Thinking about Teachers, Teaching & the 2030 Agenda for Sustainable Development

Møller Centre, Cambridge, 18th – 19th April 2016
Thinking about Teachers, Teaching and the 2030 Agenda for Sustainable Development

*Leaving No One Behind*

Pauline Rose
REAL Centre, University of Cambridge
What are sustainable development goals...
...and how do they add up for teachers?

**Target 4.c:** By 2030, substantially *increase the supply of qualified teachers*, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

**Indicator 4.c.1:** Percentage of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the *minimum organized teacher training* (i.e. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country.
Dual task: train new and existing teachers

Required annual growth in numbers of new and existing trained teachers to reach universal primary education by 2020

- Sierra Leone
- Namibia
- Lesotho
- Ghana
- Benin
- Cameroon
- Liberia
- Guinea-Bissau
- D. R. Congo
- Comoros
- Congo
- Ethiopia
- Uganda
- Mozambique
- Guinea
- Nigeria
- Gambia
- Rwanda
- Equat. Guinea
- U. R. Tanzania
- Côte d’Ivoire
- Niger
- Mali
- Chad
- Malawi
- C. A. R.
- Eritrea

Required annual growth rate in number of trained teachers, 2011–2020 (%)

New trained teachers to be recruited
Existing teachers who need to be trained

...indicators extended in Framework for Action: but insufficient focus on **Leaving No one Behind**

<table>
<thead>
<tr>
<th>Qualified</th>
<th>37.</th>
<th>Percentage of teachers qualified according to national standards by education level and type of institution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38.</td>
<td>Pupil/qualified teacher ratio by education level</td>
</tr>
<tr>
<td>Trained</td>
<td>39.</td>
<td>Percentage of teachers in (i) pre-primary; (ii) primary; (iii) lower secondary; and (iv) upper secondary who have received at least the minimum organized and recognized teacher (i.e. pedagogical) training pre-service and in-service required for teaching at the relevant level in a given country, by type of institution</td>
</tr>
<tr>
<td></td>
<td>40.</td>
<td>Pupil/trained teacher ratio by education level</td>
</tr>
<tr>
<td>Motivated</td>
<td>41.</td>
<td>Average teacher salary relative to other professions requiring a comparable level of education qualification</td>
</tr>
<tr>
<td></td>
<td>42.</td>
<td>Teacher attrition rate by education level</td>
</tr>
<tr>
<td>Supported</td>
<td>43.</td>
<td>Percentage of teachers who received in-service training in the last 12 months by type of training</td>
</tr>
</tbody>
</table>

- **What is difference between ‘qualified’ & ‘trained’?** What about relevance of training?

- **Motivation**: include national measures on career advancement for supporting weak learners?

- **Nothing on recruitment**: eg teachers’ attainment in school/subject knowledge

- **Nothing on deployment**: eg pupil/trained teacher in rural vs urban areas; early grades
Why focus on No One Left Behind matters...

Rural India

Rural Pakistan

Uganda

Tanzania

Kenya

Source: Author calculations based on ASER and UWEZO, 2012
... and learning gaps widen from early years

By age 11 only around 7% of poor girls have achieved the basics.

Source: Authors’ calculations based on ASER, India
Early learning and poverty affect achievement of other goals and targets

Higher education access: odds ratios

Results from logistic regression models for each country, also controlling for mother’s literacy, enrolment at age 8

Source: Authors’ calculations based on Young Lives data
Translating goals in policies – and change

Source: EFA Global Monitoring Report 2013/4
Policy lessons to Leave No One Behind

• SDGs need to identify, monitor and tackle disadvantage in learning early, particularly associated with poverty together with gender and disability

AND So...

• Teacher targets, indicators and policies need to focus on Leaving No One Behind in access to quality education

• Engage Teacher Unions as a source of power to Leave No One Behind

Watch this space: Teaching Effectively All Children (TEACH)
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TEACHERS AND TEACHING

SDG 4: Towards inclusive and equitable and lifelong learning for all

Montse Gomendio
Deputy Director Education and Skills
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)
<table>
<thead>
<tr>
<th>Target</th>
<th>Number of indicators</th>
<th>Concepts</th>
<th>OECD coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>7</td>
<td>Learning, Completion, Participation, Provision</td>
<td>PISA, EaG, PISA and EaG</td>
</tr>
<tr>
<td>4.2</td>
<td>5</td>
<td>Readiness, Participation, Provision</td>
<td>Early Learning Outcomes, EaG</td>
</tr>
<tr>
<td>4.3</td>
<td>3</td>
<td>Skills</td>
<td>PIAAC, EaG</td>
</tr>
<tr>
<td>4.4</td>
<td>2</td>
<td>Completion, Equity</td>
<td>EaG</td>
</tr>
<tr>
<td>4.5</td>
<td>Parity indexes</td>
<td>Policy</td>
<td>PISA, PIAAC, EaG, TALIS, DAC, CRS</td>
</tr>
<tr>
<td>4.6</td>
<td>3</td>
<td>Skills, Provision</td>
<td>PIAAC, EaG</td>
</tr>
<tr>
<td>4.7</td>
<td>5</td>
<td>Provision, Knowledge</td>
<td>PISA, EaG</td>
</tr>
<tr>
<td>4.a</td>
<td>5</td>
<td>School environment</td>
<td>EaG, LEEP</td>
</tr>
<tr>
<td>4.b</td>
<td>2</td>
<td>Scholarships</td>
<td>DAC, CRS, EaG</td>
</tr>
<tr>
<td>4.c</td>
<td>7</td>
<td>Teachers</td>
<td>PISA, EaG, TALIS</td>
</tr>
<tr>
<td>TOTAL</td>
<td>43</td>
<td></td>
<td>34</td>
</tr>
</tbody>
</table>
‘Teachers are the key to achieving all of the Education 2030 agenda, so Target 4.c is critical.

– (Education 2030 Framework for Action: page 21)

Target 4.c:

By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small-island developing states.
## Teachers – Global Indicator

<table>
<thead>
<tr>
<th>Target 4.c</th>
<th>Indicator 4.c.1</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small-island developing states.</td>
<td>Percentage of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (i.e. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country.</td>
<td>Administrative data from schools and other organized learning centres. OECD: 34 countries participate in TALIS 2013 - provides policy-relevant analysis on teachers’ participation in professional development activities through a robust indicator.</td>
</tr>
</tbody>
</table>
Education 2030 – strategies for teachers

• Attract the best and most motivated candidates for teaching and ensure they are deployed where they are needed most.

• Review and improve the quality of teacher training (pre-service and in-service)

• Develop a qualifications framework for teachers, teacher trainers, teacher supervisors and inspectors

• Better teacher management policies

• Provide teachers with adequate skills to manage ICT and meet the challenge of children with special education needs

• Develop and implement effective feedback systems to support good teaching and teachers’ professional development

• Strengthen school leadership to improve teaching and learning

• Strengthen mechanisms for institutionalised social dialogue with teachers and their representatives, ensuring full participation in policy processes
Building capacity for the SDGs

- We have made a key contribution to the SDGs on education and, in doing so, acquired the trust from the international community to contribute to their implementation. We will build on this both
  - through our metrics, and
  - through our membership in the global UN Steering Committee
- PISA for Development will help countries build institutional capacity
- Our survey instruments are becoming global standards
  - Over the next biennium, PISA will expand by another 10 countries to >80 and we will be working with 30 countries beyond that to prepare the ground for their participation
  - TALIS will reach 50 countries
  - PIAAC will reach 40 countries
PISA FOR DEVELOPMENT
Main project outputs

1. **Contextual questionnaires & data-collection** instruments adapted to a **wider range of economic and social contexts**

2. The descriptive power of **cognitive assessments** in reading, maths & science enhanced to meet a wider range of student abilities

3. An approach developed for including **out-of-school 15 year-olds** in the assessments.

4. **Country capacity** in assessment, analysis & use of results for monitoring & improvement strengthened among participating countries.

5. Engagement established with pilot countries, development partners & with other developing countries to identify **peer-to-peer learning** opportunities regarding participation in PISA & its potential contribution to the UN-led discussions on the post-2015 framework.
Three main issues driving change in PISA participation:

- OECD’s overall strategy on development – making OECD policy instruments more relevant to developing countries
- Growth in participation in PISA by middle income countries and demand for a more targeted instrument, additional inputs and support.
- Likely inclusion of PISA in the Education SDG indicators framework that will be used to monitor progress towards a universal learning goal by 2030.

Pressure on OECD to respond quickly to these drivers, necessitates the development of PISA-D
### Eight participating countries

<table>
<thead>
<tr>
<th>Latin America</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ecuador</td>
<td>• Senegal</td>
</tr>
<tr>
<td>• Guatemala</td>
<td>• Zambia</td>
</tr>
<tr>
<td>• Honduras</td>
<td></td>
</tr>
<tr>
<td>• Panama</td>
<td>• Asia</td>
</tr>
<tr>
<td>• Paraguay</td>
<td>• Cambodia</td>
</tr>
</tbody>
</table>
Similarities between PISA and PISA-D

• Country ownership of the project
• Cognitive items in reading, math, science
  – 60% are PISA items, the rest are PISA for Schools, PIAAC, STEP, etc.
• Technical standards (design, operations, analysis)
• Student target population:
  – 15 year-olds in school at grade 7 and above
• Background variables
  – e.g. ESCS, engagement, etc.
What’s new in PISA-D?
Population coverage

• PISA-D covers:
  – students below grade 7 (14-16 year-olds)
  – out-of-school youth (14-16 year-olds)

• Household assessment
  – 35 minutes interview (youth, parent, interviewer)
  – 55 minutes assessment in reading and math

• Conducted on a tablet computer in the language of instruction and other local languages (questionnaires)
Assessment Overview

**Strands A-B**
- 15-year-olds in school
- School-based
- Group data collection
- Self-administered tests and questionnaire
- Paper-based
- Reading, Mathematical and Scientific Literacy
- Questionnaires: Students, Schools and Teachers

**Strand C**
- 14 to 16-year-olds
- Household-based
- Individual data collection
- Questionnaire interview and self-administered tests
- Computer-based*
- Reading and Mathematical Literacy
- Questionnaires: Respondents and Parents

*Paper-based Parent Questionnaire*
Post-2015: Quality with equity

Post-2015 education targets focus on quality with equity will require use of surveys that capture individual characteristics, e.g., gender, location & socioeconomic status.

• PISA can help: PISA as a potential metric for measuring progress towards a learning goal in the context of the post-2015 agenda
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32 000 000
40 %
16,7 %
142
80 %