

Monitoring learning against the Sustainable Development Goals



Australian Government
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ACER's role in the work plan of the Global Alliance to Monitor Learning

The Global Alliance to Monitor Learning (GAML) is an international collaboration to improve learning around the world, led by the UNESCO Institute for Statistics (UIS). The Australian Council for Educational Research Centre for Global Education Monitoring (ACER-GEM) has a major role in supporting GAML, as the UIS's technical partner.

The GAML work plan supports reporting against the United Nations' Sustainable Development Goals and building capacity in monitoring learning. In relation to reporting on [Indicator 4.1.1](#) of the Sustainable Development Goals, the GAML work plan includes two main objectives:

1. Provide countries with options for reporting on Indicator 4.1.1 that accommodate a range of assessment programs but enable consistent interpretation on a common scale
2. Support countries to increase their capability to use assessment data to inform system improvement, as a result of tools and support from GAML.

These are ambitious goals that require sophisticated responses; they require the development of tools and methods which balance the need for technical rigour against accessibility to all.

ACER is working with UIS and GAML to develop many of these tools and methods, constituting a major program of work for ACER-GEM over the coming years.

This multi-year program of work is broadly organised into three stages, with an increasing number of tools and options becoming available at each stage.

Stage 1 – Conceptual work

Conceptualising and drafting tools and processes

Stage 2 – Field work

Validating, equating, piloting and refining tools and processes

Stage 3 – Implementation

Applying tools and processes

As GAML moves towards its goals, assessment programs and education systems will participate in each stage iteratively. For example, in Stage 2, variation in assessment program cycles will mean that equating of programs will occur iteratively over time. Similarly, education systems may choose to engage with capacity-building tools at different times, depending on the availability of resources and other forms of support.

ACER-GEM's iterative approach towards supporting GAML to achieve its goals will allow for steady improvement in global monitoring of learning over time, as education systems achieve greater alignment in their Indicator 4.1.1 reporting, and build capacity with GAML support. The process will also generate many valuable insights and open up new ways of using assessment data to inform education policy and practice within and across international contexts. ACER-GEM's work plan is designed to help ensure that Indicator 4.1.1 fulfils its potential not only as an indicator of quality of learning, but as a driver for genuine improvement in how well education systems meet their students' needs.

The three stages are detailed below, showing how education systems can engage with ACER-GEM's work at each stage.

Stage 1 – Conceptual work

This stage, which is already well in progress, involves the preparation of draft tools based on conceptual analysis, as well as concept notes to guide the next stages of GAMLs work. Table 1 introduces these ACER-led tools and their current status.

Table 1 Purpose and status of tools in Stage 1 – Conceptual work

Tool / Process	Purpose	Status
UIS reporting scales (UIS RS)	Common scales that will be used to support consistent understandings of reading and mathematics across assessment programs, including in reporting against Indicator 4.1.1.	The UIS RS and related documentation have been drafted, based on analysis of existing assessment programs and curricula. The draft UIS RS can be explored through the prototype Learning Progression Explorer .
UIS RS item pool	Pool of items that can be used by education systems to link assessment programs to the UIS RS.	To be developed as part of Stage 2 (see below).
Data alignment	Process for education systems to align assessment programs with the UIS RS, using either: <ol style="list-style-type: none"> 1. equating (see below) 2. the UIS RS item pool 3. conceptual alignment. The UIS Content Reference Framework (being developed by the International Bureau of Education) may also help to align curriculum to the UIS RS.	Concept note completed.
Principles of Good Practice in Learning Assessment (GP-LA)	Independent articulation of good practices that assists education systems in planning and conducting robust assessment programs and to analyse the quality of existing assessment programs.	Draft available online.
System-Wide Analysis of Assessment Practices (SWAAP)	Concept to develop an analytic process to guide education systems through analysis of the quality of their assessment practices and the use of results in policy and practice, to inform improvement plans.	Concept note completed.

How can education systems engage with ACER-GEM in Stage 1?

- Familiarise themselves with the tools in Table 1, and consider how they might be used in Indicator 4.1.1 reporting and capacity development processes as they become available.
- Review tools and provide comment, as draft prototypes become available online.

Stage 2 – Field work

The focus of Stage 2 is on empirically validating, piloting and refining the draft tools, to prepare them for use in the field. This will include ongoing work to equate existing assessment programs with the UIS RS, which is a key element of GAML’s approach to Indicator 4.1.1 reporting. Table 2 shows ACER-GEM’s current thinking about Stage 2 for each tool.

Table 2 Tools and processes in Stage 2 – Field work

Tool / Process	Stage 2 process
UIS reporting scales (UIS RS)	<p>Validation and equating to occur in two steps:</p> <ul style="list-style-type: none"> analysis of existing empirical data, to transform the descriptive draft UIS RS into numerical scales validation and equating of the scales to existing assessment programs, through collection of new data.
UIS RS item pool	<p>Item pool to be developed and validated iteratively, as part of the validation and equation of UIS RS. As more assessment programs participate in validation and equating, more items will become available for the pool.</p>
Data Alignment	<p>Data Alignment Record Tool (for conceptual alignment) to be developed and piloted with selected assessment programs, which are not involved in UIS RS equating.</p> <p>The UIS Content Reference Framework may also support this process by assisting with mapping curriculum to the UIS RS.</p>
Principles of Good Practice in Learning Assessment (GP-LA)	<p>Operationalisation of major key areas into more practical ‘How-to Guides’, to inform practice in the field.</p>
System-Wide Analysis of Assessment Practices (SWAAP)	<p>Tools for the SWAAP toolkit to be sourced and developed. Piloting of the tools will be undertaken through the Global Partnership for Education’s Assessment for Learning (A4L) initiative.</p>

How can education systems engage with ACER-GEM in Stage 2?

- Participate in validation and equating of UIS RS.
- Participate in piloting the Data Alignment Record Tool (for assessment programs that are not part of the UIS RS validation and equating process).

Stage 3 – Implementation

The focus of Stage 3 will be on implementation. In this stage, an increasing range of options will become available to education systems to enhance their reporting on Indicator 4.1.1, and to analyse their system-wide assessment practices and develop and implement plans for improvement. Table 3 shows the ways in which education systems can benefit from the outcomes of the ACER-GEM work program at this stage.

Table 3 Tools and benefits in Stage 3 – Implementation

Tool / Process	Stage 3 benefits
UIS reporting scales (UIS RS)	<p>Education systems can report directly against the UIS RS, if they are using an equated assessment program.</p> <p>Education systems will also be able to report against the UIS RS, by using the UIS RS item pool or the Data Alignment Record Tool.</p> <p>The UIS RS will also assist education systems to develop and improve their assessment programs, and strengthen connections between curriculum and assessment.</p>
UIS RS item pool	<p>Education systems can use the UIS RS item pool to link non-equated assessment programs to the UIS RS.</p>
Data Alignment Record Tool (DART)	<p>Education systems can use the Data Alignment Record Tool to report on their assessment program's alignment with UIS RS, if they are not using an equated program.</p>
Principles of Good Practice in Learning Assessment (GP-LA)	<p>Education systems can use the GP-LA to guide planning and analysis of their assessment practices (including as part of SWAAP), and use the How-To Guides to inform improvement.</p>
System-Wide Analysis of Assessment Practices (SWAAP)	<p>Education systems can use the SWAAP toolkit to analyse the quality of their assessment practices and develop plans for improvement, including in Indicator 4.1.1 reporting.</p> <p>The SWAAP toolkit will also assist education systems to engage with the Assessment for Learning initiative by the Global Partnership for Education. The Assessment for Learning initiative will support diagnostics of national assessment systems, among other components.</p> <p>The UIS Content Reference Framework is another tool to help evaluate alignment between curriculum and assessment.</p>

How can education systems engage with ACER-GEM in Stage 3?

- Education systems can access any of the benefits in Table 3 to support their Indicator 4.1.1 reporting and broader capacity building activities.
- Over time, the use of GAML tools and processes within education systems will help to refine tools further and identify further uses for them in driving system improvement. Education systems are encouraged to share their experiences using these tools as part of a global community of practice in monitoring learning for better outcomes for all.