ICT and Education Indicators
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Introduction

UNESCO Institute Statistics (UIS) and Information Society

UIS has been working in addressing some the issues that has been identified as UNESCO's areas of competence during the two WSIS summits in 2003 & 2005.

Introduction

UIS has been concerned not only with infrastructure issues of the information society but to look at the impact of ICTs in the society from the angle of access and usage both at household level and in public space.

Introduction

Main issues related to impact and access are:

- ICTs and Education

- Literate Environment (what sort of information is available to an individual in a public space- Newspaper, old ICTs, Library)
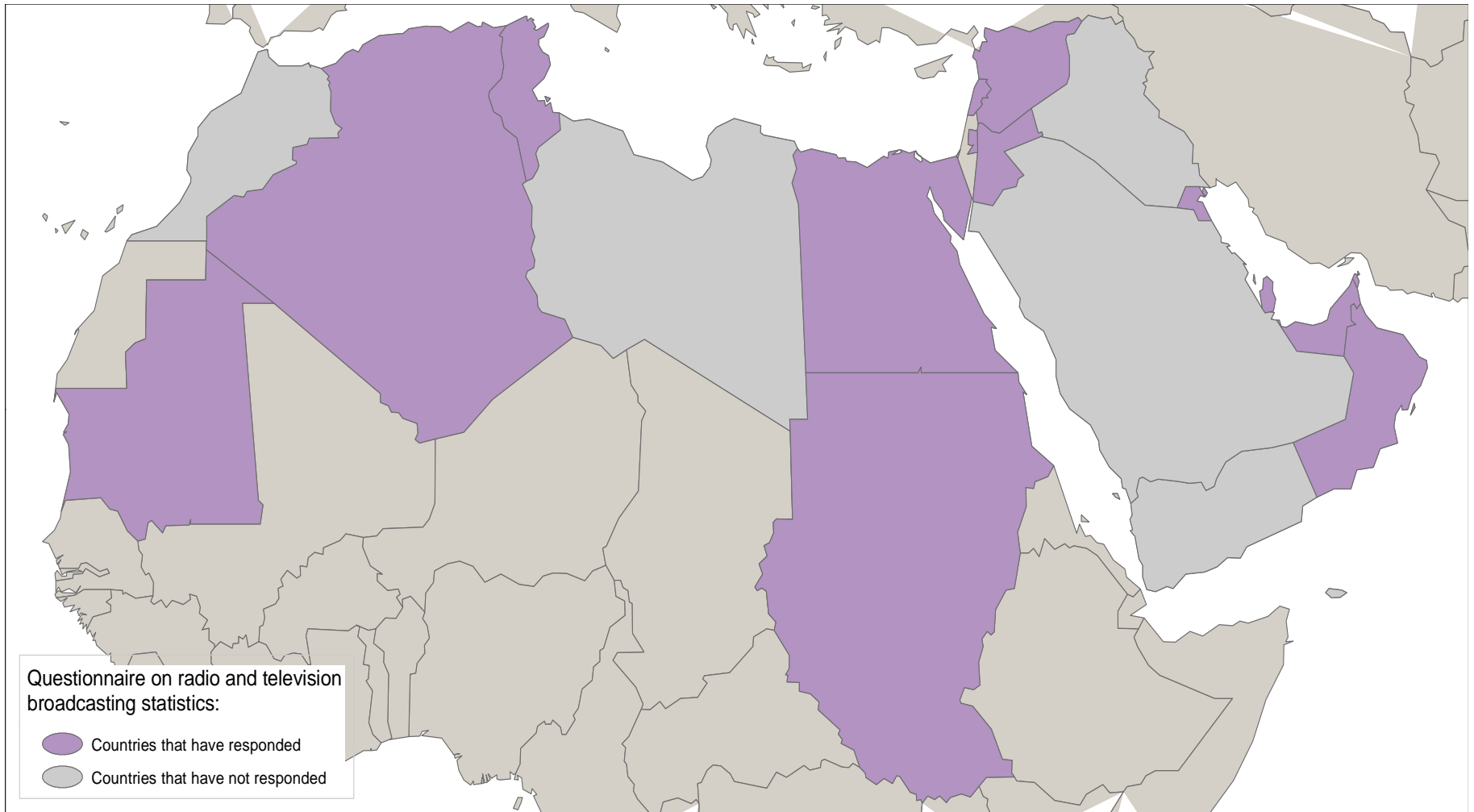
- Access to ICTs at Household level

Brief sketch of the other areas of work followed by ICT and education Indicators

INFORMATION SOCIETY

Literate Environment:

1. Access to information (Press & Broadcast)

- Launched Newspaper survey in 2005 and Broadcast (Radio & Television survey) in 2006. Result expected by end of 2007.

Response to Broadcast Questionnaire- Arab/North African region

Questionnaire on radio and television broadcasting statistics:

- Countries that have responded
- Countries that have not responded

Response to Press Survey

Questionnaire on newspaper statistics:

- Countries that have responded
- Countries that have not responded

Library

- Libraries are public access points
- Many libraries are digitized
- Use of ICTs for retrieving information

- UIS and IFLA will launch a survey of Libraries.
- Results expected in 2008
- Initially in Latin America

Access to Information

2. Access to information at household level

- Through the Literacy Assessment Monitoring Programme (LAMP)

Access to Information

ICT literacy

Questions on ICT introduced in the LAMP Background Questionnaire.

Currently 6 countries are participating in the pilot phase of LAMP.

ICT and Education

ICT and Education

ICTs can be used in education to:

improve administrative efficiency

disseminate teaching and learning materials to teachers and students

improve the ICT skills of teachers and students

allow teachers and students access to sources of information from around the world

share ideas on education and learning

collaborate on joint projects

conduct lessons from a remote location

ICT and Education

- Data on availability of ICTs in formal education--their costs and benefits, their use, equity of access, their impact on educational outcomes useful for educational planning

- ICTs play equally major role in promotion of non-formal education– older technologies too!

Examples of indicators assessing use and impact of ICT in education

Basic groups of indicators aimed at assessing the use and impact of ICT in education:

- Policy
- Infrastructure and access
- Budget
- ICT use in the curriculum
- Professional development
- Student outcomes

UIS ICT and Education Paper and the Core Indicators

- Was presented at WSIS Tunis

- The document circulated to various partners and experts for review

- Regional meetings held to discuss with view of implementing collection of ICT education data at country level.

Objectives of the ICT education paper

- To establish a core set of indicators for ICTs in Education
- Focussed on capacity of developing countries
- Minimise burden of data collection and response
- Use existing indicators to maximise existing data on survey design sampling etc.
- Use school –based data which can largely be collected through administrative systems and linked directly to educational processes

Surveys of Schools used for coming up with the list of core indicators

- **Asia Pacific Survey on ICTs in Education (APRS)- pilot**
  - the school survey of Latin America (LABORATORIO)
  - OECD countries (PISA)
  - Primarily European and North American (PIRLS)
  - Some African Countries (SACMEQ)
  - Selected countries that have computers in schools only (SITES – 1) SITES-2 (Case Studies)
  - Selected countries across the world - Third International Mathematics and Science Survey (TIMSS and TIMSS-R)
  - Selected countries across the world - World Education Indicators- Primary School Survey - WEI-SPS

ICT and Education Scoping Exercise

Based on the exercise, a list of core indicators were proposed as well as launching of an scoping exercise for ICTs and Education

Scoping exercise to determine data availability through UIS regular data collection for education statistics. Survey launched recently. Results by end 2007

ICT and Education Indicators

Indicators

- These indicators are based on the paper that looked at the various existing international school surveys

- Typical questions exist

- Internationally comparable data

- Helps better policy making

Suggested Basic Core of Indicators for ICT in Education

Basic Core:

1.% of schools with electricity (by ISCED level 1-3)

2.% of schools with radio used for educational purposes (by ISCED level 0-4)

3. % of schools with television sets used for educational purposes (by ISCED level 0-4)

4. Student to computer ratio (by ISCED level 0-4)

5. % of schools with basic telecommunication infrastructure or telephone access (by ISCED level 1-4)

6. % of students who use internet at school (by ISCED level 1-4)

Indicators- contd..

- Extended Core:

    (i) % of students enrolled by gender at the tertiary level in an ICT-related field (by ISCED level 5-6)

    (ii) % of ICT qualified teachers in primary and secondary schools (of the total no. of teachers)

(Note: all indicators should be collected by   sex, grade and age)

Need for adopting the indicators

We still do not have a comprehensive assessment of the true impact of ICTs in education

There is a need for every individual to gaining the necessary skills to face the competitive world

ICT literacy is a one such important skill

It is high time we have internationally comparable data to be able to study the progress countries have made since WSIS in the field of introduction of ICTs in education

The set of core indicators proposed is a step towards achieving that goal.

Thank You!

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