Champions for Learning
The Legacy of the Learning Metrics Task Force

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B | Center for Universal Education at BROOKINGS

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Acknowledgements

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Based in Montreal, the UIS was established in 1999 with functional autonomy to meet the growing need for reliable and policy-relevant data. The institute serves member states, UNESCO and the UN system, and a range of intergovernmental and nongovernmental organizations, research institutes, and universities.

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LMTF Partner Organizations

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Agence Française de Développement (AFD)

Arab League's Educational, Cultural, and Scientific Organization (ALECSO)

Association for the Development of Education in Africa (ADEA)

Australian Agency for International Development (AusAID)

Campaign for Female Education (Camfed)

Center for International Cooperation in Education Development (CICED)*

Children's Global Network-Pakistan*

City of Buenos Aires, Argentina

Coalition des Organisations en Synergie pour la Défense de l'Education Publique (COSYDEP)

Dubai Cares/United Arab Emirates

Education Development Center (EDC)*

Education International (EI)

FHI 360*

Global Partnership for Education (GPE)

Government of India, Ministry of Human Resource Development

Government of Kenya, Ministry of Education, Science and Technology

Inter-American Development Bank (IADB)

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International Education Funders Group (IEFG)

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Lab for Evaluation, Analysis and Research in Learning (LEARN)—São Paulo School of Economics*

Office of the UN Secretary General

Pearson

Programme d'Analyse des Systèmes Educatifs de la CONFEMEN*

Pratham

Queen Rania Teacher Academy

Save the Children*

Southeast Asian Ministers of Education Organization (SEAMEO)

State Students Admission Commission of the Republic of Azerbaijan*

Tshwane University of Technology*

UK Department for International Development (DFID)

Unit of Education Assessment and Evaluation, City of Buenos Aires*

United Nations Development Program (UNDP)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

United Nations Children's Fund (UNICEF)

United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA)*

United States Agency for International Development (USAID)

University of Management and Technology, Lahore*

Women Educational Researchers of Kenya (WERK)*

World Bank

New members in LMTF 2.0

Learning Champions

City/Country	Organization
Botswana	Botswana Examinations Council
City of Bogotá, Colombia	Secretary of Education
City of Buenos Aires, Argentina	Ministry of Education*
	UNICEF Argentina
Ethiopia	Department of Curriculum, Ministry of Education
Kenya	Ministry of Education, Science and Technology (MoEST)*
	Kenya Primary School Headteachers' Association/Teachers Service Commission
	Women Education Researchers of Kenya (WERK)
Rwanda	Ministry of Education
	Department of Examination and Accreditation, Rwanda Education Board
Senegal	Institut National et d'Action pour le Développement de l'Education (INEADE)
Zambia	Ministry of Education, Science Vocational Training and Early Education
	Examinations Council of Zambia
Kyrgyz Republic	Ministry of Education and Science
Nepal	Education Review Office, Ministry of Education
	Sammunat Nepal
Pakistan	Idara-e-Taleem-O-Aagahi (ITA)
	Inter Board Committee of Chairmen, Ministry of Inter-Provincial Coordination
	Policy Planning & Implementation Unit, Secondary Education Department
	Punjab School Education Department (Punjab Province)
	Consultant Reform Support Unit (Sindh Province)
	Aga Khan University Institute for Educational Development (Sindh Province)
	Provincial Institute for Teacher Education (Khyber Paktunkhwa Province)
Palestine	The Palestinian Commission for Mathematics (RAFA'H) Assessment and Evaluation Center, Ministry of Education
Tunisia	Department of Evaluation, Ministry of Education
Sudan	Department of Technical and Vocational Education, Ministry of Education
	Evaluation Department, Ministry of Education
Ontario, Canada	People for Education

indicates Learning Champions who were also task force members of LMTF 1.0

LMTF Secretariat

Name	Organization
Rebecca Winthrop	Center for Universal Education (CUE) at the Brookings Institution
Kate Anderson	
Tyler Ditmore	
Silvia Montoya	UNESCO Institute for Statistics (UIS)
Albert Motivans	

Advisory Committee

Rukmini Banerji	CEO, Pratham
Jean-Marc Bernard	Deputy Chief Technical Officer, GPE
Jo Bourne	Associate Director, Education, UNICEF
Jimin Cho	Director, Center for Global Education, KICE
Marguerite Clarke	Senior Education Specialist, World Bank
Seamus Hegarty	Honorary Professor, University of Warwick; Former chair, International Association for the Evaluation of Educational Achievement (IEA)
Maki Hayashikawa	Chief, Section for Learning and Teachers Division for Teaching, Learning and Content, UNESCO
Mercedes Miguel	Secretary of Innovation and Quality Education, Ministry of Education and Sports, Argentina
Dzingai Mutumbuka	Former Chair, Association for the Development of Education in Africa (ADEA)

LMTF visit a sustainable education fair during the Learning Across the Seven Domains meeting in Buenos Aires, Argentina. Photo by Kate Anderson.

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Editors' Note

The Learning Metrics Task Force (LMTF) was a group of education experts, civil society members, and government representatives convened in 2012 to catalyze a shift in the global education conversation from access to access *plus* learning. The LMTF also sought to build consensus on global learning indicators and actions to improve the measurement of learning in all countries. After two phases of work, the initiative sunset in early 2016.

The first phase of LMTF (1.0) centered on research and consultations to build global consensus around assessment and learning domains. The second phase (2.0) centered on implementing the recommendations from the first phase. This report, the final report of LMTF 2.0, will focus on the task force's work during that second phase.

However, we cannot explain LMTF 2.0 without describing LMTF 1.0, and we cannot describe LMTF 1.0 without re-creating the global education context at the time of the task force's formation. We thus start the report with a timeline of global developments in education from the past three decades and situate the LMTF within them, and then we describe how the initiative was formed, how it functioned in both of its phases, and why it is ending.

The Learning Metrics Task Force was an extensive, multi-stakeholder partnership, and we want to emphasize the participation and work of the coalition of the LMTF because the actions of these partners drove the work of the task force. Thus, after we have provided the background of the LMTF and its work, we have given space to key partners to share how they contributed to and benefited from these efforts.

In the second section of the report, representatives from the Learning Champions and partner organizations, share their experiences about their work and connection with the LMTF. The third section features several global education experts describing the 2030 education agenda and a variety of initiatives prepared to implement the LMTF's recommendations. The report ends with a brief conclusion on the future of education, to 2030 and beyond.

We hope the LMTF's story will inform people interested in global education as well as others who are excited by the power of partnerships in a globalized, interconnected world. Although assessment of learning can be a complicated and technical topic, the LMTF rested upon a foundation of not only academic expertise but also of relationships—the participatory nature of the task force, exemplified by its open consultations and bevy of in-person meetings, fostered an open and sharing environment among a diverse group of stakeholders. We think its lessons are valuable for any topic or body of knowledge, particularly as technology reduces the distance between cultures and global frameworks such as the SDGs emphasize the interconnected nature of development.

The Learning Metrics Task Force truly was a group effort, and we wish to thank all of the thousands of participants who contributed to the work. We look forward to seeing the learning agenda carried forth in other forms.

Kate Anderson and Tyler Ditmore
Center for Universal Education at Brookings
LMTF Co-Secretariat

The road to 2015

The global education agenda has made great progress over the past 25 years. In particular, 2015 was a watershed year for international education because of the adoption of the Sustainable Development Goals. Of course, SDG 4 on education was not created from thin air; it was the culmination of decades of work, including that of the Education for All goals and the Millennium Development Goals. The LMTF complemented these and other global efforts, highlighting the importance of relevant learning outcomes for all.

A Tanzanian learning to read. Her development is seen. Photo by Daniel Hayduk, Courtesy of Campaign for Female Education.

Major global education events and the LMTF timeline

1990:

Adoption of *World Declaration on Education for All*[1] in Jomtien, Thailand. This document defined goals to meet the basic learning needs by all citizens by 2000, including universal access to learning and an emphasis on learning outcomes.

In the year the World Conference on Education for All took place, **102 million*** children of primary school age were out of school worldwide.

2000:

The Millennium Development Goals were introduced in 2000. Education for All goals were reaffirmed in Dakar and a framework for action[2] was developed for 2000-2015.

In the year the Millennium Development Goals were adopted, **100 million** children of primary school age were out of school, nearly the same numbers as 10 years earlier. In addition, **98 million** adolescents of lower secondary school age were out of school.

*Data provided by the UNESCO Institute for Statistics.

2010:

Enormous progress observed since 2000, as the number of out-of-school children of primary age fell to **62 million**. The most progress was observed in South Asia, where the combined number of out-of-school children and adolescents fell by half, from **73.5 million** in 2000 to **37.5 million** in 2010.

2012:

The UN Secretary General's Global Education First Initiative (GEFI)[3] launches. GEFI had three goals over five years: put every child in school, improve the quality of learning, and foster global citizenship.

UNESCO produced global estimates of learning outcomes,[4] which show at least **250 million** children are not learning the basics in reading, writing, and math, and **more than half** of these children had spent at least four years in school.

2012, September:

The Learning Metrics Task Force convened and held its first in-person meeting in New York City during the UN General Assembly.

2013, May:

The UN Secretary General's High-Level Panel of Eminent Persons on the Post-2015 Development Agenda released its report,[5] which included education and lifelong learning as a standalone goal and included learning and skills in three of the four example indicators.

2013, September:

The LMTF launches its summary report of recommendations at a high-level event in New York City during the UN General Assembly.

2014, January:

LMTF 2.0 begins

2015, May:

The World Education Forum was held in Incheon, Republic of Korea, which resulted in the Incheon Declaration.[6]

2015, September:

September: UN member states adopt the Sustainable Development Goals.

Progress in reducing the number of out-of-school children slowed significantly over the past years, with **61 million** primary-age children and **60 million** lower-secondary-age adolescents out of school.

With the SDG agenda's focus on universal secondary education, new UIS figures showed that in addition **142 million** youth of upper secondary age were out of school.

2015, December:

LMTF officially ends.

2016:

Implementation of the Education 2030 Agenda begins

Top left: Kartikeya Sarabhai, co-chair of the LMTF 2.0 Global Citizenship Education Working Group, talks with a teacher at a school visit in Bogotá, Colombia. Photo by Kate Anderson.
Left: A secondary school teacher in Hyderabad, Pakistan teaches in a classroom damaged by recent flooding. Photo by Kate Anderson.

LMTF 1.0

In September 2015, the United Nations member states adopted the Sustainable Development Goals (SDGs), including the new global education goal to "ensure inclusive and equitable education and promote lifelong learning opportunities for all." In the years prior to the adoption of the SDGs, the global education community was busy making sure education and learning were considered a priority on the member states' agenda.

Recognizing the critical need for better data to improve education quality and measure learning, the Center for Universal Education (CUE) at Brookings and the UNESCO Institute for Statistics (UIS) convened a high-level task force in 2012 to define a small set of learning outcomes that could potentially be tracked by all countries.

Thus the Learning Metrics Task Force began.

The LMTF worked in two phases. The first phase (LMTF 1.0) focused on catalyzing global dialogue and developing a series of recommendations on learning assessments. The second phase (LMTF 2.0) focused on implementing the task force's recommendations.

The LMTF started its research by convening experts to help answer three important questions: What learning is important for all children and youth? How should learning outcomes be measured? And how can measurement of learning be implemented to improve education quality? By the end of the first phase in December 2013, the LMTF had held three open consultations and received advice from more than 1,700 teachers, students, academics, government representatives, and education experts from 118 countries, including from more than 50 national education ministers or their representatives.
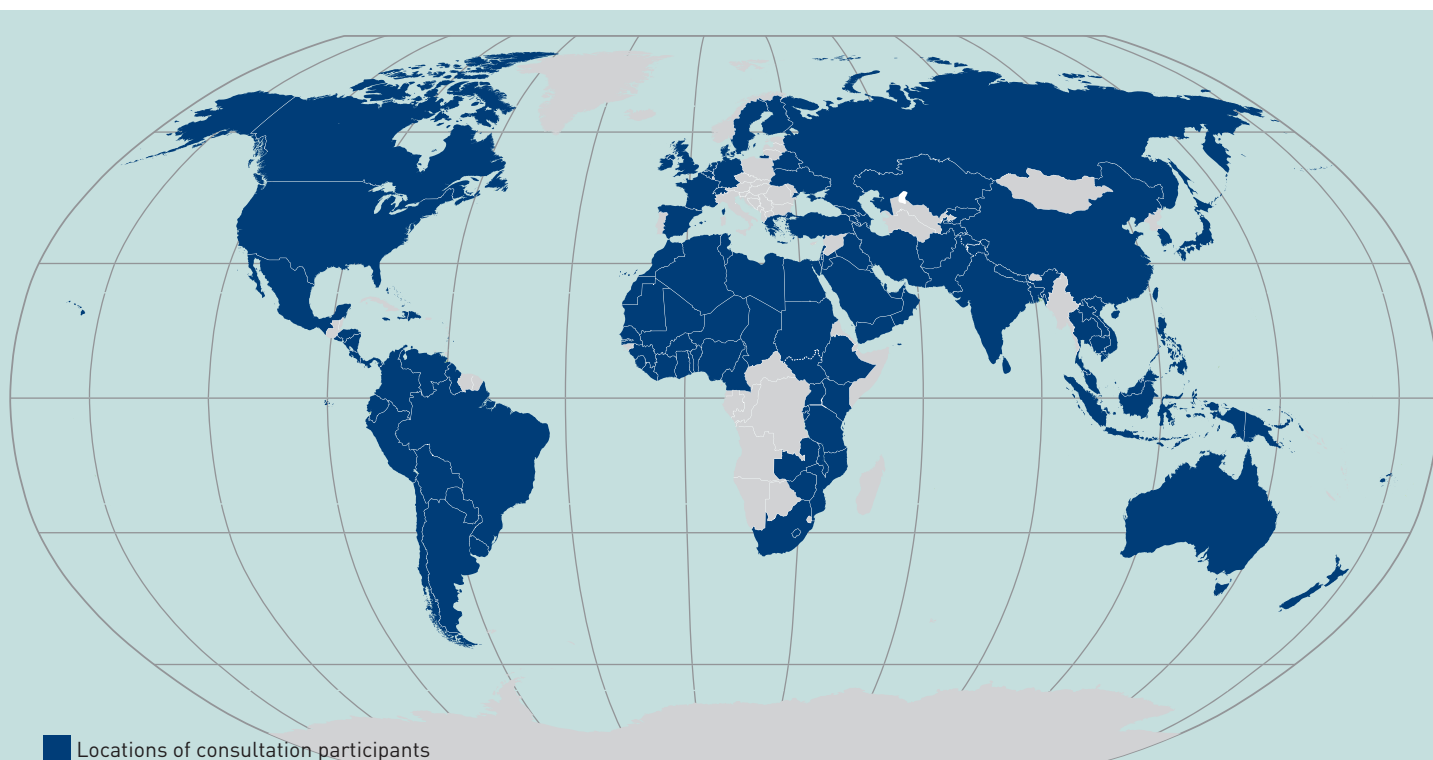
1700+ participants
186 working group members
118 countries
7 key recommendations:
- paradigm shift
- learning competencies
- learning indicators for global tracking
- supporting countries
- equity
- assessment as a public good
- taking action

In the first LMTF report,[7] *Toward universal learning: What every child should learn*, the task force proposed a holistic framework of seven learning domains for all students from early childhood through lower secondary: physical well-being, social and emotional, culture and the arts, literacy and communication, learning approaches and cognition, numeracy and mathematics, and science and technology.

Locations of consultation participants

Report #1: What learning is important for all children and youth?
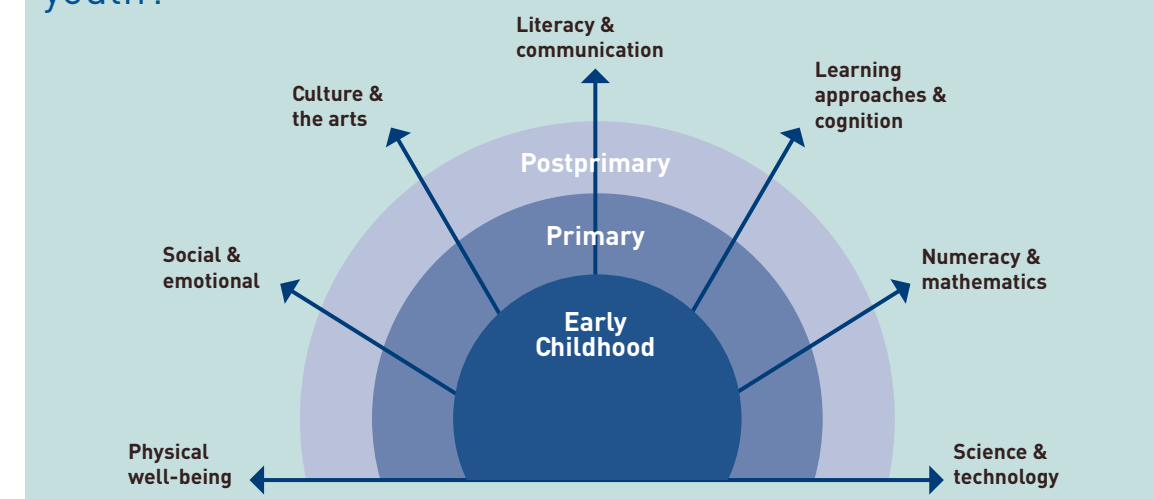
The second report,[8] *Toward universal learning: A global framework for measuring learning*, recommended six areas of measurement to fill the global data gap on learning. That was eventually expanded to seven to include the Learning for All indicator, which captures both access and learning outcomes.

Report #2: How should learning outcomes be measured?

Areas of Measurement	Description of Indicators
Learning for All	Combine measures of completion and learning (reading proficiency at the end of primary school) into one indicator.
Age and Education Matter for Learning	Measure timely entry, progression, and completion of schooling, and population-based indicators to capture those who do not enter or leave school early.
Reading	Measure foundational skills by grade 3 and proficiency by the end of primary school.
Numeracy	Measure basic skills by end of primary and proficiency by lower secondary school.
Ready to Learn	Measure acceptable levels of early learning and development across a subset of domains by the time a child enters primary school.
Citizen of the World	Measure among youth the demonstration of values and skills necessary for success in their communities, countries, and the world.
Breadth of Learning Opportunities	Track exposure to learning opportunities across all seven domains of learning.

The third report,[9] *Toward universal learning: Implementing assessment to improve learning*, focused on the critical question of implementation, with recommendations for practical actions to deliver and measure progress toward improved learning outcomes.

Report #3: How can measurement of learning be implemented to improve education quality?

A final summary report,[10] *Toward universal learning: Recommendations from the Learning Metrics Task Force*, outlined a series of recommendations to use existing assessments of learning as well as new and innovative measures to improve learning opportunities and outcomes for all children and youth.

Illustration by Irina Dvilyuk, iStock.

Strong Learning Measurement System

Institutional Capacity

Technical Expertise

Political Will
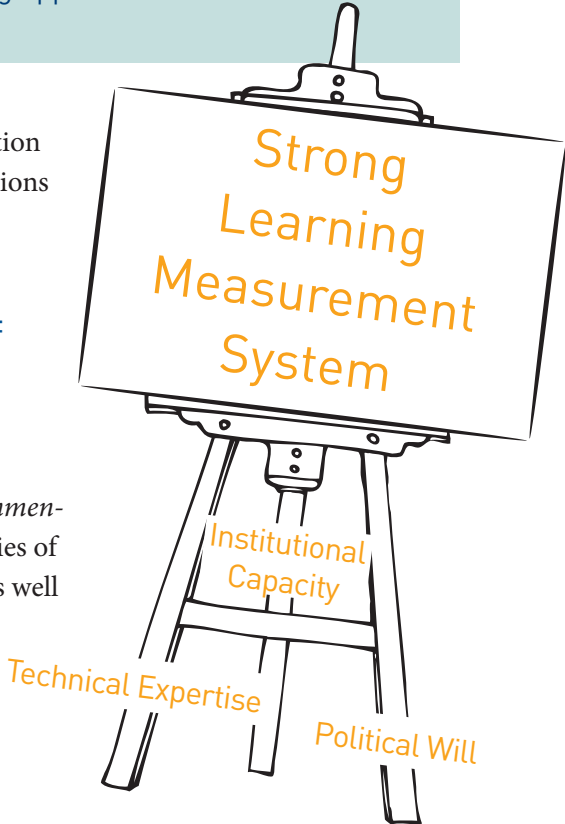
LMTF 2.0

As the task force reviewed its consultations, it became clear that by opening up these debates the LMTF had a responsibility to see these ideas through. At a regional consultation in Nairobi in the final period of LMTF 1.0, participants from Kenyan government offices and civil society said that this was the first time they had all come together to discuss how they measure learning. LMTF opened up the conversation, but what were the next steps?

This sentiment was expressed in other consultations as well. As a group, the task force decided that the work was not finished, and the new partnership that had begun in the task force needed a coordinating mechanism to see it through. Thus LMTF shifted into a second phase: finding practical ways to implement the recommendations.

Five Key Goals in LMTF 2.0

As a result of the consultation process, it was clear that countries wanted sustainable programs, not more projects. The sentiment expressed in the task force's consultation in Nairobi was repeated dozens of times by LMTF members and working group representatives. Given the importance of kick-starting some of the LMTF recommendations and the demand for the task force to continue, the task force considered what a second phase would look like.

The task force developed five focus areas for LMTF 2.0, based upon the first phase's recommendations. LMTF opened up for new organizations to join and partner organizations aimed to achieve results in the following areas by the end of 2015:

1. **Technical:** Indicators in each of the areas recommended for global tracking are developed by partners.

2. **Institutional:** At least 10 Learning Champions use task force recommendations to support country-level work on learning assessment and use of assessment data to improve learning.

3. **Political:** The post-2015 global development and education agendas (now known as the SDGs and Education 2030 Framework for Action) reflect task force recommendations.

4. **Assessment as a Public Good:** A strategy is developed for advancing an agenda in which student learning data are supported as a global public interest.

5. **Knowledge Sharing:** Actors and experts in learning assessment share knowledge and coordinate efforts.

LMTF 2.0 Outcomes

Technical: Technical indicators needed to be developed through an inclusive process that bridged the best research with the experiences of teachers and governments. Smaller groups of task force members and other experts formed projects such as Measuring Early Learning Quality and Outcomes (MELQO), which sought to generate locally relevant data on children's learning and development at the start of school in an efficient way, as well as on the quality of pre-primary learning environments with specific relevance to inform national early childhood policy. MELQO tools were designed to have sufficient comparability across countries to inform global monitoring. Through a consultative process designed to draw on the best experiences in measuring early childhood development to date, two modules were developed, one focused on child development and learning at the start of school and the other on the quality of children's learning environments.

UNESCO furthered work on topics and learning objectives[11] for Global Citizenship Education (GCE) and a working group convened by UNESCO, the Youth Advocacy Group, and CUE developed a catalogue of GCE assessments used at the classroom, local, and national levels.

UIS launched the Catalogue of Learning Assessments,[12] which provides descriptive information on public examinations, as well as national and international assessments in primary and lower-secondary education programs around the world. It also recently launched the to bring together all available data to monitor the Sustainable Development Goal on education.

Institutional: LMTF 1.0 consultations made explicit that assessments often drove national visions for education rather than supported them. To explore the relationships between policy and assessment, the task force launched the Learning Champions initiative in 2014.

The initiative comprised education experts, governmental officials, and teachers from 15 countries, provinces, and cities around the world. Each of the 15 "Learning Champions" joined the LMTF to turn its initial recommendations into a practical reality. The initiative offered a space for the Learning Champions to experiment with new approaches to assessment in their countries, from the classroom the national education ministry, according to their own goals and needs.

The Learning Champions initiative was a major focus of LMTF 2.0, and it is thoroughly described later in the report and the work of each Learning Champion is summarized.

Political: Ensuring that access *plus* learning made it into the final list of SDG indicators for education was the initial goal of LMTF, and LMTF member organizations such as UNESCO, UNICEF, Global Partnership for Education (GPE), the World Bank, and others in decision-making roles came together to ensure learning was included.

Assessment as a Public Good: The Phase 1.0 consultations demonstrated that cost and capacity are huge barriers to rigorous assessment, and the LMTF member organizations worked to develop a strategy for advancing learning assessment as a public good. With the sunset of the LMTF, two aligned initiatives were proposed that can carry forward the network built by LMTF: Assessment

for Learning (A4L)[13] of GPE and the Global Alliance to Monitor Learning (GAML)[14] of UIS. GAML will offer a space for stakeholders to share knowledge and best practices on assessment. A4L's pilot phase was approved by the Global Partnership for Education's board of directors in June 2016, will work toward establishing a financing mechanism to support countries' development of learning assessment.

Knowledge Sharing: Finally, the consultations revealed the education community needed a place to share and communicate about assessment and learning. The LMTF Secretariat continued to serve as a platform for knowledge sharing, and a new generation of task force members entered through an open application process. At the end of 2013, the LMTF initiative was extended for two years, to enable the SDG and Education 2030 Agenda to solidify and identify new structures for collaboration. A4L, GAML, and the IIEP Learning Portal (part of UNESCO's International Institute for Educational Planning) are three such initiatives structured to facilitate communication in the education and assessment communities. UNESCO also hosted a forum on learning assessments and offered to continue the global convening under the auspices of the Education 2030 Agenda.

With the SDGs in place, the LMTF has officially sunset. In February 2016, the LMTF hosted a final in-person meeting in Livingstone, Zambia, to summarize discoveries and learning from the LMTF and to plan the Learning Champions community's next steps. This being the largest in-person meeting, with interest exceeding room space, it became clear that while the LMTF is no more, the research and consensus built by LMTF and the community of practice it convened will continue long into the future.

At the meeting, the Learning Champions and LMTF members agreed to carry on the LMTF's work by leveraging established regional education organizations. Organizations such as UNESCO Bangkok and SEAMEO (the Southeast Asian Ministers of Education Organization) secretariat already have regional networks they can build upon; ADEA (the Association for the Development of Education in Africa) has initiated an assessment network for Africa since the meeting; and other regions have begun meetings and consultations to determine the best process for developing regional assessments suited to their contexts. These regional groups will support individual member countries and each other, carrying on the networking of the LMTF into the SDG era.

The Learning Champions Initiative

THE LEGACY OF THE
LEARNING METRICS TASK FORCE

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Recommending theoretical changes

to assessment systems is one thing; converting those recommendations into concrete action is another. Thus the second phase of the LMTF focused on the challenges education systems face when taking up the LMTF 1.0 recommendations. The Learning Champions initiative, which featured 15 education systems working directly with the task force, was the main focus of LMTF 2.0.

The goal of the initiative was to demonstrate how education systems might better assess learning outcomes and use assessment data to help improve learning outcomes across all seven domains. When the task force surveyed the landscape after making its recommendations, it found few education systems actively included broad domains and assessment of those domains. The task force then decided to recruit a representative group of countries to help move its recommendations from theory to practice.

The task force put out an open call for education systems to join LMTF 2.0 as Learning Champions and ultimately selected 15 countries, cities, and provinces in the initiative. The Learning Champions featured public and civil society education institutions from 15 countries, cities and provinces—Bogotá, Colombia; Botswana; Buenos Aires, Argentina; Ethiopia; Kenya; the Kyrgyz Republic; Nepal; Ontario, Canada; Pakistan; Palestine; Rwanda; Senegal; Sudan; Tunisia; and Zambia. The Learning Champions worked throughout 2015 to turn the theory of the LMTF framework into practical reality.

Each Learning Champion—as the group of actors in each system was called—took responsibility for its approach to improving learning assessment. The Learning Champions were supported by the LMTF framework, but they led their own projects and identified their own ways of strengthening and expanding their systems that fit their unique aims and the singular characteristics of their educational and social contexts.

Short summaries of the activities of each of the Learning Champions are provided below, and the following section offers more in-depth reflections from a few of the Learning Champions themselves.

Learning Champions Progress

Each Learning Champion started from a different point, and each took a different path toward improving the quality of its education system through improving measurement. Although these short summaries are not comprehensive analyses of the Learning Champions' progress, they illustrate the wide variety of experiences and work each team undertook. The LMTF Secretariat will also publish an in-depth research report on their work.

See the table on page iii for a list of the organizations leading and involved with each Learning Champion.

A secondary school teacher in Punjab, Pakistan gives an English lesson in a school supported by the Pakistan Learning Champions team. Photo by Kate Anderson.

Ontario had previously observed that the province's students perform well on international assessments, but the education system's measures of success narrowly focused on literacy and numeracy. Ontario thus began developing a new set of learning objectives for schools that reflects the long-term needs of their graduates and of society as a whole. Ontario identified five domains of emphasis (creativity, citizenship, health, social-emotional learning, and quality learning environments) and started creating and validating new measurement tools for each domain. By 2016, Ontario had refined competencies for the first four domains, defined essential conditions for the fifth domain, and launched trials of the measurement tools in more than a dozen schools.

Bogotá was especially interested in developing a system of measurement that takes into account a breadth of domains and competencies outside of standard academics. Over the course of several months in 2015, Bogotá developed "Pruebas Ser," a set of assessments on citizenship, art, and physical fitness skills, piloted the new assessments, and distributed the tools widely across the city. The three tools are being used in all 370 public schools in the city and reach 55,000 ninth grade students.

Buenos Aires was motivated by three factors: low graduation rates from secondary school, low exam scores in secondary schools, and low youth employment rates. Buenos Aires adapted the seven LMTF learning domains to its secondary school curriculum, and it reformed assessments and teacher training to match the new curriculum. The team also made municipal assessment results available to superintendents and principals. The city's teachers college designed trainings for teachers that were tailored to specific areas where data had shown the need for improvement. Buenos Aires hosted a regional meeting in August 2015 featuring Learning Champions participants and representatives from across Latin America, including countries that did not have Learning Champions.

Senegal sought to counteract the continued decline of learning outcomes across the country by improving the continuous and formative assessment capabilities of teachers. The team selected and studied a small research group of 10 schools from diverse areas, then developed a set of tools and strategies for teachers in those schools. After further research, Senegal will measure the level of student achievement since the introduction of the tools and strategies and then publish the study's results. Senegal will lead the Francophone countries of the Network for African Learning Assessment.

Tunisia wanted both to update its assessments and to inform policymakers about the performance of children in schools, particularly in early education arenas. The team disseminated analysis from international assessments such as PISA and the Trends in International Mathematics and Science Study (TIMSS) to university partners, NGOs, media agencies, private education institutions, and high-level officials in the government. Unfortunately, Tunisia has had four different ministers of education over the past four years, and the political repercussions slowed progress. Tunisia also hosted a coordination meeting with Sudan and Palestine to initiate the creation of regional assessment for the Middle East and North Africa region.
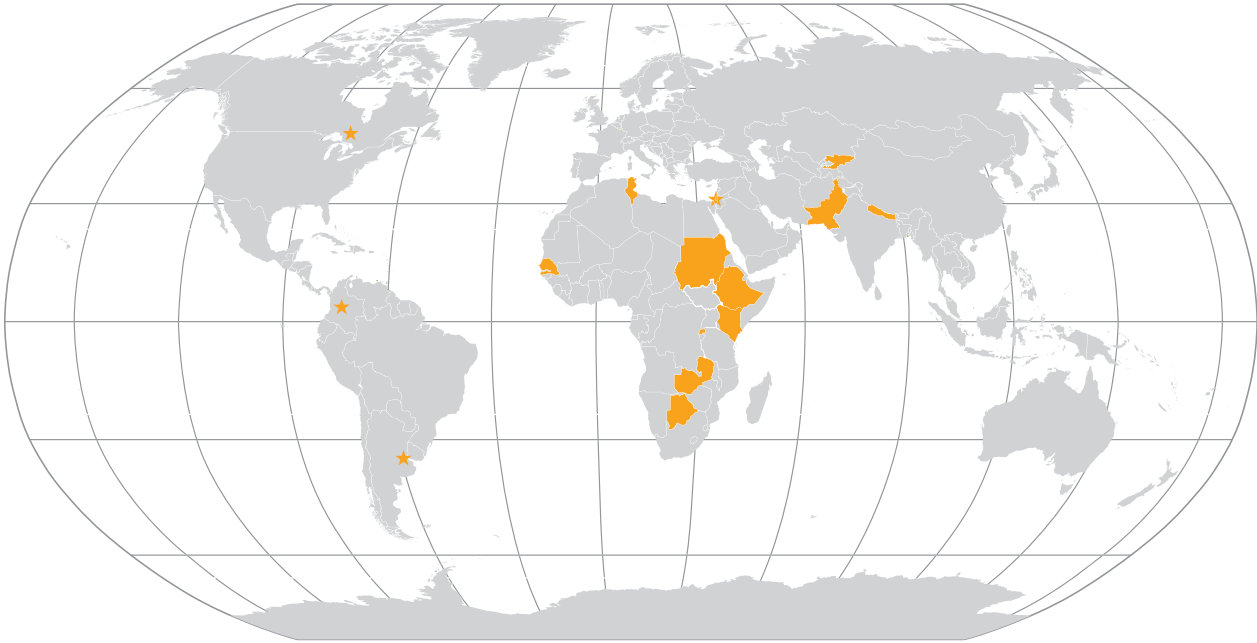
Ethiopia focused on improving continuous assessment and promoting its use to combat low-quality education—national tests had demonstrated that teachers were not equipped to assess children's learning on a daily basis. The team worked with assessment experts to start developing continuous assessment manuals for grades 1-8 in several areas: English and mother tongue languages, mathematics, environmental sciences, art education, and physical education. Ethiopia will use the manuals to prepare teacher trainers and plans to then deploy them to reach the greatest number of teachers possible.

Zambia's primary-level students have not achieved at an adequate level, with effects flowing into their secondary school years and their careers. The Learning Champions team therefore focused on continuous assessment across a number of different domains at the primary level, both to support teachers' knowledge of student performance and to provide opportunities to review what students are learning. Zambia also hosted the Final LMTF Meeting and Second Learning Champions Forum in Livingstone in February 2016 and will lead the Anglophone countries of the Network for African Learning Assessment.

Botswana applied to be a Learning Champion because of students' poor results on end-of-cycle examinations. Botswana started with two objectives: to provide teachers, schools, and local education agents with detailed information from the national examinations to improve their formative assessment abilities and strengthen continuous assessment. In 2015, Botswana held workshops in seven regional centers and provided detailed feedback to regional staff, school leaders, and teachers on students' performance on the 2014 primary, lower secondary, and upper secondary examinations.

Rwanda elected to focus its efforts on disseminating data from the Learning Achievement in Rwandan Schools assessment in ways useful for policymakers, teachers, parents, and the general public. The assessment focuses on literacy and numeracy at grades 3 and 5, with the goal of data analysis to inform policies and teaching strategies. The team also engaged in a feasibility study to determine whether the My School platform developed in Australia could be adapted for use in Rwanda. Rwanda is leading ADEA's Inter-Country Quality Node on Teaching and Learning. The country hosted the First Learning Champions Forum in Kigali in February 2015.

Kenya had two goals for its assessment system: to create harmonized, comprehensive tools to ensure access, learning, and competency development, and to eliminate uncoordinated assessments serving largely to rank students. Kenya built on previous work to make a tool to measure the quality of schools and another to measure kindergarten readiness. The Learning Champions team also contributed to policymakers' decisions to change the high-stakes nature of assessments that had been associated with end-of-year exams. Kenya hosted a Regional Learning Champions meeting in June 2015 and will continue to foster regional cooperation with ADEA and the Network for African Learning Assessmentt.

Palestine approached its education challenges from two directions: developing better assessments in life skills, information and communications technology (ICT) literacy, and school readiness, and assembling a network of education experts to influence the national government's education strategy. The team established a strong network of governmental officials, nongovernmental organizations, education researchers, and education practitioners to help drive education reforms. Palestine also coordinated with Tunisia and Sudan to initiate the creation of regional assessment for the Middle East and North Africa region.

Nepal examined the results of the country's National Assessment on Student Achievement and formed a working group of different stakeholders to analyze Nepal's curriculum against the LMTF recommendations. The team's work was put on hold because of the earthquake in April 2015, but the relationships Nepal developed were not lost, and the team has continued to progress over the past year. Nepal defined learning standards for grade 8 English, Nepali, math, and science, and the team plans to continue its curriculum analyses and design standards-based assessments for each grade.

The **Kyrgyz Republic** ranked last of all countries assessed by the Organization for Economic Cooperation and Development's Program for International Student Assessment (PISA) in 2009, and the test results demonstrated that poor teaching quality affects its students' learning outcomes. As a Learning Champion, the Kyrgyz Republic laid the groundwork for wholesale educational reform, gathering important stakeholders and disseminating information on LMTF recommendations to all relevant actors in the country. The Kyrgyz Republic also began several projects with a variety of international organizations focused on improving assessment at the primary level.

Pakistan's team comprised several provincial government offices and a nongovernmental organization working with the national government. Pakistan first convened the entire team and mapped out all the major assessments occurring in the country (the team released a report with the results in fall 2015). Pakistan also strove to develop assessment tools for numeracy, literacy, and cognition, piloted the tools in each province, and formally launched them in early 2016. The Learning Champions team initiated a National Learning and Assessment Forum to sustain Pakistan's LMTF work.

Sudan first organized meetings among key stakeholders to discuss which learning domains are of primary importance for the country. The group ultimately decided to focus on literacy and communication, numeracy and mathematics, and science and technology. Sudan then set out to reform the assessment, pedagogy, and curriculum for each area and started designing the National Learning Assessment tools for literacy, numeracy, and ICT; the team is still in the midst of the final analysis of the tools. Sudan also coordinated with Tunisia and Palestine to initiate the creation of regional assessment for the Middle East and North Africa region.

LMTF 2.0:
From Recommendations to Results

LMTF 1.0:
7 Recommendations

1 — A Global Paradigm Shift

2 — Learning Competencies

3 — Learning Indicators for Global Tracking

4 — Supporting Countries

5 — Equity

6 — Assessment as a Public Good

7 — Taking Action

LMTF 2.0:
5 Key Goals

Technical
- Indicators in each of the areas recommended for global tracking are developed by partners.

Institutional
- At least 10 Learning Champions use task force recommendations to support country-level work on learning assessment and use of assessment data to improve learning.

Political
- The post-2015 global development and education agendas (now known as the SDGs and Education 2030 Framework for Action) reflect task force recommendations.

Assessment as a public good
- A strategy is developed for advancing an agenda in which student learning data is supported as a global public interest.

Knowledge sharing
- Actors and experts in learning assessment share knowledge and coordinate efforts.

LMTF 2.0:
Partners' Achievements

- UNESCO, UNICEF, the World Bank, and CUE: Measuring Early Learning Quality and Outcomes (MELQO) project
- UNESCO and others: Global Citizen Education (GCED)
- UIS: Catalogue of Learning Assessments
- UIS: eAtlas for Education

- LMTF Secretariat: Learning Champions initiative

- Several partners influenced the development of the Sustainable Development Goals

- UIS: Global Alliance for Monitoring Learning (GAML)
- GPE: Assessment for Learning (A4L)

- IIEP: Learning Portal
- UNESCO: Forum on learning assessments
- LMTF Secretariat: Continued facilitation of network

The power of partnerships

Reflections from LMTF participants

The LMTF contributed to dialogue at the global, regional, national, and local levels and reached a broad range of education actors. The following section features reflections from some Learning Champions and LMTF members on their experiences and lessons learned from the initiative.

A schoolyard sign promoting the new student government at the Mulwani School in Livingstone, Zambia. Photo by Kate Anderson.

How the Learning Champions leveraged the LMTF recommendations

Each Learning Champion came to the LMTF from the perspective of working in a unique context and with different problems to solve. Below, some of the Learning Champions reflect on their interactions with the LMTF and how the task force helped them progress toward the achievement of their distinct goals.

## Learning across the domains in Buenos Aires

Mercedes Miguel

I remember attending the first meeting in New York, in September 2012, when the LMTF started forming the recommendations on the seven domains of learning. The foundational reports and presentations clearly explained what children should learn and began the groundwork for how we can measure learning and use data. I brought a very clear vision from that meeting back to Buenos Aires, where I was the director general of education planning in the Ministry of Education—a vision of the need to plan for a deep and comprehensive transformation in the curricula, in teaching and school organization, and in how assessment data were effectively used to improve learning. Buenos Aires needed to be ready to educate its students in all of the LMTF domains.

Buenos Aires was already interested in reforming its curriculum at the secondary level—the assessments we had showed students were not learning, and our unemployment numbers demonstrated they were struggling to find work after graduation. I sat down with the city's minister of education, Esteban Bullrich, and we reviewed the seven LMTF domains. We decided the curriculum reform would be the perfect timing to introduce the broad domains, and we also knew that we should include all of the domains and not just a few. I organized my own task force and started the process of adapting the domains to our city.

We held more than 485 meetings with principals and superintendents to discuss and build consensus around our vision for the curriculum and how they could best implement it. We reviewed our own curriculum and found places where we could fit the domains into the content we already had, and we found ways to include domains in new ways. Ultimately, based on this broad consultation, we developed our own framework of eight domains necessary for secondary students: communication; critical thinking, initiative, and creativity; information analysis and comprehension; conflict resolution and problem solving; social interaction and collaborative work; responsible citizenship; appreciation of the arts; and self-care, autonomous learning, and personal development.
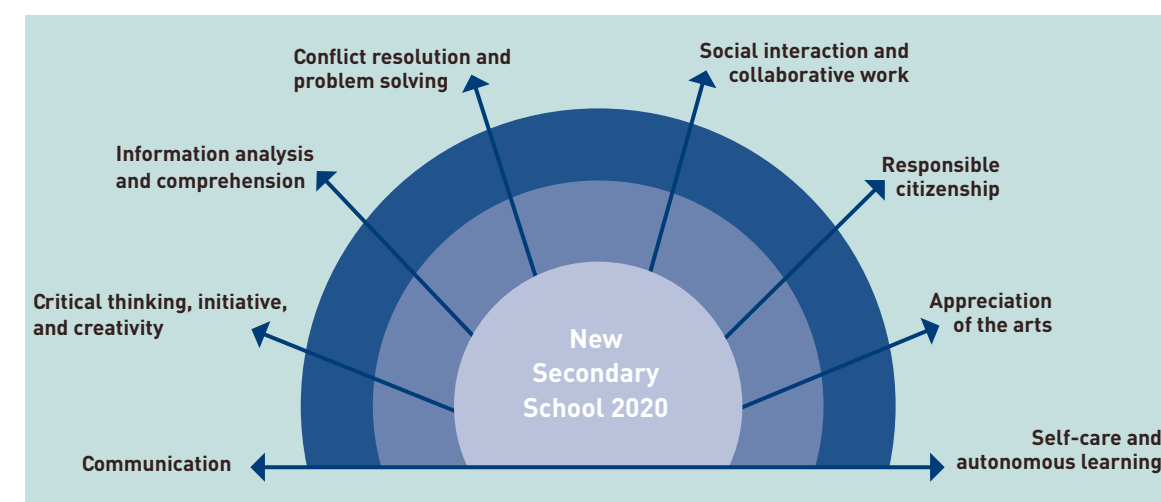
When we finalized this new curriculum, we added a special chapter to the curriculum document to explain how to introduce and teach the skills and domains within all the subjects so teachers could have a starting point for implementing the LMTF recommendations. We packaged the curriculum reform with changes to our teaching training programs for the benefit of new teachers, and we updated our evaluation tools and capacity accordingly. This is how the Nueva Escuela Secundaria came to be.

Now the program is implemented in every one of the 450 secondary-level schools. The city of Buenos Aires is working on deeper implementation of the LMTF recommendations, focused on reforming the school organization to provide new ways of teaching, assessment, and collaboration within schools to promote the new curriculum and quality learning for all.

A student in Buenos Aires engages with technology during a computer class.
Photo by Kate Anderson.

Since that time, I have had the fortune to move to the national ministry and am now the secretary of state for innovation and quality education in Argentina's national Ministry of Education. We are working to create a new national framework to introduce the LMTF domains to the entire country, as we did in Buenos Aires. We have already presented the domains to each of the 24 provinces and are working on new content that will provide domains based on the foundation of human and social development through quality education.

Since that first meeting in New York, the city of Buenos Aires has pursued important education reforms inspired by the Learning Metrics Task Force, the exceptional community of the LMTF Learning Champions, and many practitioners and specialists from all over Latin America and the world. This wide network of connections was crucial to accomplishing our goals; the support and experiences of other LMTF members and experts provided invaluable knowledge for our own policies. We look forward to continuing our work at the national level and to ensuring that all Argentinian children have access to quality education.

Mercedes Miguel is secretary of innovation and quality education, Ministry of Education and Sports, Argentina, and a Learning Champion representative from Buenos Aires.

Teachers influence the LMTF in Kenya

Charles Kado

I am a head teacher of a primary school in Nairobi, Kenya, and a member of the Kenya Primary Schools Headteachers Association (KEPSHA). The association has more than 20,000 members. Its goal is to promote effective management of schools conducive for learning.

The definition of "learning" was and has always remained controversial to us. I was assigned to head the research wing of KEPSHA in 2010, and I was pondering how best to tackle the challenges of learning as we kept staring at the wastage of children graduating from primary school

to secondary school. At KEPSHA, we were concerned that more than half of the about 1 million children who graduated from the primary schools in Kenya never proceeded to secondary schools. It seemed wrong that so many students would not move forward. Either they were not learning or we were not defining "teaching" correctly.

In early 2012, I was honored to join the first LMTF working group to discuss and outline the knowledge, skills, attitudes, and values that are important for children and youth in the 21st century. For KEPSHA, this was an opportunity sent by God, for it gave us the chance to address in a global forum the issues we had been debating all along. We were indeed concerned that the academic subjects emphasized by our curriculum did not capture all the competencies of the children in our schools.

The LMTF allowed us to discuss with diverse groups the appropriate competencies for learning assessment. The members of KEPSHA liked this as it gave them a forum to have the association's voice heard in the global education agenda. They were also excited to amplify the voices of the children who were directly affected by any changes in the education sector.

KEPSHA became more involved with the LMTF in its second phase. In addition to setting up an LMTF tent at our annual delegates conference, which was attended by more than 10,000 head teachers and the vice president of Kenya, we hosted LMTF meetings together with the Kenyan Ministry of Education Science and Technology (MoEST) and the Women Educational Researchers of Kenya (WERK) as the Learning Champion team in Kenya. The meetings held with this team helped KEPSHA influence the national policies directly. Our shared influence saw the Kenyan government abolish student rankings based on the national examinations results, which was negatively affecting the children's holistic learning.

The various forums organized by the LMTF Secretariat, both within and outside of the African continent, were a good learning experience for me and the KEPSHA chairman, Joseph Karuga. These meetings helped us not only be recognized internationally but also engrave the LMTF ideals in Kenya's education system and in KEPSHA schools in particular. I was made the secretary of the Learning Champion team in Kenya, and this has made us view the education reforms in Kenya in light of the recommendations of the LMTF. We have done this by incorporating the LMTF recommendations and Kenyan values in our new national school monitoring tool.

Even after the LMTF sunset, we have continued meeting as a team. As the Learning Champions of Kenya, we are lucky to be led by the State Department of Basic Education's national director of policy and partnerships, and our regular meetings at the MoEST offices confirm that indeed the LMTF objectives have left a legacy in Kenya. We intend together to champion the LMTF ideals, and we shall continue embracing the recommendations as the vehicle toward providing quality education to all children in our schools.

Charles Kado is head teacher, Kenya Primary School Headteachers Association (KEPSHA), and a Learning Champion representative from Kenya.

Charles Kado presents the LMTF 1.0 recommendations at a national head teachers' conference in Mombasa, Kenya. Photo by Kate Anderson.

Evaluating the education system in Pakistan

Dr. Syed Kamal Ud Din Shah and **Saba Saeed**

Pakistan, like many countries, faces the challenge of providing equitable access to education to a growing student population while still ensuring that these students learn the necessary skills to fully contribute to society. Since Pakistan gained independence in 1947, its education system has been transformed several times with the intent of increasing access to education and the quality of education. Most of the changes thus far, however, have been of a cosmetic nature. As a result, Pakistan has advanced only minimally toward improving the efficiency and effectiveness of its education system.

As a part of Pakistan's more recent education reforms, the federal Ministry of Education created the National Education Assessment System (NEAS) to help address assessment issues from the national level. The four core objectives of the NEAS are to inform policymakers; monitor standards; identify correlates of student achievement; and enhance teachers' use of assessment data to improve student achievement. The NEAS carries out a sample-based national assessment at the fourth and eighth grade levels and in 2016 is carrying out its sixth cycle in the subjects of language (Urdu, Sindhi, and English), mathematics, science, and social studies.

National-level assessments are only part of the problem, though. The latest effort to advance quality education has been the National Education Policy 2009, which recommends national, provincial, and school-level capacity be developed to better assess learning and thus improve student achievement. One of the highest priorities, therefore, is establishment of an efficient and cost-effective mechanism at the elementary level for continuously assessing students' performance and teachers' competency.

Given Pakistan's education system challenges from the national to local level, several Pakistani organizations (some of which had participated in the first phase of consultation) naturally came to be interested in the LMTF and the Learning Champions initiative.

In Pakistan, where LMTF was spearheaded by Idara-e-Taleem-o-Aagahi (a not-for-profit organization known as ITA) and the NEAS, and funded by Dubai Cares, a strong working relationship developed between public and private partners. Federal and national government agencies and civil society groups worked together with a profound level of ownership and consensus for achieving the broader targets proposed under SDG 4.

The LMTF and the Learning Champions team, supported by this major public and private sector community, quickly gained momentum in Pakistan as an effort aimed at developing new measurements of successful learning that are both educationally useful and publicly understandable. The partnership approach was nurtured from the very beginning with the federal ministry, the provincial ministries, and all major public and private bodies fully involved in the nuts and bolts of the process, making it easier to develop plans for sustainability within Pakistan even after the LMTF sunset at the global level.

Primary school students attend class in Punjab, Pakistan. Photo by Kate Anderson.

The yearlong country-level process of the Learning Champions initiative culminated with our Launch of Publications event in Islamabad in January 2016. NEAS and ITA hosted the event to showcase and celebrate the achievements of the Learning Champions team in Pakistan, at both the system and school levels, and also to engender informative discussions on aligning assessment practices and methods to our national context and to the post-2015 global development agenda. We launched a report on our work alongside a presentation on the three tools developed by the Learning Champions Pakistan consortium.

At the school level, the response to the work with the LMTF has also been tremendous. In schools where the Learning Champion tools were field-tested, we discovered that students initially were more comfortable answering questions with a binary, right-or-wrong, textbook answer. After a brief explanation of the task, however, the students began to better understand the more complex questions and even to enjoy answering them. One of the head teachers told us that after the teachers experienced the Learning Champion critical thinking tools, they wanted to learn more about how to teach critical thinking. There is clearly an interest for these kinds of assessments, even among students, and we have an opportunity in Pakistan to use assessments as an entry point for motivating teachers to teach a broader set of skills.

Pakistan's journey as a part of the second phase of the Learning Metrics Task Force has been a truly engaging collaborative effort among many stakeholders, all of whom strived to improve learning outcomes for children in Pakistan by strengthening the assessment system. We are pleased that together we accomplished the main tasks asked of the Learning Champions and laid the foundation for an effective assessment system measuring more than literacy and numeracy. We really appreciate the efforts of the LMTF in bringing the Learning Champions together and allowing each of us to play a leading role in developing good practices on learning and assessment, including helping to shape indicators in our country-level tools.

We have learned immensely from our engagement with other LMTF partners, both virtually and in person, and we hope that this collaboration will multiply manifold as we continue working to achieve access *plus* learning for all children.

Dr. Syed Kamal Ud Din Shah is focal person (capacity building), Policy Planning and Implementation Unit, Secondary Education Department, Pakistan Ministry of Education, and a Learning Champion representative from Pakistan. Saba Saeed is a research associate at Idara-e-Taleem-o-Aagahi and also a Learning Champion representative from Pakistan.

Education and occupation in Palestine

Mohammad Matar

Palestine, as you will already know, is mired in a singular political situation, engendered by a military occupation that since 1948 has negatively influenced almost all aspects of Palestinian life. I work for the Palestinian Commission for Mathematics (RAFA'H), which operates in the West Bank, Gaza, and East Jerusalem. Our borders are controlled by Israel, so every time I traveled to meet with the LMTF and other Learning Champions – whether the meeting was in Zambia, Argentina, or Tunisia – I spent a day traveling to Amman, Jordan, to catch a flight, and then I spent a day on my return traveling from Amman back to my home. Of course, I have to apply many weeks in advance for most visas, and I was not always able to get one before an LMTF meeting. Difficulties like this can stack on top of each other and make engaging with international efforts on learning and assessment difficult.

Even though the overall Palestinian situation is unique, many of the challenges we face in improving the quality of our education are not. We first became interested in the Learning Champions because Palestinian assessment activities are too traditional. National and international assessments overemphasize core subjects like literacy and numeracy, with little to no focus on other important areas such as life skills, information and communications technology, and school readiness. While literacy and numeracy are obviously important, focusing too much on them narrows learning because it pressures instructors to teach to the test.

Classroom-based assessments in Palestine are old-fashioned as well, with most being teacher-made tests that assess memorization and copy traditional questions from textbooks. The same goes for our matriculation exam. These strategies often further encourage teaching to the test. Thus we wanted to move our assessment activities from assessment of learning toward assessment for and as learning, and to align them with modern technology, contemporary curricula, and the latest research. These improved assessments will provide teachers better incentives for truly teaching well and will inform the decisions of policymakers. This drove us to become a Learning Champion.

As a Learning Champion, our main goal was to help reform educational evaluation and learning assessment systems and strategies at the national, district, and school levels through Palestine. Key elements in Palestine's education system (such as curriculum, examination, teacher education) have not been changed since 2000, and in late 2014 the Ministry of Education and Higher Education was looking to update it accordingly. With the help of donors, we slowly formed a broad network of 40 organizations to help communicate to the ministry how important it is to reform our assessment programs as well and to provide the ministry with concrete steps to take. We formed a research group among our network to develop the thinking and evidence behind our work, and we made international assessment tools available as we could.

The LMTF, with its unique and comprehensive assessment framework and approach, aided our work in a variety of ways through its knowledge-sharing networks and technical expertise.

Of course, we did face several obstacles to gathering our group together, many of which can be attributed to our relationship with Israel. It is hard to form reforms in education, which requires long-term thinking, when dramatic political and administrative changes can occur without warning. It is hard to make firm commitments in such a context.

We have had to navigate our internal political situation as well. Not every policymaker wants to reform the assessment system, and some oppose change. We attribute our success thus far to the steady development of our community—bringing together nongovernmental organizations, governmental representatives, international organizations, and higher education institutions to discuss our education system and how we can make it better. The LMTF aided us in our initial stages: its research and recommendations gave us the credibility to convene diverse actors behind the banner of the Learning Champions and access *plus* learning.

Palestinian schoolchildren walk from their homes to school in the Muslim Quarter of the Old City of Jerusalem. Photo by Joel Carillet, iStock.

As the LMTF has now sunset, we are trying to maintain its momentum in Palestine and in our region. We are planning to re-administer the World Bank's SABER (Systems Approach for Better Education Results) tools and pilot a new style of our matriculation system. We are conducting a rapid assessment of our old national curriculum, developing a new national strategy for educational evaluation, preparing a national assessment on ICT literacy, and arranging for a national "readiness to learn" assessment. We are also gathering with other Learning Champions, including Tunisia and Sudan, to work on a regional learning assessment initiative called the Arab Learning Assessments Forum to be a regional umbrella that hosts and supports all of our approaches.

The time I have spent over the past 18 months attending LMTF meetings has been an important investment to further my work to ensure that Palestinian students receive the education they need to grapple with the problems of the 21st century. This is something we can do—something that is within our control—even in a time of political uncertainty. We will still need technical, financial, and political support to achieve our ultimate goal, but with the help of the LMTF and through the great work of many Palestinians, we are moving closer to achieving quality education for every child in Palestine.

Dr. Mohammad Matar is development and planning director for the Palestinian Commission for Mathematics (RAFA'H) in the Assessment and Evaluation Center of the Ministry of Education, and he is the Learning Champion representative from Palestine.

Technical assistance and assessment support in Senegal

Mame Ibra Bâ

When it comes to improving its assessment system, Senegal faces many challenges. We need to develop better information collection tools, better pre-test administration techniques, better coding items, and better data entry and processing methods. We need to improve our training for teachers. We need more efficient organization and analysis of assessment results as well as more useful and expanded sharing of results. We need to turn our assessment data into policy action.

We joined the Learning Metrics Task Force as a Learning Champion because we knew, when facing all these challenges, that we needed assessment expertise we did not have to help us make the necessary improvements and reach our goals.

As we hoped, we received suitable technical assistance from the LMTF. For example, a technical expert from the Center for Universal Education visited Dakar in December 2015 to examine our work and offer further suggestions to help bring our team closer to reaching our final objectives. The expert suggested expanding the targeted students and teachers for our pilot research program and recommended adopting an inclusive strategy for the production and implementation of our assessment results.

As a Learning Champion, we conducted research in both rural and urban zones in 12 schools with a total of 500 grade 4 students. We selected six schools as experimental groups and six as con-

trol groups to determine if an appropriate use of formative assessment by teachers in the classes improved the quality of learning. The methodology we used consisted of observing classroom practices, analyzing the students' notebooks and assignments, reviewing assessments proposed by teachers and interviewing teachers, analyzing the formative assessment tools (homework and textbook), and developing tools for continuous assessment.

Before we began our research, we took a baseline measurement of the schools and found the following results:

- Students' mean scores were 41.98 in reading and 54.22 in science.
- One-third of the teachers did not know proper science teaching approaches.
- Teachers used more oral teaching and rarely used the written exercises (only 16 percent used it).
- The student exercises were not varied and never touched all taxonomic levels.
- The teachers did not have tools to track each student individually.
- Self-assessment techniques were rarely used during the session.
- Communities and civil society hardly participated in monitoring student performance.

After our four-month pilot, we found that, in the schools where formative assessment practices were introduced:

- The teachers' ability to use corrective feedback was enhanced.
- Teachers improved their science pedagogy.
- Teachers proposed a wider variety of exercises for continuous assessment.
- Teachers could use more tools to monitor progress and make any necessary remediation.
- Work groups were more systematized and improved.
- The self-assessment techniques were put to better use.
- Communities' participation in the monitoring of school performance grew.

The tangible results and positive feedback we received in this research confirmed our initial idea that there is still much work to be done in the area of continuous evaluation. Now we are working with the World Bank and COSYDEP (Coalition des Organisations en Synergie pour la Défense de l'Education Publique) to expand the sample size of our program and carry on our research.

We share this story to provide a practical example for how assistance from the Learning Metrics Task Force has placed us on the right path to improving our assessment system. The LMTF also pushed us to take on more responsibility, to learn more about assessment and how to turn results into policy, and to embed its recommendations into our own actions. So though we have not advanced to our ultimate goal yet, we have grown more competent and more confident in our abilities to achieve it. When we started our work, we felt we needed help from other experts. Now we are becoming experts ourselves and sharing our knowledge with others.

For example, the countries of Africa are coming together to develop a regional assessment network for the continent—the Network for African Learning Assessment (NALA). Senegal hosted

representatives in June 2016 to discuss NALA's creation, and we will be leading the Francophone countries of Africa in the development of tools and expertise in French-speaking countries. We have been able to take leadership of this activity because of the way the task force interacted with the Learning Champions, by assisting us while following our lead.

We continue to face challenges, we have much to learn, and we have much work to do before our assessments are functioning as best as possible. But our experience as a Learning Champion has ignited a chain of positive reactions, and we will keep working to promote quality education for all Senegalese children.

Mame Ibra Bâ is director of the Institut National et d'Action pour le Développement de l'Education (INEADE) and a Learning Champions representative from Senegal.

Telling the story of quality education in Ontario

Annie Kidder

All around the world these days, we hear about theories, experimentation, and new assessment tools designed to reform education in the 21st century. We are inundated with a broad array of silver bullets that will seemingly solve whatever educational woes we think we are facing.

The reality is never that simple.

When I was in Buenos Aires for a meeting of Learning Champions and other countries in the region interested in assessment, we heard from a Venezuelan teacher who talked about education in this century and said, "I feel as if we swim so far and then we die on the shore." What he meant was that the work that experts and educators do inside the system is not enough, and that lasting change will come only when we start to work more intentionally on developing a new narrative for education—a story told more effectively to the rest of the world about the purpose of education, and about expanded goals for our schools.

This idea—of how we get so close, but cannot get beyond "the shore"—has stuck with me. It perfectly articulates the task ahead: How can we be more effective at telling the rest of the world that there's more to life, and to education, than reading, writing, and math? How can we do a better job at explaining that this complex world—with its daunting global challenges—requires new generations with broader skills and competencies than the ones we tend to focus on?

Our world needs young people who are able to take on such global issues as climate change, conflict, mass migration, and globalization itself. We need new generations with the capacity to innovate, adapt, imagine, and continue to learn. We need new thinking about how to address growing gaps between rich and poor, and we need young people with the capacity and desire to be civically engaged. We need our next generations to be healthier, both physically and mentally, to be resilient, persistent, and willing to take risks.

The capacities required are far beyond what we used to think of as "the core" in education. Whatever we call these broad skills and competencies—21st century skills, non-cognitive skills, creativity, or global citizenship skills—we have to understand that they are foundational. It is not a matter of teaching reading, writing, and mathematics first and then—somewhere down the road—addressing those other competencies. They are the foundation for how kids learn. Social-emotional skills, for example—how to manage yourself and understand your own capabilities, how to ask for help, how to collaborate with others—are at the core of life, work, and learning. And they are teachable, learnable skills; they are not just human attributes we are born with.

The Learning Metrics Task Force as a whole has understood this—you can see it in the seven learning domains and across the work on quality education. What is most important about the LMTF's work is that it is beginning to define a common language for these broad skills and create some consensus about how to measure progress in these areas. All along, participants in the LMTF have understood that the work is complex, but that we cannot bring about change without defining some of our common ground.

The LMTF focused on metrics as a way to be able to be more specific about educational goals and measurement and assessment, not as a mechanism for putting more pressure on teachers or on education systems. Assessment helps teachers be intentional in their classroom, it helps principals be intentional in their schools, and so on up the ladder, all the way to ministers of education and leaders of governments. Developing concrete indicators helps us set goals, choose areas to focus on, and helps all of us to understand where we are making progress and where policies, practices, or even structures may need changing.

The LMTF is one of many organizations around the world that have tried to expand the narrative of education to include a broad range of skills and competencies. The more we look at what real success for students is, all around the world we see that it involves creativity, citizenship, social-emotional learning, and health. The Sustainable Development Goals acknowledge this, as do other world education goals.

Even so, our narrative is far from complete. We now have to make sure that we are thoughtful as we move forward, and that we are not setting up new ways to fail or more simplistic ways to measure learning. In Ontario, we are testing out these broader domains and beginning to develop new ways of thinking about assessment. We must continue to wrestle with how to ensure that our systems do not get trapped in setting narrow goals for our students and that they have effective ways to measure success in areas that many people assume are not measurable. All of the work, trials and errors, explorations, and dialogues occurring through the LMTF and within other global education spaces will help to build new ways of measuring educational success that recognizes what is most important for students and for the challenges we face in society—today, and in the future. Otherwise we risk our students swimming so far only to collapse on the shore.

Annie Kidder is executive director of People for Education and a Learning Champion representative from Ontario.

How the task force members leveraged their involvement in LMTF

While the Learning Champions were a major focus of LMTF 2.0, a large amount of work was done by LMTF member organizations to meet the five key goals of the initiative. Their stories are below.

A Tanzanian student responds to a question in a school where Camfed is working with the government to introduce a well-being curriculum. Photo by Daniel Hayduk, Courtesy of Camfed International.

Building momentum around learning assessment: The experience of Camfed

Lucy Lake and **Katie Smith**

Camfed, an NGO focused on educating girls and empowering young women in sub-Saharan Africa, is leveraging the momentum of the LMTF to engage ministries of education, rural schools, and communities on the issue of learning assessment.

Camfed works with communities to identify and dismantle the myriad obstacles to girls' school retention and outcomes, and from the outset has sought to demonstrate that, when given the opportunity of an education, marginalized girls can perform as well as other students. In the mid-1990s, the first cohort of girls to complete secondary school with Camfed's support achieved pass rates of 79 percent in math and 81 percent in English, against district pass rates of 18 percent and 21 percent, respectively.

Better exam results did not, however, necessarily equate with greater opportunity. A mismatch between narrowly focused, highly academic curricula and the reality of the context rural girls graduate into—where resilience, creativity, and adaptability are requisite to overcoming a dearth of formal opportunity—meant girls were poorly equipped to capitalize on the benefits of completing education. Camfed therefore developed a transition program to bridge this gap and to address the broader learning outcomes and develop the sort of skills often termed "soft," but which are critical for the success of these young women.

Then in 2012, the Learning Metrics Task Force was launched, bringing the issue of learning and learning assessment center stage. Around the same time, the UK Department for International Development launched its Girls' Education Challenge (GEC) with the aim of supporting 1 million of the most marginalized girls through education and with a focus on improving their learning outcomes. For Camfed, the GEC provided a unique opportunity to scale a proven model of investment in girls' education and an important forum to bring the subject of learning outcomes (both academic and more broadly) to the center of dialogue with ministries of education and with communities, around understanding the success of girls within and beyond the school system. The LMTF afforded us a framework for this discussion, and a platform from which to explore the issues with partners at all levels.

Under the GEC, Camfed is tracking the outcomes of 41,000 students in Zimbabwe, Tanzania, and Zambia. This is a high-stakes assessment: emphasis on learning under the GEC is reinforced by the attachment of a payment-by-results mechanism to numeracy and literacy outcomes. In all three countries, Camfed elected to use national assessment tools, being age-appropriate for lower secondary, and in order to engage with ministries of education and national examinations councils in meaningful dialogue on the results. This has brought critical issues to the fore, including low pass rates for marginalized girls and the associated "push-out" effect: as limited school places mean that national exams often act as gatekeeper for progression to the next grade, marginalized girls disproportionately lose out and are pushed out of school because without targeted support they are performing worst in exams.

The LMTF brought attention to the importance of broader learning outcomes beyond numeracy and literacy. Camfed has been able to capitalize on this attention and has incorporated a focus on these outcomes under the GEC with measures to improve them: in Tanzania and Zimbabwe, this takes the shape of a new, complementary, well-being curriculum developed with young people. In Zambia, Camfed is working with Fundacion Escuela Nueva to introduce child-centered pedagogy in rural primary schools, emphasizing co-operation, self-esteem, and other wider skills. These interventions are giving Camfed an opportunity to explore how the acquisition of wider skill sets interplays with improvements in numeracy and literacy.

Critically, we are disaggregating data sets by dimensions including gender and marginality, and reviewing these with ministries to support national- and district-level dialogue on the importance of improving the learning experience for all groups. This leverage extends right to the individual school level, where Camfed is sharing retention, performance, and well-being data—empowering

teachers, students, and parents to engage with students' current outcomes and form plans to improve the outcomes, reducing reliance on a single annual reference point of national exams.

In this regard, the LMTF provided a valuable reference point, not just in bringing broader learning outcomes center stage, but also in making the issue of learning assessment accessible—something in which all participants can recognize their role as stakeholders. As an exciting next step, Camfed is partnering with the Ministry of Education in Zambia. The partnership aims to mainstream continuous assessment in the Zambian education system, building capacity to integrate an assessment data sharing and feedback loop down to school level—empowering stakeholders at every level in relation to learning assessment. Going forward, this multi-stakeholder engagement will be critical to galvanizing and broadening the discussion around assessment and the dimensions of children's learning, facilitating exploration of how learning outcomes are affected by gender and marginality, the correlation between academic and broader outcomes, and, ultimately, how learning outcomes link to opportunities and choices in adulthood.

Lucy Lake is CEO of Camfed. Katie Smith is Camfed's director of operations.

Regional work in Southeast Asia: SEAMEO and SEA-PLM

Asmah Ahmad

In Southeast Asia, around the time the LMTF was beginning in 2012, we

were also thinking about our collective vision for what children should learn. While literacy and numeracy are important competencies, there was widespread interest in measuring other aspects of learning, particularly global citizenship. We looked at existing national and international assessments and determined that a third option, regional assessments, could help us pool our expertise and build national capacity in a way that is relevant to the region. Regional metrics provide indicators that both have the support of international technical experts and are culturally appropriate for each country, thus encouraging each country to develop its own education system according to its own values while still maintaining high standards for education quality.

To this end, the Southeast Asian Ministers of Education Organization (SEAMEO) and UNICEF launched a major new regional assessment: the Southeast Asia Primary Learning Metrics (SEA-PLM).

In 2012, SEAMEO and UNICEF's East Asia and Pacific Regional Office convened a working group to agree on a common approach to assessing learning and to establish a committed network of government officials in the region. SEAMEO and the Australian Council for Educational Research conducted desk reviews, grounded in the seven LMTF domains, on the primary education curriculum in Southeast Asian countries to identify both common and unique elements within cur-

ricula. SEAMEO later hosted a seminar in 2013 to bring regional experts and government officials together, and they agreed on the three domains SEA-PLM will assess: numeracy, literacy, and global citizenship. The experts at the seminar also, most vitally, acknowledged what makes SEA-PLM unique—its reflection of Southeast Asian values and context.

SEA-PLM is distinct in many ways. It is indeed the only regional assessment designed to measure progress in relation to the values and curricula of the Southeast Asia region, and it is also the only assessment in the region to examine the foundation of global citizenship and Southeast Asian values. But it is also the first assessment of its kind to assess writing across different languages. Thus it fulfills that important middle ground for a regional assessment, combining the results of countries while retaining their unique features.

The thematic focus of SEA-PLM was influenced by many global efforts, including the work of the LMTF to develop universally agreed domains of learning well beyond numeracy and literacy. The global citizenship feature of SEA-PLM most explicitly captures the recommendations of the LMTF, as it is one of the global measurement areas. We also agreed to break literacy into two sub-domains (reading and writing) instead of treating it as a whole subject.

We have since developed a vision for SEA-PLM and further refined the structure of the program. The next steps are the field trials and then regional and in-country capacity-building workshops to discuss the findings from the field trial experiences. The main survey will be conducted in 2017. The long-term objective is to incorporate the survey into government plans and budgets and ensure the national governments' commitment to periodic surveys, as has been the case with other regional and global assessments.

We foresee several challenges when moving the trials to the main survey. The first is ensuring that sufficient countries are engaged to constitute a critical mass and provide credibility for SEA-PLM as a regional metric. The intention is that at least six of the 11 SEAMEO member countries should be involved: Brunei Darussalam, Cambodia, Laos, Malaysia, Myanmar, and the Philippines.

The second challenge will be funding the scaling of SEA-PLM so it supports the main survey and reaches more countries. This will involve seeking new donor partners as well as, most crucially, persuading governments to invest at least some of their own resources into conducting the survey and following up on the findings.

In spite of the challenges we face in instituting SEA-PLM for the long run, we have several suggestions for what we consider to be the key conditions for success: strong political leadership and commitment, a comprehensive communication strategy, extensive capacity building, accommodation to government priorities and planning cycles, a clear and coherent coordination mechanism, high-quality technical leadership, a firm commitment to the utilization of data, and adequate and predictable funding. These conditions have enabled us to build SEA-PLM thus far, and they will help us overcome future obstacles.

Asmah Ahmad is a program officer at SEAMEO.

The South and Southeast Asia regional groups pose for a photo at the Second Learning Champions Forum in Livingstone. Photo by Asmah Ahmad.

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Innovative data, the My School program, and the Rwanda Learning Champions

Julia Gillard

In February 2015 I was honored to chair the first Learning Champions forum in Kigali. I was deeply impressed by the commitment delegates showed to developing new solutions to the challenges of translating education data into enhanced learning outcomes around the world.

I know how important this work is. As prime minister of Australia, and before that as education minister, I was passionate about driving reforms to our education system that would ensure Australian children were getting the very best start in life. A key element of this was the My School platform, which provides information to government, schools, parents, and communities on student and school characteristics, learning outcomes, and school finances in an easily accessible online format. It enabled government to make the best judgments about how to allocate resources to schools, and it inspired a movement of continuous improvement toward better learning outcomes for a more diverse range of students.

My trip to Kigali in 2015 sparked an idea to bring this platform to Rwanda. Together with my colleagues at the Center for Universal Education, the Rwandan Ministry of Education, and international aid partners, we are exploring the feasibility of a My School pilot in Rwanda.

My hope is that in Rwanda, this new platform will lift education outcomes and enhance transparency, delivering a better outcome for children and the nation. If we are to have any hope of meeting the new Sustainable Development Goal on education, efforts like these will be essential, and we will need to identify even more ways to use education data innovatively.

Julia Gillard is a former prime minister of Australia and is currently chair of the board of directors of the Global Partnership for Education and a nonresident distinguished senior fellow with the Center for Universal Education at the Brookings Institution.

Below: Young schoolgirl writing outside her classroom. Photo by Riccardo Lennart Niels Mayer, iStock.
Bottom right: Teacher reading a book with a class of preschool children. Photo by monkeybusinessimages, iStock.

Regional Partnerships: Launching an African Community of Practice

Dzingai Mutumbuka

My love for Africa makes me passionately committed to the future of the continent and to the potential of the region's Learning Champions to leapfrog traditional development models and accelerate progress in their education systems. I strongly agree with Nelson Mandela's observation that "Education is the most powerful weapon which you can use to change the world." To vindicate Mandela, and to see where Africa can go with quality education, let us look at a few examples of the importance of education for development.

During my time at the World Bank, I traveled with colleagues on many study visits to East Asia to understand what role education played in their unprecedented and sustained economic growth. The common thread is that all these countries had rapidly expanded quality education and training.

First, an oft-quoted comparison—South Korea and Ghana. South Korea is a country with very limited natural resources. In the 1950s, after the Korean War, Ghana was as wealthy a country as South Korea.[15] Step forward a couple of decades, and South Korea has a GDP per capita more than eight times that of Ghana.[16] The major difference between the two is their education quality. South Korea is just one of the "Asian tigers" that rapidly developed because of a combination of good policies, availability of cheap investment capital, and above all, an educated, skilled, and motivated workforce.

Africa, too, can economically develop at this fast pace. The McKinsey Global Institute's 2012 study "The World at Work" has some interesting data relevant for Africa's education:

- About 60 percent of the increase in the global labor force growth will come from Africa and South Asia.
- By 2060, Nigeria's working age population will triple while Ethiopia's will double (from 2020 levels).
- By 2020 Africa will enjoy a demographic dividend (increasing numbers of young people and declining fertility rates).[17]

These statistics show Africa's potential for growth and rapid development. Africa needs to capital-ize on this opportunity by making sure its education is of the best quality.

Education systems throughout Africa have witnessed massive expansion since the Education for All forums in Jomtien in 1990 and Dakar in 2000. Most African countries have achieved univer-sal primary education. In turn, getting all children into primary school has led many countries to increase access to secondary education. Unfortunately, expanded access has been achieved at the cost of quality.

Reforming the education system is both a political and technical process. Perhaps a good start-ing point is to ask: What do we want future Africans to be? Fortunately we are not starting from a blank slate. The world is full of successful reforms as well as unsuccessful ones. We also need to undertake a thorough examination of our own past efforts. What worked well, and why? What did not work so well? Honest answers to these questions—global, regional, and national—will deter-mine our success or failure.

What students learn, how they are taught, and how they are assessed should be seen as a national public good owned by everyone—students, parents, teachers, ministry officials, employers, reli-gious and civic leaders, and elected officials. Once developed and approved, reforms should be owned and defended by all.

At the technical level, we need experts who can guide monitoring toward the SDG education tar-gets, and also go beyond to include what is important to each country in Africa. One key question

the education systems will need to take on board is the labor market we are preparing our students to join. The labor market a child born today will confront will be totally different from what exists now. Many of these new jobs have not even been created. How should the education system ac-commodate this situation?

Earlier on I raised the imperative of broad political ownership of the reforms at the cabinet, legis-lature, ministry, school, and household levels. But if reforms are to enable teachers to be successful as the agents of change, teachers must have a seat at the table. Without the buy-in of teachers and school heads, reforms will remain a pipe dream. Ultimately teachers and school heads are the cru-cial test of whether implementation of reforms will succeed or fail. We have to identify what incen-tives teachers and school heads will need in order to embrace and faithfully implement reforms.

Reflecting on all this, the greatest risk inherent in reforms is throwing out the baby with the bath water—we do not want to lose the education quality we do have through too many poor reforms. Africa's education systems are facing many challenges. Each country must decide what is impor-tant, but the entire region can come together and share its efforts. The LMTF has sunset, but Af-rica as a region can take over its job of connecting passionate leaders around the issues of learning.

Thus ADEA is creating the Network for African Learning Assessment to bring Africa together around evaluation and monitoring of student learning. As we know, assessment is key for improv-ing education quality. NALA will convene all the education ministries of Africa to discuss the importance of assessment and its place in improving education quality. The goal is to create a criti-cal mass of experts within Africa and reduce dependence on outside experts who lack the cultural understanding of education in Africa. This work will be coordinated by ADEA and led by the Afri-can Learning Champions themselves.

ADEA is also organizing the region around the other areas of education, including by hosting several inter-country quality nodes, such as one on teaching and learning in Rwanda. A major mistake reformers make is to see assessments, curriculum, and teaching as isolated. For example, if the curriculum's objective is to impart critical thinking skills, that is what should be taught and what should be assessed, not some useless factoids derived from rote learning.

What may not be obvious or is often forgotten is that providing education is not charity work. Education is an investment that should *always* produce commensurate returns. Poor quality education is a gross waste of resources. Africa needs to turn its abundant natural resources and the biggest projected youth bulge of any continent this coming century into comparative economic advantages. Achieving this will require strategic investments in and reforms of the quality of edu-cation.

Let education reforms truly provide more light, rather than make more noise. Let them be the compass that will lead us to Africa Agenda 2063 and make Africa the continent of enlightenment.

Dzingai Mutumbuka is former education minister of Zimbabwe and former chair of ADEA.

Dzingai Mutumbuka asks students in Kibera informal settlement, Nairobi, about their career aspirations during an LMTF site visit. Photo by Kate Anderson.

The road to 2030
Recommendations for the path forward

The global education agenda through 2015 was largely determined by the Millennium Development Goals and the Education for All goals. As the MDGs wound down, the Learning Metrics Task Force worked to ensure that learning would be a focus in global education. Now, with the adoption of the Sustainable Development Goals and the Education 2030 Agenda at the end of 2015, we have a new agenda to follow for the next 15 years that does include learning and has a new set of objectives. Some of the experts from the LMTF have offered their thoughts and insights for how to achieve these new goals.

Students walking to the Mulwani School in Livingstone, Zambia.
Photo by Kate Anderson.

Laying the landscape of the new 2030 learning environment: Education in the Sustainable Development Goals

Silvia Montoya and **Jordan Naidoo**

"Ensure inclusive and equitable education and promote lifelong learning opportunities for all"—this is the goal for education the United Nations member states adopted in September 2015 along with 16 similarly worthy objectives under the framework of the Sustainable Development Goals. Each goal was vetted through rigorous debate at numerous stages over the past several years and combined the SDGs represent the culmination of lessons learned from the Millennium Development Goals (adopted in 2000), the aspirations of countries around the globe, and the cumulative understanding of political and technical realities. These goals collectively define the development agenda for the next decade and a half and will indelibly shape the strategies of governments, multilateral organizations, nongovernmental organizations, and individuals.

At UNESCO, we know why we want to ensure inclusive and quality education for all and promote lifelong learning: Every person deserves the right to quality education, which in turn promotes societal and economic development necessary to respond to the rapid changes already evident in the 21st century. We know education must be improved around the world, from the least developed countries to the most advanced. We know that to meet these goals, we need all stakeholders, from parents and teachers to world leaders, to be involved. We know we must achieve this goal by 2030. We must now answer the vital question of implementation: How will we achieve this goal?

In addition to SDG 4, as the goal for education is better known, the international education community recently adopted the Education 2030 Framework for Action. The framework is a guiding outline for implementing and supporting SDG 4 and should not be considered separately. UNESCO will play a central role in collaborating with governments and other partners in supporting efforts to achieve SDG4 targets based on the Framework for Action. While it provides some broad indicative strategies and an overarching road map for the next 15 years, we can also look to other recent attempts to improve education quality for more specific tactics.

The Learning Metrics Task Force is one such initiative. The LMTF consultations (conducted in the first phase of the project, 2012 to 2014) shed light on the key measurement issues related to SDG 4, and insights gained from the LMTF's years of activity can augment our understanding of the development landscape ahead of us. As the education community works toward achieving and measuring progress on SDG 4, we first can look back at the LMTF to help inform some of our planning and next steps.

Learning at the country level

Let's be clear: Countries are responsible for the implementation of SDG 4. Without the commitment of national ministries and leaders to implement the necessary actions to meet the SDG 4 targets, no amount of work by regional and global actors will produce effective results. We must recognize, however, that governments often face several constraints related to the technical capacity needed to implement policies that improve the quality of education for all. Thus, governments have the responsibility for achieving SDG 4, but the international community has a collective responsibility to support their efforts.

UNESCO is organizing consultations with individual education ministries and other sectoral ministries and partners to better understand country contexts and how we can help policymakers achieve SDG 4. We are also holding consultations at the provincial and community levels (as well as at regional levels) so as to further understand the context and help policymakers determine what steps they can take that will have the greatest impact in improving the quality of education.

The focal point in our work is SDG 4. Just as we do not separate the goal from the Education 2030 Action Plan, we encourage all ministries to tie their objectives to SDG 4 and to communicate this down to the community level. As part of this effort, UNESCO helps ministries to establish or strengthen appropriate national coordination mechanisms for SDG 4 that are linked to the overall SDG coordination mechanisms being set up in-country. UNESCO also bolsters country-led education sector working groups to ensure that ministries have the capacity to overcome their challenges and adapt to their needs and demands of their contexts.

The LMTF's Learning Champions initiative is an example of country-led action. The Learning Champions each identified key issues of their assessment regimes that they wanted to address and worked with experts in the relevant fields to develop an action plan appropriate for their context. The broad LMTF network aided their efforts through technical assistance and international coordination.

Colombian boy at school coloring in his notebook. Photo by andresr, iStock.

While technical capacity and global communication are vital, they are not enough to empower governments. UNESCO will also support countries' efforts through advocacy and communication, establishing and facilitating long-lasting coordination mechanisms, enhancing partnerships, and monitoring and reporting on outcomes. UNESCO's entire range of activities, from local to international levels, will be founded upon country-led action. Global efforts to improve education access and quality will build upon the principle of national ownership; to do otherwise is to risk failure.

Common vision and efficient communication

While governments have the primary responsibility to deliver the new global education agenda, UNESCO and the international development community have a clear role to support the governments. In particular, the Incheon Declaration (2015) and the member states clearly recognized UNESCO's mandate to lead and coordinate the necessary actions to support countries in their efforts to achieve the Education 2030 Agenda. This will also entail collaboration with partners at the global and regional levels to ensure that the lines of communication with national governments are open and efficient.

This work has already started, with UNESCO helping to organize regional consultation meetings across the globe to discuss national priorities based on the SDG 4 agenda. Participants at these meetings have highlighted capacity development needs specific to certain contexts and agreed on appropriate regional and national mechanisms and processes. All regions have developed a time-bound road map of action with specific activities reflecting regional contexts and shared priorities. Regional structures and mechanisms will now serve as intermediary levels of support and will facilitate open and efficient lines of communication to ensure the vision for SDG 4 is well understood, thus sustaining a stable connection between the national and global levels of the education community.

UNESCO is continuing to work with partners to develop and promote regional efforts, including by enhancing intraregional and subregional coordination and establishing regional technical support groups. Looking back at the LMTF's body of work, we recognize that it developed and

supported regional efforts, but it also served as a global actor to inform and assist the underlying agenda behind those efforts. From our perspective as a global actor, we need to encourage and support regional networks—they can ensure integrity in content and communication in ways we cannot—but global technical and advocacy efforts are also necessary as a complement to national and regional efforts to improve the quality of education and lifelong learning for all.

Recognizing the challenges of global assessments

Country-led implementation and regional coordination will bring us closer to achieving SDG 4, but we face yet another challenge: How do we measure progress globally? Each country has its own assessment tools and systems, including national assessments and examinations. Some countries participate in regional assessments such as the Southern and Eastern Africa Consortium for Monitoring on Educational Quality, the Programme d'Analyse des Systèmes Educatifs de la CONFEMEN (PASEC), and the Latin American Laboratory for Assessment of the Quality of Education. Other countries also participate in international assessments such as PISA. Given the complexity of the different issues, not to mention the sheer number of actors involved, a global mechanism is needed for monitoring learning outcomes that is adaptable to the political and technical realities in complex country contexts.

The UN has defined four levels of monitoring for the global goals: national, regional, thematic, and global. The first two categories will be composed of indicators selected by the relevant actors at those levels. The thematic level features a broad set of globally comparable indicators that countries can elect to use. The global indicators are a smaller set that the international community will use for monitoring.

The Inter-Agency and Expert Group on SDG (IAEG-SDG) has agreed on a core set of indicators for each SDG, although it continues to work on data and methodology for some of the proposed indicators, on procedures for the review of indicators, and on global reporting mechanisms. The Technical Advisory Group on Education Indicators proposed a list of 43 thematic indicators aligned to SDG 4, with 10 global targets—seven related to content, three related to means of implementation—and 11 indicators. The IAEG's recommendations for a basic global indicator

The Palestinian Learning Champions, represented by the research team from Palestine's Ministry of Education and Higher Education. Photo by Mohammad Matar

Group of Chinese children at school in front of a chalkboard. Photo by Liuser, iStock

framework (which include LMTF recommendations related to reading) were agreed upon by the United Nations Statistical Commission during its session in March 2016; the indicators are still subject to future technical refinement, however. The UN is expected to adopt the underlying indicators by the end of 2016, but we must temper our expectations and understand the many remaining challenges we face in creating and using these indicators.

For example, the SDG Target 4.1 is to "ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes" by 2030. But what is the end of primary school? In Brazil, elementary school ends at grade 9 and is followed by upper secondary education; in South Korea, elementary school finishes at grade 6 and leads to middle school and then high school. These disparities at the end of primary education exist within regions as well: Chile, like Brazil, has only elementary and upper secondary levels, but its primary education finishes at grade 8. These disparities complicate the process of developing a measurement framework for global and thematic indicators. Comparing government spending, socioeconomic status, information extracted from different types of assessments, and learning taxonomies across the globe, to name just a few issues, further convolute the situation.

UNESCO is sifting through all of the details to ensure that the global and thematic indicators are empirically grounded and comparable across all countries, and we are steadily stepping toward global reporting metrics. As a global actor with relevant technical expertise, we are developing standards, guidelines, and tools while monitoring progress toward SDG 4 and providing technical support and capacity-building services to enable countries to collect the data they need to improve their policies. Support at the global level is essential to providing countries with the tools needed to produce comparable data and learn from the experience of others.

What comes next?

Many of the actors involved in the LMTF have positively influenced the international education community over the past five years, from the local level all the way up to the global platform. To name just a few: Camfed improved women's education in communities across sub-Saharan Africa; the Learning Champions enriched assessment systems in a variety of ways; UNESCO Bangkok and SEAMEO have helped develop dynamic regional assessment programs; and the Global Partnership on Education and other multilaterals have connected to innovatively aid country-led work. The success of the SDGs will rely upon the sustained efforts of these and other vital actors over the next 15 years.

We have part of our framework for achieving SDG 4. Countries will implement reforms; regional networks will maintain communication and vision; global stakeholders will provide technical support and coordinate among all relevant actors. UNESCO's next steps are to compose a SDG 4 Education 2030 Steering Committee, which will have the mandate to support countries and member partners in achieving the main education goal by 2030, and to implement the global indicators framework. While these activities are clear, new issues will need to be addressed, such as who is responsible for monitoring which targets and which data sources to target and harmonize.

Indicators and data are crucial to helping the global community achieve SDG 4—without good-quality data, we cannot determine who is learning what and who has been left behind or which interventions can effectively improve the learning outcomes of all. There has always been a plethora of data in education. However, the data have not always been used effectively or appropriately by putting the information in context. New statistical methods and technology now allow efficient data collection, but the challenge is still making full use of the data for policy development. With careful coordination among national, regional, and global actors, we can use our education data to ensure inclusive and quality education and lifelong learning for all.

Silvia Montoya is the director of UNESCO Institute for Statistics. Jordan Naidoo is the director of Education for All and International Education, UNESCO.

Getting better data from the start: The Measuring Early Learning Quality and Outcomes (MELQO) project

Abbie Raikes and **Tamar Manuelyan Atinc**

With the start of a new development agenda focused on promoting equity and increased global attention to the importance of early childhood development in delivering on this agenda, education leaders are seeking reliable information. Demand for measurement of early childhood development has been growing at both the global and national levels, but few resources are available to support development and implementation of measurement tools, especially in low- and middle-income countries where children face the greatest risks to healthy development. Initiated in 2014, the Measuring Early Learning Quality and Outcomes (MELQO) project was designed to efficiently generate locally relevant data on children's learning and development at the start of school, and on pre-primary learning environments with specific relevance to national policy on early childhood development. In addition to ensuring alignment with national standards, MELQO tools were designed to have sufficient comparability across countries to inform global tracking.

As a consortium led by UNICEF, UNESCO, the Brookings Institution, and the World Bank, MELQO used a consultative process that engaged experts from around the world to agree on common constructs and items that can be used across countries to measure children's development and quality of learning environments.[18] These items were then integrated into modules, which also include guidance for country adaptation to align with national standards and cultural expectations for children's development. The modules were then tested in several low-income countries[19] in partnership with the World Bank and UNICEF, and analyses were conducted to establish the degree of comparability across settings.

The MELQO modules present countries with options for measurement. There are several ways to collect reliable information, with advantages and disadvantages to each. Parent or teacher perceptions of children's development and the quality of classrooms can be collected through household surveys (for parents) or through visits to classrooms (for teachers). Direct observations of classrooms and direct assessments of children's development and learning are often considered the gold

standard for measurement; those require highly trained observers to administer the assessments. Decisions on which instrument to use—parent/teacher report, or direct observations—have been made to date based on the needs of the country.

For child development and learning, a common set of items, or "core," covering mathematics, executive function, language and literacy, and social-emotional development is presented as a starting point for national measurement. The modules use parent or teacher surveys or direct assessment. Additional items of specific interest to a country can always be included as part of the measurement tool in that country.

For quality, a common set of constructs with example items is presented, since the degree of comparability of these items requires more testing, with direct observation, parent, teacher, and school administrator surveys. Quality and child development/learning modules are intended to be used together: Information on child development/learning and quality of learning environments are complementary and together provide a more complete picture of the state of children's development at the start of school, and the extent to which pre-primary environments are achieving the level of quality required to reach maximum return on investments.

A key consideration for MELQO is the cost of measurement. While MELQO's research and development has been able to reduce design costs (and training materials are being developed to guide country adaptation and use), data collection can be expensive. The cost is not uniformly higher for one method of assessment over another, however, and countries will need to make those decisions based on their existing infrastructure and preferences. If children are assessed in classrooms, for example, at the start of primary school, the cost of direct assessments may be lower than using a parent report household survey of all children, both those who are in school and those who are not. At the same time, it may be possible for some countries to include a child development mod-

School kids in class using a digital tablet. Photo by Lise Gagne, iStock.

ule in an existing household survey. Costs for data collection may decrease over time, with continued tool development to shorten the length of the instruments and improve their precision.

Drawing upon successes and lessons learned to date, MELQO is now prepared to support countries in implementation while continuing module development. Basic technical properties of the modules and the processes for country adaptation have already been established. Through partnerships with the World Bank, UNICEF, and the UNESCO Institute for Statistics, once funding is secured, MELQO will pursue two related goals: country-level implementation with continued technical development of the tools and advancement of an approach to global monitoring using national-level data. For country-level implementation, additional technical development is needed in some areas: to identify and test "nationally specific items" for close alignment with local goals and priorities, beyond the set of items that MELQO is proposing as a global core; to establish, through longitudinal studies, the predictive validity of the tools, or the extent to which items predict children's development throughout the school years; and to examine the role of data in systems building, so as to enhance the odds that data on early childhood development will be used by policymakers and program implementers to improve the quality of services.

The second phase will also generate technical solutions for using national-level data to inform global monitoring. Through both lines of work, MELQO will achieve related goals of producing country-level evidence on early childhood development and spurring better, more efficient measurement of early childhood development in all countries. All this is with a view to informing national and global debates and influencing policy and practice to deliver better child development outcomes.

Abbie Raikes is an assistant professor at the College of Public Health, University of Nebraska Medical Center. Tamar Manuelyan Atinc is a visiting fellow at the Center for Universal Education at the Brookings Institution.
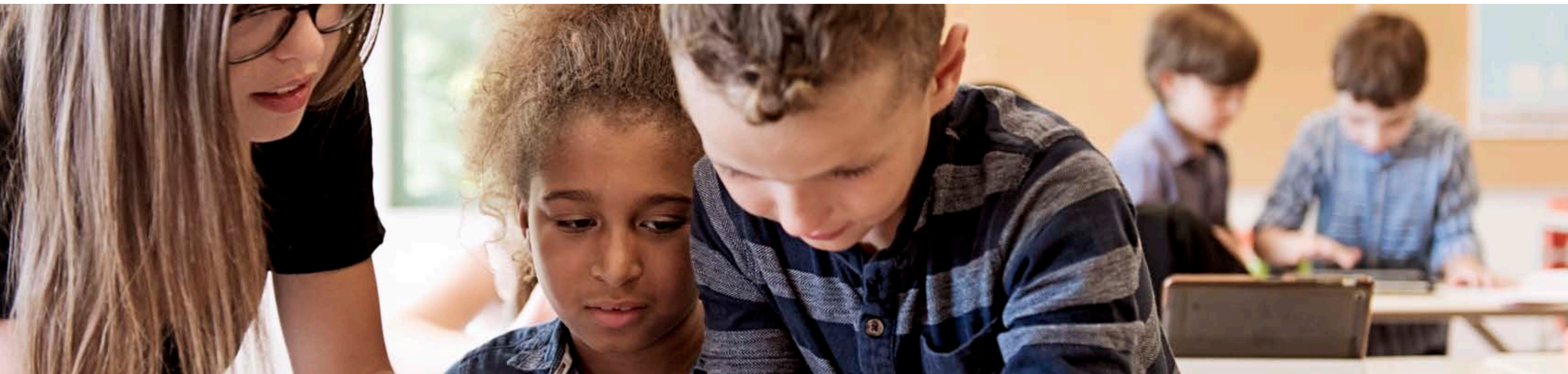
Assessment for learning: An international platform to support national assessment systems

Jean-Marc Bernard

I first heard about the Learning Metrics Task Force in a discussion with Rebecca Winthrop in March 2012. The LMTF had not been formed yet, and she was describing the big picture idea behind the task force—global consensus on measuring learning. She asked me what I thought about the concept, and I told her it would be extremely challenging to reach any global agreement on the domains of learning, but it was something worth undertaking as it would be a breakthrough of the education community at a critical moment as we were heading to the future SGDs.

Several months later, in September, I found myself at the first meeting of the LMTF in New York, along with Carol Bellamy, the Global Partnership for Education's board chair at the time. I was representing GPE's technical team, and I would go on to attend every meeting until the task force's sunset in Livingstone.

After these several years of involvement, I have taken away two major lessons from my time with LMTF. The first lesson is the importance of being truly consultative. The LMTF consultations adeptly involved a set of very diverse stakeholders, including many governments and civil society organizations from the Global South, which played a key role in the LMTF's achievements. The LMTF seven domains of learning are an example of this success—we were able to arrive at a set of domains in spite of my initial doubts, and the consultations were a vital part of overcoming that challenge. The consultations also had the education community thinking about indicators prior to the Sustainable Development Goals deliberations, and many of the debates argued at the UN around measuring learning were first argued in the LMTF meeting rooms.

The second takeaway is even more practical—mobilizing key experts and institutions in the area of international assessment was vital. The LMTF arranged for many meetings over the years of its work, but the most important part of those meetings was the people sitting around the table. From the beginning, the task force included important people in international education, experts in assessment, and relevant government actors from all around the world. This allowed for natural, informal discussions and helped spark relationships among the participants, but the meetings would not have been successful had it not been for the right people being included in those discussions.

After our meeting in the summer of 2013, it was clear to me that a link was missing in our approach to strengthening national learning assessment systems. We needed a better structure to support financing, as many countries cited the lack of predictable and sufficient funding as a main inhibitor of assessment system reform. Because of GPE's general work and our technical background, we offered to lead the development of a concept note on an international platform to support the development and strengthening of national learning assessment systems, which came to be called Assessment for Learning, or A4L.[20]

We followed the LMTF approach when we were developing the concept and hosted a series of consultations. We consulted with technical experts from 70 countries and 80 organizations, and collectively they pushed us, rightly so, into a systemic approach. We realized we needed to take into account assessment at the classroom level as well as large-scale assessment used to inform national policy. The responses we received elevated a simple idea to something much more ambitious.

The GPE board approved a pilot phase of A4L at its meeting in June 2016, and additional development will be discussed early 2017. Whatever happens to A4L, it will always be an outcome of the Learning Metrics Task Force, both in its conception and its structure. Like the LMTF, it will be committed to inclusion and to consultation, to ensuring the Global South and Global North both have a voice in international discussions.

Jean-Marc Bernard is the deputy chief technical officer of Global Partnership for Education.

Breadth of learning opportunities: A tool for evaluating education systems

Seamus Hegarty

School curricula and pedagogies have historically been organized on a disciplinary basis, with priority being given to acquiring knowledge in discrete subject areas such as literacy and numeracy. This may have served well in the past but will not do so in the future: it does not match the dynamic knowledge environment already surrounding us and is not optimal for equipping young people for their adult lives. The mismatch between current school practice and its role in preparing young people for the future is widely recognized, and numerous attempts have been made to reconceptualize the curriculum on a broader basis or set out principles on which a contemporary curriculum should be based. The LMTF's seven domains of learning is one of the best known approaches of reconceptualizing the curriculum.

While many acknowledge the power and relevance of frameworks such as the LMTF's seven domains, we are a long way from their widespread adoption. There are various reasons for this but one stands out: the role of assessment, particularly in relation to high-stakes examinations. Put simply, what is taken seriously in schools is what is assessed; what is not assessed receives less attention from teachers and students alike. The social and emotional domain, for instance, is not generally subject to measurement and rarely is considered part of high-stakes assessment. Partly as a consequence, this domain receives limited attention in schools, increasingly so as students progress through the system.

One response to this situation might be to institute robust assessment across all seven domains. This is indeed a commendable goal and might be seen as a target to work toward. It is unlikely to be achieved in the short term, however: Some of the measurement entailed is psychometrically challenging, and school assessment systems—and the general public—are not ready for the changes that would be required.

This does not mean, however, that we are unable to act. What we can do is focus on students' *breadth of learning opportunities*: establish how their learning experiences match up with the seven domains; identify gaps, needless repetition, and so forth, and take remedial action as necessary.

At the LMTF meeting in Dubai in February 2013, the idea emerged of measuring children's exposure to learning opportunities across the seven domains of learning. Breadth of learning is an aspect of curriculum and needs to be seen in the same, multilevel way. Curriculum is commonly seen in terms of three dimensions or levels: intended, implemented, and achieved. This is a useful categorization, but a more fine-grained analysis may be helpful:

Internalized curriculum: What has a student learned during his or her time in school?

Experienced curriculum: What learning opportunities do students experience in school?

Implemented curriculum: What are students taught, both in lessons and in independent learning opportunities?

Planned curriculum: What learning opportunities does the school seek to provide for students?

Intended curriculum: What learning opportunities does the education system intend to provide for students?

Effective curriculum: What aspects of learning are measured in national assessments and examinations?

Thus we have six different levels of the curriculum—internalized, experienced, implemented, planned, effective, and intended. This framework points to a concrete way of measuring students' breadth of learning: for each level, compare the curriculum on offer with the principles embodied

in the LMTF's seven domains of learning to establish breadth of coverage and identify if there are gaps, repetitions, or undue emphases. The breadth of learning opportunities across each level can also be analyzed vertically to check the alignment within the system so as to identify any barriers or bottlenecks. The resulting "map" of domains across the levels of curriculum can be used as a basis for discourse among education actors within a country.

Over the next two years, the Center for Universal Education and Education International will be working together to create a framework and begin developing tools to measure curriculum coverage at the national, school, and classroom levels. The work will focus on adapting or developing instruments to measure breadth of learning opportunities across the multiple levels of the curriculum. It is envisaged that different instruments will be required at the kindergarten, primary, and secondary levels. Piloting will be conducted in a small number of countries with a view to producing tools for general use.

The goal is to highlight the concept of breadth of learning by giving it operational significance. If it becomes possible to measure breadth of learning opportunities at the different levels and there is concrete evidence on how broad, or narrow, students' learning opportunities actually are, public discourse on the curriculum can be both more specific and more productive. This would ensure a lasting legacy from the LMTF. The seven domains are a laudable aspiration; the danger is that they remain just that. Tools of the kind envisaged here can be a powerful input to educational reform and help to ensure that children and young people around the world access the full curriculum to which they are entitled.

Seamus Hegarty is honorary professor at the University of Warwick and former chair of the International Association for the Evaluation of Educational Achievement.

Left: Teacher instructs children outdoors in Thailand. Photo by THANATASDcom, iStock.
Below: Cheerful girl in the library with teacher. CreativaImages, iStock.
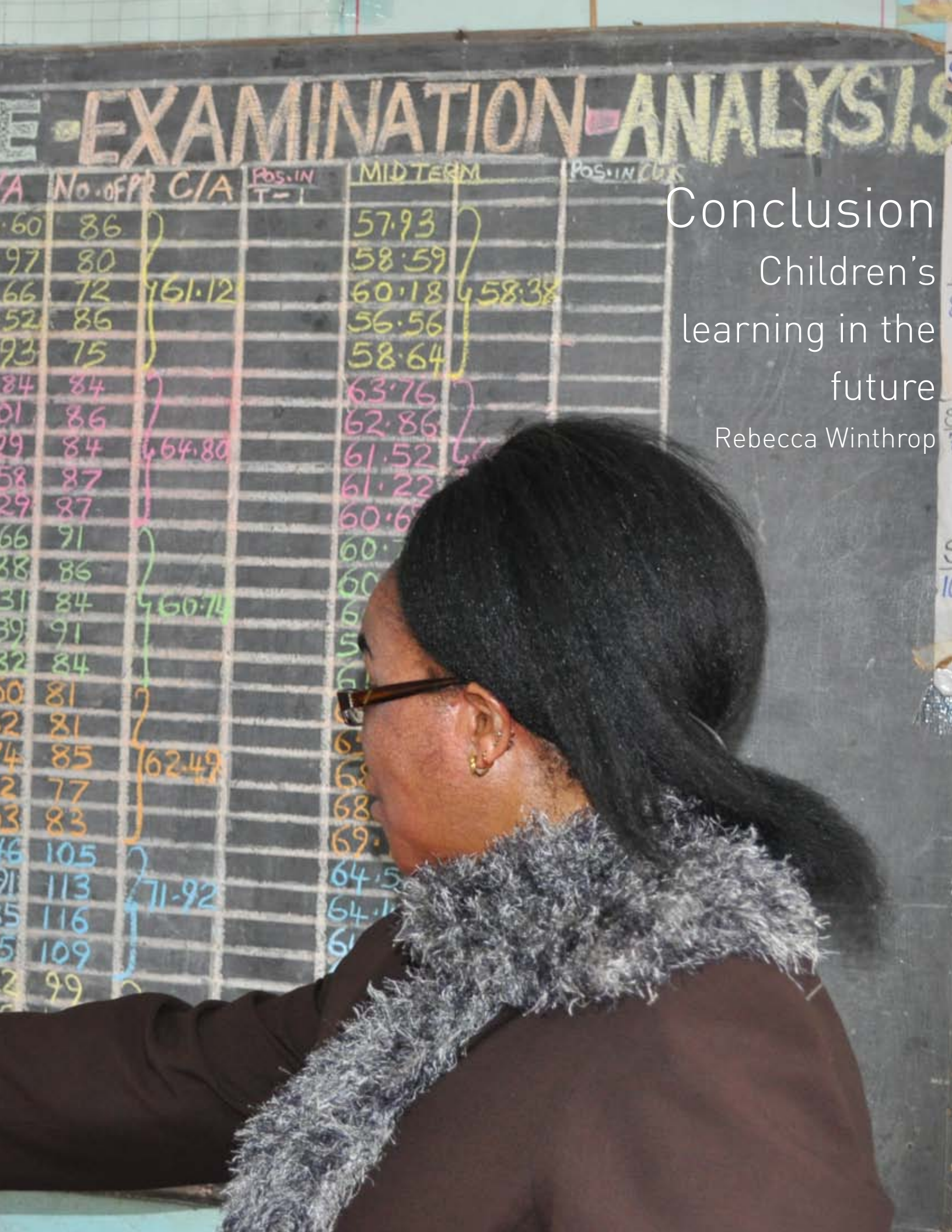
Conclusion

Children's learning in the future

Rebecca Winthrop

One of the most important contributions

of the Learning Metrics Task force and ultimately the UN's Sustainable Development Goals on education has been to focus the global education dialogue on *all* children learning a range of important skills. Twenty years ago, UNESCO released a report titled *Learning: The Treasure Within*, which laid out four main pillars for children's learning globally: learning to know, learning to do, learning to live with others, and learning to be. The report, which has come to be affectionately known as the Delors Report in honor of Jacques Delors, who chaired the commission that wrote it, is still relevant today. Its vision of the purpose of education applies equally well to the world children are living in today and will inherit in the future as much as it did in 1996. Indeed, we see echoes of its vision in the LMTF's recommendations to focus across seven domains of learning and in the existing global education frameworks, SDG 4 and the Education 2030 Agenda, which include a strong focus on children's learning across a diversity of competencies.

There are those who criticize this focus on children's learning across a broad array of skills as overly ambitious. This criticism is not without its merits and mainly stems from a concern about practical implementation of such a wide-ranging agenda. "Are we asking education systems to run before they can walk?" is a worry I have heard voiced more than once. "Why should we focus on improving children's learning when there are still children who still have not even made it to the school door?" or "Why should we focus on children developing other skills, like global citizenship competencies, when so many children still do not know how to read?" are all frequently expressed concerns.

While these concerns are all legitimate, I believe that a global focus on the lowest common denominator is a recipe for sustained inequality. Global goals must aspire to the types of outcomes we want for all children. The great lesson from the focus on school enrollment in the education MDGs is that while the policy world was busy focusing on building schools and neglecting the quality of learning within them, parents with any means began to exit government-run schools for private education in search of better learning (real or perceived) for their children. In today's world, and certainly in the future, essential academic skills such as literacy and numeracy are crucial but by no means sufficient. We do not want a world in which poor children are taught only to read while rich children are not only taught to read but also provided the types of learning experiences that can help them develop the full breadth of skills they will need to succeed in life and work in the future.

Ultimately, each country will face a different set of implementation challenges and will have to plan accordingly for the progress it wishes to make. The global goal of developing the breadth of skills children need, meanwhile, is a good one for education systems to aspire to. It should not matter that a small subset of skills children learn should be tracked globally, which is an important exercise for global development actors and can help prioritize their support. Education systems should aim to impart a quality education for each child. Indeed, if forced to name three measures with which to track children's learning globally, my favorite would be literacy, numeracy, and an

A head teacher in Kenya describes her students' public examinations results.
Photo by Kate Anderson.

opportunity of children to learn breath of skills (see Seamus Hegarty's essay on the breadth of learning opportunities tool above).

Imparting the full breadth of skills requires us to rethink education in and out of the classroom. Throughout human history, education has been the method we have used to impart knowledge, values, and culture to our progeny. The practice of education, however, is dependent on contextual factors of the era at hand, especially any changes the people of the time face, and the available tools to manage those changes.

Today we face changes in at least three notable domains with major implications for education: technology, work, and globalization. Within each of these domains are both promise and peril— promise for a better future where the world is more connected, efficient, and equal; peril that rapid change can leave large communities behind and fail to maximize every member of society's potential. Today and in the future, we will need young people who are prepared to harness these promises and mitigate these challenges.

The new demands of our societies require cultivating breadth of skills. Breadth of skills refers to a range of important skills that include the basics that many education systems focus on, such as literacy, numeracy, and content knowledge in academic subjects, as well as a wider array of competencies including empathy, information literacy, flexibility, and problem solving.

A focus on breadth of skills means educating for a mastery of a wide range of competencies that will help mitigate the challenges posed by our changing world. While it can appear there is tension between teaching subject-specific content and other skills such as self-regulation, critical thinking, and problem solving, they are intrinsically interconnected. Content is not learnable if communication skills are not in place, and critical thinking operates on content, not in a vacuum. In this way, the skills build on and reinforce one another.

Learning and cultivating breadth of skills requires us to rethink how we educate young people. Because skills build off one another, effective teaching and learning practices will teach children how to be good communicators and critical thinkers through literacy and numeracy education. Active

learning strategies that place children at the center and allow them to guide and practice their own learning through projects, collaboration, and inquiry are effective ways for teaching content knowledge as well as developing a range of other competencies. In order to improve children's outcomes in science, literacy, and numeracy, we need to effectively foster the full breadth of skills. But doing so will require a big shift in our educational environments, inside classrooms between teachers and students as well as outside the classroom.

Perhaps the most important question for us all now, at this time in our society, is this: How can we help young people around the world cultivate the breadth of skills they need to manage the problems of the future? In answering this question, we need to identify what types of teaching and learning experiences will build the competencies that young people need. We need to seek to accelerate progress to deliver on the world's aspirations and global commitments. We need to find scalable, equitable, and effective methods for education in our era, methods for inside and outside of school.

Rebecca Winthrop is senior fellow and director of the Center for Universal Education at the Brookings Institution.

Left: A student in Buenos Aires uses a laptop to create a presentation in her social studies class. Photo by Kate Anderson.
Below: A teacher lectures schoolchildren on geography with a globe. Photo by XiXinXing, iStock.

Endnotes

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19. Pilot countries to date are Bangladesh, Colombia, Kenya, the Kyrgyz Republic, Laos, Madagascar, Mongolia, Nicaragua, Sudan, and mainland Tanzania and Zanzibar.

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