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Toward Universal Learning

What Every Child Should Learn

Executive Summary

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Report No. 1 of 3
Learning Metrics Task Force
Executive Summary
February 2013

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Toward Universal Learning: What Every Child Should Learn is the first in a series of three reports from the Learning Metrics Task Force. Subsequent reports will address how learning should be measured within the proposed global framework of learning domains, and how measurement of learning can be implemented to improve education quality. This report represents the collaborative work of the Learning Metrics Task Force's members and their organizations, a technical working group convened by the task force's Secretariat, and more than 500 individuals around the world who provided feedback on the recommendations. See the main technical report for a full list of task force members, working group members and consultation participants.

About the Learning Metrics Task Force

The UNESCO Institute for Statistics and the Center for Universal Education at Brookings have joined efforts to convene the Learning Metrics Task Force. The overarching objective of the project is to catalyze a shift in the global conversation on education from a focus on access to access *plus* learning. Based on recommendations from technical working groups and input from broad global consultations, the task force will work to ensure learning becomes a central component of the global development agenda and make recommendations for common learning goals to improve learning opportunities and outcomes for children and youth worldwide. Visit www.brookings.edu/learningmetrics to learn more.

Support for this project was generously provided by Dubai Cares, the William and Flora Hewlett Foundation, the John D. and Catherine T. MacArthur Foundation and the Douglas B. Marshall, Jr. Family Foundation.

The UNESCO Institute for Statistics

The UNESCO Institute for Statistics (UIS) is the statistical office of UNESCO and is the UN depository for global statistics in the fields of education, science and technology, culture and communication. The UIS was established in 1999. It was created to improve UNESCO's statistical program and to develop and deliver the timely, accurate and policy-relevant statistics needed in today's increasingly complex and rapidly changing social, political and economic environments. The UIS is based in Montreal, Canada.

The Center for Universal Education at the Brookings Institution

The Center for Universal Education (CUE) at the Brookings Institution is one of the leading policy centers focused on universal quality education in the developing world. CUE develops and disseminates effective solutions to achieve equitable learning, and plays a critical role in influencing the development of new international education policies and in transforming them into actionable strategies for governments, civil society and private enterprise. The Center for Universal Education is engaged in three broad areas: improving education resources and learning outcomes, influencing the global education agenda to 2015 and beyond, and advancing quality education in conflict contexts.

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Introduction

The benefits of education—for national development, individual prosperity, health and social stability—are well known, but for these benefits to accrue children in school have to be learning. Despite commitments and progress in improving access to education at the global level, including Millennium Development Goal (MDG) 2 on universal primary education and the Education for All (EFA) Goals, levels of learning are still too low. According to estimates in the 2012 EFA Global Monitoring Report, at least 250 million primary-school-age children around the world are not able to read, write or count well enough to meet minimum learning standards, including those children who have spent at least four years in school (UNESCO 2012). Worse still, we may not know the full scale of the crisis and this figure is likely to be an underestimate because measurement of learning outcomes among children and youth is limited and, relative to the measurement of access, more difficult to assess at the global level.

To advance progress for children and youth around the world, it is critical that learning is recognized as essential for human development. As EFA and the MDGs sunset in 2015, and the UN Secretary-General promotes the Global Education First initiative, the education sector has a unique window of opportunity to raise awareness of international education goals and ensure that learning becomes a central component of the global development agenda. To do this, the global education community must work together to define global ambition on improving learning and propose practical actions to deliver and measure progress.

In response to this need, UNESCO through its Institute for Statistics (UIS) and the Center for Universal Education (CUE) at the Brookings Institution have co-convened the Learning Metrics Task Force (LMTF) project. The overarching objective of the project is to catalyze a shift in the global conversation on education from a focus on access to access *plus* learning. Based on recommendations of technical working groups and input from broad global consultations, the task force aims to make recommendations to help countries and international organizations measure and improve learning outcomes for children and youth worldwide.

The Process

With members representing national and regional governments, EFA-convening agencies, regional political bodies, civil society, and donor agencies[1], the task force is engaged in an 18-month-long process to build consensus around three essential questions addressed in the following order:

- Phase I: What learning is important for all children and youth?
- Phase II: How should learning outcomes be measured?
- Phase III: How can measurement of learning improve education quality?

From the outset, the task force agreed on a set of basic principles to guide its proceedings:

- The work of the task force should be open, transparent and inclusive, with balanced representation from the global north and south.
- Rather than focusing solely on the developing world, task force recommendations should be truly global, addressing learning in all countries.
- Equity within countries should be emphasized in ad-

[1] For a list of task force members, working group members, and consultation participants, see the full report.

dition to overall national learning levels, with a particular attention to marginalized groups.

- The recommendations of the task force should not be limited to current capacity for measurement, but should look ahead to the next 15 years, allowing for changing needs and future innovations in technology and assessment.

During each phase of the project, a working group of technical experts, academics and practitioners around the world works collaboratively to investigate existing policies related to measuring learning, review the research, and analyze feedback from global consultations. The task force then makes decisions based on recommendations from the working group, and releases a report with its findings. This report presents the results of Phase I.

The Purpose of the Report

For Phase I, the Standards Working Group was charged with investigating whether certain competencies, knowledge or areas of learning are important for all children and youth to master in order to succeed in school and life. The primary purpose of this report is to document the Phase I process and present the rationale for the learning domains framework proposed by the task force. Subsequent reports, to be released later in 2013, will build on this foundation by providing actionable recommendations for stakeholders in the global education community.

Before identifying what learning is important, the working group first needed to examine the various contexts in which children are learning around the world, from early childhood (birth through primary school entry) through primary school and postprimary (end of primary through end of lower secondary) levels.

When and Where Children Learn

Early Childhood

Globally, 164 million children are enrolled in preschool programs, and the preprimary gross enrollment ratio (GER) is 48 percent (UNESCO 2012). However, access to preprimary programs is unevenly distributed — in low-income countries the GER for preprimary is only 15 percent. The children least likely to be enrolled in preschool are those belonging to minority ethnic groups, those with less educated mothers, and those who speak a home language different from the language used in school (UNESCO 2012). These are also the children who are most likely to benefit from high-quality preprimary programs.

While many children, especially in high-income countries, attend formal, regulated preprimary programs, the majority of the world's young children learn in nonformal contexts through unstructured or informal processes. For these children, learning typically occurs in the home and community through interactions with parents, siblings and other family members. Even when children are enrolled in preprimary programs, they may not be exposed to high-quality formal early learning opportunities.

Primary

Partly as a result of the push for universal primary education, the majority (89 percent) of primary age children are now enrolled in school (UNESCO 2012). Free, compulsory primary education is recognized as a fundamental human right (United Nations 1948), and primary education is compulsory in almost every

country (UNESCO Institute for Statistics [UIS] 2012). Still, there are nearly 61 million out-of-school children of primary-school age, a number that has stagnated since 2008 (UNESCO 2012).

While some children are either not enrolled in school or are enrolled in nonformal programs, the majority of children globally are learning in formal contexts. However, the degree to which formal processes are good enough to ensure children's right to a decent education depends in large part on the quality of the teachers, curriculum and materials found in the school. In schools where there are enough qualified teachers and materials to respond to each individual child's learning needs, academic learning occurs through formal processes. In schools where teachers are not properly qualified, are overextended or do not come to work regularly, learning still occurs through peer-to-peer interactions—but not necessarily the types of learning intended by the school system (Wagner et al. 2012).

Postprimary

The category of postprimary refers to the various contexts in which children learn beyond primary schooling. For most children, "postprimary" refers to secondary education. Given the diverse areas of specialization students engage in after secondary school, the task force decided to limit its recommendations at the postprimary level to lower secondary. The UIS reports that in 2010, lower secondary education was part of compulsory education in three out of four countries reporting data, and upper secondary was included in compulsory education in approximately one out of four countries (UIS 2012). It is estimated that globally, 91 percent of children who entered school stay there until the end of primary school, and 95 percent of those students transition to secondary school. However, for children in low-income countries, only 59 percent make it to the last year of primary school, and 72 percent of those students successfully transition to secondary school (UIS 2012). For children who do not attend secondary school, learning occurs mainly through work, family and community experiences (i.e., nonformal, unstructured contexts) (Wagner et al. 2012).

Proposed Framework: Seven Domains of Learning

Given the diversity of structures, places, and times at which children and youth learn, it is a challenge to define what outcomes related to learning are important, especially at a global level. Furthermore, to develop a framework that would be relevant for the next 15 years, the task force recognized that it would have to take a step back from what is measurable today and consider first what learning is important for the 21st century. Feedback from interviews with key stakeholders and global consultations points to a growing demand globally for measuring learning in multiple areas, not just literacy and numeracy. Accordingly, the task force proposes a broad definition of learning that encompasses seven domains, with corresponding subdomains, as important for all children and youth to develop (see Table 1 and Figure 1).

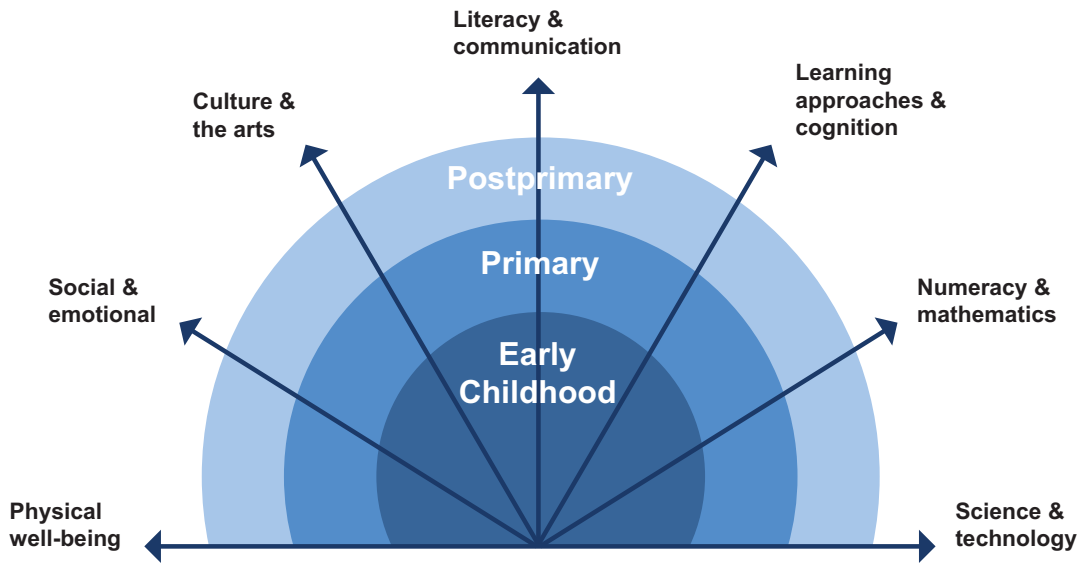
Table 1: Global Framework of Learning Domains		
Domain	**Description**	**Subdomain Examples***
Physical well-being	How children and youth use their bodies, develop motor control, and understand and exhibit appropriate nutrition, exercise, hygiene and safety practices.	• Physical health and hygiene • Food and nutrition • Physical activity
Social and emotional	How children and youth foster and maintain relationships with adults and peers. Also, how they perceive themselves in relation to others.	• Social and community values • Civic values • Mental health and well-being
Culture and the arts	Creative expression, including activities from the areas of music, theater, dance or creative movement, and the visual, media and literary arts. Also, cultural experiences in families, school, community and country.	• Creative arts • Cultural knowledge • Self- and community identity • Awareness of and respect for diversity
Literacy and communication	Communication in the primary language(s) of the society in which children and youth live, including speaking, listening, reading, writing, and understanding the spoken and written word in various media.	• Speaking and listening • Vocabulary • Writing • Reading
Learning approaches and cognition	Learning approaches describe a learners' engagement, motivation and participation in learning. Cognition is the mental process of acquiring learning through these various approaches.	• Persistence and attention • Cooperation • Problem solving • Self-direction • Critical thinking
Numeracy and mathematics	The science of numbers and quantitative language used universally to represent phenomena observed in the environment.	• Number concepts and operations • Geometry and patterns • Mathematics application • Data and statistics
Science and technology	Science is specific knowledge or a body or system of knowledge covering physical laws and general truths. Technology refers to the creation and usage of tools to solve problems.	• Scientific inquiry • Life science • Physical science • Earth science • Awareness and use of digital technology

*Subdomains listed here are by way of example only. See the main report for the full list of subdomains across each level (early childhood, primary and postprimary).

This holistic framework of learning domains was developed by drawing on:

- Existing global policies and dialogues, such as EFA and the UN Convention on the Rights of the Child, which mandate a broad definition of education and learning.
- Research supporting the importance of learning in these domains for human development, economic growth and prosperity.
- Results from global public consultation, in which more than 500 individuals in 57 countries provided feedback. The overwhelming majority of participants in the global consultation, especially those from the Global South, argued for a broad definition of learning that goes beyond basic literacy and numeracy.

Figure 1: A Global Framework of Learning Domains[2]



Note: This framework is intended for the purpose of the Learning Metrics Task Force to identify areas in which to measure learning outcomes. It is not intended to be used as a framework for policymaking, curriculum or instruction.

[2]Each arrow in Figure 1 represents one domain of learning, radiating outward as a child expands his or her development or competency in a given area. The half circles represent three stages in which the task force will concentrate its recommendations: early childhood (birth through primary school entry); primary and postprimary (end of primary through end of lower secondary). The arrows extend outward beyond the diagram to indicate that an individual may continue learning more deeply in a given domain at the upper secondary, tertiary, or technical/vocational level or through nonformal learning opportunities.

Considerations Related to Equity

The task force noted several considerations for the following populations and contexts related to the seven learning domains.

Children with Disabilities

An estimated 15 to 20 percent of students worldwide have special learning needs, and children with disabilities are less likely to enroll in and complete school than their nondisabled peers (World Health Organization and World Bank 2011). In low-income countries, their exclusion from education can be very significant and result in lifelong discrimination.

The learning domains framework covers a broad set of learning outcomes, allowing children who struggle with traditional academic or cognitive tasks to have an opportunity to demonstrate strengths in a variety of domains. With targeted instructional support and accommodations, children with disabilities can make progress toward learning goals in all seven domains. When assessing learning for children with disabilities, as with all children, a focus on individual progress can be more relevant in measuring and improving learning outcomes than a focus on absolute learning levels. More frequent and fine-grained monitoring of progress may be necessary to capture improvements in learning for children with disabilities.

Gender

Gender may be more important in discussing the determinants of learning in the classroom than in making choices about outcome measures. Gender issues are important across all domains, but especially in the domains of physical well-being, social and emotional, and learning approaches and cognition. For example, under physical well-being, the fact that girls can get pregnant and boys cannot, compounded with a social and cultural context of male power and female subservience, make necessary learning outcomes in this area quite different for boys and girls.

There is an implicit assumption in this framework that as the arrows radiate out, from level to level, children are developing and learning at a similar and steady rate. However, in many settings this is not always the case given delayed school entry ages as well as repetition rates. Thus particularly when looking at the physical well-being domain and the social and emotional domain, one needs to recognize that physical and emotional development may also be affected by age as well as by level. This is compounded by the fact that girls tend to reach puberty about two years before boys do. While one can reasonably assume that all postprimary students are older adolescents or young adults, one cannot assume that all primary students are preadolescent.

Learning in Conflict and Emergency Contexts

War and natural disasters can significantly disrupt a child's education and learning trajectory. When children are displaced due to these circumstances, they often are excluded from school for years, sometimes even generations. However, a high-quality education in emergency situations can provide physical, psychosocial and cognitive protection that can sustain and save lives (Inter-Agency Network for Education in Emergencies [INEE] 2010). In the physical well-being and social and emotional domains, education can provide children with critical survival skills and coping

mechanisms through learning about landmine safety, HIV/AIDS prevention and conflict resolution strategies, for example. During conflict and emergencies, learning may occur in formal schooling settings, but very often it occurs in informal ways. Therefore, efforts to assess children's learning must take into account where school-age children are, what is being taught, mother tongue and language of instruction, and a variety of other factors (INEE 2010).

Countries Demonstrating Low Levels of Learning

Currently, international capacity for measuring learning is concentrated most strongly in the domains of literacy and communication, numeracy and mathematics, and science and technology. While these measures do not provide a complete picture of what children and youth have learned, they form the basis for analysis of learning levels globally. Beatty and Pritchett (2012) argue that any learning goals proposed as part of the post-2015 development agenda should be "based on feasibility, not wishful thinking." Goals are only successful in accelerating progress if they are perceived as achievable. In many developing countries, learning progress in the areas of literacy, mathematics and science is stagnant or even declining based on results from national and international assessments. The authors estimate that given current trends, it would take Colombia 30 years and Turkey 194 years to reach mean Organization for Economic Cooperation and Development (OECD) levels of learning as measured by Trends in International Mathematics and Science Study (TIMSS). They also posit that countries such as Indonesia, Iran, Jordan, Malaysia, Thailand and Tunisia will never catch up given current trends, as learning levels have actually declined from one testing period to the next. Among countries participating in the SACMEQ (Anglophone countries in Southern and Eastern Africa), it could take four to five generations (150 years, on average) to catch up to mean OECD learning levels in reading, given current trends.

In another report, Pritchett and Beatty (2012) find that having an overambitious curriculum in countries where achievement levels are low can lead to a "curriculum gap," whereby more children are excluded from learning and never catch up. These countries end up being even farther behind than ones in which the curriculum is appropriate for children's learning levels. Given these complexities, it appears that setting one-size-fits-all standards is unlikely to be useful at a global level. The challenge for the task force is to determine whether a framework can be developed that allows countries to set achievable goals based on current learning levels, understanding that a tiered system could send a message that high standards are achievable by some children and youth but not others.

Remaining Issues

The task force identified the following issues as requiring further investigation by subsequent working groups.

Should global learning goals be measured in an internationally comparable way?

The task force felt that more analysis is needed on how internationally comparable tests can influence policy and practice. Investing time and resources in internationally comparable tests only to end up at the bottom of a league table is discouraging to education ministries and may not provide the type of information necessary to improve learning levels. However, inter-

nationally comparable assessments have successfully drawn attention to gaps in curriculum and instruction and have been used to design school reform efforts in many countries. It is clear that internationally comparable assessments are useful in some contexts and less useful in others. The LMTF is interested in a tiered model of measuring learning that takes into account internationally comparable assessments in some contexts and alternative assessments in others.

Should learning assessment focus on children and youth in schools or all children and youth, regardless of where they are learning?

Given that schools are the primary vehicles for improving learning outcomes, some argue that learning assessments should be conducted only within schools to simplify and focus on making improvements to the system. Others cited low enrollment numbers in preprimary programs (48 percent GER globally) and secondary school (70 percent GER globally) (UNESCO 2012), especially in low- and middle-income countries, as reasons why the recommendations must extend to children outside formal school settings. This is an issue for which the answer may vary by country context—countries with universal or near-universal enrollment may compile accurate assessments of learning through schools, while countries with lower levels of enrollment may need an alternative strategy for learning assessment, such as household surveys.

Should learning be measured by age cohort or grade level?

Some argue that an age-based model would keep governments accountable for the learning of all children, whether or not they are enrolled in school. Children would need to be enrolled in schools, progressing through the levels, and learning as they go in order to meet any national or global education goals based on age cohorts (Pritchett and Beatty 2012). Others argue that the varying ages at which children begin school globally would make grade levels a fairer way of measuring learning, especially in any internationally comparable way.

Next Steps

This report documents Phase I of the LMTF project. It describes the research and policies the Standards Working Group deemed most relevant, but it is by no means a comprehensive report of education policy and learning research.

In Phase II of the project, the Measures and Methods Working Group will investigate the feasibility of measuring learning in the seven domains, taking into account current initiatives to measure learning at the local, national, regional and international levels. The second technical working group will also make recommendations for expanding the capacity for measuring learning in domains that are not currently measured on a large scale.

During the third and final phase of the initiative, the Implementation Working Group will develop recommendations for how learning assessment can be implemented to improve policy and ultimately learning outcomes. A final report with recommendations is currently scheduled for release in September 2013. Updates will continue to be available online at www.brookings.edu/learningmetrics.

Conclusion

The human right to education cannot be achieved simply by ensuring children attend school; they must also be learning while they are there. Setting goals and measuring progress have the potential to accelerate learning at the global level and building consensus around these goals and measures for learning is a crucial step toward ensuring a worldwide focus on access plus learning. The global framework of learning domains represents the task force's vision for what every child everywhere should learn and be able to do, whether at the classroom, system, or global level, by the time they reach postprimary age.

The Learning Metrics Task Force was convened to provide a forum for all interested stakeholders to work collaboratively and share their expertise and ideas for what learning is important and how it can be measured to improve education quality. By identifying areas of consensus and discussing areas of disagreement, the task force aims to propose a framework for measuring learning that is acceptable to all stakeholders, even if it is not "ideal" for everyone. The task force recognizes that not all of the domains are feasible for a potential global learning goal; however, all seven domains are deemed important and should remain the aspiration for every child throughout the education lifespan. The second and third technical working groups will continue to refer back to the global framework of learning domains and develop a rationale for why a particular domain of learning is or is not included in subsequent recommendations.

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