Post-2015 Education Indicators

Regional workshop for Eastern Europe, Caucasus and Central Asia
Istanbul, 20 April 2016
Sustainable Development Goals

- Launched at the end of the **UN Conference on Sustainable Development (Rio+20)** in June 2012
  - UN Member States: **Open Working Group on Sustainable Development**, UN General Assembly.
  - UN Secretary General: High Level Panel of Eminent Persons, **Sustainable Development Solutions Network**, UN System Task Teams
  - UNESCO and its partners: **EFA Steering Committee**, World Education Forum
  - NGOs, civil society and other interest groups
Sustainable Development Goals

• **17 Goals, 169 targets**
  – Covering the three pillars of sustainable development: *economic, environmental* and *social*
  – Emphasis on *equity* and *equality* throughout and
    • Goal 5 on *Gender*, Goal 10 on *Reducing inequality*
  – Means of implementation targets in all goals and
    • Goal 17 Means of implementation
  – Goals and targets in *new areas/themes*

• **Adopted by Heads of State at UN Summit in New York** (25-27 September 2015 and by UNSD in March 2016)
Goal 4: Education

• Ensure **inclusive** and **equitable quality** education and promote **lifelong learning** opportunities for all
  – 7 **outcome-based** targets (4.1-4.7)
  – 3 **means of implementation** targets (4.a-4.c)

• **Full range of lifelong learning**: early childhood, primary, secondary, TVET, tertiary, skills for work, literacy and numeracy (4.1-4.4, 4.6)

• One target on knowledge and skills for **sustainable development** (4.7)

• One target on **equity** (4.5)

• **Means of implementation**: school environment, scholarships and teachers (4.a-4.c)
Selection of Post-2015 SDG Indicators

- **Country-led** drawing together inputs from many sources
  - UN Member States: **UN Statistical Commission, Inter-Agency and Expert Group on SDG Indicators**
  - Regional bodies: **AU, EU, OECD, UN Regional Commissions**
  - International bodies: **UN and other intergovernmental organizations**
  - Technical experts and academia: **Sustainable Development Solutions Network**
  - NGOs, civil society and others
  - Global education community: **Technical Advisory Group on Post-2015 Education Indicators**
Cascading indicator sets

Global (SDGs)
Thematic (Education)
Regional
National
Sub-national
Criteria for selecting global and thematic indicators

– Relevance
  • Indicators should reflect the **key policy themes** in each target

– Alignment
  • The item to be measured should be **valid and meaningful** across all countries

– Feasibility
  • Data should be **collected regularly and available** for most countries

– Communicability
  • Indicators must be **easily understood**
Global indicators for education

- 4.1.1 Reading and mathematics learning outcomes (Primary grade 2/3, end of primary and end of lower secondary)
- 4.2.1 % of under 5s who are developmentally ‘on track’
- 4.2.2 Participation rate in organized learning (one year before the official primary entry age)
- 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the last 12 months
- 4.4.1 % of youth/adults with ICT skills by type of skills
- 4.5.1 Parity indices (for all indicators that can be disaggregated)
- 4.6.1 Proficiency of youth/adults in literacy and numeracy skills
- 4.7.1 % of 15-year olds proficient in environmental and geoscience
- 4.a.1 % of schools with access to basic services and facilities
- 4.b.1 ODA expenditure on scholarships
- 4.c.1 % of trained teachers
Thematic indicators for education

• 43 thematic indicators (including the proposed global indicators)
• Going beyond the measurement of outcomes to include indicators on the provision of education, access, participation, completion and on education policies
Thematic indicators for education: 10 targets

• Target 4.1: Primary and secondary education
• Target 4.2: Early childhood education
• Target 4.3: TVET/Higher Education/lifelong learning
• Target 4.4: ICT skills /educational attainment
• Target 4.5: Equity
• Target 4.6: Adult literacy and skills
• Target 4.7: Global citizenship/ Education for sustainable development
• Target 4.a: School facilities
• Target 4.b: Scholarships
• Target 4.c: Teachers
Proposed indicators
Target 4.1 Primary and secondary education

1. **Reading and mathematics learning outcomes**
   - Source: learning assessments

2. **Existence of recent national learning assessment surveys**
   - Source: administrative information

3. **Gross intake ratio to last grade of primary and lower secondary education**
   - Source: administrative data
   - Available for c150 countries

4. **Completion rates in primary, lower and upper secondary**
   - Source: household surveys
   - Available for c100 countries

   - Direct measures of knowledge and proficiency at: (i) Grade 2/3, (ii) end of primary and (iii) lower secondary

   - To monitor governments’ commitment to measuring learning outcomes at: (i) Grade 2/3, (ii) end of primary and (iii) lower secondary

   - Proxy measure of completion
   - Readily available for most countries but a gross not net rate

   - Direct measure of completion (based on attainment levels of young people)
Proposed indicators
Target 4.1 Primary and secondary education

5. Out-of-school rates
   - Sources: administrative and surveys
   - Available for c160 countries (from administrative sources)
   - To focus attention on those being left behind
   - Increasingly important as countries get close to the target of universal participation

6. % of pupils over-age for grade
   - Source: surveys
   - Available for c100 countries
   - To focus attention on children at risk of leaving school early
   - Some further methodological work required to increase coverage

7. Years of free and compulsory primary and secondary education
   - Source: national education laws and policies
   - Available for nearly every country
   - To monitor governments’ commitments to children and young people
Proposed indicators
Target 4.2 Early childhood education

8. % of under 5 years-old who are developmentally ‘on track’
   – Source: household surveys
   – Available for c30-40 countries

9. % of under 5s experiencing positive and stimulating home learning environment
   – Source: household surveys
   – Available for c30 countries

10. Participation rates in early childhood care and education in the year prior to entry into primary
    – Source: household surveys
    – Not yet available

• Direct measure of ‘school readiness’
• Further methodological work required to agree on characteristics to be measured
• Early Childhood Development Index one possible measure (from UNICEF’s Multiple Indicator Cluster Survey)
• Recognises parents have an important role in the early years development of their children
• To include participation beyond formal pre-primary education
• Further methodological work required to agree on types of learning to be covered
• Administrative sources capture formal
Proposed indicators
Target 4.2 Early childhood education

11. Gross pre-primary enrolment ratio
   – Source: administrative data
   – Available for c165 countries

• Widely available broad measure of participation in formal pre-primary education

12. Years of free and compulsory pre-primary education
   – Source: national education laws and policies
   – Available for nearly every country

• To monitor governments’ commitments to children
Proposed indicators
Target 4.3 TVET and tertiary education

13. Gross enrolment ratio in tertiary education
   - Source: administrative data
   - Available for c145 countries

14. Participation rate in TVET (15-24 year olds)
   - Source: surveys
   - Not yet available

15. Percentage of people in a given age-range participating in education and training in the 12 months, by type of programme:
   - Source: surveys
   - Available for c30 countries (EU)

   - Widely available broad measure of participation in formal tertiary education (including university)
   - To include participation beyond formal school or university settings
   - Further methodological work required to agree on types of education and training to be covered
   - To include participation beyond formal education or training settings
   - Further methodological work required to agree on types of education and training to be covered
Proposed indicators
Target 4.4 Skills for work

16.1. % of youth/adults who have achieved at least a minimum of proficiency in digital literacy skills
   – Source: household surveys
   – Available for c35 countries (mostly OECD)

16.2. % of individual with ICT skills by type of skill
   – Source: ITU’s survey and also possibly from OECD

17. Adult educational attainment rates by age-groups, economic activity status, levels of education and programme orientation
   – Source: ITU’s survey and also possibly from OECD

- To measure existence of a critical skill required for employment and work
- Further methodological work required to agree on types of skills to be covered
- Further methodological work required to develop indicators measuring other work-relevant skills
Proposed indicators
Target 4.5 : equity

... Equity across targets: Parity indices (female/male, rural/urban, bottom/top wealth quintile and others
  – Source: household surveys and administrative data

18. Percentage of students in primary education whose first or home language is the language of instruction

19. Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations

• Alternative indicators include: (i) odds ratio; (ii) concentration index; or (iii) least advantaged group (e.g. poorest rural girls) relative to the mean.

• Measures of home language and language of instruction will be required to develop a global measurement tool.

• A reporting process will be established to describe and assess country policies on expenditure allocation.
Proposed indicators
Target 4.5: equity (*ctn’d*)

20. Education expenditure per student by level of education and source of funding
   - Source: household surveys
   - Administrative data

21. Percentage of total aid to education allocated to low-income countries
   - Administrative data

• The coverage of this indicator, especially for private education expenditure, needs to be expanded significantly.
Proposed indicators
Target 4.6: Adult literacy and skills

22. Percentage of the population by age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills

23. Youth/adult literacy rate

24. Adult educational attainment rates by age-groups and levels of education

- A number of middle-income and high-income countries have assessed literacy and numeracy skills of adults based on the STEP and PIAAC surveys respectively. A cost-effective tool needs to be inserted in household surveys for use by other countries.

- The target ages are 15-24 years for youth and 15+ years for adults, but other age groups are also possible.

- Tools should be developed in conjunction with indicator 15.
Proposed indicators

Target 4.7: Global citizenship/ Education for sustainable development

25. Extent to which (i) global citizenship education; and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

26. Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability

27. Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience

- A reporting process will be established to describe and assess country policies in these areas.

- There is not currently a cross-national survey that collects the necessary data.

- As more data become available and as more relevant indicators are developed, this indicator may be replaced.
Proposed indicators
Target 4.7: Global citizenship/ Education for sustainable development

28. Percentage of schools that provide life skills-based HIV and sexuality education

29. Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per UNGA Resolution 59/113)

- Preparatory work is required to develop a consensus on defining such approaches and developing frameworks for collecting data.

- Preparatory work is required to develop a consensus on how this framework can be monitored.
Proposed indicators
Target 4.a: School facilities

30. Percentage of schools with access to (i) basic drinking water; (ii) basic sanitation facilities; and (iii) basic hand-washing facilities

31. Percentage of schools with access to (i) electricity; (ii) Internet access for pedagogical purposes; and (iii) computers for pedagogical purposes

32. Percentage of schools with adapted infrastructure and materials for students with disabilities

- The coverage of current data collection efforts will be extended to all countries including the implementation of the WASH indicator definitions.

- Preparatory work is required to develop an approach on assessing criteria for school conditions for people with disabilities across countries.
Proposed indicators
Target 4.a: School facilities

33. Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse

34. Number of attacks on students, personnel and institutions

- The indicator is available through the Global School-based Student Health Survey.
- An organized data collection will be established to measure this indicator based on examples from the Education under Attack report.
35. Number of higher education scholarships awarded by beneficiary country

36. Volume of official development assistance (ODA) flows for scholarships by sector and type of study

- An organized data collection mechanism to measure this target will be established. The equitable distribution of scholarships will be measured where individual-level data are available.

- This indicator only measures some sources of scholarships.
Proposed indicators

Target 4.c: Teachers

37. Percentage of teachers qualified according to national standards by education level and type of institution

38. Pupil/qualified teacher ratio by education level

39. Percentage of teachers in (i) pre-primary; (ii) primary; (ii) lower secondary; and (iv) upper secondary who have received at least the minimum organized and recognized teacher pre-service and in-service training

40. Pupil/trained teacher ratio by education level

- Common standards will need to be agreed that can be applied to both public and private institutions. Qualified teachers have at least the minimum academic qualifications required by national standards for teaching a specific subject.

- Common standards will need to be agreed that can be applied to both public and private institutions. Trained teachers have received at least the minimum pedagogical training required by national standards to become a teacher.
Proposed indicators
Target 4.c: Teachers

41. Average teacher salary relative to other professions requiring a comparable level of education qualification

42. Teacher attrition rate by education level

43. Percentage of teachers who received in-service training in the last 12 months by type of training

- A methodology will be developed based on labour force data.

- The coverage of current data collections will be extended to all countries.

- A tool to assess the incidence, duration and content of training will be developed.
The needs

• Transforming data into knowledge:
  – National agencies need to provide data to users (policy makers, schools, media, parents).
  – Need to engage countries in the use of data in policy and practice
  – Training national offices in understanding new data needs and reporting
  – Emphasise the need to integrate systems and to use them
The challenges

• Need to develop new methodologies and new surveys to capture all the data needed
• Demand for ‘real-time’ data to inform policy decisions
• More diverse sources of data and of data users
• Strengthening capacities for data analysis
Indicators by major statistical development need

Indicators by target where development is need

![Bar chart showing indicators by target]

- **All targets (25 of 43)**: Large bar in red

- **Target 4.1 (2 of 7)**: Small bar in red
- **Target 4.2 (3 of 5)**: Medium bar in red
- **Target 4.3 (2 of 3)**: Small bar in red
- **Target 4.4 (1 of 2)**: Very small bar in red
- **Target 4.5 (3 of 4)**: Medium bar in red
- **Target 4.6 (2 of 3)**: Small bar in blue
- **Target 4.7 (4 of 5)**: Medium bar in blue
- **Target 4.a (3 of 5)**: Small bar in red
- **Target 4.b (1 of 2)**: Very small bar in red
- **Target 4.c (4 of 7)**: Medium bar in red

Legend:
- Red: Methodology, data collection, standards and/or data coverage improvement
- Blue: Global Metrics

Note: The chart shows the number of indicators per target where development is needed.
Timeline

March 2016  1. UN Statistical Commission reviewed and endorsed IAEG-SDGs global indicator framework

July 2016  2. ECOSOC adopts global indicator framework

Sept 2016  3. UN General assembly adopts global indicator framework