Executive Summary

Transforming the Education Workforce: Learning Teams for a Learning Generation

the Education Commission

The Learning Generation

The Education Commission is a global initiative dedicated to greater progress on Sustainable Development Goal 4 – ensuring inclusive and quality education and promoting lifelong learning for all. The Commission is helping to create a pathway for reform and increased investment in education by mobilizing strong evidence and analysis while engaging with world leaders, policymakers, and researchers.

Drawing upon new research and analysis from more than 300 partners in 105 countries, the Education Commission's groundbreaking 2016 report – *The Learning Generation: Investing in education for a changing world* – put forward an action plan to deliver and finance an expansion of educational opportunity for the more than 260 million children and youth who are not in school today. *The Learning Generation* report made 12 key recommendations to improve performance, harness innovation, improve inclusion, and mobilize more and better finance.

One of these recommendations was to strengthen and diversify the workforce. Thanks to the generous support of the United Kingdom's Department for International Development, the Commission's Education Workforce Initiative has worked with several Commissioners and many partners to produce *Transforming the Education Workforce: Learning Teams for a Learning Generation* – a report that offers visions for the urgent action needed to strengthen, diversify, and reimagine an education workforce to deliver quality education for all.

Foreword

We live in an age of unprecedented change and disruption. In some places, cars drive themselves, drones deliver packages, and refrigerators tell you when it's time to buy milk – but over 800 million children and youth around the world are not on track to learn the skills needed to thrive now and in the future.

With millions of precious young minds at stake, the harsh reality of the global learning crisis stands in stark opposition to the "progress" promised by the Fourth Industrial Revolution. We are running out of time to respond to one of the world's most fundamental needs: ensuring inclusive, equitable, quality education for ALL our children.

We are just over 10 years away from the 2030 deadline to meet this goal, as outlined by the United Nations' Sustainable Development Goal 4. How can we get there?

Teachers are at the heart of the learning process and teacher quality is the single most important influence on learning outcomes at the school level. But in many countries, teachers are in desperately short supply.

And it is increasingly evident that teachers cannot work alone.

As the African proverb says, "It takes a village to raise a child." When this ethos of collaboration and care is applied to the learning process, we believe it takes a team to educate a child. Teachers need leadership and support to be effective at what they do best and to help reach those with the greatest needs. To build this support team, we must tap the potential of the broader education workforce – school and district leaders, specialists, learning assistants, community experts, entrepreneurs, health and welfare professionals, parents, volunteers, and many others – to create a responsive, evolving system that keeps pace with today's changing world and equips young people with the new skills, knowledge, values, and competences they need to succeed.

The Education Commission's 2016 *Learning Generation* report called for the strengthening and diversification of the education workforce, as well as the establishment of an international expert group to take a fresh look at redesigning the workforce. Thanks to the support of the UK's Department for International Development, the Commission's Education Workforce Initiative (EWI) convened a high-level team of researchers, teachers, and policymakers that spent more than a year digging out data, debating, and developing new approaches to the challenges of workforce reform. This report is the result. (It takes a team to produce a report, too.)

We are grateful to our country partners for their openness in collaborating with EWI to co-create and test concrete proposals for education workforce reform in Ghana; teacher deployment for equity in Sierra Leone; and adaptive high-touch, high-tech learning to support the STEM workforce in Vietnam.

Unsurprisingly, no “one-size-fits-all” model for education workforce design exists given the diverse social and political contexts of each country. But given the workforce is an education system’s biggest investment, countries should make it a smart one. Robust learning systems are powerful levers of change, and members of the workforce should be strengthened and empowered to be change agents themselves.

While more research and evidence is needed to evaluate the impact of newer approaches, we do know that many workforce models in use today are outdated, inefficient, and unable to respond quickly enough to the rapidly changing world around us.

The unmet promise to the world’s children for universal quality education demands a transformative response. We believe the evidence, innovations, and vision of building collaborative learning teams for a learning generation shared here are a good start.

The Education Workforce Initiative Leadership Team

Ju-Ho Lee, Chair

Susan Hopgood, Vice-chair

Theo Sowa, Vice-chair

Executive Summary

Learn more and download the full report: **EducationWorkforce.org**.

Join the conversation online: **#EducationWorkforce**.

Note: All references for the Executive Summary are included in the main report.

Key Messages

The challenge

- The world is not on track to achieve Sustainable Development Goal 4 (SDG 4). There are still more than 260 million children out of school and more than 600 million in school who are not learning the basics or the skills, knowledge, and values required to thrive now and in the future.
- Teacher quality is the most important determinant of learning outcomes at the school level, but in many countries teachers are in short supply, isolated, and not supported to provide effective teaching and learning.

The opportunity

- To meet SDG 4, teachers are critical but they cannot work alone. It takes a team to educate a child – teachers need leadership and support to be effective and to help learners with the greatest needs.
- Achieving inclusive and quality education for all requires urgent action to harness the broader education workforce. The workforce is an education system's biggest investment and one of its greatest levers for change.
- The education workforce must evolve to keep pace with the rapidly changing world and embrace the new opportunities these changes bring.

Three visions for change

We can address urgent education challenges and leverage opportunities for change by embracing three interacting visions.

Vision 1: Strengthening existing systems

- Professionalize teachers and other key roles with appropriate recruitment, training, professional development, career paths, and working conditions to enable them to be effective.
- Improve workforce planning, deployment, and management, which means robust data must be available and utilized.

Vision 2: Developing learning teams

- Develop collaborative teams focused on improving education outcomes in the classroom, within schools, and at all levels in the system to result in more effective teaching and better support for inclusion, on-the-job learning, and motivation.
- Developing learning teams does not necessarily involve hiring new staff – it entails diagnosing the challenges, understanding existing roles and skills, and considering how best to utilize them in a team; realigning roles; focusing any new roles on the areas of greatest need; and enabling more teamwork.

Vision 3: Transforming an education system into a learning system

- Harness learning teams to build networks of schools, professionals, and cross-sectoral partnerships that use data and evidence to transform education systems into learning systems that are self-improving and adaptable to change.

How to get there

- Workforce reform depends on context. Common ingredients for success include: strong leadership; drawing on evidence; engaging with and empowering the workforce to lead change; ongoing communication with key stakeholders; monitoring and adapting implementation; and building the structures to sustain reform.
- Financial support for investments in human *and* social capital of the workforce is needed. Smart investment will deliver longer-term returns through improved efficiencies and greater effectiveness.

Call to action

Collectively, we must take on the challenge of reforming the education workforce to test, analyze, scale and promote changes that better prepare and support the education workforce and young people to learn and work together so they have the skills they need to succeed.

We need to:

1. Develop a workforce diagnostic tool underpinned by reliable data, indicators, and improved costing models to help countries dianose the challenges and improve the design and management of their workforce.
2. Experiment, research, and evaluate to explore what works and at what cost.
3. Lead coalitions for change at all levels.

The role of the education workforce in achieving SDG 4

The challenge

With only 10 years remaining until the deadline, the world is at serious risk of not achieving SDG 4. Today, there are still more than 260 million children out of school and more than 600 million in school who are not learning the basics, let alone the wider breadth of skills required to thrive in this century. The Education Commission estimates that despite some progress, by 2030 more than 800 million children will still not be on track to achieve basic secondary level skills if current trends continue.

Teacher quality is the most important determinant of learning outcomes at the school level, but in many countries teachers are in short supply, isolated, poorly trained, and not supported to provide effective teaching and learning

Teacher quality is the most important determinant of learning outcomes at the school level, but in many countries teachers are in short supply, isolated, poorly trained, and not supported to provide effective teaching and learning. To meet SDG 4, an estimated 69 million teachers must be recruited globally by 2030, with over 76 percent of these in Sub-Saharan Africa and South Asia. In some of the poorest countries, the required increase in teachers is equal to at least half of the projected number of tertiary education graduates, given low secondary completion rates (less than 25 percent in Sub-Saharan Africa). Teacher shortages occur frequently in vulnerable communities and particular subject areas, exacerbating inequality. On top of this, multiple interacting and often systemwide factors can create conditions where teachers are absent or do not spend enough time on instruction.

In some low-income countries, even where there are teachers, many are poorly trained or unqualified and often have limited pedagogical and subject knowledge. In Sub-Saharan Africa, only 62 percent of teachers in primary schools and only 45 percent of teachers in secondary schools are trained to teach. A study of seven countries in Sub-Saharan Africa found that less than 10 percent of primary school language teachers could demonstrate a minimum level of subject knowledge skill to teach grade four students. Models of initial teacher training and professional development are often outdated and ineffective. In the Gambia, 77 percent of primary school teacher training instructors surveyed had never taught in a primary school themselves. Districts are often not providing effective support. In Zimbabwe, teachers are on average visited every two and a half years by a supervisor and those in rural areas have to wait four years.

Teachers often work in relative isolation and are expected to fulfill increasingly diverse roles and to address a wider range of student learning needs. The education workforce is not designed to deliver inclusive education, and inequities within the workforce itself are rarely recognized or addressed. For example in Sierra Leone, only 27 percent of teachers at primary level and 14 percent at secondary level are female.

The opportunity

Teachers are at the heart of the learning process, but this report emphasizes that they cannot work alone. It takes a team of professionals to educate a child – teachers need leadership and support to be effective and to help learners with the greatest needs. Developing an effective teacher workforce by prioritizing the professionalization of teachers and ensuring their effective management is a critical first step to improve education outcomes. However, other roles and relationships, such as school leadership and management roles, are also strongly associated with better education outcomes. Specialist and complementary education support roles have been effective in helping reach those left behind and enabling inclusion. District roles have supported teachers and school leaders to improve their practice and sustain change and in a number of successful systems, state-level (central government) roles have used clear change leadership, coalitions, and evidence-based adaptive policymaking to drive system change. Many of these roles already exist in education systems, but they have received very little attention and there has been limited experimentation on ways professionals with different specializations and levels of qualifications could work together effectively in low-income country contexts.

Teachers are at the heart of the learning process, but this report emphasizes that they cannot work alone. It takes a team of professionals to educate a child – teachers need leadership and support to be effective and to help learners with the greatest needs

The education workforce must evolve to keep pace with the rapidly changing world and embrace the new opportunities these changes bring. Experts point out that current education workforce design is still largely based on an outdated model of education created to meet the labor needs of the Industrial Revolution and organized on the principle of mass production. A modern education workforce must be able to respond to the world's demographic shifts, environmental changes, technological innovation, advances in neuroscience, and evolving curricula. As the understanding of what teaching and learning can look like is shifting, some of the best systems have started to adapt and innovate in response. They offer examples of opportunities to think differently about the education workforce.

This report aims to catalyze new thinking on education workforce reform by drawing on existing evidence and promising examples from education and other sectors, and using this to develop visions for the education workforce needed in the future. The report uses a systems lens, considering the education workforce needed at the school, district, and state levels and throughout the workforce life cycle, recognizing the interdependencies between workforce and other education policies, actors, the political economy, and financing. There is no "one-size-fits-all" model. Each system starts from a different point, faces different challenges and expectations, and operates in different social and political contexts.

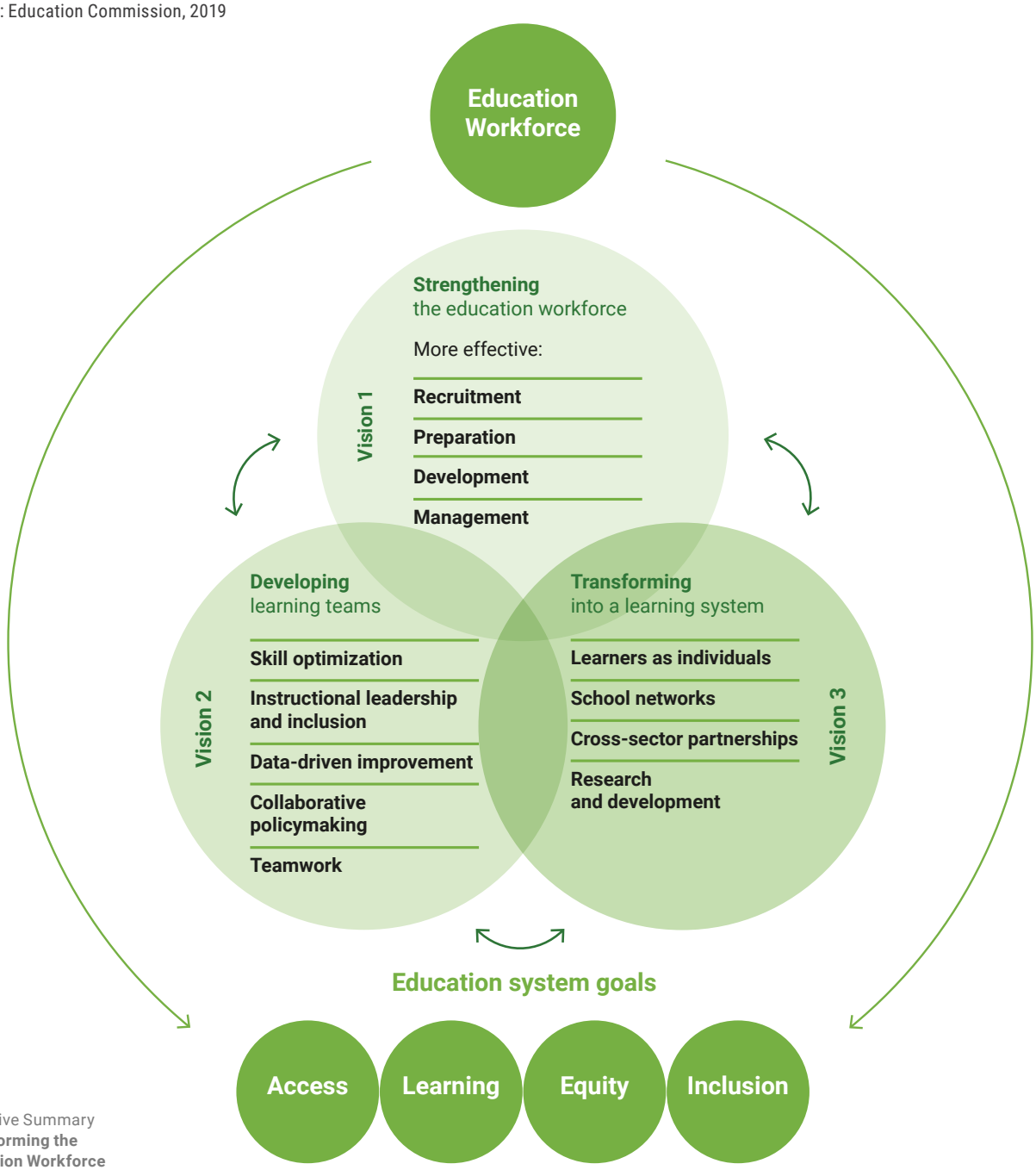
Achieving equitable, quality education for all requires urgent action to harness the broader education workforce. The workforce is an education system's biggest investment and one of its greatest levers for change.

An education workforce for today, tomorrow, and the future

This report outlines three interacting and iterative visions for an education workforce to deliver SDG 4: 1) incremental change to address immediate challenges through strengthening the existing education workforce, 2) a shift to a more collaborative education workforce through developing learning teams, and 3) a more radical paradigm-shifting vision through transforming education systems into learning systems.

Three interacting visions for the education workforce to reach system goals

Source: Education Commission, 2019



Given that challenges vary between and within countries, these visions will need to be adapted to specific contextual needs and are likely to involve hybrid approaches depending on the political economy and financing considerations.

Vision 1: Strengthening the education workforce

Strengthening the education workforce envisions an effective education workforce at all levels in the system, with coherent approaches to the professionalization of teachers and other key roles throughout the workforce life cycle – from recruitment and preparation to professional development and career progression to workforce leadership and management.

This vision aims to address the most pressing challenges and to get the foundations right – by establishing decent working conditions and wages, and raising the status of teachers and other key workforce roles to attract high-quality applicants and address shortages. This will help strengthen the existing "human capital" of the education system.

Addressing teacher shortages is a top priority in many countries. Successful education systems demonstrate that higher-skilled individuals can be attracted by raising the status of teachers, providing fair working conditions, and professionalizing them throughout the life cycle – recruitment, training, professional development, and career progression. Short-term "fast-track" solutions that decrease the entry criteria into teaching, often applied to respond to urgent needs, can have long-term negative consequences for professionalism. Recruitment should be merit-based and, where possible, based on clearly defined dispositions and capabilities. To address teacher shortages in underserved areas, systems should consider hiring more teachers directly from these areas; where necessary they should provide alternative school-based training routes that address their needs. Incentives can be effective for addressing specific subject or location shortages in the short term, but should be accompanied by other efforts to increase motivation and retention over the long term.

The evidence from high-performing education systems shows that investment in improving the standard of initial teacher training is critical to improve learning outcomes. Although reform in this area can be challenging, it can be more cost-effective to invest in high-quality teachers entering the workforce than to rely on remedial in-service training. Teacher training institutions and their workforce should be supported to make reforms based on evidence of what works. This includes putting a stronger emphasis on addressing trainees' foundational subject knowledge before building and applying greater subject and pedagogical knowledge; including more school-based practicum; and aligning teacher training to what is relevant for the curriculum and context. Training courses should be inclusive in terms of trainee accessibility, course content, and diversity of trainers. Structured induction programs should be introduced for teachers and other roles when starting new jobs, and mentoring encouraged during the initial years.

Professional development opportunities should be made available to all teachers and other key roles and evaluated regularly. These should be practice-based cycles of quality improvement oriented towards improving teaching and learning. Evidence suggests that professional development is most effective when it is focused on a specific subject, is tailored to topics relevant to the local context, and provides supporting materials, coaching, follow-up visits, and collaboration opportunities to complement training. Low-tech approaches can facilitate professional development when combined with face-to-face approaches. When there is a large cadre of untrained or unqualified teachers, policymakers could consider a range of pedagogical support strategies including structured pedagogy, frequent rounds of formative assessment to support their development, and pathways to teacher qualifications or alternative education support roles (see Vision 2) if more appropriate. Career progression should be based on achievement of professional skills and competencies and result in salary increases.

Workforce planning, deployment, and management need to be improved, which means robust data must be available and utilized. Deployment systems should use data to better match supply and demand, and consider workforce preferences and equitable distribution of resources. This requires robust data on the workforce, but a 2016 mapping found that only half of the countries surveyed had any data available on teacher attrition rates or teacher training from the previous year. Data should also be used to target specialized support to schools, prioritizing the most marginalized. Workforce management policies must address the root causes of workforce absenteeism. This includes setting salaries at the same level as similarly qualified professionals and paying the workforce on time and in an easily accessible way. In addition, requests for teachers to undertake activities that impact scheduled class time should be minimized and fair accountability mechanisms established.

A learning team approach is about investing in the "social capital" as well as the "human capital" of the workforce

Vision 2: Developing learning teams

The current education workforce model in most education systems is built around a "one teacher to one classroom" model. Teachers work in relative isolation, with limited support and often with challenging conditions such as large class sizes. To address this and other challenges, this report proposes the development of learning teams aligned with evidence on what works to improve education outcomes.

Learning teams collaborate inside the classroom, within schools, within districts, and even at national and international levels. These teams of professionals collectively focus on improving the learning and inclusion of all students and continually learn themselves.

The learning team approach is based on a concept of professionalism that leverages the collective capacity of a group of people as opposed to just focusing on developing the skills of individuals to do their work better. **It is about investing in the "social capital" as well as the "human capital" of the workforce.**

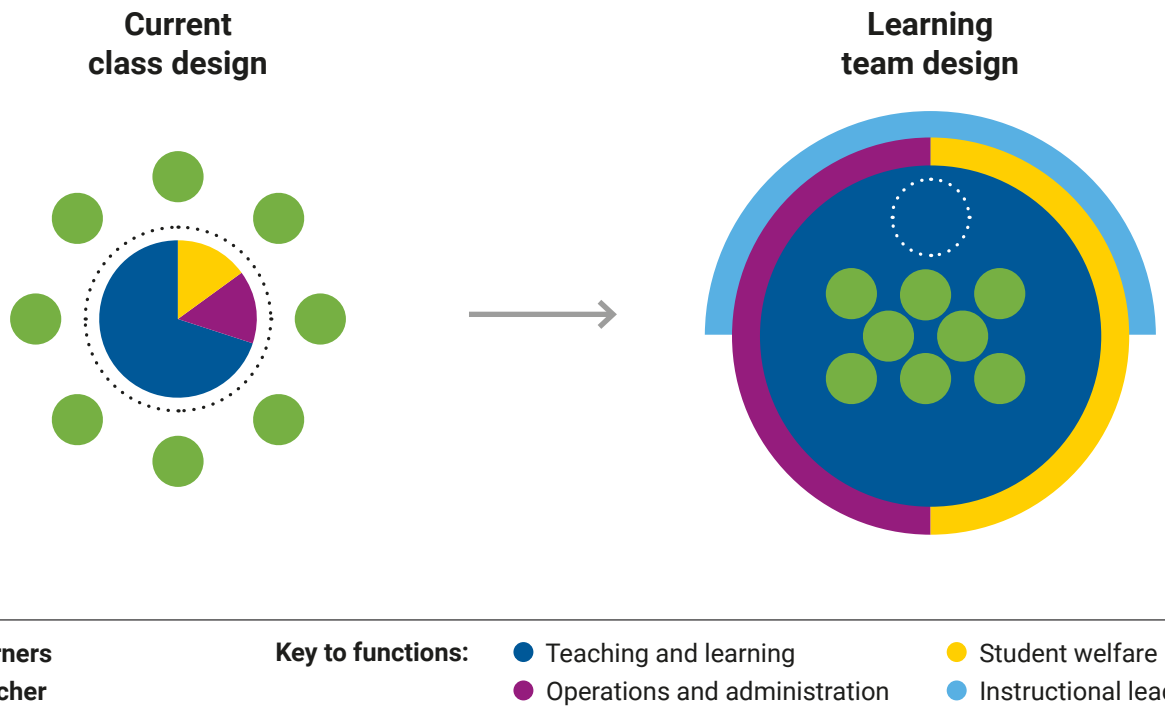
A meta-analysis of factors influencing student achievement identified collective teacher efficacy as the single most powerful characteristic of highly effective schools and the leading factor influencing student achievement. A study in New Zealand found that teacher-peer collaboration doubled student achievements, but in a survey of 25 countries, only one-fifth of teachers reported participating in mentoring or collaborative work. Team-based approaches are integral in other sectors such as early childhood development (ECD) and health, where they have demonstrated improvements in service delivery, health outcomes, and cost-effectiveness.

A learning team approach at the class level ensures that all the critical education functions are shared across a team and not concentrated on a single teacher

Learning teams can include a variety of professionals – qualified teachers, trainee teachers, other teaching and learning roles, leadership and management, and welfare professionals – within and across schools and at all levels in the system. A learning team approach at the class level ensures that all the critical education functions are shared across a team and not concentrated on a single teacher. The diagram below illustrates the shift from a typical current class design to a learning team design, which reorganizes key functions into teaching and learning, student welfare, instructional leadership, and operations and administration.

Comparison between current class design and learning team design

Source: Education Commission, 2019



Note: In the learning team design, the functions are shared between a team and would be undertaken by different roles depending on the context.

Developing learning teams does not necessarily involve hiring many new staff – it entails diagnosing the challenges, understanding existing roles and skills, and considering how best to utilize them in a team; realigning roles; focusing any new roles on the areas of greatest need; and enabling more teamwork. To develop learning teams, the following approaches are proposed:

1. **Optimizing the right skills and expertise of the workforce.** This includes repurposing existing roles to align with learning, equity, and inclusion and leveraging the expertise of higher-performing teachers and those with specialist skills by teaming them with less experienced teachers, trainees, and learning support staff. It also involves engaging learning support staff and/or a community education worker for the most marginalized learners to improve foundational learning, student inclusion, well-being, and welfare. A teacher-led team supported by community resources could help manage large class sizes, multiple languages, and diverse learner needs while teacher pipelines are being developed. Specialists may need to be shared across schools; technology could enable this if conditions allow.

A teacher-led team supported by community resources could help manage large class sizes, multiple languages, and diverse learner needs while teacher pipelines are being developed

2. **Developing instructional leadership.** This includes reorienting school leader and district roles towards instructional leadership, i.e. guiding teaching and learning through clear educational goals, curriculum planning, supporting and providing feedback to teachers, and creating an enabling environment for learning, including for the marginalized. Although school leaders are increasingly viewed as instructional leaders, in practice they tend to focus on administrative and supervisory activities and are rarely selected or supported to lead activities that enhance learning. The shift towards instructional leadership at the school level can be facilitated by training school leaders to undertake instructional leadership and provide the necessary tools; task-shifting administrative activities to technology or support staff where possible; and strengthening district capacity to provide coaching and support for school leaders to develop instructional leadership skills.

3. **Data-driven improvement.** This includes reorienting district staff to support schools with data-driven improvement, targeting those most in need. In many systems, roles at the district level (such as supervisors) focus on compliance monitoring, which on its own does not have a strong effect on teaching and learning quality. In an analysis of Education Management Information Systems (EMIS) use, only 7 percent of countries used student assessment data to identify support needed for teachers. Evidence shows that the district can be more effective if it supports data-based school self-evaluation, builds school improvement capacity and resources, and provides regular and sustained professional development. The data analysis function at the district level should shift to support data-driven planning and providing analysis to help leaders identify performance gaps and prioritize district-wide resources.

4. **Increasing workforce collaboration in policymaking.** In the latest *Status of Teachers* survey, 29 percent of unions responded that they were rarely or never consulted on education policy. State-level policymakers should draw on research, evidence, and data, but should also engage with the school- and district-level workforce, developing strong feedback loops to inform and drive strategic change.

5. **Creating team-based structures and practices.** These should enable staff to work in learning teams at all levels in the system and be embedded in initial training and professional development. They can include professional learning communities; peer collaboration; developing training or qualifications for key roles beyond teachers including managerial and technical career paths; and providing team-based goals and incentives. Consideration should be given to professionalization of other key roles such as school and district leaders so they are supported to do their job effectively.

The benefits of the learning team approach include: better teaching through planning and teaching in teams, peer collaboration, coaching, and mentoring; capacity to support proven teaching and learning strategies with learning assistants and trainee teachers; increased instructional time through sharing of non-instructional duties; greater access to specialist expertise; better support for inclusion through more dedicated roles; on-the-job training; and improved motivation. In some low-capacity and low-income contexts, governments may not feel ready to consider the learning team approach. However even in these contexts, learning teams provide new ways to address immediate challenges and leverage existing expertise to develop a more effective workforce.

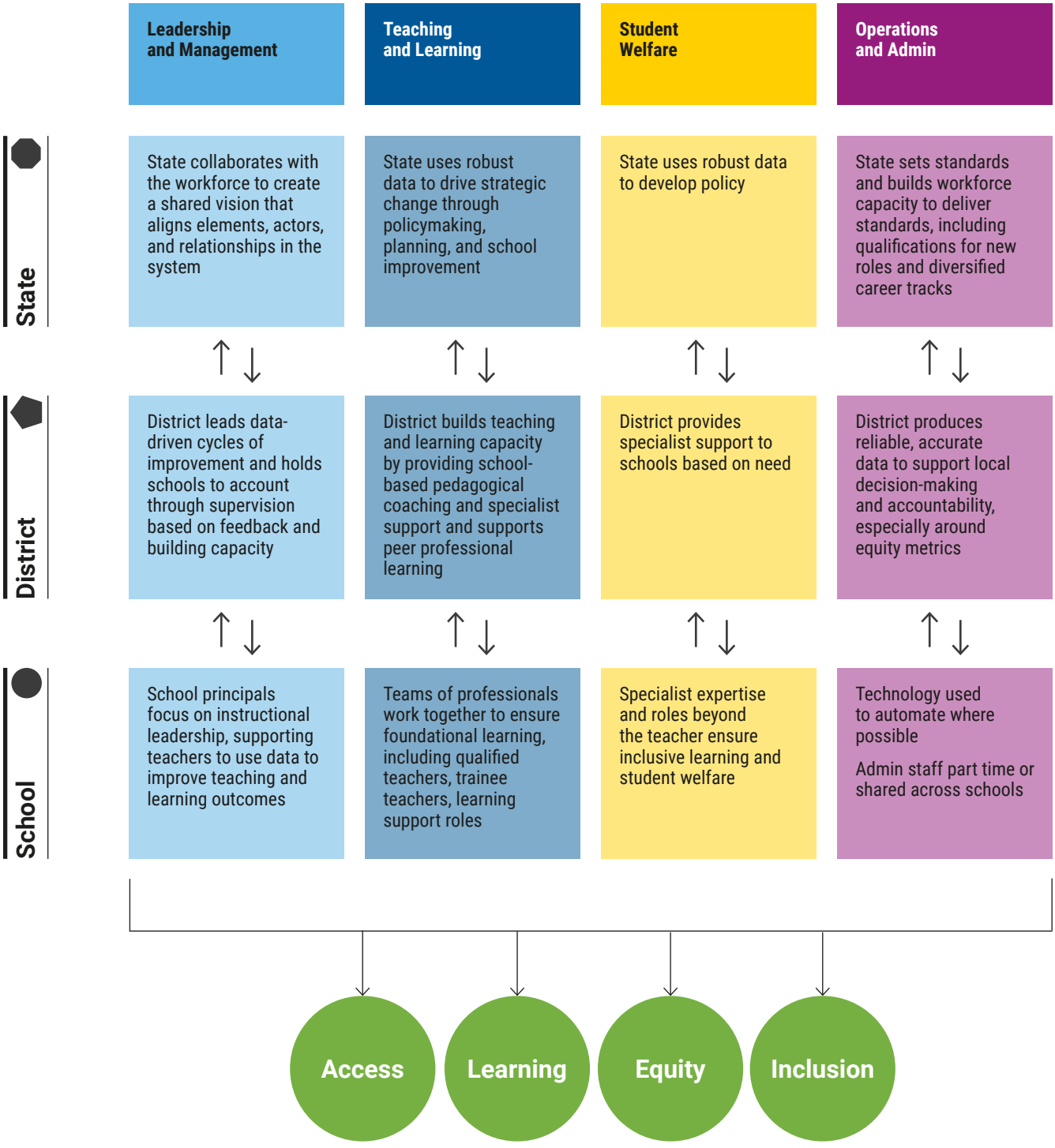
Even in low-income contexts, learning teams provide new ways to leverage existing expertise to address challenges

The diagram below shows the four functions in an education system (leadership and management; teaching and learning; student welfare; and operations and administration) at the school, district, and state levels. It illustrates potential shifts in how the functions are performed when using a learning team approach. Given that every country is at a different stage of development, some of these shifts may have already been undertaken.

As the idea of learning teams is relatively new in education especially in low-income contexts, testing the approach at a larger scale and evaluating its long-term benefits is critical for successful implementation.

Key shifts for a learning team approach by function at each level in an education system

Source: Adapted from Jones, Charlotte, Ruth Naylor and Tal Rafaeli (Education Development Trust), Yeukai Mlambo, Ann Nielsen and Iveta Silova (Arizona State University), and Freda Wolfenden (The Open University). 2019. "Designing the Education Workforce." Forthcoming *Background Paper for Transforming the Education Workforce: Learning Teams for a Learning Generation*. New York: Education Commission.



Vision 3: Transforming to learning systems

Learning systems harness learning teams, networks of education professionals, cross-sectoral partnerships, data, and evidence to create a system that is coherently organized with a focus on learning and the ability to learn and adapt itself.

A learning system approach builds on the learning team approach to maximize the collective capacity of professionals in a system. The vision is informed by research on the power of networks and improvement science, public service reform, systemic innovation literature, innovative education models, emerging thought leadership, and global and education trends.

A learning system approach builds on the learning team approach to maximize the collective capacity of professionals in a system

As the capacity of education professionals grows, school networks can become the engine of professional development: skilled school-based practitioners can share their expertise and knowledge across school networks and beyond. Such networks can successfully organize the diverse expertise needed to solve complex educational issues and quickly spread lessons learned in one part of the network to another. A networked education system can engage and connect to other actors – such as employers, new innovators, and other sectors – who can work in partnership with schools to improve student outcomes and close achievement gaps for marginalized students more rapidly.

To transform education systems into learning systems, the following approaches are proposed:

1. **Exploring innovative learning configurations to address individual needs.** Schools and systems can pilot and develop alternative learning configurations, including technology-assisted learning, to address individual learning needs and give learners access to a wider variety of knowledge sources and ways of learning.

2. **Developing school networks and harnessing system leaders.** Learning systems are highly networked, enabling schools and districts to generate and exchange evidence and knowledge about effective instruction and management approaches. Policies need to foster the conditions for working across networks, allowing schools to work as networks and roles such as system leaders to work across schools.

3. **Leveraging cross-sectoral partnerships to support broader education goals.** Policies, funding, and governance structures should enable greater cross-sectoral working when it facilitates better education outcomes. These partnerships enable, for example, the involvement of a wider range of professionals and community members in schools to support applied and real-world learning, bridge the gap between school and work, and enhance school resources; closer coordination between health and social service sectors to meet learner needs and address systemic barriers to learning; and collaboration with technology providers to develop, test, and scale cost-effective technology-based solutions.

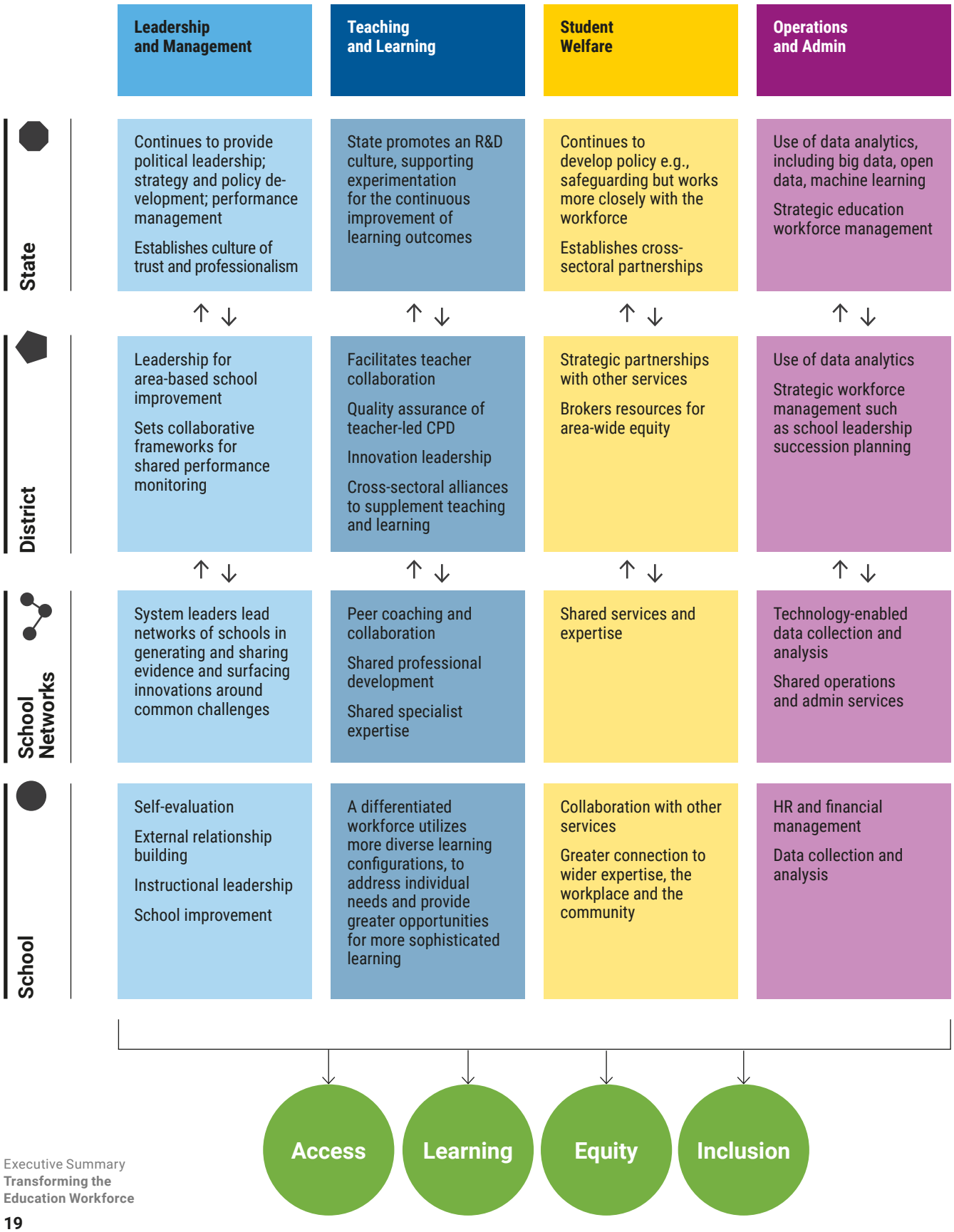
4. **Encouraging a research and development culture at all levels in the system to identify and scale high-impact innovations.** Governments should introduce policies, systems, and structures that support evaluative research, use of data for decision-making, sharing of lessons, and scaling or targeting of effective innovations across the system. Policy is informed by frontline evidence as well as national and international research, and adapted to meet changing needs.

While some of today's best performing systems already incorporate elements of a learning system, this future vision by its very nature draws on more limited evidence from education systems in low-income countries. This means that some aspects of a learning system approach may seem aspirational for some countries. This report recognizes, however, that countries do not develop in a linear way and should have the opportunity to leapfrog. More research is needed to prototype and evaluate these approaches for education, especially in low-income contexts.

The diagram below shows the four functions in an education system and illustrates potential shifts in how the functions are performed when moving to a learning system.

Key shifts across functions at each level to transform into a learning system

Source: Adapted from Jones, Charlotte, Ruth Naylor and Tal Rafaeli (Education Development Trust), Yeukai Mlambo, Ann Nielsen and Iveta Silova (Arizona State University), and Freda Wolfenden (The Open University). 2019. "Designing the Education Workforce." Forthcoming *Background Paper for Transforming the Education Workforce: Learning Teams for a Learning Generation*. New York: Education Commission.



How to get there

Workforce reform is not easy, but it is possible with the right leadership, data and evidence, navigation of the political economy, resources, and a workforce empowered to lead change.

Navigating the political economy of education workforce reform

Workforce reform needs to be undertaken with a deep understanding of the political context

Before embarking on reform, policymakers should analyze the political context to understand what is possible and identify windows of opportunity for major reform. Elements of political context – such as election cycles and the level of decentralization in a system – will influence reform options. It may not be possible to achieve the desired change through a single reform; sequencing, strategic bundling of reforms, and gradual integration of reforms are options to consider.

Reform processes must recognize the members of the education workforce and their representative organizations as change agents and engage them in genuine dialogue to design, implement, and sustain education workforce reform. Instead of being valued and empowered to innovate, teachers are too often perceived as obstacles rather than agents of change. In the latest *Status of Teachers* survey, 33 percent reported that they are not consulted on the development and selection of teaching materials, and 25 percent reported not being consulted on curriculum development.

Policymakers also need to engage other key stakeholders including parent groups, civil society, and government bodies in other sectors to identify risks and opportunities and ensure joint ownership. They should draw on robust evidence, both international and local, to build the case for reform and to clarify options. In designing a reform, careful attention should be given to best practice delivery and change management approaches should inform implementation.

Ongoing communications with all stakeholders, monitoring and evaluation, and adapting approaches as necessary are critical to implementation. Success measures at all levels in the system should be defined, measured, and analyzed. To sustain change, reform goals must be embedded in sector plans and where appropriate in legislation. Building the capacity of accountability structures and recognizing reform leaders is also crucial.

Costing and financing education workforce reform

Financial support for investments in the human and social capital of the workforce is needed to ensure the fundamental right to education and meet SDG 4. Smart investment in the workforce will lead to longer-term returns through improved efficiencies and greater effectiveness. Some of the proposals outlined in this report require an increase in investment (e.g. hiring sufficient trained and qualified teachers, specialist teachers, or formal support roles), while others may produce efficiencies or improve cost-effectiveness of workforce investments (e.g. redistribution of teachers, reorientation of roles towards learning, use of differing learning configurations). Choices with respect to teacher allocations, supplementary roles, improved leadership at the school, district, and national levels, and their associated unit costs will be highly context-specific.

Smart investment in the workforce will lead to longer-term returns through improved efficiencies and greater effectiveness

To unlock resources, ministries of education need to make a convincing investment case for change. By using cost-benefit analysis, reformers can compare options and demonstrate the learning gains workforce reform can achieve as well as the economic and social returns improved learning can generate. Investments in the education workforce should be prioritized towards the poor and most marginalized to deliver the greatest returns.

As the education workforce becomes more diverse and multifaceted, costing models need to reflect a wider range of roles, levels, geographies, and composition of the workforce. Systematic collection of additional data on the current workforce (including roles beyond teachers) is needed and cost-effectiveness analysis should be undertaken when possible to consider different options.

Call to action

In parallel with the development of this report, three countries have been working with the Education Commission's Education Workforce Initiative to draw on the report's evidence and new thinking to address their own education workforce challenges. Sierra Leone is considering how to improve workforce planning and management to enable more efficient allocation and deployment of teachers, better matching of supply and demand, and closing of its teacher gap. Ghana is redesigning its education workforce to better align with learning, inclusion, and more effective management. And Vietnam is prototyping a high-touch, high-tech learning approach with changed workforce roles to explore how it may lead to greater personalized learning and higher-order outcomes in mathematics. Potential tools to help policymakers think through education workforce reform are included in Annexes A, B, and C.

The Education Commission calls on countries to take on the challenge of reforming the education workforce, working with the members of their workforce, national and international organizations, and researchers to

test, analyze, scale, and promote reforms that better support the education workforce and young people to learn and work together and build the skills they need to succeed.

This report recommends:

1 Developing a workforce diagnostic tool underpinned by reliable data, indicators, and improved costing models for countries to use to inform workforce design and management

The Education Commission calls on each country to work with their education workforce to test, analyze, scale, and promote workforce reforms

The first step to education workforce reform is understanding the long-term needs of an education system and diagnosing the education workforce constraints and opportunities. An education system diagnostic tool and better costing models could help guide policymakers through this process. These need to be underpinned by robust data on all roles in the education workforce; their characteristics (e.g. gender, language, disability, and location preference); and current and future workforce supply, demand, and cost. Standard datasets and classifications could be established together with workforce indicators that link workforce data to education outcomes.

- **Policymakers at the national and district levels should work with members of the workforce and their unions to diagnose the current workforce challenges and identify opportunities to overcome them**. This would include generating and analyzing data on the education workforce and its effectiveness, and identifying opportunities to improve deployment, allocation, and better matching of supply and demand. New policies should, where possible, consider evidence of good practices to strengthen the workforce and how learning team or learning system approaches can address context-specific challenges.
- **International agencies and donors** should support governments in diagnosing the challenges, providing good practice evidence, considering learning teams and system approaches, establishing efficient data systems, and building government capacity for data-based decision-making. The Global Partnership for Education (GPE), UNESCO's International Institute for Educational Planning (IIEP), and the World Bank could work together to support countries to develop an education system workforce diagnostic tool as well as improved costing and financing models to understand and tackle workforce reform.

2 Experimenting, researching, and evaluating to explore what works and at what cost

Further research is needed to test, prototype, and evaluate new approaches to workforce reform in low-income contexts and low-capacity environments. This includes collecting detailed evidence on cost-effectiveness, system-wide changes, and understanding *how* effective education workforce reforms are implemented and taken to scale by identifying their enabling and success factors and how challenges and barriers to reform are addressed. Key stakeholders should work together to do the following:

- **Governments should work with members of the education workforce and their unions** to pioneer, test, and evaluate effective reforms, and share lessons and key success factors.
- **International agencies, non-governmental organizations (NGOs), civil society organizations, and donors** should support governments to do the above and provide platforms for these lessons to be shared.
- **Researchers and funders of research** should evaluate existing and new reform approaches; undertake systematic analyses of the outcomes and cost-effectiveness of approaches to strengthening the workforce, developing learning teams, and building learning systems; and contribute to identifying success factors.

3 Leading coalitions for change at all levels

When reforms are ready to be scaled or targeted towards areas with the most need:

Now is the time for all actors – and most importantly policymakers and members of the education workforce themselves – to be open to new ways of working and learning together

- **National policymakers** should build a coalition for change, working with the workforce and their unions, teacher training institutions and universities, development partners, civil society, and other sectors to implement reform. They should monitor the implementation, adapt as necessary, and ensure that coherent structures, policies, and practices are in place to sustain the reform. They should be open to evaluating the reform at scale and sharing lessons from systemwide reforms over time.
- **Members of the education workforce and their unions** should actively engage in the policymaking process, pushing reform from the bottom up. They should lead the changes based on their needs and expertise, generate evidence of what works, and champion reforms by acting as changemakers.
- **International agencies and donors** should support governments to implement at scale and consider establishing or building on an existing international alliance or network to undertake further rigorous research and support policymakers to use this research to inform education workforce reform.

With only 10 years left until 2030, this must be the decade of delivery. We have no time to waste. Now is the time for all actors – and most importantly policymakers and members of the education workforce themselves – to be open to new ways of working and learning together. It takes a team to educate a child. By building learning teams and learning systems, we can harness the human and social capital of the wider workforce and create a learning generation.

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