UIS Education Surveys: An update

UIS Education Finance Workshop for South and West Asia
Bangkok (Thailand), 20 June 2016

Wendy, Xiaodan Weng
Outline

- Overview of international education data
- The education surveys
- Important dates to remember
- Timelines for UIS publications and data dissemination
- Response rates
- Key data gaps and issues
International education data, what for?

UNESCO Institute for Statistics (UIS)

Countries around the world

Data collection and verification

> Production of cross-nationally comparable indicators

UIS database on education, science, culture, and communication

DATA FOR POLICYMAKING AND BENCHMARKING
UN agencies and international organizations
Donor agencies
Regional policymakers such as African Union
National governments

DATA FOR RESEARCH
Researchers and academic community

DATA FOR ADVOCACY
Civil society
Non-governmental organizations
Journalists
How to ensure international comparability?

- Data comparability across countries is ensured by:
  - Adopting ISCED (ISCED 2011)
  - Using United Nations Population Division (UNPD) population estimates
  - Using World Bank and IMF economic data
Education Surveys

- **UIS/OECD/EUROSTAT – UOE survey**
  - 48 countries (one in South and West Asia)
  - Data processing split between organizations

- **UIS Education survey**
  - 163 countries
  - Data processed by UIS
Based on ISCED 2011

3 questionnaires – sent every year:

- Questionnaire A (UIS/ED/A): students and teachers (ISCED 0-4)
- Questionnaire B (UIS/ED/B): educational expenditure (ISCED 0-8)
- Questionnaire C (UIS/ED/C): students and teachers (ISCED 5-8)
3 questionnaires – not necessarily collected every year

- Questionnaire T (UIS/ED/T): Supplementary Questionnaire on Teachers
- Survey on teachers in East and South and West Asia (UIS/ED/WM/T)
- Questionnaire ISCED 2011 (UIS/ED/ISC11): national education systems
Your UIS questionnaires to complete – Survey 2016
http://www.uis.unesco.org/UISQuestionnaires/Pages/country.aspx

To download your customized questionnaires:

UIS QUESTIONNAIRES - AFGHANISTAN

Welcome to the new questionnaires page, which provides access to current surveys for education and literacy, science, technology and innovation; culture; communication and information. To access the questionnaires that your country has been requested to complete, select your country name and download the relevant questionnaire. To report any issues regarding the data collection or for additional support, please do not hesitate to contact us at: uis.survey@unesco.org

2016 SURVEY OF FORMAL EDUCATION

<table>
<thead>
<tr>
<th>UIS/ED/A</th>
<th>Students and Teachers (ISCED 0-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UIS/ED/B</td>
<td>Educational Expenditure (ISCED 0-8)</td>
</tr>
<tr>
<td>UIS/ED/C</td>
<td>Students and Teachers (ISCED 5-8)</td>
</tr>
<tr>
<td>UIS/ED/T</td>
<td>Supplementary Questionnaire on Teachers</td>
</tr>
<tr>
<td>UIS/ED/ISC11</td>
<td>National Education Systems</td>
</tr>
</tbody>
</table>

Supporting documents:

- Instruction Manual: Survey of Formal Education
- International Standard Classification of Education 2011
- ISCED Fields of Education and Training (ISCED-F 2013)
- Fields of Education and Training 2013 (ISCED-F 2013) – Detailed field descriptions
- ISCED 2011 Operational Manual
## UIS Survey Schedule

<table>
<thead>
<tr>
<th>SURVEY</th>
<th>Collection (dates)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mail-out dates</td>
</tr>
</tbody>
</table>
Data processing and validation at UIS

Data entry

Questionnaires received

Mail out

Data check

Data correction

Data Processing

Calculation of Indicators

Indicators review

Country feedback

Education Indicators and Data Analysis

Publishing

Questionnaires received

Mail out
# Data processing report

This document contains a Data Report, Time Series Report and the cleaned tables from your data submission for the questionnaire indicated above. We have reviewed your data submission to ensure that all metadata and data are complete and are consistent with your country’s latest ISCED mapping and historical data. We have also run a series of data checks to ensure the validity of the data provided. Please respond to our questions/comments below and review the data and metadata in the cleaned questionnaire tables. If necessary, corrections to data, codes and comments may be made directly in the relevant cells of the questionnaire tables. Your timely and complete response is essential to ensure the quality of the data produced and their international dissemination.

Please provide your response to tn.ho@unesco.org and/or uis.survey@unesco.org by June 1st 2016.

## 1. Coverage, coding and coherence with ISCED mapping:

Please review the issues below:

<table>
<thead>
<tr>
<th>Table</th>
<th>All</th>
<th>A8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Data at ISCED 3,4 have been coded as &quot;0 Z&quot; (not applicable) based on the ISCED mapping.</td>
</tr>
</tbody>
</table>

## 2. Missing data:

The following data items were not provided in this data submission. These data items are essential for producing cross-nationally comparable data. If possible, please provide estimates for the missing data or an explanation regarding why the data are missing or when they will be available.

### Students and teachers at ISCED 4

<table>
<thead>
<tr>
<th>Table</th>
<th>A3, A9, A10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students and teachers at ISCED 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table</th>
<th>A8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduates at ISCED 2 are missing but were available last year. Graduates at ISCED 2 are the number of students who completed the last grade of lower secondary, in your country it is lower secondary grade 3 in the new education system. Could you provide data or estimates please?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table</th>
<th>A8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduates at the column &quot;ISCED 34+35+36&quot; are missing but were available last year. ISCED 35+36 exits according to the ISCED mapping. Could you provide data or estimates please?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table</th>
<th>A10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classroom teachers, qualified and trained teachers at ISCED 02</td>
</tr>
</tbody>
</table>

## 3. Data issues:

Please review the issues below:

<table>
<thead>
<tr>
<th>Table</th>
<th>A5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>At ISCED 1, the number of students in Table A3 (both initial education and formal adult education) do not equal to the sum of Tables A4 (formal adult education only) and A5 (initial education only) but should be. For example, total number of students at ISCED 1 age =24 is 888,598 in Table A3 but the sum of data in Tables A4 and A5 for age =24 is 886,528 (difference of 2980). The same can be observed for age group &lt;15, 15, 16 and 24. Could you verify and provide corrected data please?</td>
</tr>
</tbody>
</table>
# Education Indicators Country Review

## Access and participation in primary education

### Gross enrolment ratio (GER)

<table>
<thead>
<tr>
<th>Year</th>
<th>MF</th>
<th>M</th>
<th>F</th>
<th>GPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>104.4</td>
<td>105.0</td>
<td>104.1</td>
<td>0.98</td>
</tr>
<tr>
<td>2001</td>
<td>103.3</td>
<td>103.4</td>
<td>102.7</td>
<td>0.96</td>
</tr>
<tr>
<td>2002</td>
<td>103.6</td>
<td>103.3</td>
<td>102.7</td>
<td>1.00</td>
</tr>
<tr>
<td>2003</td>
<td>103.3</td>
<td>103.5</td>
<td>103.1</td>
<td>1.00</td>
</tr>
<tr>
<td>2004</td>
<td>104.5</td>
<td>104.8</td>
<td>104.0</td>
<td>0.99</td>
</tr>
<tr>
<td>2005</td>
<td>105.7</td>
<td>106.0</td>
<td>105.3</td>
<td>0.99</td>
</tr>
<tr>
<td>2006</td>
<td>106.8</td>
<td>107.0</td>
<td>106.2</td>
<td>0.99</td>
</tr>
<tr>
<td>2007</td>
<td>107.6</td>
<td>107.1</td>
<td>106.3</td>
<td>0.99</td>
</tr>
<tr>
<td>2008</td>
<td>107.4</td>
<td>108.2</td>
<td>106.6</td>
<td>0.99</td>
</tr>
<tr>
<td>2009</td>
<td>107.3</td>
<td>107.0</td>
<td>106.4</td>
<td>0.99</td>
</tr>
<tr>
<td>2010</td>
<td>107.2</td>
<td>107.9</td>
<td>106.0</td>
<td>0.99</td>
</tr>
<tr>
<td>2011</td>
<td>107.6</td>
<td>108.2</td>
<td>107.1</td>
<td>0.99</td>
</tr>
<tr>
<td>2012</td>
<td>108.2</td>
<td>108.9</td>
<td>107.4</td>
<td>0.99</td>
</tr>
</tbody>
</table>

**Definition:** Number of pupils enrolled in primary education, regardless of age, expressed as a percentage of the population in the corresponding age group for the same level of education.

**Formula**

\[
\text{GER (ISCED 1)} = \frac{\text{ENRL (ISCED 1)}}{\text{Population (aged 5 to 10)}} \times 100
\]

- \( \text{MF} = \frac{1139634}{105852 \times 100} = 105.2 \)
- \( \text{Female} = \frac{55886}{52029 \times 100} = 107.4 \)
- \( \text{Male} = \frac{(113934 - 55886)}{50023 \times 100} = 103.9 \)

**UIS:** Please explain why you request UIS not to publish GER for years before 2004.

**M.O.E.** GER for years prior to 2004 (i.e. for years 2003, 2002 and 2001) are lower compared to our National Estimates. Consequently, this would lead to an overestimation of out-of-school children. GER from the year 2004 onwards is more realistic. This is the reason why we recommend UIS to publish GER as from 2004.

## Adjusted net enrolment rate (NERA)

<table>
<thead>
<tr>
<th>Year</th>
<th>MF</th>
<th>M</th>
<th>F</th>
<th>GPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>92.8</td>
<td>92.5</td>
<td>93.0</td>
<td>1.00</td>
</tr>
<tr>
<td>2000</td>
<td>93.2</td>
<td>93.1</td>
<td>93.4</td>
<td>1.00</td>
</tr>
<tr>
<td>2001</td>
<td>92.8</td>
<td>92.4</td>
<td>93.2</td>
<td>1.01</td>
</tr>
<tr>
<td>2002</td>
<td>94.4</td>
<td>93.9</td>
<td>95.0</td>
<td>1.01</td>
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<tr>
<td>2003</td>
<td>93.9</td>
<td>93.2</td>
<td>94.5</td>
<td>1.01</td>
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<tr>
<td>2004</td>
<td>95.7</td>
<td>95.1</td>
<td>96.2</td>
<td>1.01</td>
</tr>
<tr>
<td>2005</td>
<td>96.4</td>
<td>95.4</td>
<td>96.7</td>
<td>1.01</td>
</tr>
<tr>
<td>2006</td>
<td>96.0</td>
<td>95.5</td>
<td>97.1</td>
<td>1.01</td>
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<tr>
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<td>96.8</td>
<td>98.5</td>
<td>97.1</td>
<td>1.01</td>
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<tr>
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<td>97.6</td>
<td>97.0</td>
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<td>97.4</td>
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<tr>
<td>2010</td>
<td>97.3</td>
<td>97.1</td>
<td>97.6</td>
<td>1.00</td>
</tr>
<tr>
<td>2011</td>
<td>97.7</td>
<td>98.4</td>
<td>97.9</td>
<td>1.01</td>
</tr>
</tbody>
</table>

**Definition:** The percentage of children in the official primary school age range who are enrolled in either primary or secondary education.

**Formula**

\[
\text{NERA (ISCED 1)} = \frac{\text{ENRL (ISCED 1)}}{\text{Population (aged 5 to 10)}} + \frac{\text{ENRL (ISCED 2)}}{\text{Population (aged 5 to 10)}} \\
\text{MF} = \frac{(103532 \times 143 + 1103563 \times 100)}{905} = 89.5 \quad \text{Capped value: 97.9} \\
\text{Female} = \frac{(51104 + 70) \times 52029}{100} = 89.5 \quad \text{Capped value: 97.9} \\
\text{Male} = \frac{(52185 + 87 \times 50023) \times 100}{98.5} \quad \text{Capped value: 98}
\]
Data checking and your feedback: the importance of data report and indicator review

- Important steps to validate new data
- Improve UIS understanding of countries’ specificities
- Allows for feedback which ensures that the data are of the best possible quality
Sub-Saharan Africa


Niger - 1.18

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary. Total</td>
<td>16</td>
<td>16</td>
<td>18</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Primary. Total</td>
<td>92</td>
<td>94</td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Secondary. All programmes. Total</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>37</td>
<td>38</td>
<td>40</td>
<td>41</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Upper secondary. All programmes. Total</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>27</td>
<td>29</td>
<td>30</td>
<td>32</td>
<td>33</td>
<td>33</td>
<td>34</td>
</tr>
</tbody>
</table>
UIS outputs

UIS Publications
- Thematic reports
- Information papers
- Technical documents
UIS outputs

Other important international publications
One of the most popular and unique data of the UIS: Top 20 source countries of international students

Distribution of degree-seeking international students by country of origin, 2013

- China, 18% (Outbound mobility ratio 2.1)
- India, 4% (0.6)
- Germany, 3% (4.3)
- Rep. of Korea, 3% (3.5)
- France, 2% (3.6)
- Saudi Arabia, 2% (5.4)
- US, 1% (0.3)
- Malaysia, 1%
- Viet Nam, 1% (2.4)
- Nigeria, 1%
- Russia, 1% (0.7)
- Iran, 1% (1.1)
- Kazakhstan, 1% (6.3)
- Italy, 1%
- Canada, 1%
- Turkey, 1% (0.9)
- Ukraine, 1% (1.8)
- Indonesia, 1%
- Morocco, 1%
- Pakistan, 1% (2)
- Remaining countries, 52%
Main destinations of international students

Distribution of internationally mobile students by main destination countries, 2013

- US: 19
- UK: 10
- Australia: 6
- France: 6
- Germany: 5
- Russia: 3
- Japan: 3
- Canada: 3
- China: 2
- Italy: 2
- Austria: 2
- Netherlands: 2
- Saudi Arabia: 2
- Korea, Rep.: 2
- United Arab Emirates: 1
- Spain: 1
- Turkey: 1
- Ukraine: 1
- Singapore: 1
- Belgium: 1
- Switzerland: 1
- Remaining destination countries: 23
Initial result from Asia regional survey on teachers ---
Where aid to education goes?

While millions of children remain excluded from primary school, an extra $39 billion is needed each year to achieve universal primary and secondary education.
Outputs and data dissemination - Data visualization

Where students goes?

India

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Destination country</th>
<th>Key Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepal</td>
<td>United States</td>
<td></td>
</tr>
<tr>
<td>Bhutan</td>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>United Kingdom</td>
<td></td>
</tr>
<tr>
<td>Iran, Islamic Rep.</td>
<td>Canada</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>New Zealand</td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td>United Arab Emirates</td>
<td></td>
</tr>
</tbody>
</table>

Internationally mobile students:

- Students abroad: 181,872
- Total number of mobile students abroad (% of total mobile students): ...
- Outbound mobility ratio: 0.6
- Gross outbound enrolment ratio: 0.2
Response rate by region, Survey 2015
Response rate for South and West Asia region, Survey 2013 to Survey 2016 (provisional)

- **Survey 2013**:
  - UIS QA: 8
  - UIS QB: 5
  - UIS QC: 7
  - UIS QT: 5
  - UIS RM/T: 3

- **Survey 2014**:
  - UIS QA: 8
  - UIS QB: 5
  - UIS QC: 5
  - UIS QT: 5
  - UIS RM/T: 3

- **Survey 2015**:
  - UIS QA: 9
  - UIS QB: 7
  - UIS QC: 7
  - UIS QT: 4
  - UIS RM/T: 4

- **Survey 2016 (provisional)**:
  - UIS QA: 9
  - UIS QB: 7
  - UIS QC: 7
  - UIS QT: 4
  - UIS RM/T: 3
The importance of timely data

- To meet the international demand for data and their respective deadlines
- To influence policy changes within the country
- Country level statistics may not be shown if deadlines are missed
- UIS’ own outputs rely on the availability of reliable timely data
- Last but not least, timely data allows for feedback which ensures that the data are of the best possible quality
Key data gaps and issues in UIS QA

- Pre-primary education (missing, under/over coverage)
- Lack of data on technical and vocational education (TVET)
- Post-secondary non-tertiary education often missing
- Enrolment by age
- Teaching staff disaggregated by ISCED level not available
- Graduates at primary and lower secondary education (missing, misreporting)
Key data gaps and issues in UIS QB

- Expenditure allocated by ISCED levels (e.g. high proportion not allocated)
- Expenditure by nature of spending (often not disaggregated by nature)
- Inconsistency between expenditure source and spending
Key data gaps and issues in UIS QC

- Enrolment and graduates by fields of study (not disaggregated by ISCED levels, high proportion in fields unknown)
- Enrolment and graduates in first degree programmes
- New entrants and first time new entrants to tertiary programmes
- International mobile students often missing
Document list

- Education Finance training materials
- ISCED documents
- UIS questionnaires and indicator guideline
- Education 2030 indicators

UIS website: http://www.uis.unesco.org/

UIS blog: https://sdg.uis.unesco.org/
“Education is the most powerful weapon which you can use to change the world.”

-- Nelson Mandela