UNESCO Institute for Statistics

Information and Communication Technologies (ICTs) in Education: How data can support transparent and effective policy making

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POLICY ISSUES
WHY MEASURE ICTs IN EDUCATION?

- International Commitments:
  - WSIS (Geneva, 2003) Plan of Action
  - Education for All (EFA) goals
  - Millennium Development Goals (MDGs)
  - eLAC2010 (Strategy for the Information Society in Latin America and the Caribbean)
  - New Partnership for Africa’s Development (NEPAD) e-schools initiative

- UNESCO sector demands, vision and mission

- Supporting national policy making and benchmarking

- Demands from analytical community

- Partnership on Measuring ICT for Development (ICT4D)
ICT IN EDUCATION STATISTICS: METHODOLOGY AND DATA COLLECTION
WHAT DO WE MEAN BY ICTs IN EDUCATION?

**ICTs in education** refers to education models that employ ICTs to support, enhance and enable the delivery of education. Any, all or combinations of the following types of ICTs are included.

- Radio
- TV
- Computer
- Internet
# ICT CORE INDICATORS

Adopted by the United Nations Statistical Commission (UNSC) through the Partnership on Measuring ICT for Development at its 40th session in February 2009

<table>
<thead>
<tr>
<th>Indicator Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>ED1</td>
<td>Proportion of schools with a radio used for educational purposes (for ISCED level 1-3)</td>
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<tr>
<td>ED2</td>
<td>Proportion of schools with a TV used for educational purposes (for ISCED level 1-3)</td>
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<tr>
<td>ED3</td>
<td>Proportion of schools with a telephone communication facility (for ISCED level 1-3)</td>
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<tr>
<td>ED4</td>
<td>Learner-to-computer ratio in schools with CAI (for ISCED level 1-3)</td>
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<tr>
<td>ED4. bis</td>
<td>Learner-to-computer ratio (for ISCED level 1-3)</td>
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<tr>
<td>ED5</td>
<td>Proportion of schools with Internet access at school, by type (for ISCED level 1-3)</td>
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<tr>
<td></td>
<td>• Fixed narrowband Internet access (using modem dial-up, ISDN)</td>
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<tr>
<td></td>
<td>• Fixed broadband Internet access (DSL, cable, other fixed broadband)</td>
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<tr>
<td></td>
<td>• Both fixed narrowband and broadband Internet access</td>
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<tr>
<td>ED6</td>
<td>Proportion of learners who have access to the Internet at school (for ISCED level 1-3)</td>
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<tr>
<td>ED7</td>
<td>Proportion of learners enrolled by gender at the post-secondary non-tertiary and tertiary level in ICT-related fields (for ISCED level 4 and level 5-6)</td>
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<tr>
<td>ED8</td>
<td>Proportion of ICT-qualified teachers in primary and secondary schools (for ISCED level 1-3)</td>
</tr>
<tr>
<td>EDR1</td>
<td>Proportion of schools with electricity (for ISCED level 1-3) <em><strong>Reference indicator</strong></em></td>
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</table>
WSIS TARGETS

1. Connect all villages with ICTs and establish community access points
2. **Connect all secondary schools and primary schools**
3. Connect all scientific and research centres with ICTs
4. Connect all public libraries, museums, post offices and national archives with ICTs
5. Connect all health centres and hospitals with ICTs
6. Connect all central government departments and establish websites
7. **Adapt all primary and secondary school curricula to meet the challenges of the information society, taking into account national circumstances**
8. Ensure that all of the world’s population has access to television and radio services
UIS METHODOLOGICAL PRODUCTS

- International questionnaire and instructional manual for ICTs in education:
  - Policy and curriculum
  - ICT Infrastructure in schools
  - Enrolment
  - Teachers
  - Expenditures

- Guide to Measuring ICTs in Education
UIS DATA COLLECTION

- Pilot data collection 2009 (31 countries)
- Latin America and the Caribbean regional questionnaire 2010/2011 (38 countries)
- Arab States regional data collection 2011/2012 (5 countries)
- Asia Pacific regional data collection 2012 (30 countries)
- Francophone Africa 2013 (20 countries)
Indicator 2.3: Learners-to-computer ratio
Indicator 7.1: Proportion of ICT-qualified teachers in schools
THANK YOU

For more information on UIS statistics on ICT in education, please visit the UIS website:

www.uis.unesco.org

Or contact:

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