop in Oxford, UK, a side event during RISE Conference week in June 2019, and a small group meeting at the Gates Foundation during Education World Forum week in January 2019.

² Clio was not able to attend the panel but contributed to this chapter subsequently.
in their careers. Systems thinking has grown as a stream of the literature specifically applied to international development, particularly by those working on evaluation or those who want to encourage the aid industry to embrace and work with complexity (Mosse et al., 1998; Green, 2016; Ramalingam, 2013). Yet in education, there has been a growing sense of frustration at the slow pace of outcomes (this despite the incredible success at getting children into school in the twentieth century).

Research on the failed scale-up of a successful contract teacher project in Kenya has been a major reference point for years (Bold et al., 2018). A team of researchers tracked a project that funded ‘contract’ (i.e., fixed-term hire) teachers in rural Kenya, a project first run at a small scale by an NGO and then scaled up by the government. This was an important and useful study and one of the most talked about in global education policy discourse for years. However, the researchers’ findings here did not seem surprising to this group of actors (Elmore, 2016). Their varied experiences in working to support national education (and other public policy) reform had taught them that a carefully controlled intervention designed to respond to an identified problem and run by an organised NGO would yield results in a way that running it on a large scale through government systems would not. They could reflect on why this was the case as much as the economists running the study could: implementation fidelity, competing and contradictory demands on government officials, and different strains and dynamics within large-scale systems. However, these global actors on this panel were left with the following question upon reading this research paper: (how?) can (we?) change the system so that education outcomes are improved and for a mass of children and in a sustained way – that is, that the improvement repeats not just for one cohort but in an enduring way for that targeted cohort and again for cohorts behind them? ‘Systems research’ became the bucket term for research that would help to understand these ‘how’ and ‘why’ questions of sustainability and scale.

The rest of this chapter is presented in an interview format. First, we will introduce the ‘speakers’. Clio Dintilhac is a senior programme officer at the Bill and Melinda Gates Foundation who focuses on the foundation’s learning data portfolio and governance investments in education in the developing world. Raphaelle Martinez works at the Secretariat of the Global Partnership for Education; she currently leads the Education Policy and Learning Team, whose mandate is to mobilise and support the use of evidence and good practice in the fields of system strengthening, teaching and learning and equity and inclusion. At the time of this con-
ference session, Laura Savage was the Senior Education Adviser at the UK Foreign, Commonwealth and Development Office and was given a technical leadership role on ‘education systems’. Tjip Walker is a senior policy analyst at USAID. Jason Weaver is a Senior Economist at the World Bank’s Global Education Practice and leads its new Accelerator Initiative, which draws on the approach to education systems set out in the 2018 World Development Report on Education. The discussion was curated by Moira Faul. Panellist views are all offered here as personal reflections and do not represent the official policy of their organisations. However, they are all also recognised as careful thinkers on this topic, both within their organisations and across the global education aid space.

What Originally Attracted You to Systems Thinking? What about it Appeals to You?

*Tjip:* My role is to support teams across USAID to see the value of systems thinking in their day jobs. I will give an early example of when a colleague and I worked with a country team to offer them analysis of a particular sector’s complex problem. The country team felt they understood the country enormously well and, therefore, would not be needing this kind of additional analysis to make their own decisions. They said to us, ‘Go ahead, but we do not expect much out of you’. So recognising that we did not have an awful lot to lose, my colleague and I applied some systems models. We did the analysis and presented it to the team, including the ambassador. Much to our pleasant surprise, we identified some new factors and incorporated dynamics that they were unfamiliar with. We showed where there were tipping points and, at the end, they were stunned by our taking this thinking and applying it to something they thought they understood really well. This was my realisation that this was not simply something to read about in books but actually something that could be applied in the development context.

*Laura:* I was working in contexts where the word ‘reform’ was not palatable, where parents pushed back on evidence-based pedagogy because they wanted rote learning for their children and where private sector actors and donors were pulling in different directions. I was supporting the development of education sector plans in extremely different contexts but was finding that these somehow looked the same: with three ubiquitous goals of ‘access, equity and quality’. Over my career, it has become more and more of a mantra of mine that we need to work differently in education to achieve learning gains. Working as an adviser in country
on large-scale reforms for a ministry of education and for different aid agencies, I was looking for a way to think harder about how and why good ideas, good intentions and money were not translating into strong education processes, structures and outcomes. I was attracted to systems thinking intuitively, being trained as a historian and political ethnographer. Systems thinking was attractive more for what it did not mean, which aligned with my experience – that there is not one shared outcome desired by all actors in an education system, that there is no such thing as a ‘solution’ and that a system is not some static entity that can be ‘reformed’ by outside-in or top-down reform.

_Clio_: The Gates Foundation is a new and very modest actor in education outside of the United States. The work on education in sub-Saharan Africa and South Asia started in 2018 and is a fraction of what the foundation spends on US education. As a novel actor, we were keen to better understand the gaps facing education systems in the developing world to improve their reading and math outcomes in primary schools. From our work in health in the developing world, we had a sense that we were unlikely to find ‘silver bullets’ to improve service delivery at scale in the public sector. We also realised that there was not really one authoritative framework in education, for example, the equivalent of Financial Sector Assessment Programme in the financial sector that informed policy. This may be the case for many reasons, for example the systemic nature of the financial sector and the types of risks associated with a financial crisis are distinct. The decision was for the programme to start by focusing on supporting the research and tools that would help inform and prioritise the government’s education policies. As part of this first wave of investment, we supported the World Bank’s Global Education Policy Dashboard and the Research on Improving Systems of Education (RISE) programme, jointly with the Foreign, Commonwealth and Development Office (FCDO), two endeavours that were trying to think at the system level. Since then, the programme has evolved to invest more at the country level, including the World Bank’s Accelerator imitative and, in general, advocacy around the learning crisis. At a more personal level, I had experienced first-hand, in places like Ghana and Niger, the fragmentation of policymaking. Therefore, I was particularly sensitive to the notion that a system needs to be clear on the goal it is trying to achieve in priority and on the need for the different parts to work coherently and through iterative adaptation towards that goal.
How has the Word ‘System’ Landed in Global Education Discourse and Practice in Your Organisations?

Laura: I do not use it anymore. In 2014–2015, I tried to use the language of ‘a systems approach’. However, I got a spectrum of responses, from ‘I don’t like to think about systems stuff because it is too messy; don’t talk to me about complexity’ to ‘but we don’t need a new approach, because we work at the system level already: we do budget support’. However, ‘system’ does not mean ‘national’, ‘big’ or ‘sector’. I find that I get more traction on the underlying meaning of ‘system’ if I use the language of ‘thinking and working politically’ within my organisation or if I use ‘test, learn, adapt’ in country. In the 2018 then-DFID Education Policy, we applied these ideas to education in a four-pronged way. An education system first requires thinking about the inputs. Sometimes, systems thinking in education is made out to be an argument that we do not need more money in global education; that we need to do more with what we have. However, we do need more funding and more inputs. We then need to think about processes: the building blocks in state systems that make these inputs effective or not, such as data or procurement or public financial management processes. Third, we need to think about the people in the system: the relationships between the education stakeholders, which range from accountability relationships (such as what the RISE systems framework focuses on) to professional collaboration to personal. The fourth layer is politics, which requires recognising that there is a whole swirl of ‘big P’ and ‘little p’ politics affecting implementation and – crucially – that this needs to be understood but cannot necessarily be changed. The first layer is the easiest, but we are not going to change anything unless we tackle all four. So we found a way to approach systems thinking without using the ‘S’ word.

Jason: I am fond of analogies, so I will offer one here. We are all familiar with the conceptual definition of a nation – a people united by shared history, lineage, culture or language and who are inhabiting a particular geographic area – but the concept of a nation becomes infinitely clearer when you see a map. At the World Bank, our 2018 World Development Report (World Bank, 2018) – Learning to Realise Education’s Promise – put forth some of our clearest thoughts on how to make systems work for learning. Though it does not push the ‘systems’ language or thinking explicitly, the WDR 2018 was able to capture all of the challenges and complexities that those of us on this panel know deeply, but it did so through a relatively simple and concise framework that was notably
digestible to actors outside or new to the education sector (e.g., Ministries of Finance). It posits that struggling education systems are typically missing one or more of the four learning ingredients at the school level: prepared learners, quality teaching, inputs and infrastructure and school management. It also put forth three relatively simple recommendations that also reflect a systems approach: (1) we must assess learning, which should be a serious goal of any education system, to understand where we are at and where we are headed; (2) we must act on evidence to ensure schools work well for learners; and (3) we must align actors – which is far more complicated than one might think – in a common and relentless pursuit of student learning.

In the wake of the 2018 WDR, we still needed a ‘map’ to help better clarify and apply the conceptual framework to actual education systems. The Global Education Policy Dashboard is our map. It applies a three-dimensional approach by looking at practices (or service delivery), policies and politics and then identifies a set of indicators that are focused on the same four school-level ingredients: teaching, school management, inputs and infrastructure and learner preparation. The Global Education Policy Dashboard offers a unique compilation of indicators that is comprehensive yet still focused enough to help stakeholders pay attention to what matters the most for learning.

Raphaelle: The word ‘system’ alone is not getting a lot of traction. If we were to say ‘systems approach’ or ‘system thinking’ to our country partners, they would ask the following: ‘Ok, how is that different from what we have been doing before?’ ‘How is a system different from a sector?’ It remains theoretical, and these distinctions between sector and system do not lead us very far. It is also not clear what a systems approach would mean in terms of analytics, implementation and operations that would be different from the more traditional and rather standardised way the international community has supported educational planning, implementation and monitoring for the past few decades. However, we hear a demand for big changes: more than a year ago, in the context of developing our new Global Partnership for Education (GPE) strategy, we held a roundtable at which the Ministers of Education of our country partners said, ‘We have to be bold; we have to be transformative’. So for us, it is not about defining what a system is, but rather, it is reflecting and leveraging the assets of our partners to think and work differently to achieve system transformation. This is a way of thinking that looks at unpacking complex issues, the interdependencies of various system components and
their alignment and that aims to identify the levers and opportunities to unlock system-wide changes.

For me, as an educational planner by background, it is about enabling and incentivising a more agile, quick, responsive, targeted way of doing policymaking in which there is a premium on integrating effective delivery; identifying potential ripple effects of the policy and programmatic priorities education stakeholders align behind; aligning actors’ resources of different kinds: leadership, finance, expertise and knowledge. For this, we need data, evidence (1) on the pockets of sector underperformance, (2) understanding the causes of the sector issues and bottlenecks, and (3) who is doing what and whether it is working so as to build strong accountabilities within the system. It is also about stepping back slightly from a comprehensive sector-wide approach to focus on a few key priorities to lay down a reform agenda because nowhere can we do everything at the same time. But then, how do we build consensus around priority reforms? How do we accommodate the different perspectives and behaviours of all the actors involved because there will not be full convergence of interests and resources? How do we understand the root causes of weak education outcomes to be able to come up with that prioritisation agenda? How do you implement these priorities – through testing and trial and error and nudging and working out leverage points? Our new strategy is about trying to put the word ‘system’ into practice.

*Tjip:* Education is by no means the only sector where there are issues. I have a vantage point across different sectors. In USAID, ‘system’ is not a word we shy away from. It is a matter of policy to strengthen what we call ‘local systems’, which can be defined depending on what the problem is. We have a theory of how we get to sustainable change: it is about strengthening the systems that are capable of being able to produce results in a way that allows local actors to perpetuate and realise particular outcomes. The market system is a well understood and certainly mainstream concept for agricultural economists and those who work on food security. However, in the health sector, we still have challenges between those working on improving health systems and those who focus more on trying to eradicate particular diseases – and these sometimes clash, and there are trade-offs. However, the important thing is that systems thinking is actually a set of related concepts, so you do not have to focus on the term ‘systems’ if you are essentially applying systems practice.

I would make two observations about my experience in education. First, there is a tendency to look out for ‘solutions’ that can be introduced into a system to achieve better learning outcomes. From a systems point
of view, you need to start by understanding that system in a particular context and the opportunity for change, who is motivated to make change and – something we often neglect – who holds the power to make change. For outsiders trying to promote change, the challenge is unlocking the already pent-up desire for change. Diagnostics are useful for this because they give you a set of tools to understand where that opportunity is. Or this may not be the case: it may be that there is simply not going to be the opening for the kind of change you are talking about. Second, I see a lot of effort looking at the impact of particular interventions and predicting the results from ‘what works’. The concept of ‘emergence’ in systems thinking is that in complex systems, we have very limited ability to make predictions about how the system is going to operate, and understanding causality in a complex system is only possible to a small extent. This makes policymakers and funders a little nervous. The comments earlier about the importance of adaptation, learning and leverage points are all recognising the fact that contexts really vary and that it is important to understand dynamics and have the capability to respond. So it is not about whether we adopt a word or not, but it is also whether or not you are willing to adopt a set of concepts and behaviours that go along with some humility about our ability to claim what we can accomplish, even with large amounts of money.

Clio: The Gates Foundation has been investing in improving health systems for some time. In health, there was this impression that the task of funds like the Global Financing Facility, which aims at improving health systems, was much more complex than the ones of ‘vertical’ funds (like the Gavi, Global Fund) that focus on specific diseases or on the delivery of vaccines. In the global education work, the Gates Foundation decided to focus similarly on a narrow section of the education system, that is, improving reading and math in primary schools, which was as close to a ‘vertical’ fund that we could get: in a way, improving reading and math outcomes may be the part of education for which we have a solution that is closest to a vaccine, that is, structured pedagogy with regular monitoring. So our focus has really not been to improve the education system as a whole but really just that narrow sliver. The part of the work that went deeper into system change has been in the context of our investment in the Central Square Foundation (CSF) in India. In that context, CSF designed a diagnostic tool, very much like ‘root cause’ analysis that examined how different components – for example, pedagogy, academic support and expectations – contributed to low learning outcomes. This type of very practical, voluntarily very simple tool was
one example of an interesting approach to engaging government stakeholders around a diagnostic of their system.

**So How Can Global Education Funders, Mostly in the Global North, Handle the Tension Between Wanting to Strengthen Education Systems in the Global South and Being Outsiders to those Systems?**

*Jason:* To be clear, everyone wants the desire to change to come from within – from governments, NGOs, the general population, and so forth. However, we also know that every politician, certainly every minister of education, will say they want education outcomes to be better, but are they willing to push through the politically difficult reforms that may be needed? Strong political commitment at and above the level of the ministry of education to improving foundational learning is the sine qua non of the Accelerator Initiative. We know it is difficult to quantify or measure, but we must be honest about the expected pace of progress. We look at ways that we can help use data, as Tjip mentioned, to better understand the opportunities for locally led change. Whether through international benchmarking (e.g., Learning Poverty as a metric, the Human Capital Index, PISA scores, etc.) or by starkly showing what kids are and are not capable of doing in terms of age-appropriate skills (e.g., the citizen-led assessments like the Annual Status of Education reports in India), this can be an eye-opener and help galvanise political will. In practical terms, many of the necessary reforms are deeply political. Curriculum reform can take several years to unfold; parental perspectives and social norms can be enablers or blockers. There are issues that sit outside of what we think of as technical education changes but are all factors that matter. We also need actors outside the government to establish accountability and sustain commitment across political cycles. This is what a ‘systems approach’ tries to recognise.

*Laura:* Moira [the panel chair] wrote a report for us [DFID] a few years ago, and it was based on a series of interviews with global and national education actors. It was striking that those who work in country, who grapple with issues of implementation politics and governance every day, were much more able and willing to ‘think’ systems. The further out you get from ‘the field’, maybe it becomes easier to think in linear ways because at the global level, the ‘system’ is just so massive. Some of the writing on education systems that I have enjoyed most has been that which takes the classroom as a system, as a set of interactions between
teachers, community members and students. All those layers I talked about earlier – the inputs, processes, people and politics – are all there. So I think it is less about ‘outsider/insider’ when thinking about an education system and more about framing the system and trying to identify what the RISE programme would call ‘coherence’ within that system. It is about understanding who are the decision makers and those who hold the potential to change and sway some of that system: this is key for anyone (inside or outside) who is trying to affect change within that system. And it will change constantly.

**Raphaelle:** As a partnership, GPE brings together donors, multilateral institutions, civil society, teacher representatives, philanthropic foundations and the private sector behind partner country governments’ policy priorities. We promote evidence-based policy dialogue at the country level to identify the key education priorities that have the potential to unlock system-wide change. Our operating model is also designed to be country driven, context sensitive and raise awareness around political economy questions. In essence, what we do is work through our partners to support the use of relevant evidence and knowledge, to provide technical support and to build the capacities for inclusive and informed in-country policy dialogue and policymaking.

We also build incentives into our funding for actors to ask themselves the right questions and stimulate what we call the ‘enabling factors’ to system transformation. The enabling factors are areas that are key in shaping sound foundations for effective education systems: data and evidence, planning and monitoring, sector coordination and alignment and domestic finance. Through these enabling factors, we want actors to drive a contextualised dialogue around the critical challenges across the enabling factors that would limit their effectiveness in supporting particular policy priorities. These policy priorities are up to the governments. We have only broad policy priorities at GPE – for example, ‘learning, equity, inclusion’ – and this breadth is on purpose because it puts a marker where we want to see progress, but it is up to the country partners to work out the specifics of what and how.

**Tjip:** Understanding perceptions and perspectives is important, and this has to be one of the differences that defines a systems approach, which recognises that all actors in a system have views about how that system is supposed to perform. If our engagements are only at the ministerial level, then we miss important pieces of the puzzle. However, I would also underline how difficult change in complex systems is. If we are working within a complex system, we must recognise the number of
factors at play and that there are forces pushing for progress and forces pushing against progress. As a principle of systems thinking, this means that we need to have some humility about what is actually possible: in some places, there may be more orientation than change than in others. One important construct that comes from systems thinking is called ‘the iceberg model’. This explains that below the way we construct systems are deep understandings about how we want society to operate, what our aspirations are and how we think change works. We carry all of these mental models around. I think one reason that systems thinking has perhaps had some difficulty making inroads into the international education sphere is because of some of the mental models that many people hold about the nature of change. It is difficult to get rid of those mental models. However, it is important to understand what these are. Another benefit of systems thinking regarding this insider/outsider question is that it puts a real focus on the nature of relationships between actors. Understanding these – and going beyond accountability, as the RISE framework focuses on – is an important consideration.

Clio: I think a discussion we had some time ago in this group was about whether global funders could be helpful if they associated their funding with the right ‘diagnostic tools or approaches’. These diagnostics would enable us to target aid money in a more efficient way and inform the country’s policies. Education sector analysis, which was a key tool in the last GPE operating model, is an example of this. However, I think there was also a recognition that if you associate the diagnostic with money, there is a risk it will be done in a perfunctory way and not owned. I think another risk was that the diagnostic tools ended up being academic tools trying to show the complexity of the system rather than being easily understandable prioritisation tools.

To better understand how improvement had happened at scale in country and what type of useful support external donors provided, we supported the Learning@scale study, which looked at the minimal components needed to see the impact of donor-funded projects and the system enablers for scale (Stern et al., 2022). We also supported Luis Crouch in putting together a review of how government-led programmes in the developing world, in particular Sobral in Brazil, Puebla in Mexico and nationwide in Kenya, had improved reading outcomes in their public education system (this was published by the RISE programme, see Crouch, 2020). That study has several take-aways, but I will mention three. First, consistent with what Jason is saying, there is the fact that external actors/donors certainly can come as a form of support, as in the case of Kenya,
but there is a need for strong internal motivation to enable effective reading reforms. Second, none of these systems provided a formal diagnostic of the system. Their diagnostic was intuitive and implicit, closer to Laura’s framing of ‘thinking politically’. Finally, improvement was not achieved by rehauling the entire education system. These exemplars instead thought tightly about what needed to change in the classroom and then went on to address the couple of system enablers needed to make things work. There is possibly a role for donors in sharing these lessons and putting what happens in the classroom back at the centre of the discussions. These take-aways have informed our own investments; for example, we recently supported the research organisation Research Triangle Institute International (2018) to put together (in a project called ‘Science of Teaching’) all the evidence we have on structured pedagogy for the benefits of practitioners and policymakers.

How Does Systems Thinking Help Us Think About and Achieve Sustainable Change?

*Tsip*: One of the tools we used at USAID to help our systems thinking is a relatively simple construct – the ‘five Rs’. This provides broad categories for trying to understand systems. One R is ‘results’ – the results you are trying to seek. Another is ‘resources’ – those that go into the system on a continuing basis as necessary, such as financial and human resources. There needs to be a positive translation here: people need to feel positive about the results so that they will be supportive of more resources going back into it. So there is a feedback loop. These resources are essential for sustainability. Donors can provide these on a temporary basis. A third ‘R’ is ‘rules’ – the rules that govern the system. It might be easy to change the rules, but what really matters is how they are enforced, and this is fundamental in determining whether change is sustainable over time.

*Laura*: From a slightly different perspective, I hear this question a lot from Ministers of Education and Ministers of Finance, as well as from donors: we have put funding into education, but we are not seeing learning levels increase. Some of the drive for a different way of thinking about education comes from this desire for a sustainable impact of investments already made. Over the past year, the World Bank and FCDO have partnered together to support the Global Education Evidence Advisory Panel in publishing a report on ‘Smart Buys’ in global education. This summarises the small evidence base with cost data to help highlight some
ideas that might work, if tested/adapted, and those that might not because we have lots of evidence that they do not. There is an interpretation of that report that says, ‘Here is an intervention, go do it everywhere, and it will work’, but there is a carefully worded series of paragraphs that explains these ideas need to be built into context, adapted and tracked – in other words, implemented through a ‘systems approach’. What I think we have less evidence of and what I think matters most for the question of sustainable change is why: why did an intervention/reform/idea work in practice or not? This kind of research would capture the coincidences, the accidental stars aligning, the feedback loops and the champions for change that make something happen. This is the sort of information that helps to explain how a system works, not so that we can replicate it, but so that we can understand why learning has improved (or not).

CONCLUDING REMARKS

This chapter is just a snapshot of a conversation that a group of education aid actors have been having for nearly a decade and will no doubt continue to have. They take a very practical perspective on systems thinking, and in this spirit they offer some tools that they found useful in their work. Not all of these are framed explicitly as ‘systems thinking’ tools, but for each tool, authors here have found them useful to get across the key concepts that they find compelling.

- USAID’s ‘5Rs’ framework for systems practice is a practical tool to promote good systems practice. It highlights the five key dimensions of systems: results, roles, relationships, rules, and resources. Collectively, these 5Rs can serve as a lens for assessing local systems and as a guide for identifying and monitoring the interventions designed to strengthen them (USAID, 2016).
- The World Bank’s World Development Report 2018 – *LEARNING to realise education’s promise* – is its first devoted entirely to education. The report leverages systems thinking in various ways and argues, inter alia, that countries must address stubborn system-level technical and political barriers for new reforms to sustainably improve learning (World Bank, 2018).
- The Global Education Policy Dashboard: Although this is not a dynamic system diagnostic tool, it is meant to bring together key datapoints to inform the diagnostic of an education system (World Bank, n.d.).
• The 2018 DFID Education Policy: This, as Laura outlined above, is a simple four-layered framework to think about how a planned intervention will fit within the dynamics and available levers of a particular system (DFID, 2018).

• The new GPE operating model 2025 sets out a ‘system transformation’ approach that is based on an emerging body of evidence on how to catalyse systems-level change, including some of the references cited above. GPE supports partner countries in transforming education systems at scale to get the most vulnerable girls and boys in school, improve teaching and learning and build education systems capable of withstanding shocks and adapting to new challenges (GPE, 2020).

• ‘System diagnostic’ tools have proliferated in recent years (see Chapter 10, this volume, for a deep dive into one). Fundamentally, a ‘system diagnostic’ should help a community that is grappling with a complex problem to come to a common understanding of why it might be happening, hence giving them the ability to address the real problem. There are several tools in this space – from the building state capability approach to problem-driven-iterative adaptation (Harvard University, 2022) to Oxfam’s practical guidance to systems thinking (Bowman et al., 2015) to some education-specific adaptations (such as UNESCO IBE’s framework (UNESCO, 2012), chapters in UNESCO/UNICEF’s (2021) Education Sector Analytical Guidelines on institutional and political analysis and a tool based on the RISE framework (RISE, n.d.); for more see Chapter 10, this volume). With system diagnostics, the process is can be even more important than the tool.

REFERENCES


