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Evaluation of the Latin American Laboratory for the Evaluation of Educational Quality (LLECE)

*Dr. Guillermo Solano-Flores
Dr. William Bonk*

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Executive Summary

Introduction

This document reports on the evaluation of LLECE (*Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación*), the Latin American Laboratory for Assessment of the Quality of Education, an assessment system and network of Latin American countries.

This evaluation is part of a broader evaluation project of four UNESCO international assessment programs supported by UNESCO, and which also included ALO, LAMP, and SACMEQ.

According to the proposal submitted by its director, Dr. Kadriye Ercikan, the broad evaluation project focused on the attainment of UNESCO purposes, including the technical soundness of UNESCO's outputs, the relevance and adequacy of organizational arrangements in the program, the effectiveness of the quality control and assurance procedures, the effectiveness and sustainability of the program, and the impact of UNESCO's work on the area of monitoring learning achievements.

This evaluation was conducted between October of 2007 and March 2008. It addressed five aspects of LLECE that are relevant to UNESCO's goals: (1) the technical soundness of UNESCO's outputs, (2) the relevance and adequacy of organizational arrangements in the program; (3) the effectiveness of the quality control and quality assurance procedures, (4) the effectiveness and sustainability of the program, and (5) the impact of UNESCO's work in the area of monitoring learning achievements.

The evaluation was based on information obtained from document and literature review, an interview with the coordinator of UNESCO's Regional Bureau for Education in Latin America and the Caribbean (OREALC/UNESCO Santiago), and data collected from a survey given to LLECE country representatives.

Background Information

As mentioned, LLECE can be viewed as both an assessment network and an assessment system intended to evaluate the quality of K-12 education in Latin America. The first assessment, LLECE-1st Study, was conducted in 1997; the second assessment, called SERCE (*Segundo Estudio Regional Comparativo y Explicativo*, Second Regional Comparative and Explanatory Study), was conducted in 2007. LLECE's objectives focus on producing information on student achievement levels and analyzing the factors underlying learning progress. LLECE also intends to provide support and technical assistance to measurement and assessment units at the country level, and to serve as a forum for reflection, debate and exchange of new approaches on education evaluation. An overall objective is to assist participating countries to enhance the technical quality and utilization of assessment data on education as a means of improving the quality of education.

The Scope of Evaluation

Four factors shaped the scope of this evaluation. First, there were important budgetary restrictions due to which a visit to OREALC in Santiago, Chile, could not be performed. In addition, a tight timeline and the timing of the evaluation restricted the kind of data collected. For example, this evaluation started at about the same time in which SERCE data were being collected and before they were disseminated.

Second, evaluation data were collected in accord with the communication styles and channels of the LLECE countries. We gained access to the LLECE country representatives after we had an initial conversation with the LLECE general coordinator, who also advised us on the format that should be used in the survey for LLECE country representatives.

Third, a change in the scope of the evaluation made us pay more attention to those aspects in which UNESCO's support to LLECE could be improved. As it turned out, UNESCO's

financial support to LLECE is minimal, which made accountability a weak reason for countries to provide information. In that context, the different kinds of support that could help LLECE to better function appeared to be a more relevant kind of information to collect.

Fourth, based on information obtained by Dr. Kadriye Ercikan from conversations with personnel involved in the other UNESCO-supported assessment systems, the topic of assessment capacity building was identified as critical to both properly evaluating LLECE and the kinds of support that UNESCO could provide to increase the assessment capacity of LLECE countries.

Evaluation Framework

We identified nine dimensions of UNESCO support as critical to LLECE: (1) administration and management, (2) information; (3) communication; (4) technical; (5) material; (6) finances; (7) human resources development; (8) organizational development; and (9) legislation and regulations. These dimensions are mostly relevant to enabling LLECE countries to efficiently meet their educational missions and goals in sustainable ways. Also, these dimensions are consistent with United Nations Development Programme's definition of capacity building, which includes policy and legal frameworks, institutional development, community participation, human resources development, and strengthening of managerial systems.

Methodology

The evaluation was based on: (1) the review and analysis of documents, mainly technical and progress reports; (2) informal communication with LLECE's general coordinator; (3) a questionnaire given to OREALC on the quality of support received from UNESCO; and (4) a survey given to LLECE country representatives on the quality of support received by OREALC.

Findings

Our document review revealed a great deal of thought, planning, and organization going into SERCE, with clearly stated objectives for the implementation of a high level of quality control throughout the entire process of constructing the assessment framework, developing the test items, planning the test scoring and analyses, disseminating test results, and applying the findings in a multitude of practical ways.

Our review also revealed a difference in scope between LLECE-1st Study and SERCE, conducted respectively in 1997 and 2007. SERCE was intended to capitalize on the experience and knowledge gained as a result of the administration of the LLECE-1st Study. As a result, a stronger emphasis has been made on standardizing testing procedures and ensuring quality in the implementation of its items. For example, a 2001 technical report provided many state-of-the-art forms of test item analysis that may have benefited the process of testing in SERCE. Also, SERCE may have benefited from the creation of a Technical Consultative Committee which was created to provide advice and assistance at various phases of the project.

Results from the questionnaire and the survey revealed that LLECE countries rate highly the support received by OREALC and consistently across the support dimensions, whereas that

support from UNESCO tends to be rated low by OREALC. According to OREALC, UNESCO's financial support to LLECE does not exceed 3% of the cost LLECE's budget.

Since many of the LLECE countries are in need for building the assessment capacity needed to properly address the challenges inherent to an era of accountability, it is clear that UNESCO support not only should be increased; also, it should be oriented to strengthening the development of their human resources.

Recommendations

1. Administration and management: Efforts should be made to simplify the procedures used by UNESCO in its interaction with LLECE. Also, to ensure proper functioning, efforts should be made to ensure job stability for OREALC staff.

2. Information: Efforts should be made to provide clear information to LLECE countries on the procedures used by UNESCO and to make information on administrative requirements timely and accessible to both OREALC and the LLECE countries.

3. Communication: Efforts should be made to ensure that UNESCO responds efficiently to LLECE countries' requests for information and to ensure a minimum of stability in the configuration of leadership teams.

4. Technical: Since the need for technical assistance varies considerably across LLECE countries, efforts should be made to identify the specific technical needs of each country.

5. Material and Equipment: Efforts should be made to ensure that all LLECE countries have updated versions of the software used for data analysis. More specifically, efforts should be made to ensure appropriate distribution of software among LLECE countries, and to minimize the incompatibility of software used by UNESCO and certain agencies (e.g., ACER) and the software used by LLECE countries.

6. *Finances:* Since UNESCO support represents only 3% of LLECE's budget, it is clear that any increase of UNESCO financial support will be beneficial. However, since LLECE countries vary considerably on their ability to fund their participation in LLECE, efforts should be made to target for financial support those countries that are in greater need for support for capacity building.

7. *Human resources development:* Efforts should be made to support the development of human resources in the field of assessment and data analysis, especially for those countries with a short history of assessment and few assessment specialists.

I. Introduction: Goals

This document reports on the evaluation of LLECE, the Latin American Laboratory for Assessment of the Quality of Education (*Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación*), one of several international assessment programs supported by UNESCO.

LLECE can be thought of as both an assessment system and a network for the quality assessment of K-12 education in Latin America. LLECE's activities are coordinated by UNESCO's Regional Bureau for Education in Latin America and the Caribbean (OREALC/UNESCO Santiago).

LLECE has carried out assessments in member countries twice. The first assessment, LLECE-1st Study, was conducted in 1997; the second assessment, called SERCE (*Segundo Estudio Regional Comparativo y Explicativo*, Second Regional Comparative and Explanatory Study), was conducted in 2007.

This evaluation is part of a broader evaluation of UNESCO-supported programs. In accord with the broader evaluation project, we addressed five aspects of LLECE and its relation with UNESCO: 1) the technical soundness of UNESCO's outputs, 2) the relevance and adequacy of organizational arrangements in the program; 3) the effectiveness of the quality control and quality assurance procedures, 4) the effectiveness and sustainability of the program, and 5) the impact of UNESCO's work on the area of monitoring learning achievements.

II. Factors that Shaped the Nature of this Evaluation

Several factors have shaped the kind of information obtained as part of the evaluation activities. The first factor has to do with limited budget, the tight timeline, and the timing of this evaluation. These restrictions pose a limit to the opportunity to obtain data from SERCE—the evaluation started at about the same time in which SERCE data were being

collected and was completed before SERCE results were disseminated. Each of these factors by itself might not pose serious challenges to the completion of the evaluation activity.

However, in combination, they have limited the variety of types of data collected.

A second factor that has shaped the kind of information obtained is related to the nature of LLECE as a social network of country representatives. We decided to have access to LLECE representatives done through then LLECE's general coordinator, Dr. Javier Murillo, who was well acquainted with the communication styles of the countries, and who provided advice on the format of a questionnaire that best fits those communication styles.

A third factor that shaped this evaluation was a change of its scope. After a series of conversations of the director of the project with UNESCO's cognizant program officer, it was agreed that the evaluation of the UNESCO-supported assessment programs should be as sensitive as possible to the aspects in which UNESCO support could be improved. We viewed this change in scope as something positive. One reason is that, given the budget and time constraints, obtaining appropriate information within this revised scope appeared to be a more feasible endeavor. Second, we thought that LLECE representatives would be more likely to provide information if the perceived ultimate goal of the evaluation was to identify ways in which UNESCO support could be improved.

A fourth factor that shaped this evaluation was guidance provided by the director of the general evaluation project, Dr. Kadriye Ercikan. Based on information she obtained from conversations with personnel involved in the other UNESCO-supported assessment systems, the topic of assessment capacity building was identified as critical to both properly examining these systems and providing recommendations for future support.

III. Evaluation Framework

Based on the terms of reference of the evaluation, a preliminary analysis of LLECE-related documents, an interview with OREALC's general coordinator, and informal interviews with individuals who are or have been LLECE representatives, we identified nine dimensions of UNESCO support that are critical to LLECE.

1. **Administration and management:** UNESCO's administrative procedures are easy to follow, and the amount of time investment required to complete them is reasonable.
2. **Information:** The information in operation manuals, memos, and other documents that UNESCO supplies are sufficient, clear, and arrive in a timely manner.
3. **Communication:** Communication with UNESCO is smooth, ongoing, and effective. It is clear who should be contacted for a particular need, and those individuals are accessible and are easily contacted.
4. **Technical:** The professional assistance that UNESCO provides in the form of orientation sessions, consulting, feedback, and data analysis is sufficient and arrives in a timely manner.
5. **Material:** The equipment, software, and other material resources that UNESCO provides are sufficient and arrive in a timely manner.
6. **Finances:** The monies provided by UNESCO are sufficient and arrive regularly.
7. **Human resources development:** UNESCO's support for LLECE has had a major impact on this country by providing the skills and knowledge necessary for the development and improvement of its educational assessment capacities.
8. **Organizational development:** UNESCO's support for LLECE has had a major impact on this country by getting national institutions to create work styles and

procedures necessary for the development and improvement of its educational assessment capacities.

9. **Legislation and regulations:** UNESCO’s support for LLECE has had a major impact on this country by identifying legislation and regulations necessary for the development and improvement of its educational assessment capacities.

To a great extent, these dimensions refer to countries’ assessment capacity building, an aspect of assessment systems whose importance has become increasingly evident as the project progresses. Based on UNDP’s definition of capacity building, we purported to examine the extent to which UNESCO contributed to the creation of enabling conditions for LLECE participating countries to efficiently meet their educational mission and goals in sustainable ways. These conditions include policy and legal frameworks, institutional development, community participation, human resources development, and strengthening of managerial systems.

IV. Methodology

A schematic representation of the conceptual framework used in the evaluation is shown in Figure 1. For each UNESCO support dimension, we make an attempt to integrate information concerning LLECE 1st Study and SERCE, and to determine ways of improving support provided by UNESCO for future LLECE assessments.

Figure 1. Conceptual framework used in the evaluation.

Support Dimensions	Time Projection		
	LLECE-First study	SERCE	Future LLECE studies
What kind of support was/should be received from UNESCO with regards to...?			
1) ...Administration and management			

2) ...Information			
3) ...Communication			
4) ...Technical			
5) ...Material			
6) ...Finances			
7) ...Human resources development			
8) ...Organizational development			
9) ...Legislation and regulations			

Our evaluation process employed the following methods:

Document review and analysis

This activity allowed us to examine the development of LLECE as an assessment system and thus assess the impact of UNESCO’s work in the area of monitoring of learning achievements. More specifically, this analysis allowed to compare the characteristics of LLECE-1st study and SERCE and thus assess any progress in terms of goals, procedures, and use of data. Documents reviewed were mainly technical and project progress reports.

Appendix I provides the list of documents reviewed. Some of these documents were provided by OREALC’s General Coordinator. We did not gain access to assessment instruments or working documents.

Informal Communication

Informal interviews with a former LLECE representative and a current LLECE representative and informal e-mail exchange with then OREALC’s general coordinator allowed us to

confirm that there is a great deal of heterogeneity in the characteristics of LLECE teams and Latin American countries' communication styles.

This diversity is critical to properly obtaining information from LLECE countries and interpreting data provided by them. First, teams in charge of LLECE vary considerably across countries in terms of their experience and the LLECE-related institutional memory. As a consequence, we could not reasonably expect to be able to obtain the same kind of information across countries. Second, OREALC's general coordinator confirmed our perception that, unlike other countries, focus groups or long e-mail exchanges are not as common in Latin American countries. These issues were considered in the design of the survey.

Survey

An important issue in this evaluation was the time that the representatives were able to commit to responding to survey instruments and the level of specificity of our survey questions. Hence, we gave serious thought to the format of any instruments for data collection. We came up with four possible formats:

- A): Individual, 10-15 minute phone interviews with each LLECE representative
- B): A series of three focus groups, each with four to five LLECE reps, facilitated in conference calls
- C): E-mail administered individual survey with the same questions. Responding to this survey take 25-30 minutes
- D): E-mail administered individual survey with only one or two of the questions.

While Format A would allow us to obtain the most information possible, we suspected that individual communication with each LLECE representative would be difficult to arrange.

Format B would be very difficult to implement because conference calls are not well

established in Latin American cultures. Format C would require from each country representative to spend time responding thoroughly respond to each of question. Format D would allow us to obtain only fragmented information; we concluded that we should use it only as a last recourse.

Dr. Javiel Murillo suggested us to use Format C. Accordingly, after he introduced us by e-mail with each LLECE representative, we sent the questionnaire to each country. This questionnaire asked questions about the interaction between the countries and OREALC. Appendix II shows the questionnaire, which was administered in Spanish. For the purpose of clarity to the readers of this report, Appendix III shows the English translation of the questionnaire.

The questionnaire was intended to collect information on nine areas of support: administration and management, information, communication, technical support, equipment and materials, financial support, human resources development, organizational development, and legislation and regulations. For each area of support, the questionnaire provided a 1 (completely disagree)-5 (completely agree) Likert scale for countries to rate the following the support received by UNESCO according to the nine support dimensions discussed in the section, Evaluation Framework. Also for each area of support, the questionnaire asked countries to provide comments or examples that illustrated the limitations of the support received form UNESCO.

A slightly modified version of the questionnaire was given to LLECE's general coordinator, OREALC's representative. While this questionnaire addressed information on the same nine support areas, "support from UNESCO" had different connotations in the two instruments. In the case of the questionnaire for countries, "support from UNESCO" mostly refers to the interaction of these countries with OREALC, UNESCO's regional representation. (When, in some instances, the countries referred to UNESCO's central office in their comments, the

differences were clear to the evaluators). In the case of the questionnaire for OREALC, “support from UNESCO” refers to the interaction of OREALC with UNESCO’s central office in Paris.

In addition to the nine questions mentioned above, an additional question asked the respondents to provide additional information that they felt was relevant to the purposes of the evaluation.

V. Findings

Findings from the Document Review

LLECE’s objectives focus on producing information on student achievement levels, and analyzing the factors underlying learning progress. Additionally, LLECE aims to provide support and technical assistance to measurement and assessment units at the country level, and to serve as a forum for reflection, debate and exchange of new approaches on education evaluation. An overall objective is to assist participating countries to enhance the technical quality and utilization of assessment data on education as a means of improving the quality of education.

The organizational structure involved in the production, administration, and analysis of the LLECE assessments comprises four levels of teams:

- Technical Coordination (OREALC/UNESCO)
- National Coordinators Council
- Expert Teams
- Consulting Technical Committee

The assessment for LLECE-1st Study was administered between June and November 1997 in 13 countries (Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Chile, Honduras,

Mexico, Paraguay, Peru, Dominican Republic, and Venezuela) to samples of primary school students in the third and fourth grades.

The assessment had three components: language, mathematics, and associated factors questionnaires. *Associated factors* are defined as inputs and processes related to school administration and policy; current and planned curricula; school management and policy; the teacher and his or her performance; the family and its commitment to education; and students and their attributes.

Each country conducted the assessment in roughly 100 schools, with each school sampling approximately 20 students at each grade level. There were a total of 54,589 test-takers in language and 54,417 in mathematics. “Associated factors” questionnaires were administered to 48,688 students, 41,088 parents and guardians, 3,675 teachers, and 1,387 school principals in a total of 1,509 schools.

Three reports have been produced by LLECE on the basis of this first data collection:

1. First Report on the First International Comparative Study of Language, Mathematics and Associated Factors for Third and Fourth Grade Primary Education Students

(OREALC/UNESCO, Santiago 1998). This report examined the quality and equity of education in the region based on achievement scores of students in the third and fourth grades. The primary finding of this preliminary analysis was the tremendous amount of country-to-country variation in achievement scores.

2. Second Report on the First International Comparative Study of Language, Mathematics and Associated Factors for Third and Fourth Grade Primary Education Students

(OREALC/UNESCO, Santiago 1998). This report presents the results of the analysis of factors that underlie student performance, thereby complementing and enriching information available from the first report. These “associated factors” were data collected on variables

associated with students, parents, teachers, and school principals. This report spotlighted the apparently large effect on student achievement level of variables such as social-economic characteristics of students, school pedagogy, classroom practices, etc.

3. Technical Report on the “First International Comparative Study of Language, Mathematics and Associated Factors for Third and Fourth Grade Primary Education Students (OREALC/UNESCO, Santiago 2001). This report contains information found in the above reports 1) and 2), with data by disaggregated by country, and additional information regarding the rationale of the sampling and data gathering procedures.

LLECE-1st Study is considered to have been a successful endeavor in a number of ways. At the transnational level, LLECE represented a first step towards the creation of a culture of testing and accountability in Latin America. Until now, there has been little expertise in large-scale testing in this region. LLECE created a funded organization with a structure that gives training and experience in international achievement testing to teams from all participating countries.

At the national political level, the collection of data and resultant cross-country comparisons created Latin America’s first opportunity to understand how each country’s educational system outputs stacked up against its regional counterparts using a common metric. The previous lack of a common basis for comparison across countries can be considered to have been a major obstacle to the necessary process of collecting appropriate data, identifying problem areas in the system, and carrying out reforms in light of these findings. LLECE also offered member states input to support decision-making processes in matters of educational policy and policy reform. Some evidence for the impact of the LLECE-1st Study on stakeholders in many of the participating countries was documented in an external evaluation of an Inter-American Development Bank-supported technical cooperation project, written by R. W. McMeekin in 2004.

The desire to carry out a second administration of the international assessment was expressed at a meeting of the LLECE national coordinators in Panama in 2002, and a decision to undertake it was made in Monterrey, Mexico in November that same year. This effort was seen as an opportunity to collect longitudinal data on what changes in the educational systems might have occurred since the first LLECE assessment was carried out, as well as to improve many aspects of the LLECE-1st Study and keep momentum going at all levels of involvement.

This second wave of data collection within the LLECE framework is henceforth referred to in this document as SERCE (Segundo Estudio Regional Comparativo y Explicativo, the Second Regional Comparative and Explanatory Study). Contributors to the SERCE effort included UNESCO and its partners: the participating countries, the Ford Foundation, the Spanish government, International Plan, the Inter-American Development Bank, and the World Bank. The overall budget for SERCE was estimated at about 5.2 million dollars.

LLECE's goals for SERCE study can be outlined as follows:

- To carry out and promote studies on associated-factors based on SERCE's findings
- To build and strengthen support to LLECE-associated assessment units and networking initiatives
- To produce information in the field of teachers' and schools' evaluation
- To promote reflection and informed discussion in order to develop comprehensive evaluation systems based on the development of students, their differences, similarities, etc., in line with the concept of educational quality advanced by OREALC/UNESCO Santiago
- To use UNESCO's support on various lines of action in matters concerning evaluation

- To generate knowledge about student learning, and fostering discussion about what students should learn and be able to do as a result of their education
- To promote a discussion regarding teaching practices and educational policies within each region
- To disseminate SERCE results effectively

The countries participating in the SERCE were the following: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic, Uruguay and Venezuela. The Mexican state of Nuevo León also joined LLECE as a sub-national entity. SERCE tests and questionnaires were administered in all participating entities during 2006.

The assessment was conducted on a somewhat larger scale than the LLECE-1st Study had been. Each entity conducted the assessment in roughly 180 schools, for a total of 3,133 total schools participating. At the 3rd-grade level, there were a total of 94,620 test-takers in language and 96,663 in mathematics. At the 6th-grade level, there were a total of 90,471 test-takers in language, 91,333 in mathematics, and 53,979 in science. The data are currently being processed, and findings are expected to be presented in a number of forthcoming planned reports:

- First Report on learning and contextualized results, and a summary of the associated factors study
- Technical report outlining the methods used at the various stages of the study
- Associated factors study
- Additions to the series “Contributions to Teaching”

LLECE-1st Study and SERCE differ in a number of important ways regarding design:

- SERCE used a matrix-based test design, based on a curricular analysis of the educational systems of the various school systems sampled. This design was not used in the LLECE-1st Study. The purpose of this design was to ensure that test content is actually covered in all the participating school systems, so that accurate inferences can be made about achievement level and progress towards it for students from all countries.
- While LLECE-1st Study assessed reading and mathematics, SERCE assessed reading, writing, mathematics and science.
- SERCE included open-ended questions in mathematics and science tests, item types that were not used in the LLECE-1st Study. This in turn required the development of a system of rater training and scoring procedures, as well as a method of analyzing the open-ended test responses and incorporating them into the objectively scored item responses in the construction of total scores.
- LLECE-1st Study focused on students in the 3rd and 4th grades; SERCE evaluated students in the 3rd and 6th grades.

This last point of difference is crucial in that it enables a comparison of achievement test results among the same countries as in the LLECE-1st Study in two important ways: a horizontal comparison of 1997 3rd-graders and 2006 3rd-graders, which yields cross-sectional information about whether educational systems have made any gains in fostering progress in achievement test scores at a particular grade; and a vertical comparison of 2006 3rd- and 6th-graders, giving information on the kinds of differences that exist in performance for students with three additional years of instruction in the same school system.

There are other significant differences between the two studies. SERCE was intended to capitalize on the experience and knowledge gained as a result of the administration of the

LLECE-1st Study, and it should therefore have been tighter in terms of its adherence to standardized procedures, in addition to having higher quality in the implementation of its items. A 2001 technical report provided many state-of-the-art forms of test item analysis that were likely of great benefit in the preparation of the next generation of the test. It is also probable that the data analysis from the LLECE-1st Study pointed to new directions for interesting analyses and avenues for application. SERCE will also have benefited from the addition of a Technical Consultative Committee that provided advice and assistance at various phases of the project.

Findings from the Survey

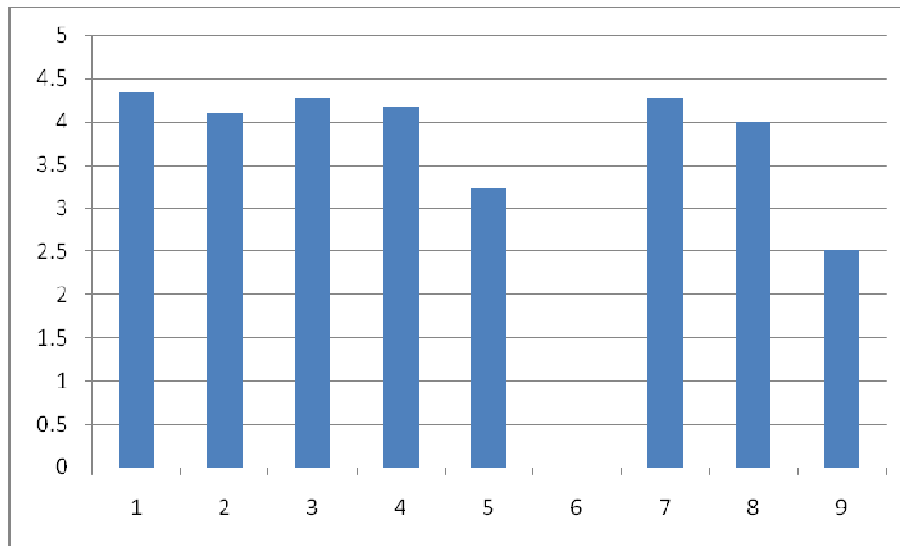
In addition to OREALC, the following eleven of the LLECE countries responded to the survey: Argentina, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Peru, and Uruguay.

Likert Scales

Figure 2 summarizes the results from the Likert scale ratings on the nine support dimensions obtained from the countries and from OREALC. As mentioned above, while the version of the questionnaire given to LLECE's general coordinator was only slightly different from the version given to LLECE representatives, the meaning of "support from UNESCO" is not the same for the two types of respondents. For LLECE representatives, "support from UNESCO" refers to OREALC, UNESCO's representation in Santiago. In contrast, for LLECE's general coordinator, "support from UNESCO" refers to the interaction of OREALC with the office of UNESCO in Paris in relation to LLECE.

As the figure shows, LLECE countries rate the support received by OREALC highly and consistently across the support dimensions, whereas that support from UNESCO tends to be rated low by OREALC. According to OREALC, UNESCO's financial support to LLECE does not exceed 3% of the cost LLECE's budget. This limited participation and the asymmetry observed in the figure suggests that effective support to LLECE activities should be attributed to efforts and sources of support other than UNESCO.

Countries: Interaction of LLECE countries with OREALC.



OREALC: Interaction of LLECE with UNESCO's central office.

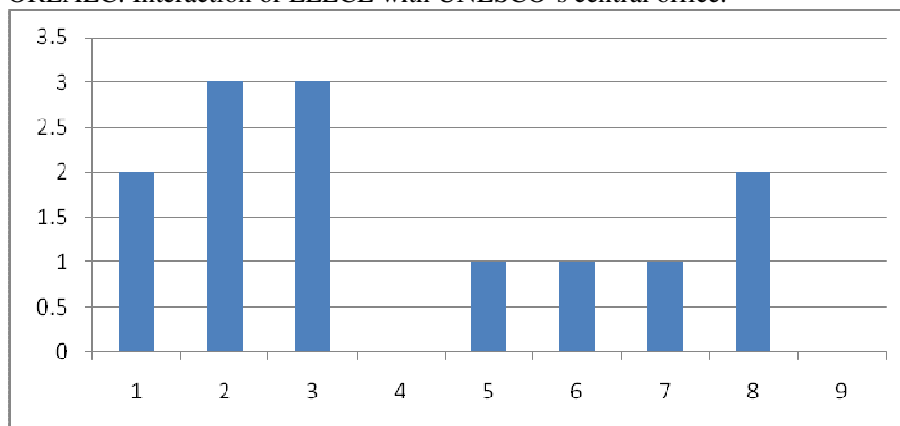


Figure 2. Average rating of support received by UNESCO on nine support dimensions. 1: Administration and management; 2: Information; 3: Communication; 4: Technical support; 5: Equipment and materials; 6: Financial support; 7: Human resource development; 8: Organizational development; 9: Legislation and regulations. Question 6 is not applicable to countries due to the fact that countries finance their own participation in LLECE. Question 9 is not applicable to OREALC due to the fact that this entity is not a country. Question 4 was reported by OREALC as not applicable, due to the fact that no technical support is received for LLECE. Question 9 also was reported by OREALC as not applicable.

Comments on the Support Dimensions

This section summarizes the comments provided by the respondents on each of the nine support dimensions. In order to present a coherent analysis, the discussion integrates information provided by both the countries and OREALC.

1. Administration and management: The interaction of countries with UNESCO takes place through OREALC and this is mostly limited to the payment of agreements.

Bureaucracy in the application of the procedures used by UNESCO or other organizations is a major limitation to the proper functioning of LLECE, to the extent that it may have a serious impact on the effectiveness of LLECE's activities. For example, the World Bank finances a great portion of the SERCE activities, which were initiated in January of 2003 (in April, 2008 the results will be made public). However, the moneys from the World Bank did not arrive until November 2007, four months before the scheduled end of the project.

Information collected indicates that this delay in the allocation of moneys was due to a mismatch between the administrative procedures used by UNESCO and the administrative procedures used by the World Bank.

Countries also report challenges related to the timeliness with which information is made accessible to them and the tightness of the timelines for meeting administrative requirements.

A major source of frustration is the fact that OREALC's personnel is not stable, due to lack of job security, the administrative procedures which require renewal of appointments every three months, and the lack of benefits. Combined, these challenges may limit the continuity of efforts to improve the coordination of LLECE-related activities.

2. Information: While the countries tend to rate the quality of the information received from UNESCO as reasonably good, they also report some confusion due to the lack of clearly established procedures. Also, there is indication that the webpage used by countries to obtain

information relevant to SERCE was not updated timely, which caused some pressure in the timelines that countries needed to meet in their analyses of data.

In general, the information provided by operation manuals is timely and clear. However, the amount of information that countries need to examine is sometimes overwhelming. Countries express the need for periodical summaries.

3. Communication: Results from the survey indicate that, although the communication between LLECE and UNESCO is good, UNESCO does not respond efficiently to LLECE's requests. Additional challenges due to defective communication have derived from instability in the configuration of leadership teams, an aspect that several countries identified as a difficulty that hampered the proper functioning of SERCE.

4. Technical: Countries report having adequate technical support from OREALC. They report that the technical support received has been the best possible, given the limited resources available.

The need for technical assistance varies considerably across LLECE countries, with Mexico having stronger technical capacity. Some countries which have benefited from training activities express that this kind of support is still insufficient to meet their needs. They also express that those training efforts were successful in spite of the limited budget.

5. Material and Equipment: UNESCO does not provide equipment or material for LLECE activities. Equipment and material used by LLECE is obtained from funding from other agencies.

Inappropriate distribution of software across LLECE countries or software incompatibility appears to be the main limitation to LLECE activities. Some of the limitations identified by LLECE representatives show that decisions concerning material and equipment need to be made considering the opportunities that will be created for countries to build their assessment

capacity. For example, SERCE data have been analyzed with Winstep, a software that some of the LLECE countries do not have. A further round of analyses has been performed by ACER in Australia with ComQuest, a software which no LLECE country has. This marginalizes countries from the process of analysis of their own data and seriously limits their possibilities for capacity building.

6. *Finances:* Only about 3% of LLECE's budget comes from UNESCO. Each LLECE country is responsible for financing its participation in the program. However, the countries appear to vary considerably on the resources they have available to meet this purpose. For example, a country declared having used a loan from the Inter American Development Bank to finance its participation in the program.

7. *Human resources development:* UNESCO does not provide significant support for the development of human resources. Professional development and the opportunity to benefit from participating in LLECE does not appear to be an issue for countries that already have certain critical mass of human resources in the field of assessment. Those countries which are in more need of developing human resources in the field cannot take advantage of opportunities derived from their participation in LLECE due to lack of resources to pay travel expenses.

Countries vary considerably on their needs for professional development. Guatemala, for example has joined LLECE recently and is in great need for support to build assessment capacity, whereas Mexico has a longer tradition and a stronger cadre of professionals in the field.

Countries express that they could benefit from UNESCO's support, especially with regards to the development of skills related to data analysis.

8. Organizational development: Countries report that support received from their participation in LLECE has allowed them to build assessment capacity. More specifically, participation in this international comparison has helped countries to become alert of important issues related to the logistics and methods in the field of assessment and large-scale testing.

9. Legislation and regulations: Activities concerning the regulations of LLECE activities, such as regulations on the procedures used during the meetings of LLECE representatives, have been developed without any assistance from UNESCO. No country reports any impact on their internal legislation of their participation in LLECE.

10. Additional comments. Countries report that the lack of stability of both OREALC's personnel and the national coordinators hinders the continuity of LLECE activities.

Several countries identify the lack of specialists in the fields of measurement and assessment as the area in which UNESCO could provide support.

VI. Final Comments

The documents reviewed give an overall impression of a great deal of thought, planning, and organization going into SERCE, with clearly stated objectives for the implementation of a high level of quality control throughout the entire process of constructing the sampling frame, developing the test items, planning the test scoring and analyses, dissemination of test results, and applying the findings in a multitude of practical ways.

The results from the survey reveal that the small amount of financial support received by LLECE from UNESCO does not have an impact on the three important aspects of assessment capacity building, mainly human resources development, organizational development, and legislation and regulations. Since many of the LLECE countries are in need for building the assessment capacity needed to properly address the challenges inherent to an era of

accountability, it is clear that UNESCO support not only should be increased; also, it should be oriented to strengthening the development of their human resources.

LLECE's activities reflect a remarkable level of effort and organization that contrast with its limited budget and the difficulties that many of its countries have to finance their participation. While LLECE countries appear to have found creative ways to develop a culture of collaboration and mutual supports that help them to overcome their limited resources, they could definitely benefit from a more substantial financial support from UNESCO.

Notwithstanding, the most important challenges they express appear to be related to the development of human resources as key to building their assessment capacities. We recommend that UNESCO takes appropriate actions oriented to providing LLECE countries with technical support and the opportunities for them to develop cadres of professionals in the field of assessment.

Appendix I: List of documents reviewed

Latin American Laboratory for Assessment and the Quality of Education LLECE, Second Regional Comparative and Explanatory Study – SERCE. Estimate of Costs and Sources of Financing. LLECE, (OREALC/UNESCO, Santiago 2007 [?])

Latin American Laboratory for Assessment and the Quality of Education LLECE, Second Regional Comparative and Explanatory Study – SERCE. Quality assurance criteria and procedures draft number 2. LLECE, (OREALC/UNESCO, Santiago 2007 [?])

Latin American Laboratory for Assessment and the Quality of Education LLECE, Second Regional Comparative and Explanatory Study – SERCE. Main study sampling manual. LLECE, (OREALC/UNESCO, Santiago 2007 [?])

Final report: Evaluation of the technical cooperation project “Strengthening the use of educational assessments in Latin America and the Caribbean.” R. W. McMeekin. August 17, 2004.

First Report on the First International Comparative Study of Language, Mathematics and Associated Factors for Third and Fourth Grade Primary Education Students LLECE, (OREALC/UNESCO, Santiago 1998).

Second Report on the First International Comparative Study of Language, Mathematics and Associated Factors for Third and Fourth Grade Primary Education Students. LLECE, (OREALC/UNESCO, Santiago 1998)

Informe Técnico del "Primer Estudio Internacional Comparativo sobre Lenguaje, Matemática y Factores Asociados para alumnos de Tercer y Cuarto grado de la Educación Básica" LLECE, (OREALC/UNESCO, Santiago, 2001)

Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación (LLECE) Second Regional Comparative and Explanatory Study (SERCE) Report on Quality Control (October 07)

Segundo estudio regional comparativo y explicativo (SERCE) 2004-2007 Análisis curricular LLECE, (OREALC/UNESCO, Santiago 2005)

Qualitative study of schools with outstanding results in seven Latin American countries. LLECE, (OREALC/UNESCO, Santiago, 2002).

Letter from Ana Luiza Machado to Aïcha Bah Diallo (Santiago, Feb. 3, 2005). Subject: Re-orientation of activities in measuring learning achievement beginning (sic) with discontinuation of the Measuring Learning Achievements (MLA) Programme in its current configuration.

Appendix II: Questionnaire given for LLECE representatives

Cuestionario Sobre el Apoyo de la UNESCO al LLECE (cuestionario para países participantes)

Fecha:

País:

Instrucciones. Este cuestionario tiene como finalidad evaluar el apoyo que la UNESCO ha dado a la actividades del LLECE y obtener información que permita mejorar ese apoyo en futuras actividades del LLECE. El cuestionario tiene nueve preguntas sobre distintos aspectos de ese apoyo. Cada pregunta tiene dos partes.

La parte (a) tiene una aseveración sobre algún aspecto del apoyo de la UNESCO y una escala del 1 (Totalmente falso) al 5 (Totalmente cierto). Por favor ponga una **X** arriba del número que corresponda para indicar el grado de acuerdo con esa aseveración.

En la parte (b) se le pide un ejemplo de la experiencia de su país que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO en relación con ese aspecto. Por favor, proporcione información específica. Si es posible, indique si su ejemplo pertenece a las actividades relacionadas con el primer estudio del LLECE o con el SERCE.

Si alguno de los aspectos del apoyo de la UNESCO no es aplicable, simplemente escriba “No se aplica”.

Al final del cuestionario se le pide que escriba comentarios adicionales.

MUCHAS GRACIAS por su participación.

1. Administración y Operación.

(a) Los procedimientos administrativos de la UNESCO son fáciles de cumplir y la cantidad de tiempo que hay que invertir para cumplir con sus requisitos es razonable.

Totalmente	_____	_____	_____	_____	_____	Totalmente
falso	1	2	3	4	5	cierto

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Administración y Operación*:

2. Información.

(a) La información que proporciona la UNESCO en forma de manuales de procedimientos, memorandos y otros documentos es suficiente y clara y se le recibe de manera oportuna.

Totalmente	_____	_____	_____	_____	_____	Totalmente
falso	1	2	3	4	5	cierto

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Información*:

3. Comunicación.

(a) La comunicación con la UNESCO es fluida, continua y efectiva. Hay claridad acerca de las personas con las que hay que comunicarse; esas personas son accesibles y se les puede localizar con facilidad.

Totalmente	_____	_____	_____	_____	_____	Totalmente
falso	1	2	3	4	5	cierto

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Comunicación*:

4. Apoyo Técnico.

(a) La asistencia profesional recibida de la UNESCO en forma de orientación, asesoría, realimentación y análisis de datos es suficiente y oportuna.

Totalmente	_____	_____	_____	_____	_____	Totalmente
falso	1	2	3	4	5	cierto

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Apoyo Técnico*:

5. Materiales y Equipo.

(a) El equipo, el software, y otros recursos materiales que proporciona la UNESCO son suficientes y se les recibe de manera oportuna.

Totalmente	_____	_____	_____	_____	_____	Totalmente
falso	1	2	3	4	5	cierto

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Materiales y Equipo*:

6. Recursos Financieros.

(a) Los fondos que da la UNESCO son suficientes y se les recibe con regularidad.

Totalmente	_____	_____	_____	_____	_____	Totalmente
falso	1	2	3	4	5	cierto

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Recursos Financieros*:

7. Desarrollo de Recursos Humanos.

(a) El apoyo de la UNESCO al LLECE ha contribuido de manera importante a formar personas con las habilidades y los conocimientos necesarios para desarrollar o mejorar la capacidad evaluativa del país.

Totalmente							Totalmente
falso	_____	_____	_____	_____	_____	_____	cierto
	1	2	3	4	5		

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Desarrollo de Recursos Humanos*:

8. Desarrollo Organizacional.

(a) El apoyo de la UNESCO al LLECE ha contribuido de manera importante a que las instituciones nacionales creen formas de trabajo y procedimientos necesarios para desarrollar o mejorar la capacidad evaluativa del país.

Totalmente							Totalmente
falso	_____	_____	_____	_____	_____	_____	cierto
	1	2	3	4	5		

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Desarrollo Organizacional*.

9. Legislación y Reglamentos.

(a) El apoyo de la UNESCO al LLECE ha contribuido de manera importante a identificar qué legislación y qué reglamentos son necesarios para desarrollar o mejorar la capacidad evaluativa del país.

Totalmente							Totalmente
falso	_____	_____	_____	_____	_____	_____	cierto
	1	2	3	4	5		

(b) Describa un ejemplo que ilustre las limitaciones que tiene el apoyo recibido de la UNESCO con respecto a *Legislación y Reglamentos*.

10. Comentarios Adicionales.

Por favor, escriba aquí comentarios adicionales que ayuden a mejorar el apoyo que pueda dar la UNESCO al LLECE en el futuro:

Appendix III: English translation of the questionnaire for LLECE representatives

Questionnaire on UNESCO support to LLECE
(for participating countries)

Date:

Country:

Instructions: The purpose of this questionnaire is to evaluate the support UNESCO has given LLECE in its activities and to get information on how this support could be improved in the future. There are nine questions on various aspects of this support on this questionnaire, and each question has two parts.

Part (a) of each question is a statement about some aspect of UNESCO support; you should respond to it using a scale from 1 (completely disagree) to 5 (completely agree). Please put an X above the number that corresponds to your level of agreement with each statement.

In part (b) of each question you are asked to give an example that illustrates your country's experience with regard to UNESCO support in that specific area. Please be specific. If possible, state whether this example is based on activities from the LLECE 1st study or from SERCE 2nd study.

If you feel that you do not have a basis for responding to a particular item, please write "N/A."

We would also appreciate any additional comments you might have; please write them at the end of this questionnaire.

Thank you very much for your participation.

1. Administration and Management.

(a) UNESCO's administrative procedures are easy to follow, and the amount of time investment required to complete them is reasonable.

	_____	_____	_____	_____	_____	_____	
Completely disagree	1	2	3	4	5	Completely agree	
_____						_____	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Administration and Management*

2. Information

(a) The information in operation manuals, memos, and other documents that UNESCO supplies are sufficient, clear, and arrive in a timely manner.

	_____	_____	_____	_____	_____	_____	
Completely disagree	1	2	3	4	5	Completely agree	
_____						_____	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Information*

3. Communication

(a) Communication with UNESCO is smooth, ongoing, and effective. It is clear who should be contacted for a particular need, and those individuals are accessible and are easily contacted.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Communication*

4. Technical Support

(a) The professional assistance that UNESCO provides in the form of orientation sessions, consulting, feedback, and data analysis is sufficient and arrives in a timely manner.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Technical Support*

5. Equipment and Materials

(a) The equipment, software, and other material resources that UNESCO provides are sufficient and arrive in a timely manner.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Equipment and Materials*

6. Financial Support

(a) The monies provided by UNESCO are sufficient and arrive regularly.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Financial Support*

7. Human Resource Development

(a) UNESCO's support for LLECE has had a major impact on this country by providing the skills and knowledge necessary for the development and improvement of its educational assessment capacities.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Human Resource Development*

8. Organizational Development

(a) UNESCO's support for LLECE has had a major impact on this country by getting national institutions to create work styles and procedures necessary for the development and improvement of its educational assessment capacities.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Organizational Development*

9. Legislation and Regulations

(a) UNESCO's support for LLECE has had a major impact on this country by identifying legislation and regulations necessary for the development and improvement of its educational assessment capacities.

Completely disagree	_____	_____	_____	_____	_____	Completely agree
	1	2	3	4	5	

(b) Give an example that illustrates the limitations of UNESCO support with respect to *Legislation and Regulations*

10. Additional Comments

Please add any comments that could help UNESCO to provide LLECE with better support in the future.

Appendix IV: Management Response

Recommendations	If not accepted, give reasons for rejection
<p>1. Administration and management : Efforts should be made to simplify the procedures used by UNESCO in its interaction with LLECE. Also, to ensure proper functioning, efforts should be made to ensure job stability for OREALC staff.</p>	<p><i>By November 2008, LLECE will present a detailed plan on the implementation of this recommendation.</i></p>
<p>2. Information : Efforts should be made to provide clear information to LLECE countries on the procedures used by UNESCO and to make information on administrative requirements timely and accessible to both OREALC and the LLECE countries.</p>	<p><i>By October 2008, LLECE will distribute relevant information on procedures used by UNESCO to its countries representatives. At the October 2008 LLECE countries meeting, it will include a special session to discuss the issue.</i></p>
<p>3. Communication : Efforts should be made to ensure that UNESCO responds efficiently to LLECE countries' requests for information and to ensure a minimum of stability in the configuration of leadership teams.</p>	<p><i>By October 2008, LLECE will distribute relevant information on procedures used by UNESCO to its countries representatives. At the October 2008 LLECE countries meeting, it will include a special session to discuss the issue.</i></p>
<p>4. Technical : Since the need for technical assistance varies considerably across LLECE countries, efforts should be made to identify the specific technical needs of each country.</p>	<p><i>During the second week of September 2008, LLECE will organize a training workshop its countries on SERCE's technical background. It also plans on updating the SERCE website more often and use it also to distribute among LLECE countries relevant technical documents and information.</i></p>
<p>5. Material and Equipment : Efforts should be made to ensure that all LLECE countries have updated versions of the software used for data analysis. More specifically, efforts should be made to ensure appropriate distribution of software among LLECE countries, and to minimize the incompatibility of software used by UNESCO and certain agencies (e.g., ACER) and the software used by LLECE countries.</p>	<p><i>By September 2008, LLECE plans on acquiring the relevant software licenses (Stata, HLM, AMOS, amongst others) used in SERCE's analysis. By December 2008, it plans to distribute one single-user license of each relevant software used in SERCE's analysis to all countries.</i></p>
<p>6. Finances : Since UNESCO support represents only 3% of LLECE's budget, it is clear that any increase of UNESCO financial support will be beneficial. However, since LLECE countries vary considerably on their ability to fund their participation in LLECE, efforts should be made to target for financial support those countries that are in greater need for support for capacity building.</p>	<p><i>By November 2008, LLECE will elaborate a detailed plan, indicating functions and budgets for each position for the whole period. It will also present the plan to UNESCO's headquarters, emphasizing that UNESCO has to be the main source of LLECE funding.</i></p>
<p>7. Human resources development : Efforts should be made to support the development of human resources in the field of assessment and data analysis, especially for those countries with a short history of assessment and few assessment specialists.</p>	<p><i>LLECE's aim is to ensure that LLECE Countries have improved their technical skills in the field of assessment and data analysis, especially those who needed the most. We will have permanent contact with LLECE countries by telephone and e-mail.</i></p>