



UNESCO INSTITUTE for STATISTICS



The importance of literacy for development is reflected in international agreements such as **Education for All** and the **UN Literacy Decade** (2003-2012). Through both of these agreements, countries have committed to a 50% improvement in the adult literacy rate by 2015. The **Millennium Development Goals** (MDGs) also envelop goals towards literacy, a fact that illustrates the central importance of literacy in poverty reduction.

“A lack of literacy skills limits the potential for societies to deal with issues such as discrimination, poor health, social exclusion and powerlessness. Literacy is at the heart of the social, cultural, economic and political wellbeing of individuals, communities, societies and nations, indeed of the world” (The Literacy Decade: Getting Started, 2003-2004).

The task ahead is enormous - globally over 785 million adults are classified as ‘illiterate’ and hundreds of millions more can do little more than recognise isolated words. (See Figures 1 and 2)

LITERACY ASSESSMENT AND MONITORING PROGRAMME (LAMP)

Effective policy development and policy change require relevant and accurate data. Knowing how literacy skills are distributed within a population allows for efficient resource allocation and effective programming.

The UNESCO Institute for Statistics’ (UIS) *Literacy Assessment and Monitoring Programme* (LAMP) was developed to gather quality data on literacy through new national household surveys repeated on a five to ten-year cycle. The LAMP instruments and methods were developed by and validated in six countries: **El Salvador, Kenya, Mongolia, Morocco, Niger** and **Palestinian Autonomous Territories**.



LITERACY ASSESSMENT AND MONITORING PROGRAMME

UNESCO sees LAMP as a fundamental tool for policy development and implementation of its *Literacy Initiative for Empowerment (LIFE)* programme, which aims to support the achievement of the EFA literacy goal, especially for women, in developing countries with the lowest literacy rates. LAMP will provide the basic data upon which LIFE implementation plans and adult literacy programmes can be built.



photo: B. O'Malley @UNESCO

Figure 1. Traditional literacy measure

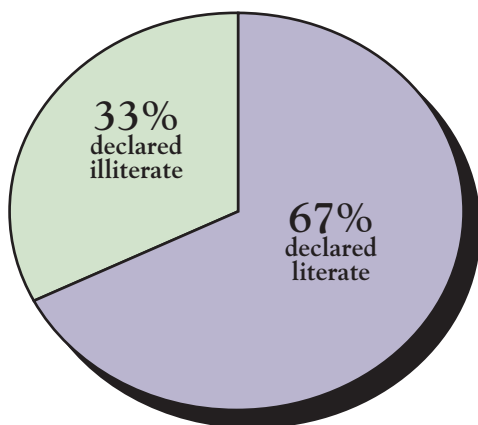
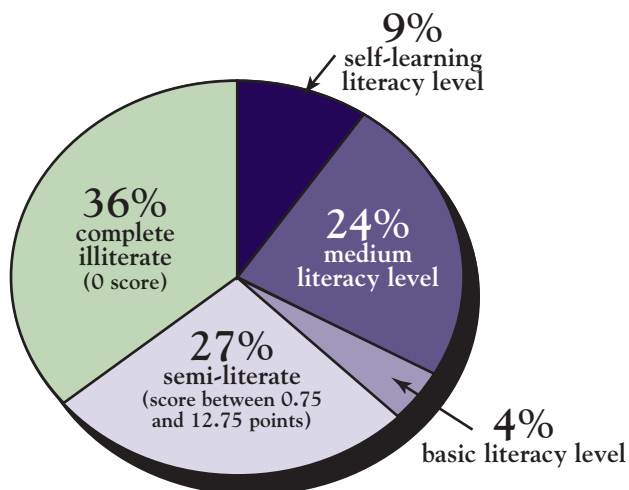


Figure 2. Differentiated literacy measure



LAMP employs a sample survey of adults (aged 15 years or more) to identify the full range of literacy - from the most basic reading and writing to the skills needed to participate fully in a learning society. The comparative dimension of LAMP allows it to assist in monitoring and programme design both at national and international levels. LAMP also builds statistical capacity, in the area of surveys and literacy assessments, which will be used for improving policies and intervention strategies.

Note: Figures 1 and 2 provide a comparison of two different methodologies of literacy data collection, for the same country and for a relatively close time period. Figure 1 presents results from the population census: 67% of the population is declared as literate and 33% as illiterate. In Figure 2, however, a closer examination of the literate population during a literacy survey, one year later, showed that 27% of the total population is *semi-literate*. *Semi-literates* are individuals who scored between 0.75 and 12.75 points out of 100, which reflect very low levels of literacy.

WHY SHOULD COUNTRIES CONDUCT LAMP?

LAMP provides valid, reliable, comparable and interpretable literacy data through carefully conceived and tested instruments. These data seek to help governments to focus on real needs and allow them to target resources where they are most needed. This form of transparent and evidence-based decision-making will also give donor agencies more confidence in a country's capacity to deal with poverty alleviation, economic growth and political independence.

Capacity building is an important and essential part of LAMP. Throughout, LAMP provides training to local authorities and institutions, in order to strengthen local capacity to undertake direct literacy assessment. LAMP is implemented in conjunction with authorities in countries to ensure ownership, which is crucial for the long-term sustainability of the programme. (See Box 1)

LAMP is designed to build the capacity that matches the needs and technical competence of literacy data users at all levels of understanding. These data users will be targeted through effective strategies:

- LAMP results can be used for increasing the understanding of literacy. For example, one of the key concepts involved in the acquisition of literacy is the need to achieve a high level of automatic (sight) reading as a basis for higher-order skills.
- Engaging various stakeholders, such as civil societies and government bodies, to debate and take action at the community level. Action can also be taken through awareness campaigns, following the survey.
- The use of survey tools, with or without data results, generates discussions. It also generates reflection and interest in resulting programmes.

Box 1. SUSTAINABILITY OF LAMP THROUGH CAPACITY BUILDING

Countries are trained to develop survey assessment instruments and administer the survey by developing a framework, assessment items, a background questionnaire, tools and software, and other associated supporting documents.

Countries are encouraged to develop local expertise in using the data for policy and programme analysis and advocacy.

Sustainability can be supported through government commitment to the programme.

HOW IS LAMP IMPLEMENTED?

LAMP participation is formally agreed upon between a country and the UNESCO Institute for Statistics (UIS) through a Memorandum of Understanding. Both international and local financing are required.

First, countries nominate a National Project Leader and form National Project Teams, which include multi-disciplinary and cross-ministerial technical and implementation cells, as well as a user group.

Second, through consultations with the UIS, and on the basis of template and reference documents, country teams prepare National Planning Reports, which define the structure of the team, the choice of test languages, the sample design, the number of interviewers, and the type of reports that will be produced. Budgets are prepared in parallel.

Third, country teams translate and adapt the survey instruments. This includes the test items, the background questionnaire, and the various interviewer training packages. A field test is then conducted to ensure operational and psychometric integrity of the adapted instruments. The main Survey is conducted following the successful completion of the field test. The main survey should include a sample of at least 2250 adults per test language.

The UIS will produce an international comparative analysis, an international data file and an associated technical report. National Project Teams will produce more focused reports aimed at a broad spectrum of national users.

WHICH LITERACY SKILLS ARE ASSESSED AND HOW?

A framework is used as the basis for the comparative assessment of adult literacy in LAMP. The LAMP framework is an adaptation from the IALS (International Adult Literacy Survey), the world's first multi-country multi-language assessment of adult literacy. LAMP identifies five levels of proficiency as defined below.

FIVE LEVELS OF LITERACY

Level 1 indicates persons with very poor skills, where the individual may, for example, be unable to determine the correct amount of medicine to give a child from information printed on a package.

Level 2 respondents can deal only with material that is simple, clearly laid out, and in which the tasks involved are not too complex. It denotes a weak level of skill, but more hidden than Level 1. It identifies people who can read, but test poorly. They may have developed coping skills to manage everyday literacy demands, but their low level of proficiency makes it difficult for them to face novel demands, such as learning new job skills.

Level 3 is considered a suitable minimum for coping with the demands of everyday life and work in a complex, advanced society. It denotes roughly the skill level required for successful secondary school completion and college entry. Like higher levels, it requires the ability to integrate several sources of information and solve more complex problems.

Levels 4 and 5 describe respondents who demonstrate command of higher-order information processing skills.

Knowing the distribution of component skills across the population, and how these relate to proficiency, and designing suitable programmes that take this into account, will lead to increasing more effectively the functional literacy of a population.

LAMP goes further than IALS by assessing component skills that are believed to be the building blocks that underpin fluent reading as defined below.

HOW LAMP MEASURES COMPONENT SKILLS

The component skill measures that make up reader profiles are measured by:

1. *Alphanumeric perceptual knowledge and familiarity*
Recognise the letters of the alphabet and recognise single digit numbers.
2. *Word recognition*
Recognise common words that appear frequently in print. These common words are expected to be in the listening/speaking lexicon/vocabulary of an individual who is a speaker of the target language.
3. *Decoding and sight recognition*
Produce plausible pronunciations of novel or pseudo words by applying knowledge of the sight-to-sound correspondences of the writing system, and do this accurately, rapidly and with ease.
4. *Sentence processing*
Process simple written sentences and apply language skills to comprehend - accurately, rapidly and with ease.
5. *Passage reading*
Process simple written passages and apply language skills to comprehend - accurately, rapidly and with ease.

Each country decides on the language or languages that will be used to test the literacy levels of its population. Validity of the instruments at the national and international levels will be established by linking the assessment of skills in each domain to a theory that explains a significant proportion of the observed variance in both item difficulty and individual proficiency.

POLICY AND RESEARCH ISSUES ADDRESSED BY LAMP

Distribution of literacy skills for particular population sub-groups that share patterns of need:

- What is the distribution of component reading skills in the adult population? What do these patterns imply for resource allocation and for the design and delivery of curricula and instruction?

Relationship between literacy and inequalities in social outcomes:

- To what extent do individuals with low skills appear to be less engaged in the broader society (community service and social activities)? How do individuals with low skill levels cope with their everyday reading and numeracy demands?

Relationship between literacy and social inequality in economic outcomes at individual (sub-group) levels:

- To what extent are literacy skills related to social inequity in economic outcomes such as employment rates? Do the literacy levels of specific groups place them at particular risk economically?
- How do an individual's literacy skills relate to employment opportunities and economic outcomes? How do an individual's literacy skills associate with social benefits and better access and utilisation of health care and health information?
- Are literacy and numeracy levels high enough to support the national economic objectives of particular countries? To what extent are overall levels of macro-economic growth being constrained by the level of literacy and numeracy skills available to the economy? Could overall levels of economic growth be improved by increasing the level of public investment in social institutions that create literacy and numeracy skills?

The adequacy of adult learning systems

Many countries are investing public resources to support higher levels of formal, non-formal and informal adult learning. By profiling the level and context of participation in non-formal adult learning, the LAMP programme will allow users to explore questions such as these:

- Who is participating in adult learning of various types, including adult literacy classes?
- To what extent are particular population sub-groups excluded from adult learning systems?

The quality of formal education

LAMP includes estimates of literacy and numeracy skills for individuals aged 16–25 years who may have recently left the formal education system.

- What is the relative quality of the current educational output in a country?
- How do numeracy and literacy compare to that of other countries?

The comparative dimension of the LAMP study will also allow users to explore, through statistical analysis, the influence of various background questions on literacy and, hence, where policy might have the most impact.

DATA USERS

LAMP data will serve a broad range of users and uses.

Civil society, social advocates and community leaders need standardised facts to understand the social (educational) and economic systems that are in place.

Education Ministries and educational administrators: at all levels need quality, reliable and timely data to:

- assess and report on the performance of specific groups of adults;
- adjust teaching priorities and curricula to match learning needs;
- target in-service training for teachers;
- improve programmes; and
- adjust allocation of funds to achieve maximum return on investment.

Politicians and policy-makers need information to understand the abilities of their citizens. Across countries and ministries, economists, policy-makers, statisticians and others can use the same data and discuss the utility of the data in their respective contexts. In particular:

- **Labour ministries** need to understand the quality and quantity of literacy and numeracy and the labour market needs for these skills.
- **Culture ministries** use this information to understand and ensure equal rights among all citizen including minorities.
- **Health ministries** relate literacy to population health and design appropriate communication strategies for better use of health care and health information.
- **Tax officials** and their policy-makers need information to understand the literacy levels of the taxpaying public so that they can engineer their reporting systems accordingly.
- **Social development ministries** are informed about trends in literacy levels and the role that they play in addressing issues related to all sorts of inequity in and access to resources and information in the society.
- **Agriculture ministers** use information to understand the connections between literacy levels and new initiatives that can be introduced to agricultural practices.
- **Industry ministers** monitor the supply of individuals at specific levels of literacy that are available to the workforce.



photo: VVictoria @UNESCO

THE UIS LITERACY STRATEGY

The UNESCO Institute for Statistics (UIS), along with the UNESCO Education Sector (LIFE), as well as other partners, undertakes several complementary initiatives.

Light literacy module

The UIS is developing a reduced form of the full-scale LAMP literacy assessment.

This module is designed with two purposes in mind:

- to provide countries with a cost-effective method to monitor literacy trends between large-scale LAMP assessments; and
- to serve the needs of countries who lack the financial, technical and operational resources needed to undertake the full LAMP assessment.

In the module, functional literacy is measured by adding a literacy questionnaire onto an existing household survey and by administering the LAMP assessment to a small sample of adults. It provides a limited key set of literacy estimates linked to the LAMP proficiency levels.

Census questions

The UIS will use what is learned through LAMP and its other literacy initiatives to improve literacy measurement in other contexts, including the next round of population censuses.

Current literacy estimates

National literacy data currently reported by the UIS are gathered from a wide variety of sources collected at different dates and are without assurance of cross-national comparability. The LAMP programme will, as it expands, produce more relevant and reliable literacy data for the majority of countries in the world. In the meantime, the UIS continues to improve the quality of current data.

In 2004 the UIS adopted a policy that it would begin to publish observed literacy figures gathered directly through surveys and censuses where available, rather than estimates, and would not produce literacy projections. The UIS also requires countries to provide metadata on how such data were collected.

More recently, the UIS has also initiated new research into the production of improved international literacy projections. The new model will continue to use the dichotomous literacy classification obtained from population and housing censuses and household surveys, in addition to the demographic characteristics of the national population, as its inputs. The output from the model will provide both estimates of adult literacy for current years and projections to the year 2015 by age group and sex for each country, for specified regions and globally.

Strengthening data collection systems

The UIS is keen to promote the analysis and dissemination of all forms of literacy data, for national policy formulation and monitoring. In 2005 the UIS undertook a project to assist four countries: **Benin, Mauritania, Niger** and **Senegal**, in the analysis and dissemination of literacy data from national censuses and household surveys. This project was developed within the context of the monitoring and evaluation component of UNESCO's *Literacy Initiative for Empowerment* (LIFE) in order to ensure that data users are able to obtain the latest available literacy data. The results of the project were:

- improvement in the overall analytical capabilities for literacy data;
- improved use of literacy data in support of policy formulation;
- provision of observed literacy data in the UIS literacy questionnaire format; and
- support for the needs assessment and monitoring components of the UNESCO *Literacy Initiative for Empowerment* (LIFE) programme.



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FOR FURTHER INFORMATION

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