



WORLD BANK SYMPOSIUM: ASSESSMENT FOR GLOBAL LEARNING

November 7-8, 2013 – Washington, DC
World Bank Headquarters, MC2-800





Introduction

A global learning crisis is affecting the life chances of millions of children around the world. Despite significant progress over the past fifteen years in getting more girls and boys into school, gains have been uneven and learning levels remain alarmingly low. In response to this crisis, governments, international organizations, and other stakeholders are turning their attention to the challenge of improving the quality of education and accelerating learning. Measurement, through the use of learning assessment systems, is key to accelerating progress.

A symposium on learning that brings together technical experts and policy researchers who are active in the development community is intended to provide a platform to review and discuss the existing menu of tools and approaches for monitoring and supporting student learning, and to explore how best they can be used or improved to meet the needs of the post-2015 development agenda.

The symposium aims to address the following questions:

1. Why is measurement of learning important in the post-2015 development agenda?
2. What are the available tools and approaches for measuring and effectively using information on learning?
How can these tools and approaches be adapted or improved in order to better meet the learning needs outlined in the post-2015 agenda?
3. How can governments best go about adapting or creating measurement tools and approaches that respond to the post-2015 agenda?

This document provides a summary of some of the tools and approaches to be discussed during the symposium. These tools and approaches are categorized as either International Large-Scale Assessments; Regional Large-Scale Assessments; or National Large-Scale, Citizen-Led, and Other Assessments.



International Large-Scale Assessments

PISA—Programme for International Student Assessment

Purpose: To evaluate the quality of education systems every 3 years by assessing knowledge and competencies in 3 subject areas: reading, mathematics and science.

Target Population: 15-year old students enrolled in schools at grade 7 or above.

Participating Systems: 74 countries, states and school systems in 2009. So far, PISA has covered 74 countries (27 of which were developing countries/ODA recipients in 2010).

Assessment Domains: Reading, mathematics and science, with a focus on one subject in each year. The focus is on higher order thinking skills and the capacity to apply knowledge and skills to real life situations. Optional areas include: financial literacy, problem solving, digital reading, and reading components.

Background Information: Information collected includes instructional time, opportunities to learn, student attitudes and reading activities, socio-economic background, teacher and school-related factors, among others.

Methodology: PISA uses a school-based, group administration approach. It uses paper and pencil tests that include multiple-choice (1/2) and constructed response (1/2) questions/tasks. The test takes two hours. (The 2012 assessment included an optional computer-based assessment for mathematics and reading.) PISA has been administered every 3 years since 2000.

Information Published: International report and a website which includes ranking of countries, percent of students at different performance levels, trends across years, and background information, among others. The international database is publicly available.

Costs: The international overhead costs for new participants in PISA 2015 is EUR 182 000 payable over four years at EUR 45,500 per year from 2013 to 2015 inclusive. In addition, the costs for the national implementation of the programme are borne entirely by the participating country. Implementation costs vary by country and are highly dependent on cost of living.

PISA for Development

Purpose: To identify how PISA can best support evidence-based policy making in emerging and developing economies and countries and contribute to the UN-led definition and monitoring of education-related goals in the post-2015 agenda.

Target Population: In- and out-of-school 15-year olds.

Participating Systems: 5-7 countries and jurisdictions are planning to participate in a pilot that will take place from 2014-2016.

Assessment Domains: Mathematics, science and reading, with an emphasis on adapting and enhancing existing PISA test items to make these more relevant to developing countries.

Background Information: Will adapt PISA context questionnaires in order to better measure learning contexts in developing countries.

Methodology: School-based, group administration approach in addition to developing an approach to incorporate out-of-school youth (probably through a household survey that includes a paper and pencil test complemented by an oral test). The test will be adapted from PISA in order to target basic skills that better match these youth's abilities.

Information Published: Results from PISA for Development would be made available on the same performance scale as results from the main PISA; enhanced instruments would subsequently be available for use in main PISA.

Costs: This project is a pilot and costs of participation, as well as participation models and options, to be determined.



PIRLS – Progress in International Reading Literacy Study

Purpose: To monitor and improve the health of a country's education system and enable evidence-based decisions for improving student achievement in reading literacy.

Target Population: Students enrolled in schools at grade 4.

Participating Systems: 59 countries, states and school systems in 2011.

Assessment Domains: Reading literacy: (a) retrieve explicit information, (b) make straightforward inferences, (c) interpret and integrate ideas and information, and (d) examine and evaluate content, language, and textual elements.

Background Information: Intended and implemented curriculum, home and classroom contexts for learning to read, instructional time, student attitudes towards reading, socio-economic background; information from school principals, teachers, students and parents.

Methodology: Paper and pencil test. Includes multiple-choice (1/2) and constructed response (1/2). Includes stories and articles of about 800 to 1,000 words. School-based, group administration. Background instruments partially online. All tests are curriculum based. Administered every 5 years since 2001.

Information Published: International report and website include ranking of countries, percent of students at different performance levels, trends across years, background information, example questions, assessment framework, and encyclopedia with background information from the countries. The international data base is publicly available.

Costs: The participation fee is US\$20,000 plus EUR 20,000 per year. In addition, the costs for the national implementation of the programme are borne entirely by the participating country. Implementation costs vary by country and are highly dependent on cost of living.

prePIRLS – Basic Reading Skills Component of the Progress in International Reading Literacy Study

Purpose: To monitor and improve the health of a country's education system and enable evidence-based decisions for improving student achievement in basic reading skills.

Target Population: Students enrolled at the end of the primary school cycle (usually grades 4, 5, or 6).

Participating Systems: 3 countries in 2011.

Assessment Domains: Basic reading skills: (a) focus on and retrieve explicitly stated information, (b) make straightforward inferences, (c) interpret and integrate ideas and information, (d) examine and evaluate content, language, and textual elements.

Background Information: Intended and implemented curriculum, home and classroom contexts for learning to read, instructional time, student attitudes towards reading, socio-economic status.

Methodology: Paper and pencil test. Includes multiple-choice (1/2) and constructed response (1/2). School based, group administration. All tests are curriculum based. Administered every 5 years since 2011.

Information Published: International report and website include ranking of countries, percent of students at different performance levels, trends across years, background information, and example questions, among others. The international data base is publicly available.

Costs: The yearly participation fee is US\$20,000 plus EUR 20,000. In addition, the costs for the national implementation of the programme are borne entirely by the participating country. Implementation costs vary by country and are highly dependent on cost of living.



ePIRLS – Online Reading Component of the Progress in International Reading Literacy Study

Purpose: To assess how successful countries are in preparing students to read, comprehend, and interpret online information.

Target Population: Students enrolled at grade 4.

Participating Systems: First assessment round will take place in 2016.

Assessment Domains: ePIRLS uses an engaging, simulated Internet environment with authentic school-like assignments about science and social studies topics to measure achievement in reading for informational purposes.

Background Information: Intended and implemented curriculum, home and classroom contexts for learning to read, instructional time, student attitudes towards reading, socio-economic status.

Methodology: Computer-based, online environment.

Information Published: Not applicable.

Costs: The fee for ePIRLS is US\$12,500 plus EUR 12,500 per year, in addition to the PIRLS 2016 fee. In addition, the costs for the national implementation of the programme are borne entirely by the participating country. Implementation costs vary by country and are highly dependent on cost of living.

TIMSS – Trends in International Mathematics and Science Study

Purpose: To monitor and improve the health of a country's education system and enable evidence-based decisions for improving student achievement in mathematics and science.

Target Population: Students enrolled in schools at grades 4 and 8, and 11 or 12 (Advanced module).

Participating Systems: 77 countries, states and school systems in 2011.

Domains: Mathematics and science.

Background Information: Intended and implemented curriculum, student attitudes towards learning, self-confidence in learning, socio-economic background, information from school principals, teachers, students and parents.

Methodology: TIMSS uses a school-based, group administration approach. It uses paper and pencil tests that include multiple-choice (1/2) and constructed response (1/2) questions/tasks. The assessment framework is based on an agreed-upon curriculum that reflects the priorities of all participating countries. Background instruments partially online. All tests are curriculum based. Administered every 4 years since 1995.

Information Published: International reports and website include ranking of countries, percent of students at different performance levels, trends across years, background information, example questions, assessment framework, and encyclopedia with background information from the countries. The international database is publicly available.

Costs: The TIMSS 2015 participation fee is US\$25,000 plus EUR 25,000 per year for 4 years for one grade. In addition, the costs for the national implementation of the programme are borne entirely by the participating country. Implementation costs vary by country and are highly dependent on cost of living.



TIMSS Numeracy – Numeracy Assessment of the Trends in International Mathematics and Science Study

Purpose: To monitor and improve the health of a country's education system and enable evidence-based decisions for improving student achievement in fundamental mathematics knowledge.

Target Population: Students enrolled in schools at grades 4, 5, or 6.

Participating Systems: First assessment round will take place in 2015.

Assessment Domains: Fundamental mathematical knowledge, procedures, and problem-solving strategies.

Background Information: Intended and implemented curriculum, student attitudes towards learning, self-confidence in learning, and socio-economic background.

Methodology: School-based, group administration. Paper and pencil test. Includes multiple-choice (1/2) and constructed response (1/2). Tests to be curriculum based, administered every 4 years.

Information Published: Not available.

Costs: Not available.



Regional Large-Scale Assessments

LLECE – Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación

Purpose: To monitor progress towards the Education for All Goal 6 (quality of education) in the LAC region, inform education policies aimed to provide quality education for all, and develop regional capacities in educational assessment.

Target Population: Students enrolled in schools at grades 3 and 4 (1997), and at grades 3 and 6 (2006 and 2013)

Participating Systems: 15 countries and the Mexican State of Nuevo León

Assessment Domains: Mathematics, language (Spanish or Portuguese), reading and writing, and natural sciences.

Background Information: Two parallel studies: one study of achievement of the aims of the intended curriculum (LLECE studies are based on a regional curriculum analysis) and one study of associated factors i.e., school location, infrastructure, school climate, teaching quality, leadership, nutrition, ICTs, and socio-economic background.

Methodology: Paper and pencil test, with multiple-choice and constructed responses. School-based, group administration. The assessment framework is negotiated considering the curriculum of all participating countries. Administration is based on country demand - so far, it has been administered in 1997, 2006, and 2013.

Information Published: International reports which include ranking of countries, percent of students at different performance levels, background information, and other specific analyses, among others. The information is publicly available on LLECE's website.

Costs: The participation fee in 2013 was US\$10,000 per country, with an additional US\$4,000 (optional) contribution for a 'solidarity fund'. In addition, the costs for the national implementation of the program are born entirely by the participating country. Implementation costs vary by country and are highly dependent on cost of living.

PASEC – Programme d'Analyse des Systèmes Educatifs de la CONFEMEN

Purpose: To provide information about the evolution of education systems' performance, and contribute to the development and monitoring of education policies.

Target Population: Students enrolled in schools at grades 2 and 5 (until 2011), grades 2 and 6 (2014), and grades 2, 6 and 9 (2018).

Participating Systems: 20 African and Asian countries have been supported by PASEC to carry out national assessments since 1994.

Assessment Domains: Mathematics and Language (French, English, Kirundi, Lao, Khmer, and Vietnamese)

Background Information: Instructional resources, teaching quality, homework, language, and socio-economic background.

Methodology: Paper and pencil test administered at the beginning and at the end of the school year. School-based, group administration. It was administered in 1-3 countries per year in 2004-7, and 2009. 10 countries evaluated simultaneously in 2014.

Information Published: Country reports include mean student performance at the beginning and end of the school year, mean performance by urban/rural, boys/girls, and socio-economic background, and background factors related to student performance, among others. One regional report plus 10 national reports were produced in 2016.

Costs: No information available.



SACMEQ – The Southern and Eastern Africa Consortium for Monitoring Educational Quality

Purpose: To generate information that can be used by decision-makers to improve the quality of education.

Target Population: Students enrolled in schools at grade 6.

Participating Systems: 16 countries.

Assessment Domains: Language literacy (English, Portuguese and Kiswahili), numeracy, and health (HIV/AIDS) knowledge.

Background Information: Instructional resources, teachers, homework, school infrastructure, and socio-economic background.

Methodology: Paper and pencil test. School-based, group administration. Administered based on country's demand and budget. It was administered in 1995, 2000-4, 2006-11, and 2012-14.

Information Published: Country reports include overall student achievement levels by subject area, background information, and policy suggestions.

Costs: No information available.



National Large-Scale, Citizen-Led and Other Assessments

EGRA – Early Grade Reading Assessment

Purpose: To measure how well children in the early grades of primary school are acquiring reading skills, assess early reading and prereading component skills, and provide national or regional diagnostic information. (Can be modified for classroom or community assessment.)

Target Population: Students enrolled in schools at grades 1, 2, 3, or 4 (or higher, depending on student skill levels).

Participating Systems: Over 60 countries and 100 languages since 2006.

Assessment Domains: Core early reading skills customizable for different contexts. Core components include letter recognition, letter-sound identification, word reading, connected text reading (fluency), and oral reading comprehension questions.

Background Information: Country/research-specific, but generally includes school, classroom and student/family background information.

Methodology: School-based, individual oral administration. Can be repeated with re-randomized items and new text as needed. Both paper and electronic forms.

Information Published: Instruments and country reports with student performance in each reading skill and related background factors available at www.eddataglobal.org. Datasets available to researchers following protocol for approval.

Costs: EGRA is an open source, public resource available to all. The costs for the implementation of the assessment have been generally financed by USAID or other donors to date. Implementation costs vary by country.

EGMA – Early Grade Mathematics Assessment

Purpose: To measure how well children in the early grades of primary school are acquiring foundational mathematic skills and provide national or regional diagnostic information. (Can be modified for classroom or community assessment.)

Target Population: Students enrolled in schools at grades 1, 2, 3, or 4 (or higher, depending on student skill levels).

Participating Systems: Over 22 countries and 25 languages since 2009.

Assessment Domains: Core early mathematics skills customizable for different contexts. Core components include: number identification, quantity discrimination, missing number, word problems, addition/subtraction problems, shape recognition, and pattern extension.

Background Information: Country/research-specific, but generally includes school, classroom and student/family background information.

Methodology: School-based, individual oral administration. Can be repeated with re-randomized items and new text as needed. Both paper and electronic forms.

Information Published: Country reports with student performance in each skill area and related background factors available at www.eddataglobal.org. Datasets available to researchers following protocol for approval.

Costs: EGMA is an open source, public resource available to all. The costs for the implementation of the assessment have been generally financed by USAID or other donors to date. Implementation costs vary by country.

SAM – School Achievements Monitoring

Purpose: To assess reasoning skills of primary school students based on subject competencies using three levels: (1) procedural knowledge, (2) conceptual understanding, and (3) functional competence. SAM is designed for the follow-up and improvement of the learning process in schools, and is intended for teachers, methodologists and education management authorities. Mass (external large-scale administration) and in-class (classroom assessment) testing of students are applicable.

Target Population: Primary school students at grades 3-4.

Participating Systems: 5 countries (Russia and CIS countries) in 2011-2013. 15 countries will have participated by 2015.

Assessment Domains: Mathematics and language.

Background Information: Student's family, his/her attitude to school/teaching/learning, school activities, classroom, relations with other students; teaching methods, educational programs, organization of educational process, availability of modern educational technologies and their efficiency.

Methodology: Paper and pencil. Computer-based version (offline and online) of test is being piloted.

Information Published: Integral (normalized) score, proficiency levels, and three-dimensional profiles by class, school, municipality, and province. Trends across years, background information, and example questions.

Costs: No participation fee.

ASER – Annual Status of Education Report

Purpose: To put children's learning at the center of debates and discussions on education; to engage citizens' in understanding their own situation and strengthening accountability; and to promote government, parent, and citizen action to improve children's learning.

Target Population: All children in the age group from 5-16 year olds (including those attending public, private or religious schools and those not enrolled in schools). Student samples are representative at the national and sub-national levels.

Participating Systems: Inspired by ASER-India, several countries have taken the initiative to adapt and implement ASER type assessments. ASER does not have a central coordinating body. Countries come together voluntarily and independently. So far, the following countries have implemented ASER type assessments: India (ASER, annually since 2005), Kenya (called UWEZO, since 2009), Mali (BEEKUNGO, since 2011), Pakistan (ASER, since 2008), Senegal (called JANGANDOO, since 2012), Tanzania (UWEZO, since 2009), and Uganda (UWEZO, since 2009).

Assessment Domains: Basic abilities in reading and numeracy that children are usually expected to learn at grade 2. The ASER reading assessment tool consists of 4 levels: letters, words, a short paragraph, and a longer "story".

Background Information: At the household level: socio-economic background, parent education, reading material at home, and extra coaching classes, among others. At the school level: in the sampled village, one government school with primary classes is visited. Observations are made about school facilities such as classrooms, teacher learning materials, toilets, drinking water; and enrollment and attendance, among others.

Methodology: Individual, oral administration of children in- and out-of-school. Reading is measured using local languages. Ordinary citizens volunteer to conduct the assessment and disseminate the results.

Information Published: Children performance in different subject areas. Performance by grade level is judged according to learning standards. Results are published within months of the assessment being conducted. Parents get instant feedback as they observe their children being asked to read or do arithmetic.

Costs: No participation fee. Leading implementing organization has to cover the costs of national implementation.



Notes:

