

Empirical information and the development of educational policies in Latin America¹

Santiago Cueto²
GRADE

Paper prepared for the Meeting of the Regional Dialogue on Education of the
Inter-American Development Bank

October 2005

¹ The present research report was commissioned by the Inter-American Development Bank within the framework of the Education and Human Resources Network. The report will be discussed at the Hemispheric Meeting of the Regional Policy Dialogue organized by the IDB that will take place in Washington, DC on 7 and 8 November 2005.

² With the collaboration of Laura Chang, research assistant at GRADE.

Index

I. Introduction.....	3
II. Brief Literature Review on the Links between Research and Educational Policies	5
Forms of knowledge.....	5
Scientific research on education and the search for evidence-based policies.....	6
Use of research for policy development	8
Case studies in Latin America	10
III. Empirical information available in the educational systems of the countries under study.....	12
National assessments of academic achievement.....	12
International assessments of academic achievement.....	13
National reports on education.....	15
International reports on education.....	16
IV. Methods.....	19
V. Results	20
Availability, quality and relevance of the information.....	20
Formal evaluation mechanisms.....	22
Accountability.....	24
Achievement assessments on a national scale.....	24
Participation in decision-making.....	25
Examples of policy development.....	26
VI. Discussion.....	27
References.....	30
Annexes	
1. Staff members who responded to the questionnaire/interview.....	34
2. Questionnaire sent to the countries and responses to closed questions.....	35
3. Cases of interest in the countries.....	44

I. Introduction

The development and evaluation of educational programs and policies that meet minimum criteria for efficiency and effectiveness is an important challenge for countries in Latin America, which in almost all cases have very limited budgets for investing in education. Policies or programs are not just selected using many criteria, including the economics recently mentioned, but also on the basis of political, legislative and cultural considerations, educational or philosophical theories, and empirical sources contained in summaries of statistical indicators, reports on academic achievement, program evaluations, educational diagnoses, research and similar sources. The role that these empirical sources play in policy development constitutes the principal focus of the present report.³ This type of information has received growing attention at the same time that its availability has increased. Other non-empirical sources of educational information and research (for example, those based on essays or theories), although valid and important in educational development, are not part of the present analysis, which concentrates exclusively on empirical information according to what was previously described.

The data presented in this paper comes from responses to a questionnaire sent to Vice Ministers, who in some cases delegated them to the people in charge of the offices that are relevant to the study, in six countries of the region: Argentina, Brazil, Ecuador, Paraguay, Peru and Uruguay.⁴ The study's principal objectives were to describe what information was available to them and to understand how, from these actors' points of view, the information available in their countries proved useful in the design and evaluation of programs and policies and, if not useful, what their information needs were. Although the study's emphasis is on the aforementioned countries, in some cases there are references to Latin America in general. The results are presented descriptively, analyzing the answers provided both with statistics and qualitatively.

Considering that the interviewees are principally Vice Ministers and that the questions refer to their work, the perspective on educational policies is to a great extent at the macro level. In other words, the questions refer in many cases to the usefulness of empirical information in their work, which of course implies the entire country. In some cases, which become evident, there is reference to policies at the micro level (for example, related to teachers or educational center directors).

In order to be able to situate these responses within a context, a brief literature review on the links between empirical information and the development of social policies in general and educational policies in particular is included in the present report. Descriptions of some of the principal information sources available through web portals and in national and international diagnostic reports are also included. The field generated for the study of these phenomena is known as *knowledge management* in the international literature (OECD, 2003). One of the principal related problems is that since the information is always increasing, it is difficult to stay up-to-date. On the

³ Empirical information could also have an impact on the practices of teachers, directors and administrators of educational centers, but this aspect escapes the focus of the present study. For a study on information use by school directors, see Biddle and Saha (2002).

⁴ For a list of the people who responded to the survey and interviews, see Appendix 1. The questionnaire appears in Appendix 2.

other hand, the information is sometimes incomplete or contradictory (Urquiola and Calderón, 2005), which generates the additional challenge of knowing how to rule out information with low levels of reliability or validity. It may be due to these problems that McMeekin (1998) found that the available educational indicators were little used in policy development in America.

The final part of the study synthesizes and discusses the results and suggests courses of action for the development of more and better links between educational policy and the empirical information resulting from diagnoses, research studies, assessments and questionnaires.

It is important to point out that the consultant Max Fernández has conducted two studies parallel to the present one, utilizing the same questionnaire. The first one is of Caribbean countries: Barbados, Belize, Guyana, Jamaica, Suriname, and Trinidad and Tobago. The second one includes Costa Rica, El Salvador, Honduras, Nicaragua, Panama, the Dominican Republic and Venezuela. As can be seen, the studies have brought together countries that are relatively similar geographically and/or culturally. The present study should be analyzed while referring to the other two just mentioned.

Special thanks to everyone that kindly and devotedly answered the questionnaires and agreed to be interviewed; to Viola Espínola of the IDB, in charge of the general study design, for the confidence to carry out the study and comments on a preliminary version of the document; to Cristina Amorim of the IDB, for her assistance at different stages of the study and comments about the document; and to Walter Secada of the University of Miami, for his assistance with the bibliographic search.

II. Brief Literature Review on the Links between Empirical Information and Educational Policies

The link between information generators and policy makers has been cause for concern and study, especially during the last decade. In general, the conclusions of the studies conducted on this link suggest that the relationship is often poor or null. The accusations are mutual: information generators think that policy makers are unaware of recent knowledge in areas relevant to their work; policy makers think that researchers do not generate policy-relevant information with due speed. Given that the emphasis of the present study is on the development of informed educational policies, it is worth asking, how is it that policy makers, or any person, know?

Forms of knowledge

Kerlinger and Reads (2000) look to Peirce in order to suggest that there are four methods for achieving knowledge:

- a) *Method of tenacity*; according to this method, people know because they adhere to truths that are very dear and long-standing to them. This method, although it generates certainties, faces difficulties in incorporating knowledge that does not agree with knowledge that is assumed to be true.
- b) *Method of authority*; in this method, what is true is established according to what is established by sources or people who are considered to be authorities. In many cases this method leads to reliable practices, for example, when a person decides to follow the civil authority's recommendations against natural disasters. The method also meets difficulties, however, in incorporating new knowledge that enters into conflict with that which was established authoritatively (for example, to question the conclusions of a world-renowned scientific figure).
- c) *A priori method*; in this method, what is rational or intuitively certain should be considered true. This method encounters problems since although two opposed propositions can be defended rationally, only one can be true. Which one? This method does not consider the evidence available in order to solve dilemmas like the one mentioned.
- d) *Scientific method*; in this method, knowledge is independent of personal beliefs and depends instead on objective empirical verification. This method makes it possible for knowledge to be renewed as soon as new evidence appears that contradicts what is assumed to be true at a given moment.

One of the present study's principal assumptions is that the development of educational policies in Latin America (especially in the poorest countries) has been based on knowledge derived using the first three methods, and that more efficient and effective policies and programs could be developed if knowledge derived through the application of the scientific method were considered together with the other forms of knowledge. We do not intend to suggest, however, that all educational policy should be based on empirical evidence. For starters, there is not sufficient conclusive evidence on a series of educational dilemmas that are unique to Latin America. Secondly, politicians would be wrong to implement initiatives that ignore the truths, authorities or reasoning of key actors in education in the countries. The intention is simply that empirical and scientific knowledge hold a relevant place together with

other forms of knowledge in policy development. Having said this, it is worth asking what is considered to be scientific knowledge in education. The following section briefly discusses this issue.

Scientific research on education and the search for evidence-based policies

Education is not a science to the extent that its objective is not the generation of knowledge but the application of knowledge through specific methods in order to improve the human condition. However, scientific research on educational issues is certainly possible. In fact recently, there has been great discussion of the issue, attempting to define what constitutes scientific knowledge in education. In 2002 a panel of education researchers convened by the United States *National Research Council* published a summary of the scientific principles that should govern scientific research in education, namely:

1. Pose significant questions that can be investigated empirically.
2. Link research to relevant theory.
3. Use methods that permit direct investigation of the question.
4. Provide an explicit and coherent chain of reasoning.
5. Replicate and generalize across studies.
6. Present the results in a way that promotes professional scrutiny and critique.

Education research has traditionally been carried out from different professional perspectives: psychology, anthropology, economics, sociology, administration, political science and education itself have served as the basis for conducting studies from one or several disciplines. This partly explains the two major research paradigms that currently predominate in education (and in the social sciences in general): the quantitative paradigm, which attempts to establish numerical relationships between variables that can be isolated and measured objectively; and the qualitative paradigm, which seeks to understand series of phenomena that occur simultaneously in given contexts, assuming that a large part of the knowledge generated is tainted by the subjectivity of the person doing the research. Discussing the virtues and critiques proposed for each model exceeds the objectives of the present study. It is sufficient to say, however, that both paradigms use methodologies that make it possible to study and learn about educational phenomena, and that therefore make them of interest to the present study. Another characteristic of education research is its applied nature, seen in that researchers who work in this area are increasingly required to discuss the implications of their studies for policy development.

The search for scientific knowledge as a foundation for educational policies has recently led to important initiatives. Hence, the governments of England and the United States have supported the development of *evidence-based* policies.⁵ The U.S. government has established an initiative about *what works* in education (WWC).⁶ This initiative collects studies that meet certain scientific criteria. The need to have criteria is justified in that, although the education research literature is extensive, studies are commonly published that, due to deficiencies in design, data analysis or other factors,

⁵ The analogy to medicine, where practices are generally based on solid scientific evidence, is clear in this case.

⁶ *What Works Clearinghouse*, available at <http://www.whatworks.ed.gov/>.

do not have sufficient internal validity to reach the conclusions identified. For example, the WWC only accepts studies that have gone through a rigorous system of peer review in academic journals and that confirm cause and effect relationships of an intervention based on rigorously designed experimental studies.⁷ The latter is without doubt a polemic issue given that it has been questioned by researchers with a qualitative approach, who adhere to a different philosophic notion of causality. The web portal mentioned above contains reviews of the state of knowledge in specific areas such as mathematics, reading, values education, school dropout, early childhood education, English as a second language, deviant behavior, adult education, and peer-assisted learning.

In England there is a similar initiative, called EPPI,⁸ which contains studies on health and educational interventions. EPPI seeks to produce research reviews on specific issues that can then be used by policy makers and educators. Published reviews include use of the summary evaluation, citizenship education, in-service professional development, child development, English instruction, gender stereotypes, inclusive education, mathematics education, motivation, science education, and the influence of directors on student learning.

At the international level, the Campbell Collaboration registers information from studies on successful interventions in education, criminology and social development in general.⁹ However, similar to the WWC, it has criteria that prioritize studies that use an experimental design. This emphasis on experimental designs, which have been recognized by many as the only design that allows total control of the variables so that assertions of causality can be made (for example, Mosteller and Boruch, 2002), has been criticized by others since the isolation of one or two variables in an intervention does not represent a real situation in which many variables simultaneously interact. They have also been criticized with regard to their possibilities for generalization: an intervention that is effective in a certain context will not necessarily be effective in another context. However Cook and Payne (2002) refute these and other criticisms of experimental designs in education, which furthermore are the standard rule for attributing causality in disciplines of great scientific prestige such as medicine.¹⁰

A notable case in Latin America is REDUC,¹¹ which has collected analytical summaries of education-related publications, full texts and journalistic articles since 1998. As of the end of September 2005, the number of visitors to the REDUC web portal was close to 300,000. The inclusion criteria for articles and summaries, however, are much less demanding than the ones mentioned for WWC, EPPI and the Campbell collaboration.

⁷ Specifically, they meet as a minimum the criterion for randomization of units of analysis, students, classrooms or a similar factor, to treatment and control conditions.

⁸ *Evidence for Policy and Practice Information*, see <http://eppi.ioe.ac.uk/EPPIWeb/home.aspx>.

⁹ See <http://www.campbellcollaboration.org/>.

¹⁰ In May 2005, the journal *The Annals of the American Academy of Political and Social Science* dedicated a special volume (#599) to articles on interventions evaluated using experimental designs. Two of the interventions are education-related: one about problem behaviors in school and another on mathematics learning.

¹¹ See <http://www.reduc.cl/>.

The growing number of academic journals, many of which are available on the Internet free of charge,¹² should also be highlighted. Subscriptions to electronic databases that offer access to education research articles published in journals of high academic prestige¹³ are also increasingly available.

Use of research for policy development

Why isn't there continuous, fluid collaboration between the world of the generators of empirical information and policy makers? Biddle and Anderson (1991) argue that is in great part due to a problem of misunderstandings, which leads to the adoption of a "simple," and incorrect, model of the impact of information. According to this model, the data generated in one, or a similar, investigation should be definitive, valid for any group of students in any context, and its implications for policy development should be clear. It is also assumed that research should generate relevant information when it is needed and not after the fact. Indeed, these assumptions are rarely fulfilled. On the contrary, research generates data that contribute to the construction of models or theories from which policy implications should eventually be able to be drawn.¹⁴ On the other hand, people who work in educational policy generally could not, even if they wanted to, use education research to develop policies without taking into account other elements related to local politics and culture, international pressure and resource availability, among others.

Many writings have pointed out that information generators and users belong to two different "cultures" that need to be understood in order to promote contact between them (Levin, 1991). Internationally, some interesting initiatives have been proposed to promote contact between representatives of these cultures, even to the point that policy makers are involved in research from the outset. There has also been insistence on the importance of involving the media, whose representatives have their own interests and characteristics, in the production and dissemination of education research.

Reimers and McGinn (2000) have also analyzed the link between research and policy development. These authors suggest a nine-stage model that should be considered, not necessarily in a linear way, if a person related to the world of research wanted to have an impact on the development of educational policies (p. 222 forward):

¹² For Latin America, an especially relevant source is the *Educational Policy Analysis Archives*, which publishes research articles in Spanish, English and Portuguese (see <http://epaa.asu.edu/epaa/>), and the *Revista Electrónica Iberoamericana sobre Calidad, Eficacia y Cambio en Educación*, which publishes articles in Spanish and Portuguese (see <http://www.ice.deusto.es/RINACE/reice/default.htm>). Other resources that warrant mention is the publication *Revista Latinoamericana de Estudios Educativos* by the Center for Education Studies in Mexico and the journal *Cadernos de Pesquisa* by the Carlos Chagas Foundation in Brazil. All of these publications include peer-reviewed articles.

¹³ For example, see *Journal Storage* at <http://www.jstor.org/>.

¹⁴ It cannot be ignored, however, that in some instances studies are conducted without adequate technical support for the research objectives or questions. This is clearly an error from both the qualitative and quantitative perspective and the results of such a study are by definition difficult to interpret in terms of their practical implications: the results of a particular study should be necessarily interpreted within the framework of studies about a specific area of knowledge (Kerlinger & Lee, 2000).

1. Define the process of change that should be informed by the research-based knowledge.
2. Identify the stakeholders within this process of change.
3. Define the current, relevant flows in the political environment.
4. Define which dialogues are under way and which should be implemented among stakeholders.
5. Strengthen the groups' capacity to dialogue, giving them a voice.
6. Establish clear rules for dialogue based on knowledge.
7. Design processes to generate knowledge.
8. Balance the technical, conceptual and process-related knowledge.
9. Prepare a report and dissemination plan.

According to the authors, the keys to making the model function are “democratic dialogue, granting of powers, time, persistence and patience” (p. 236). The text includes case studies, one of which is presented further on.

The Research and Policy in Development Program (RAPID), run by England's *Overseas Development Institute* (ODI), has collected theoretical and empirical information on the use of evidence in the identification, preparation and implementation of policies to combat poverty in order to promote exchange between policy makers and researchers.¹⁵ In order to understand and promote this exchange, the Program proposes a model that takes into account the importance of considering the **political context** surrounding the development of a given policy, the **relevance, credibility and form in which to communicate the study results** (or group of studies) and the **links** between researchers and policy makers, as well as between the these actors and networks and communicators (especially those that work in mass-circulation media). These three components should be understood within specific contexts with given socioeconomic and cultural influences as well as within the political interests of donors. Contrary to what the name RAPID might suggest, those in charge of the project often find that the transformation process of a selected group of investigations on social policies is actually quite slow.

Finally, it is interesting to highlight REDUC's experience with the issue in Latin America. Cariola, Schiefelbein, Swope and Vargas (nd) conduct an analysis of the communication gaps between researchers and decision-makers and reach the conclusion that it is necessary to develop a new professional profile aimed at facilitating communication between them. These professionals would be the “policy analysts,” “knowledge intermediaries” or “information brokers” who aim to “develop a conversation between the world of decision-making and the world of knowledge” (p. 19). In fact, REDUC has experience in providing short courses to educate these specialists since the 1990s, which have received positive evaluations from instructors and participants.

¹⁵ See ODI (2004) y www.odi.org.uk/rapid.

Case study in Latin America

In Latin America there are only a few studies on the use of empirical information. Only some of the studies carried out in the six countries participating in the present study are reviewed here.¹⁶ Perhaps the most frequently addressed issue is the use of information on achievement tests.

Two studies were recently conducted in Argentina. In the first, Montoya, Perusia and Mohorade (2005) analyze the impact of an educational policy that aims to share educational indicators, especially standardized achievement test results, with each school. The authors found that the directors and teachers generally know more about the language and mathematics test results than about the social and natural science test results. It is interesting, however, that the directors, who are the people that received the information, at times did not share it with teaching specialists in the relevant area. In addition, the information generally arrived late, detracting from its relevance. With regard to the comparison among provinces, the study found that reports were distributed more effectively in places where the Ministry supported dissemination efforts. Finally, the authors report that in view of the fact that there was often no clear plan for information use, the indicators were rarely used and in general did not lead to concrete policies. Based on the results, the authors suggest working with teachers and directors to interpret the information delivered to them.

In the second study in Argentina, Pinkasz and collaborators (2005) identify three cultures in educational institutions: academic, bureaucratic-administrative and technical-pedagogical. Information use by the members of these cultures varies as a function of their individual characteristics as well as the type of information received: statistical, administrative, for specific purposes (for example, information requested about a program's operation), and casuistic (subjective). The authors find that the most frequently used type is statistical information. However, communication channels for the flow of this type of information are often non-existent or face obstacles. As in the previous study, the authors suggest working on the preparation and comprehension of the messages that the reports seek to transmit, adapting the messages to the different intended audiences. They also suggest creating spaces for discussion among information producers, educational center supervisors, and educator planners and trainers.

In Uruguay, Aristimuño and Kaztman (2005) also studied the use of results reports on academic achievement in educational centers. They report that the tests and reports are perceived as legitimate, and attribute this to the generally participatory nature of the evaluation process. This legitimacy of information is one of the principal strengths of the Uruguayan assessment system. The authors report however that the use of the reports is limited. The authors state that teachers who have greater seniority and participate in social networks within the school, which promote for example group discussion of education issues, have a greater probability of using the reports. Regardless, various actors interviewed in the study reported that the performance evaluations carried out in Uruguay have had a notable, positive impact on national

¹⁶ For additional case studies, see Morales-Gómez (1992), Reimers and McGinn (1997), Rockika (1999), and Cueto (2005).

policies, such as curricula implemented in the classroom, student teaching and teacher training.

Fernández and Midaglia (2005) conducted a comparative study in Mexico and Uruguay, in which they surveyed administrators and teachers about their use of the reports on achievement test results received by each educational center. What they found was overall limited use of the reports (slightly less than half of the teachers had not read any of the reports). The reports were read more frequently by teachers with high levels of professionalism and by teachers in educational centers with relatively high results (the authors refer to the aforementioned as a “virtuous circle”). The teachers frequently mentioned that they would require greater guidance on how to interpret the information contained in the reports. In contrast, almost all of the directors had read the reports. The study suggests that the center directors and supervisors are the principal actors who could promote the distribution and discussion of the results reports.

Reimers and McGinn (1997) describe a context in which empirical information was used as the basis for an educational reform in Paraguay. Specifically, they describe a program for collaboration between the Paraguayan Ministry of Education and the HIID institute at Harvard University. This is an interesting example of collaboration between an institution from the North and one from the South. HIID’s recommendations generated the creation of units to promote educational reform, including an educational statistics system within the Ministry of Education (see details further on), which would generate information that is relevant to policy development. The procedure suggested by HIID also emphasized the importance of dialogue among the different offices within the Ministry and with relevant actors outside of the Ministry.

The previous discussion is not an exhaustive list of the studies on the use of empirical information in educational policies. The results are interesting however to the extent that several studies show that a great deal of the empirical information produced does not reach the final recipients (in many cases, teachers) and that often, when it arrives, it is not discussed or interpreted according to the intentions of the reports’ authors. These results suggest the need for greater dissemination of not only the empirical reports but also strategies to assure that the reports are understood and discussed by the groups they target. Information on its own is clearly insufficient. The following section presents a brief description of some of the sources of empirical information available in the countries participating in the present study.

III. Empirical information available in the educational systems of the countries under study

In Latin America during the last two decades, there has been a notable increase in reports with diverse types of empirical information. It is remarkable that, as a result of transparency policies, a great deal of this information has been made accessible through the web portals of the Ministries, other state offices or international agencies. The following sections describe some of the principal types of reports and in some cases, how they are used.

National assessments of academic achievement

The present section only presents and discusses information related to assessments of minors in primary and/or secondary education. In the document “State of the situation of national systems to assess learning achievements in Latin America” (*“Estado de la situación de los sistemas nacionales de evaluación de logros de aprendizaje en América Latina”*),¹⁷ Ferrer (2005) reports on the characteristics of the national systems to assess academic achievement in Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic, Uruguay, Venezuela, and selected states in Brazil, Colombia and Mexico. In the last 15 years practically all Latin American countries have developed national systems to assess academic achievement, although not all of them are currently active. However, as Ferrer reports, differences among countries are remarkable; perhaps the greatest one is the use of the information. While some countries use the information only for educational purposes and policy development (known as “low stakes”), others use them to define teacher incentives (Chile, São Paulo, Brazil and Mexico), to determine academic promotion (São Paulo in Brazil, the Dominican Republic and Costa Rica) or to inform the population about student achievement in educational centers (Chile). These systems are known as “high stakes” and are linked to the international movement that advocates accountability in education. The principal challenge of the low stakes systems would appear to be that the target population make use of the information to improve the system, since the lack of direct consequences for the actors involved could result in the information being ignored. The principal challenge of the high stakes systems is to design instruments and procedures that meet the proposed objectives without generating greater inequity. In general, however, Ferrer notes that difficulties persist with regard to the participation of diverse actors in the process of evaluating and disseminating results: “...communication strategies still need to be developed that make it possible to involve information users—read policy decision-makers, teachers and center directors, parents, the media, professional associations and civil society representatives, among others - in the entities that prepare tests, design reports and devise the dissemination strategies that will be used” (p. 34). Vertical approaches, where decisions and information are communicated from the top down, would not seem to have great success in educational assessment systems.

Arregui and McLauchlan (2005) cite a series of uses for national assessments in addition to those already mentioned. Among these, one that should be highlighted is the utilization of tests to select schools that, given their low performance, require

¹⁷ Available at <http://www.preal.org/GTEE/estudiosencargados.php>.

greater attention (for example, the 900 schools program in Chile). Tests have also been used in some countries to evaluate the impact of given policies and programs. In addition, the task of developing instruments to assess academic achievement has generated the need to clarify the curriculum requirements; this movement would gradually focus on the definition of academic achievement standards (there are some experiences related to this issue in Central America). Finally, it should be emphasized that several countries in the region have used tests to design materials and trainings for teachers. Ravela, Wolfe, Valverde and Esquivel (2001) discuss the options available for assessment systems and the challenges that need to be overcome in order to achieve valid, reliable assessments. In addition, Ravela (2002) presents a detailed analysis of the forms in which countries present assessment results according to (or not) the assessment system's proposed objectives.

A particularly important issue in the dissemination of results is the participation of the press. Ravela (2003) reports that newspapers have used exaggerated headlines such as "... education is mediocre, donkey ears, failed country, the worst of the continent, the collapse of education, the last in line..." (p. 9) to describe assessment results (which for the most part, with some exceptions, are effectively quite low). Ravela analyzes a series of reasons as to why assessment reports are recounted in such a passionate way, using the same relatively difficult language that is employed in the reports themselves (it is important to remember that in the majority of cases, the journalists that report the results are not specialists in education or the analysis of statistical tables). In order to improve the quality of communication with journalists, Ravela suggests that the reports' producers have a clear idea of the messages they want to transmit, which should be few, clear and reiterative, and that have a strategy for implementing them. At the same time it is important to point out to journalists what conclusions can *not* be drawn from the reports.

International assessments of academic achievement

The present section only includes international assessments targeted at students in primary and/or secondary education. There are data from two assessments of adults in which some of the region's countries participated.¹⁸

a) *TIMSS* is an international project that has collected information on academic achievement in science and mathematics periodically since 1995.¹⁹ The assessments are carried out in the 4th, 8th and final grades of school education. Argentina, Chile, Colombia and Mexico have participated at different points for Latin America. TIMSS is an assessment that has considered, like the others described here, the factors associated with achievement in a way that permits reporting of not only the country's average score (and its position in the international context) but also the policy implications. TIMSS is organized by the International Association for the Evaluation of Educational Achievement (IEA).²⁰ A new round of TIMSS is anticipated for 2007.

¹⁸ For further details, see Arregui y Ferrer (2003).

¹⁹ Initially known as the *Third International Mathematics and Science Study* and then as the *Trends in International Mathematics and Science Study*. For results and reports from the 1995, 1999 and 2003 assessments, see <http://nces.ed.gov/timss/>.

²⁰ See <http://www.iea.nl/>.

b) *Civic education*, also organized by the IEA. The assessment was conducted at the end of the last decade and was targeted at students from 14 to 18 years of age (Arregui and Ferrer, 2003). Colombia and Chile participated in this assessment for Latin America. The publications and databases can be obtained at the IEA web portal mentioned previously.

c) *PIRLS* is a study on reading comprehension (literacy) for fourth grade students.²¹ Argentina and Colombia from Latin America participated together with other 33 countries in the 2001 assessment. PIRLS is also organized by the IEA and a new assessment is planned for 2006.

d) *PISA* is an assessment of aptitude in mathematics, reading comprehension and science targeted at 15 year-olds that are enrolled in school.²² The OECD (Organization for Economic Cooperation and Development) organizes the assessments. The first assessment was carried out in 2000 and the second one in 2003. It is expected that the assessment will continue every 3 years, emphasizing one of the previously mentioned areas each time (the first one was for reading comprehension and the second one for mathematics). Argentina, Brazil, Chile, Mexico, Peru and Uruguay have participated in one or both rounds for Latin America. All of the same Latin American countries, with the exception of Peru and the addition of Colombia, plan to participate in the 2006 PISA assessment. An additional piece of information is that the First Ibero-American PISA Meeting, which brought together representatives from Argentina, Brazil, Colombia, Chile, Spain, Mexico, Portugal and Uruguay, recently took place. This represents without a doubt an interesting initiative that aims to achieve the greatest possible benefit from test results.

In view of the fact that the previous assessments are ones in which mainly industrialized countries participate, it is not surprising that the students from Latin American countries have demonstrated poor achievement (usually at the bottom of the rankings). However, press coverage of these poor performances in each country is remarkable. Part of the dialogue has been positive in that it has generated discussions on the course of education, but part has completely lacked connection to the data. For example, in Peru, actors wrote and commented in journals and seminars that Peru had ranked below the African countries (even in history), when the reality is that the African countries have never participated in a single assessment with Peru and that Peru has never been assessed at the international level in history.

e) *LLECE*: In 1997, UNESCO's Latin American Laboratory for Assessment of Quality in Education (LLECE)²³ carried out the First Comparative International Study on Language, Mathematics and related factors for students in the third and fourth grades of basic education. Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Honduras, Mexico, Paraguay, Peru, the Dominican Republic and Venezuela participated in this study.²⁴ This study was widely commented on at the time since Cuban students had achievements well above the rest. UNESCO is currently

²¹ *Progress in International Reading Literacy Study*, see <http://nces.ed.gov/surveys/pirls/>.

²² *Programme for International Student Assessment*, see <http://www.pisa.oecd.org/>.

²³ See <http://llece.unesco.cl/> for objectives and publications.

²⁴ Although the Peruvian data was not published in the original LLEVE report, it was later published by the Peruvian Ministry of Education. See Boletín UMC 9 at www.minedu.gob.pe/mediciondelacalidad.

preparing the second study on academic achievement, in which it is expected that the number of countries will be even greater than in the first assessment.

As seen in the brief previous description, the assessment of academic achievement at the international level has become increasingly generalized among the Latin American countries and there is no reason to think that this movement might be reversed in the near future. In fact there are other international initiatives, for example the Teacher Education and Development study (with emphasis on mathematics and science in primary education and the first grades of secondary education), also organized by the IEA, in which Chile and Mexico have expressed interest in participating.²⁵ Arregui and Ferrer (2003) discuss the arguments in favor and against the participation of Latin American countries in international assessments such as the ones previously mentioned. The principal caution in this regard may be that if countries participate, they should have a plan for using the results that leads to improvements in education. Participation in these assessments has often taken place without such a contingency, resulting in missed opportunities for establishing coherent educational reforms and disastrous journalistic headlines.

National reports on education

It has become common for countries to produce educational statistical reports based on national standard of living surveys, censuses and other instruments that contain various data, such as for example the number of educational establishments and teachers, net and crude enrollment, promotion, repetition and dropout rates, percentage of population literate, public spending on education, years of education of the population and other similar statistics, as well as data on factors related to the previous ones such as the composition of the enrolled population by gender, data by province, educational status of students' families, maternal language and poverty. As was mentioned before, a great deal of this information is available not only at the level of reports but the same databases are also available for academic tasks or for verification of the information presented.²⁶ The objectives, programs and strategic plans proposed by governments are also frequently found on these web portals. In addition, many universities and research centers have information about investigations that are relevant to educational development on their web portals.

However, not all of the information is reliable. McMeekin (1998) conducted a study on educational statistics in Latin America and the Caribbean in which he noted that although national systems have advanced a great deal with regard to the quality and quantity of their indicators, there was a difference between the systems with more developed data, for example Argentina, Brazil, Chile and Mexico, and the remaining systems. He also observed the difficulty of obtaining comparable indicators over time

²⁵ See <http://www.iea.nl/teds.html>.

²⁶ See for example: Argentina: Ministry of Education, Science and Technology, <http://www.me.gov.ar/index1.html> and the Argentine National Institute of Statistics and Census, <http://www.indec.gov.ar>; Bolivia: Ministry of Education, <http://www.minedu.gov.bo/>; Brazil: Ministry of Education, <http://portal.mec.gov.br/> and National Institute for Educational Research and Studies, <http://inep.gov.br/institucional>; Ecuador: Ministry of Education and Culture, <http://www.mec.gov.ec/>; Peru: Ministry of Education, <http://www.minedu.gob.pe/>; Paraguay: Ministry of Education and Culture, <http://www.mec.gov.py/>; Uruguay: Ministry of Education and Culture, Directorate of Education, <http://www.mec.gub.uy/educacion/> and the National Administration of Public Education, <http://www.anep.edu.uy>.

both within and between countries. This same problem was pointed out by Urquiola and Calderón (2005), who for example noted data from countries that had net enrollment rates above 100% (which by definition is impossible). The authors conducted an analysis in 23 countries in order to obtain comparable data for enrollment, years of schooling and grades completed. International projects like PRIE (see below) have used the same logic to try to develop indicators that are comparable across countries.

International reports on education

There are multiple reports that report exclusively or partially on educational indicators for Latin America. Only some of them will be mentioned here:

a) *Regional Education Indicators Project Summit of the Americas* (PRIE)²⁷: This project started in 2000. According to the PRIE web portal: “The Regional Education Indicators Project (PRIE) is an initiative that emerged from the agreements reached during the Second Summit of the Americas, during which the heads of State identified education as a primary priority for the region. In the search for effective educational policies, the decision was made to strengthen data gathering and statistical information in order to build comparable indicators. These indicators would help analyze our situation and in turn develop more effective policies that make it possible to meet the goals advanced by the Presidents and Ministers of Education in the region. This project is coordinated by the Chilean Ministry of Education with the cooperation of the UNESCO Regional Office for Education in Latin America and the Caribbean and with the support of the UNESCO Institute for Statistics. The 34 countries that constitute the Summit of the Americas, as well as 8 additional Caribbean countries, participate in the PRIE.”²⁸

The aforementioned web portal has notable reports, for example the *Educational Panorama of the Americas*, which includes information on coverage, educational investment, efficiency and gender equity. Objectives linked to technical cooperation and the dissemination of indicators are proposed within the PRIE framework. PRIE includes objectives related to educational coverage and quality to be attained by 2010.

b) *Education for All*: UNESCO organized a meeting in 2000 in Dakar in which representatives from over 160 countries participated. At this meeting, participants agreed to establish the Education for All (EFA) goals, which relate to early childhood care and education, universal primary education, the learning of young people and adults, literacy, gender equality and educational quality. The specific objectives proposed should be attained by 2015. UNESCO has produced three EFA reports: “Is the world on track?” (2002), “Gender and education for all” (2003/4), and “The quality imperative” (2005).²⁹ The Dakar objectives apply to the entire world and therefore, some may not be as relevant for Latin America. On the other hand, the issue of educational quality, which was central in the last report, indeed is. It is also interesting to note that the 2005 report includes the EFA Index, which was prepared based on several indicators. Although the index, like any educational indicator that brings together several components in one sole measure, can be questioned, it is

²⁷ See <http://www.prie.cl/>.

²⁸ Accessed 20-09-05.

²⁹ See www.efareport.unesco.org

interesting to have it as a reference since it is presented periodically. Furthermore, the report includes an interesting discussion on the concept of quality in education, descriptions of selected national cases and research reports about the goals and steps for achieving them. Many countries in Latin America already have or are developing a national plan for achieving the EFA objectives (the case of Peru is presented further on).

c) *Educational Progress Reports*: The Partnership for Educational Revitalization in Latin America and the Caribbean (PREAL) has published in recent years a series of educational progress reports at the regional, national and provincial level.³⁰ These reports include both a diagnosis and a series of recommendations on actions to improve education. The idea is that the report serve as a “report card.” In fact, the reports from 2001 forward include a grade for different educational facets and an evaluation of whether there has been progress. The first reports were regional: “The Future is at Stake” (1998) and “Tomorrow is very Late” (2000, specifically for Central America). These reports were then followed up with the publications “Being Left Behind” (2001, at the regional level), and “It Is Time to Act” (2003, for Central America). In addition, PREAL has national reports for El Salvador (2002), Guatemala (2002), Honduras (2002 and a second version in 2005), Panama (2002), Peru (2003) and Nicaragua (2004) (prepared with counterparts from each of these countries) and has begun to work on reports for Nicaragua and the Dominican Republic. It also has reports for certain regions in Colombia, namely: Bolívar and Cartagena, Atlántico and Barranquilla, Casanare, Caldas and Manizales and Antioquia. All of these reports can be found on the PREAL web portal mentioned previously.

The first PREAL report was based on a series documents prepared by investigators and experts in order to formulate four recommendations for improving education in Latin America:

- Establish quality standards for the educational systems and measure progress toward their achievement.
- Grant greater control over and responsibility for education to the schools and local communities.
- Strengthen the teaching profession through increases in salaries, reform of the training systems and greater responsibility of teachers to the communities they serve.
- Increase student investment in basic education. (PREAL, 1998, p. 5).

These recommendations are, to a great extent, maintained or made more specific in subsequent reports. The text also includes a call to action for political leaders, business leaders, teachers and parents.

In addition, the PREAL web portal contains a series of freely-available publications related to education in Latin America, including prominent ones on successful practices and working groups on standards and assessment, unionism and teacher education. Finally, PREAL maintains an active agenda of activities, including an internship program, the organization of international conferences, and the Educational

³⁰ See <http://www.preal.cl/infprogeduindex2.php>.

Research Fund (FIE) that has completed three international rounds of open research competitions.

e) *Regional Information System (SIRI)*³¹: coordinated by the UNESCO Regional Office for Education in Latin America and the Caribbean. Its general objective is “to contribute to the generation, collection, use and dissemination of information on education in the region, as a prior, necessary condition for improving educational systems in their goal of providing quality care for everyone.”³² Its work includes the development of indicators, the strengthening of local capacities and regional analysis. In fact, the EFA and PRIE projects mentioned previously are part of SIRI. Interesting technical documents about school coverage, efficiency and flow, as well as others, can be found on this web portal.

f) *World Education Indicators (WEI)*³³: This is a collaborative project between the UNESCO Institute for Statistics and the OECD to generate educational indicators that are comparable across countries and relevant to policy development. The participating countries are all middle-income; Argentina, Brazil, Chile, Paraguay, Peru and Uruguay participate for Latin America. It is interesting to note that this represents a joint effort by national coordinators from each country. The web portal cited includes publications on how to retain skilled teachers and returns to investments in primary, secondary and tertiary education. They are currently collecting data on primary education; the resulting report should be published in 2006.

³¹ See <http://siri.unesco.cl/>.

³² Accessed through the web portal <http://siri.unesco.cl/quienes.act?f=F> on 28-09-05.

³³ See www.uis.unesco.org/ev.php?URL_ID=5263&URL_DO=DO_TOPIC&URL_SECTION=201.

IV. Methods

The present research report includes responses from Vice Ministers of education, or close collaborators, with regard to the availability, quality and use of empirical information in the development or review of educational programs and policies. The countries included are Argentina, Brazil, Ecuador, Paraguay, Peru and Uruguay. The questionnaire administered, including the instructions for its completion, is shown in appendix 2 of the present document. The questionnaire was initially developed by the consultant Jorge Max Fernández and then reviewed based on the comments of specialists from the Inter-American Development Bank, including Viola Espínola, Ana Cristina Accioly de Amorim and Lawrence Wolff. Santiago Cueto collaborated on the final review of the instrument.

The procedure was as follows: the questionnaire was sent to the Vice Ministers of each country participating in the Regional Dialogue. They decided whether to answer it personally or send it to a specialist on issues related to indicators within the Ministry. There is no differentiation made between responses from the different types of respondents. Once the questionnaires were received and processed, the results section from the present report was sent to each person in order to confirm that the data contained reflected their responses. In some cases, in addition to the questionnaire responses, the respondent was interviewed in order to clarify or expand on certain responses.

It is important to point out that the results presented further on constitute to some extent a description of the empirical information systems that are available in their countries, but that they also include the Vice Ministers' perceptions about the systems, which by definition are subjective, useful and relevant. This does not mean that these lack value, on the contrary: ultimately, it is perceptions and not objective realities that define people's actions and surroundings with regard to policies that in this case are of great importance in their countries.

V. Results

As can be seen in Appendix 2, some of the questions are closed and others are open. This section presents descriptive statistics for the first type of questions and a summary of the second type of questions. In some cases some responses are taken textually from the questionnaires or interviews and identified with quotation marks. The results of the closed questions can be found in Appendix 2, which contains the frequency of responses to each question.

Availability, quality and relevance of the information

Perhaps the most general question on the questionnaire is number 4, which respondents could elaborate on in the two following questions. The question investigated whether the country had an information system capable of providing information that is relevant to educational policy makers. Peru and Ecuador answered negatively, while the remaining countries responded positively.

In Argentina there is a specialized office: the DiNIECE (National Directorate of Information and Evaluation on Educational Quality) which, together with the Federal Educational Information System and the National System for the Evaluation of Educational Quality, generates different types of information for policy development. In Paraguay, the Information System for Continuous Statistics (SIEC), the National System for the Evaluation of the Educational Process and the National Educational Map, among others, generate varied information at the national and decentralized levels. In both countries, these offices are assigned to the Ministry of Education. In Brazil there is an Integrated Educational Information System that combines information from different sub-systems, including information about the programs' progress in order to be able to make adjustments if necessary. It is interesting to point out that every four years an action plan, which establishes specific objectives and subsequent progress, is prepared. In Uruguay, there is not only one office but three councils, for primary, secondary and technical-superior education, each of which generates its own information. The quality and relevance of the information varies a great deal according to the council on one hand and the specific indicator requested on the other hand (for example, data on student enrollment and flows are more reliable and developed than data on human resources, materials and other issues). On the other hand, the ANEP Director-General of Educational Planning and Management publishes the series "Documents" (diagnoses and investigations), "The Educational System in brief" and the journal "Educar," in addition to national achievement assessment reports.

Questions 7 and 8 delve further into the same issue. In terms of question 7, only two countries (Argentina and Brazil) stated that they have sufficient information on which to base educational policy decisions. Both emphasize the strength and experience of the institutions that are responsible for generating such information. Paraguay provided an intermediate response to this point since, "There is a need for better systems related to programming and budgetary execution, which respond to the implementation of policies, programs and actions for each level and/or modality of the educational system, with the maximum amount of disaggregation."

Question 8 concerned the relevance and organization of the information. Brazil and Paraguay state that they have, in general, relevant, well-organized information available. Paraguay comments that this development is recent, although financing for the system is always problematic. Brazil comments that it is sometimes difficult to monitor the implications of the data, including various sectors of the society in these data. Argentina comments that there is at times contradictory information on a single issue. Ecuador comments on the difficulties associated with not having a computerized system with up-to-date information or an institution devoted to managing the information.

Questions 12, 15 and 16 present summarized information relevant to the issues that were previously discussed:

Table 1. Availability of information

Question	Positive responses	Comments
Does the Ministry publish its statistics annually?	5/6	The statistics are published primarily on the Internet and, in some cases, in diverse types of print materials.
Does the Planning Unit, or its equivalent in the Ministry, provide the analysis necessary for policy development and decision-making?	4/6	Paraguay emphasizes the importance of incorporating more professionals in the planning activities.
Does the Ministry have a financial information system?	4/6	Although several countries have this information, in some cases it is oriented to the economic, not the education, sector or the financial information is not integrated with the exclusively educational information.

Finally, question 19 requests greater detail about the quality of the information available in each country and its relevance to policy development. Ecuador notes the importance of political pressure in general and union pressure in particular in the development or reform of educational initiatives. Political considerations in the development of initiatives are also raised by Uruguay, which is in the process of organizing a unit for the consolidation of statistical information. Paraguay emphasizes the importance of integrating the statistical information on performance and financing. Argentina highlights the importance of having a directorate in charge of these issues (the DiNIECE). At the same time, it notes the difficulties involved in distinct actors accessing, understanding and implementing policies based on the information. For this issue, Brazil looks to the Committee for Producers of Educational Information (COMPED), which has as its objective the development of an articulated system for information dissemination. COMPED integrates 15 institutions and is chaired by the National Institute for Educational Studies and Research Anísio Teixeira (INEP).³⁴ This represents without doubt an interesting

³⁴ See <http://www.inep.gov.br/>. As can be seen in various responses, INEP plays a very important role in the provision of information that is relevant to the Brazilian educational system.

initiative that does not seem to have a counterpart in any of the countries included in the present study (see details further on).

Finally it is important to point out the important role played by multilateral agencies, which in several countries have promoted the development of systems for assessing academic achievement, educational indicators, and program monitoring and evaluation. However, it would seem that beyond the initial pressure of these agencies, countries have adopted these systems as their own, even though they sometimes have difficulties allocating sufficient budgets for them.

Formal evaluation mechanisms

The first two questions on the questionnaire have to do with evaluation mechanisms in the areas that are indicated in Table 2:

Table 2. Formal evaluation mechanisms.

Areas	Positive responses
Equity *	4/6
Teaching quality	3/6
Teacher training	3/5
Student achievement *	5/6
Educational costs and financing	4/6
Effectiveness of the administration and management	0/5
Leadership capacity at the different levels of the system	1/5
Level of teacher performance	0/6
Student grade-level promotion	6/6

* In these areas, Uruguay clarifies that the mechanisms apply only for primary education.

With regard to the open responses on the first issue, in general the countries report that equity is analyzed through achievement test results or specific processes that aim to identify the differences among provinces or defined groups in variables such as school enrollment and dropout. In Argentina and Brazil, an Educational Census is conducted every year; in Paraguay, it is carried out at the beginning and end of the year via the completion of several forms by Internet. It is interesting to point out that in Uruguay, data on the allocation of resources and infrastructure are collected in different contexts (in other words, they are concerned not only with the results but also with the inputs).

Teaching quality is without a doubt an important issue in Latin America. However, only three countries have evaluation systems in this field: Uruguay, which has a system of inspectors who visit the schools; Brazil, which gathers data in order to update its teaching profiles; and Peru, which evaluates the pedagogical institutes that educate teachers, resulting in the suspension of operating licenses for tens of these, and which initiated a system of monetary incentives for teachers in certain regions of the country that considers teacher advising as one of many criteria. In addition Paraguay has initiated the reform of the teacher certification system and the teacher selection and contracting system, the latter to include public evaluations. It is interesting to note that in 2004, Argentina conducted a national census of teachers about the “teachers’ institutional, socio-demographic, work-related and professional profiles... as well as their perceptions about the conditions for performing their

teaching activities.” Only Uruguay conducts teacher evaluations every three years for the purpose of gaining access to positions (regardless, the criterion of seniority weighs strongly in decisions).³⁵

With regard to teacher training, Ecuador and Peru administer questionnaires or evaluations at the conclusion of trainings while Brazil collects data that make it possible to monitor “the teachers’ level of education for evaluating these experiences.”

Concerning student achievement, the only country that currently does not have a student achievement system is Ecuador (although in previous years the APRENDO system was operative, but stopped operating because the cross-border loan that financed it came to an end). On the other hand, the situation in Brazil stands out, with achievement examinations in basic, secondary and higher education.

Educational costs and financing seem to be evaluated mainly through the budgetary executions and reporting realized by specialized offices within the Ministries on an annual basis. Brazil is preparing an innovative system in this regard through an institute that specializes in educational issues, the INEP, which is involved in educational data collection and analysis.

With regard to the *Effectiveness of the administration and management*, the *Leadership capacity at the different levels of the system* and the *Teacher performance level*, there was only one positive response for leadership capacity (Peru). It is worthwhile to point out, however, Paraguay’s plans to implement projects in the areas of management and teacher performance level.

All of the countries have systems to identify the levels of student grade-level promotion.

The last question on the questionnaire (#20) relates to the evaluation of educational policies. Ecuador reports that although there are no formal policy evaluation mechanisms, the media is in charge of supervising educational progress. Paraguay reports that evaluation and monitoring are activities that the country has only recently begun to implement for programs. Uruguay reports that many programs with international financing have evaluation plans from the outset (in fact, conducting an evaluation is a requirement of the multilateral agencies), but the purely national programs are often not evaluated. Argentina gives several examples of complex programs that count from the beginning on evaluation designs that include baseline data. Brazil points out that program evaluations are the responsibility of not only the executors within the Ministry of Education, but also of the personnel from the Ministry of Planning, Budget and Management. In some cases, the Applied Economic Research Institute, dependent on the Ministry of Planning, conducts specific studies linked to the good progress of educational programs.

³⁵ This final piece of information corresponds to the response to question 17 on the questionnaire.

Accountability

Question 3 on the questionnaire alluded to the assignment of responsibilities. In three of the countries (Argentina, Brazil and Paraguay), there is some formal level of accountability. In Ecuador, there is a formal but non-real level (related legislation is under review) and Peru and Uruguay do not have such mechanisms. The countries that have accountability mechanisms base them on legislation and use performance evaluation data and programs to provide their reports. In 2005, Paraguay initiated a cycle of public audiences convened by the Ministry, in which diverse actors participate to express their opinions about the progress of an educational project (Living School). Until now, 4 audiences have taken place, all in Asunción, although there are also plans to conduct them in the interior of the country. The case of Paraguay is interesting since it has joined the processes of educational decentralization and accountability. It is interesting to note that the other two countries that also report progress with regard to accountability (Argentina and Brazil) have decentralized political and educational systems.

Achievement assessments on a national scale

Question 9 on the questionnaire referred to diverse aspects of the national assessments of academic achievement. Ecuador and Peru have not found a greater use for the assessments in improving education. Peru thinks that is due to lack of coordination between the evaluation unit and the pedagogical management unit. Ecuador alludes to the lack of these data at the present time. As was stated before, the achievement assessment unit in Ecuador was discontinued some years ago after conducting several national assessments (called Aprendo), when the external financing ended (which came from the World Bank).

With regard to the use of tests as a diagnostic instrument, use is associated with determining the level of knowledge acquired (that is, an emphasis on a criteria-based evaluation model) by the students individually or grouped into educational centers, as well as in order to make comparisons between groups of students. Several countries reported difficulty in making achievement comparisons across years.³⁶ Several countries already use, and others are in the process of adopting, item response theory principles that would help in making such annual comparisons. On the other hand, all of the countries that administer assessments also collect data through surveys for students, teachers and directors and other instruments aimed at complementing and helping to understand the test results.

In Brazil, as was mentioned before, there are assessments at various educational levels. A reported difficulty in this country relates to user comprehension of statistical results; training activities are therefore being planned with some users (for example, teachers, directors, and educational center and municipal staff members). This is a task that already began with the school councils. Finally, Brazil reports an initiative to take into account issues of cultural diversity and citizenship in the assessments. Uruguay reports the use not only of national assessments (especially in sixth grade)

³⁶ In question 13, only Paraguay and Brazil manifest that they are able to make year-to-year comparisons of academic achievement.

but also of PISA assessment for making educational policy decisions (see details on the latter in Appendix 3).

Question 14 on the questionnaire shows that all of the countries that administer assessments publish the results on the Internet and in printed materials, but both the modes of publication and the target audiences vary (for a discussion of this issue, see Ravela, 2002).

An issue mentioned by some countries is the dilemma between sample and census assessments. It is not an issue that was asked about directly in the questionnaire, which means that it will not be discussed here, except for to say that such a decision depends on the assessment objectives (for a discussion of these issues, see Ravela, 2002, Ferrer, 2005, and Arregui & McLauchlan, 2005).

Participation in decision-making

Questions 10 and 11 on the questionnaire refer to the participation of diverse actors in educational policy decision-making.

Peru manifests that it does not have formal mechanisms for making decisions in a participatory manner, although the National Board of Education (created in 2001) could ultimately help in this role. Brazil also has a NBE that, as in Peru, formulates educational policy suggestions. In addition, Brazil has associations such as the Union of Municipal Education Managers and the Council of State Education Secretaries, which also make suggestions for educational development. In Uruguay, the Technical Teacher Assemblies are also advisory in nature, but convene only teachers. Ecuador has the Social Contract for Education (see details in Appendix 3).

Argentina seems to have the greatest degree of participation in decision-making: "...educational policy decisions are made within the Federal Council of Culture and Education, which is formed by the ministers of education from the country's 24 jurisdictions. The Federal Council has as its mission the coordination of the various Jurisdictions with regard to cultural development and planning, guidance and agreement about the aspects of National Educational Policy that are entrusted, at the various levels, modalities and Jurisdictions of the Educational System, to the joint action of the Nation and the different Jurisdictions."

All of the countries have the practice of consulting different levels of civil society about specific policies. These inquiries can be made in conferences, convocations through newspapers, Internet portals, or others. For example, Ecuador formalized the Social Contract for Education, which promotes partnerships between the Ministry and diverse civic organizations. In Peru, they reached a series of commitments within the framework of the National Agreement, an institution that brings together political parties, the church, the government, entrepreneurs, unions, and other civil society organizations. On the other hand, all of the countries appear to have formed or to be in the process of forming participatory institutions for decision-making at the level of educational centers.

With regard to authorities' involvement in decision-making, beyond what was mentioned previously, representatives from several sectors participate in consultations

organized by the Ministry and the efforts are also coordinated with other sectors of the executive branch and Parliament in all of the countries. Tensions can emerge in some cases between local educators and the policies that they perceive to be driven by multilateral agencies. For example, Uruguay describes a situation that seems to be common in several countries in the region: “these tensions reach their peak in the teachers’ rejection of programs promoted with the support of multilateral agencies, where they perceive that the technical rationale prevails over the educational one.” In other cases, tensions inherently occur since diverse actors represent certain interests (for example, there is mention of tensions with the Ministry of Economy concerning the availability of resources as well as with legal councils). Several countries discuss the importance of overcoming these tensions, with the objective of improving the “governance” of the country, which means that democratic institutionalality is still fragile and that improving education can help to strengthen it.

Examples of policy development

Question 18 requested one example per country. In 2003, Peru passed a new general education law. The example provided refers to the development of regulations for this law, which was based on information from both the Ministry and civil society. In Ecuador, the example relates to the universalization of the first year of basic education, targeted at 5-year-old children, starting in 2005 (see details in Appendix 3). Paraguay reports the importance of education in the process, still under way, to reform the teacher selection and contracting system.

Argentina describes the Integral Program for Educational Equality (PIIE), which aims to strengthen the institutions that serve students with high levels of social vulnerability in urban and urban fringe areas of the country. The DiNIECE collaborated by developing a social vulnerability index and identifying the educational centers with the highest levels of vulnerability. The index includes socioeconomic, demographic and educational data (see more details in Annex 3).

Brazil reports on two programs. The first one, University for All, seeks to promote the needy students’ access to higher education through scholarships. The selection of scholarship recipients is made by taking into account the academic merits, using the ENEM evaluation (National Secondary Education Examination) developed by the INEP. The program’s creation also used data from educational diagnoses and school censuses. These inputs were important in the discussion about program development, carried out among the Ministry of Education, universities and other social actors such as the National Board for Social Welfare.

The second example from Brazil refers to the Literate Brazil program. This program provides assistance for diverse types of institutions to be able to implement literacy activities for young people and adults. The program has been monitored and evaluated with regard to its effectiveness, efficiency, management, demand and sustainability, in such a way that modifications for improving it have been introduced. Dialogue with the various actors involved in the program has also played an important role in this case.

Annex 3 presents descriptions of the program or office in each country that is relevant to the present study.

VI. Discussion

If the present study had been conducted 20 years ago, there would be much less to say: almost no country had systems for assessing academic achievement, annual censuses, or studies of educational indicators disaggregated by provinces or regions. Today on the other hand, the situation is one of an abundance of different types of educational indicators, and the sensation resulting from the literature review and questionnaire responses is that the quantity and quality of information available to policy makers will continue to increase in the coming years because what currently exists is not sufficient for policy makers' needs. As Uruguay states: "There is no doubt that we are undergoing a process for the rationalization of management, where the interest in making informed decisions is growing. In fact never before have there been as many investigations on the educational system as there are now. An enduring interest in evaluating and monitoring innovative educational policies has been established."

It is interesting to note that although the questionnaire did not limit the answers to a certain level, practically all of the responses were related to the formal basic education of minors. It seems obvious that the educational indicators on preschool, technical and higher education are much less developed (the exception is Brazil, which did report examples for higher education and adult literacy). Some of the key issues that emerged from the present study are formulated as tentative conclusions:

1. *All of the countries in the present study have systems of national and disaggregated educational indicators*, some generated based on censuses and others via surveys administered to samples. However, the quality, quantity and relevance of these data seem to vary a great deal across countries. At one extreme are Peru and Ecuador, whose senior officials generally do not attain the information they would want to have. Paraguay, which has launched in the last decade programs linked to the generation and utilization of these indicators, occupies an intermediate position. Finally, Uruguay, Brazil and Argentina are the countries that seem most satisfied with the quality, quantity and relevance of the information available. This first conclusion is important to the extent that a natural continuation of the present study would be to conduct case studies of the aforementioned countries to better understand the differences that explain the reported levels of satisfaction.
2. *The countries that are more satisfied with the indicators have an office that specializes in the issue or several that act jointly*. In some cases, these offices are located within the Ministry of Education, but in others, they are public, autonomous offices with close ties to the Ministry. It would seem that the issue of the development and use of educational indicators requires specialized, experienced personnel. Additionally, they require resources that are not always available.
3. *Five countries have systems for assessing academic achievement and one (Ecuador) had this type of system until a few years ago*. Some countries have low stakes systems while others have high stakes systems. After comparing the different countries' responses about the use of the assessments and contrasting them with the possibilities contained in several reports (Arregui

and McLauchlan, 2005; Ferrer, 2005; Ferrer and Arregui, 2003; and Ravela, 2002), the impression remains that the use of the assessment results will increase and diversify in the coming years, probably with an emphasis on high stakes assessments for educational actors.

4. *The participation in standardized international achievement assessments has increased in recent years and will probably continue increasing in the near future.* There is currently a series of initiatives overseen by UNESCO, OECD and the IEA in which Latin American countries can get involved in order to ascertain the achievement of their students in reading comprehension, science and mathematics, among others. It is obvious however, as several authors have stated, that achievement measurements in and of themselves do not improve education. The countries that participate in these assessments should have specific objectives for their participation as well as plans for the dissemination and use of the resulting information. This seems to be the case in a few instances.
5. *The countries that are more satisfied with information use have not only disseminated it, but have also worked with diverse target groups on understanding the reports, and analyzing and discussing their implications for the development of educational policies.* It would initially appear that the information generators adopted an ingenuous model in which it was sufficient for the information to be produced and made available to everyone via publications or the Internet. However, even if indicators are constructed and published, target audiences may not seek them out. It seems obvious based on the reported experiences that many of the potential users have limited training in reading this type of information. In this context, it is particularly relevant to work intensely and in a coordinated manner with the members of the press on the messages intended for transmission to specific audiences and the general public.
6. *Accountability, although perceived as important in all of the countries, in general has few concrete mechanisms for implementation.* This will certainly be an issue that will gain greater importance in the coming years. It is interesting to note that the countries where there would seem to be more developed accountability policies (Argentina, Brazil and Paraguay) are the same ones where decentralization already exists or is being actively promoted. It would be interesting to investigate to what extent educational decentralization promotes accountability.
7. *Multilateral agencies have played an important role in the development of educational indicators.* Several of them have been linked to the establishment of offices for educational statistics, program evaluation or academic achievement, in this way playing a role in the development of local capacities. Important initiatives linked to the development of comparable indicators and standardized achievement assessments have been developed on an international scale. However in some cases the actions promoted by these agencies are perceived as drawbacks by certain national actors. It would seem to be important for multilateral agencies to strengthen their development

policies based on work with national counterparts and in contexts of broad consultation about the initiatives they support.

8. *Information generators need to understand the role that other actors play in the development of educational policies in each specific context.* The diverse types of pressures that influence policy development have been mentioned, for example, the press, organized sectors of civil society, professional organizations or unions, political pressure and multilateral agencies. The role played by other sectors of the executive, especially the Ministry of Economy, as well as national legislatures, is also important. Finally, the interests of the policies' potential beneficiaries and sufferers (if any) should be considered, through an approach to policy development that is more participatory than imposed, more from the bottom-up than in the reverse direction. The representatives from each sector that has an interest in the development of the given policies should be understood if it is intended that the empirical information play a role among them.
9. *The evaluation of teachers and teacher training institutions are issues that are announced as important for the coming years.* Some countries have recent experience in developing teacher evaluations for the purpose of contracting, promotion or the development of incentives. Teacher evaluation is without a doubt a complex practice, but one that is vital for reforms of the teaching profession that seem to draw near in several countries.

Some years ago, an educator that I respect a great deal commented to me that when she saw a table with statistics or figures on the relationships between variables in an educational text, she rapidly turned the page in order to look for discussion of ideas without numbers. It would seem that this approach to education based only on the preparation and discussion of essays and theories no longer works in Latin America, which now has rich, varied information, although still insufficient for the stated needs, on indicators that seem key to its development. My colleague will now have that to make the effort to assess and interpret this type of information, but the information generators will have to find ways of communicating with people that like her do not have much experience or a disposition toward this language but that do have a great willingness to improve education. The participation of all of the actors who are interested in education is required.

References

- Aristimuño, A. and Kaztman, R. (2005). "La evaluación de aprendizajes y su impacto en las políticas y las escuelas públicas de Uruguay," in [Cueto, S. \(Ed.\), *Uso e impacto de la información educativa en América Latina*](#). Santiago: PREAL.
- Arregui, P. and Ferrer, G. (2003). Las pruebas internacionales de aprendizaje en América Latina y su impacto en la calidad de la educación: Criterios para guiar futuras aplicaciones. Documento de Trabajo 26 de PREAL. Santiago, Chile.
- Arregui, P. and McLauchlan, C. (2005). *Utilization of large-scale assessment results in Latin America*. Unpublished manuscript, 2005. PREAL and the World Bank Institute.
- Biddle, B. and Anderson, D. (1991). Social Research and educational change. In Anderson, D. and Biddle, B. (Eds.). "*Knowledge for policy: Improving education through research*" (pp. 1-20). England: The Falmer Press.
- Biddle, B. and Saha, L. (2002). "*The untested accusation. Principals, research knowledge, and policy making in schools.*" USA: Ablex Publishing.
- Boruch, R. (2005) (Ed.). "Place Randomized Trials: Experimental Tests of Public Policy," in *The annals of the American Academy of Political and Social Science*. Volume 599, May 2005. USA: Sage Publications.
- Cariola, P., Schiefelbein, E., Swope, J., and Vargas, J. (nd). *La Vinculación entre la Investigación y la Toma de Decisiones en Educación: Un Nuevo Enfoque*. Santiago, Chile: REDUC. Serie Teoría y Práctica, #1.
- Centro de implementación de políticas públicas para la equidad y el crecimiento. <http://www.cippec.org/espanol/educacion/index.html>
- Cook, T. and Payne, M. (2002). Objecting to the objections to using random assignment in educational research. In Mosteller F. y Boruch, R. (2002). (Eds.). "*Evidence matters. Randomized Trials in education Research.*" (pp. 150-178). Washington, DC: Brooking Institution Press.
- Cueto, S. (2005) (Ed.) *Uso e Impacto de la Información Educativa en América Latina*. Santiago: PREAL.
- Daslav, O. Información y política: Factores limitantes y facilitadores. In: *Revista Umbral 2000 para una educación para un nuevo mundo*. N° 4, October 2000, REDUC. <http://www.reduc.cl/reduc/dostoic.pdf>
- Fernández, T. and Midaglia, C. (2005). "El uso de los informes generados por los sistemas de evaluación de aprendizajes en la educación primaria. Los casos de México y Uruguay," in [Cueto, S. \(Ed.\), *Uso e impacto de la información educativa en América Latina*](#). Santiago: PREAL.

- Ferrer, G. (2005). *Estado de situación de los sistemas nacionales de evaluación de logros de aprendizaje en América Latina*. PREAL
<http://www.preal.cl/GTEE/docr/Estado%20de%20Situacion.pdf>
- Ferrer, G. and Arregui, P. (2003). *Las pruebas internacionales de aprendizaje en América Latina y su impacto en la calidad de la educación: Criterios para guiar futuras aplicaciones*. Documento de trabajo N° 26, PREAL, Santiago.
http://www.preal.org/docs-trabajo/Arregui_et_Al_26.pdf
- Gutierrez, M. (2000) “¿Pueden los decisores en Política Educativa usar la información para tomar decisiones?”, in *Revista Umbral 2000 para una educación para un nuevo mundo*. N° 4, October 2000, REDUC. Available at
www.reduc.cl/reduc/marybell.pdf
- Kerlinger, F. and Lee, H. (2000). *Foundations of Behavioral Research (4th Ed.)*. Orlando, USA: Harcourt College Publishers.
- Levin, H. (1991). Why isn't educational research more useful? In Anderson, D. and Biddle, B. (Eds.). *“Knowledge for policy: Improving education through research”* (pp. 70-78). England: The Falmer Press
- Mancebo, M. (2001). La “larga marcha” de una reforma “exitosa”: de la formulación a la implementación de políticas educativas. In: *Revista Umbral 2000 para una educación para un nuevo mundo*. N° 6, May 2001, REDUC
<http://www.reduc.cl/reduc/mancebo.PDF>
- McMeekin, R. W. (1998). Estadísticas Educativas en América Latina y el Caribe. Informe de un estudio sobre la situación de las estadísticas educativas, indicadores y sistemas de información para la administración en la región y lecciones a aprender de otras regiones.
http://siri.unesco.cl/medios/pdf/Documentos_tecnicos/est_alc_sp.pdf.
- Ministerio de Educación de Perú (2005). *Plan Nacional de Educación para Todos 2005-2015. Hacia una Educación de Calidad con Equidad*. Lima: Ministerio de Educación.
- Montoya, S., Cruz, J., and Vera, A. (2005). “Evaluación de la calidad educativa: de los sistemas centrales al aula. Estudio del impacto de las políticas de devolución de información personalizada a las escuelas de tres provincias de Argentina,” in [Cueto, S. \(Ed.\)](#). *Uso e impacto de la información educativa en América Latina*. (pp. 295-343). Santiago: PREAL.
- Morales-Gómez, D. and Torres, C. (1992). (Eds.). *“Education, policy and social change.”* Westport, CT: Praeger.
- Mosteller F. and Boruch, R. (2002). (Eds.). *“Evidence matters. Randomized Trials in education Research.”* Washington, DC: Brooking Institution Press.
- National Research Council (2002). Scientific research in education. Committee on scientific Principles for Education Research. Shavelson, R.J. and Towne, L.,

Editors. Center for education. Division of Behavioral and Social Science and Education. Washington D.C: National Academy press.

ODI. (2004). *Superando las barreras entre la investigación y las políticas en el desarrollo internacional: un marco analítico y práctico. Documento Informativo de RAPID.*

http://www.odi.org.uk/publications/briefing/rapid/rapid_bp1_spanish.pdf

OECD (2003). *“New Challenges for Educational Research”*. Paris: OECD Publications (Organization for economic co-operation and development)

Pinkasz, D., Montes, N., Marcalain, G., Legarralde, M., Dussel, I., Tiramonti, G. (2005). “Los usos de la información empírica en el sistema educativo. Un estudio de tres jurisdicciones en la Argentina” in [Cueto, S. \(Ed.\)](#), *Uso e impacto de la información educativa en América Latina*. (pp. 295-343). Santiago: PREAL.

Pollard, A. and Court, J. (2005). *How civil Society organizations use evidence to influence policy processes: a literature review*. Working Paper 249, ODI, London. <http://www.odi.org.uk/RAPID/Publications/Documents/WP249.pdf> (21-09-05)

PREAL (1998). *El futuro está en juego. Informe de la Comisión Internacional sobre Educación, Equidad y Competitividad Económica en América Latina y el Caribe*. Washington D.C.: PREAL.

PREAL (2000). *Mañana es muy tarde*. Washington D.C.: PREAL and Comisión Centroamericana para la Reforma Educativa.

PREAL (2001). *Quedándonos Atrás. Un Informe del Progreso Educativo en América Latina. Informe de la Comisión Internacional sobre Educación, Equidad y Competitividad Económica en América Latina y el Caribe*. Washington D.C.: PREAL.

PREAL (2002). *Informe de Progreso Educativo - Honduras. Informe de la Fundación para la Educación Ricardo Ernesto Maduro Andreu FEREMA*. Washington D.C.: PREAL

PREAL (2002). *Informe de Progreso Educativo - El Salvador. Informe del Centro ALFA, S.A. de C.V.* Washington D.C.: PREAL

PREAL (2002). *Informe de Progreso Educativo - Panamá. Informe del Consejo del Sector Privado para la Asistencia Educacional, CoSAPE*. Washington D.C.: PREAL

PREAL (2002). *Informe de Progreso Educativo - Guatemala. Informe del Centro de Investigaciones Económicas Nacionales, CIEN*. Guatemala: PREAL.

PREAL (2003). *Informe de Progreso Educativo - Perú*. Washington D.C.: PREAL and GRADE

- PREAL (2003). *Es Hora de Actuar. Informe de Progreso Educativo en Centroamérica y la República Dominicana. Comisión Centroamericana para la Reforma Educativa*. Washington D.C.: PREAL
- PREAL (2004). *Informe de Progreso Educativo - Nicaragua. Informe del Foro Educativo Nicaragüense Eduquemos*. Washington D.C.: PREAL
- PREAL (2005). *Informe de Progreso Educativo – Honduras. Educación: El Futuro es Hoy*. Washington D.C.: PREAL and Fundación para la Educación Ernesto Maduro Andreu, FEREMA.
- Proyecto Regional de Indicadores Educativos. Cumbre de las Américas. <http://www.prie.cl/espanol/index.htm>
- Ravela, P. (2002). *¿Cómo presentan sus resultados los sistemas nacionales de evaluación educativa en América Latina?*. Documento de trabajo N° 22, PREAL, Santiago. <http://www.preal.org/GTEE/pdf/Resultados2.pdf>
- Ravela, P. (2003). *¿Cómo aparecen los resultado de las evaluaciones educativas en la prensa?* PREAL. <http://www.preal.org/GTEE/pdf/prensa.pdf>
- Ravela, P. Wolfe, R. Valverde, G. and Esquivel J.M. (2001). *Los próximos pasos: ¿cómo avanzar en la evaluación de aprendizajes de América Latina?* Documento de trabajo N° 20, PREAL, Santiago. <http://www.preal.org/doctr20.pdf>
- Reimers, F. and McGinn, N. (2000). *Diálogo informado: el uso de la investigación para conformar la política educativa*. México D.F.: Centro de Estudios Educativos.
- Rokicka, W. (1999). (Ed.) “*Educational documentation, research and decision-making*”. Paris: UNESCO. International Bureau of education.
- Sistema de medición de la calidad de la educación (2004). Informe de resultados. Chile: Ministerio de Educación.
- Swope, J. and Schiefelbein, P. (1999). Políticas educativas en las Américas: Propuestas, consensos y silencios. In: *Revista Umbral 2000 para una educación para un nuevo mundo*. N° 1, May 1999, REDUC. <http://www.reduce.cl/reduc/swope2.pdf>
- Unidad de Estadística Educativa (2004). Cifras de la Educación 1998-2003. Lima: Ministerio de Educación.
- Urquiola, M and Calderón, V. (2005). *Manzanas y Naranjas: Matrícula y Escolaridad en Países de América Latina y el Caribe*. Washington D.C.: Banco Interamericano de Desarrollo. Diálogo Regional de Política.

Annexes

1. Staff members who answered the questionnaire/interview

Network Member - Country	Person who answered the Questionnaire/Interview
Alberto Sileone Secretary of Education Ministry of Education, Science and Technology Argentina	Margarita Poggi National Director of Information and Evaluation on Educational Quality.
Ricardo Henriques Secretary of Continuing Education, Literacy and Diversity Brazil	Ricardo Henriques
Mercedes Valverde Vice Minister of Education Ministry of Education and Culture Ecuador	Rafael Albuja National Director of Basic Education
Marta Lafuente Vice Minister of Education Ministry of Education and Culture Paraguay	Eva Fleitas Director of Educational and Cultural Planning
Idel Vexler T. Vice Minister of Pedagogical Management Ministry of Education Peru	Idel Vexler T.
Luis Yarzabal Vice Minister of Education National Administration of Public Education Uruguay	Andrés Peri Manager of Educational Research and Evaluation at CODICEN ANEP

2. Questionnaire sent to the countries and responses to closed questions:

INTER-AMERICAN DEVELOPMENT BANK
REGIONAL POLICY DIALOGUE
EDUCATION NETWORK

Questionnaire on the availability and use of information in decision-making on educational policy in Latin America

General Information:

Let us begin by demonstrating our appreciation of the effort that you are making to answer these questions. Your responses will be very useful in the development of a frame of reference for discussing the different options that are available for improving the current situation. A study will be prepared based on the questionnaire results. This paper will be presented and discussed at the meeting that is planned for November of the current year. We would like, once again, to thank you for your cooperation since we recognize the limited time you have.

The objective of this consultation is to better understand the evaluation mechanisms and information sources that the countries in the region currently possess and how these contribute to the evaluation of current policies and better-informed decision-making. The study will take into account a series of issues that are of strategic importance, such as equity, accountability, teaching quality, teacher quality and training, student assessment, costs and financing, effectiveness of the management and administration, leadership capacity, internal efficiency and student promotion, and will provide the information necessary for identifying how the evaluation mechanisms, which are currently used to observe the progress obtained, report results and influence decision-making on educational policies, actually function.

In the following pages, you will find a series of questions that we would like you to respond to. In the case of close questions, please respond with an X in the appropriate place. In the case of open questions, please feel free to elaborate as much as you would like, although we know that your time is limited. Given that the date of the meeting is already established, we also have a limited amount of time. Please send your responses as soon as it is possible for you to do so.

Country: _____

Name and position of the person who fills out the questionnaire:

SECTION A—Please answer these questions. Feel free to give us all the information you would like to provide. Remember, what you write will be used only to benefit the region and your own country.

- 1) Does the Ministry of Education have formal evaluation mechanisms to monitor progress in the following areas?

Area to Evaluate	Yes	No
Equity	4	2
Teaching quality	3	3
Teacher training	3	2
Student performance	5	1
Educational costs and financing	4	2
Effectiveness of the administration and management	0	5
Leadership capacity at the different levels of the system	1	4
Teacher performance level	0	6
Student grade-level promotion	6	0

- 2) In those areas in which your response was positive, please explain how they operate:

Area	Explanation
Equity	
Teaching quality	
Teacher training	
Student performance	
Educational costs and financing	
Effectiveness of the administration and management	
Leadership capacity and performance	
Teacher performance level	
Student grade-level promotion	

- 3) Do you consider that the education system in your country makes it possible to establish responsibilities and develop an acceptable level of accountability? Please explain your response.

3 countries answered that there is a system that makes it possible to establish responsibilities and 3, that there is no such system.

- 4) Does the Ministry of Education in your country have an information system that is capable of providing relevant information to those responsible for making educational policy decisions?

Yes	4
No	2

If your response was No, please go to question # 7

- 5) If your previous response was yes, please explain how the system is organized and how it works:

- 6) Does this system work according to the Ministry's expectations and needs? Does it offer all of the information that is expected of it?

3 countries answered that the system works according to the Ministry's expectations and needs, 1 country answered that it does so in certain cases, and 2 responded that it does not.

- 7) As someone responsible for making decisions in educational policy matters in your country, do you think that you usually receive a sufficient volume of information in order to do your work effectively?

Mark the response that best describes your situation:	
We usually have sufficient educational information on which to base policy decisions.	2
We usually have information available, but not the amount that we would like to have.	2
We usually do not have information available when we need it.	1

Please, explain your response:

- 8) Do you think that the quality of the information you receive is satisfactory for sustaining the educational decision-making and policy development processes? What would be your greatest complaints?

Mark the response that best describes your situation:	
The available information is usually relevant and well-organized.	2
The available information is usually only partially relevant and organized.	1
We usually do not have relevant or organized information.	2

Please, explain your response:

- 9) Given the use of national tests at different levels in your country, do you believe that these tests are used as a diagnostic instrument for measuring the performance of the schools and the system? As guidelines for policy development and decision-making? Or are they used only to determine children's admission at different school levels?

In 1 country, there are currently no tests, in 1 country, it is thought that the tests do not meet any of the previous uses, and in 4 countries, the tests meet several of the previous uses.

- 10) Are educational policy decisions made in a participatory manner? Are there mechanisms to allow the participation of sources external to the Ministry? Does Civil Society participate?

2 countries have very developed participatory processes, 2 are in the process of developing them, and 2 do not have them.

- 11) Who are the staff members involved (what are their positions) in the decision-making process? Are tensions caused by the difference between teachers and administrators, between concerns of a political and technical nature?

Please answer the following questions by placing an X in the indicated space. If you would like to, you can comment on any of the questions, since it will always be useful for our work.

Questions	Yes	No	Observations
12) Does the Ministry publish its statistics annually?	5	1	
13) Are the results of examinations and other similar evaluations used to compare academic achievement at different time?	2	4	
14) Are the results of the system's national tests and other similar indicators published?	5	1	
15) Does the Planning Unit, or its equivalent in the Ministry, provide the analysis necessary for policy development and decision-making?	4	2	
16) Does the Ministry have a financial information system?	4	2	
17) Are teachers evaluated at least every three years? If the response was positive, please comment on the possible consequences (rewards and sanctions).	2	4	

18. Give us an example of an important educational policy decision that was recently made in the Ministry. Please describe the process that led to that decision. Are you satisfied with the process? Was the information available sufficient? What would you have liked to be different?

19. Would you say that the decision-making process of your country's education sector is based on a system that collects sufficient reliable information and that that information is well analyzed, systematized and shared in order to support a solid process for educational policy decision-making and development?

3 countries respond that the decision-making process is based on a reliable information system, 2 countries answer that it is partially based on such a system, and 1 country answers that it does not have this foundation.

20. After the decisions are made and the policies are implemented, how does the system evaluate the results? How are these policies and decisions evaluated?

PART B

Remember that in the near future we will call you in order to talk about your responses and other topics related to this issue. Our objective is to better understand your responses and to develop a frame of reference that is as appropriate as possible for understanding and supporting the development of the respective educational systems.

We want to explain to you that in the case of the questions with closed responses, we will present the results from all of the responses together, as averages or global results. In terms of the open responses, we intend to include some quotes from the texts received in the report. If you prefer that all of the information you send us be treated confidentially (that is, that it is only presented in averages or cited but without mentioning you as the author of the response), we request that you state this when filling out the survey.

Thank you very much.

3. Cases of Interest in the Countries

The following pages report country-by-country on a program that uses educational information to design policies or an office devoted to generating educational information for policy development. Efforts have been made to present innovative, different experiences across countries, although impact evaluations are not available in this regard.

a. Argentina: Integral Program for Educational Equality (PIIE)

PIIE is a program initiated in 2004 “whose purpose is the strengthening of urban primary educational institutions, of GBE 1 and 2, which serve the child population in situations of greatest social vulnerability.”³⁷ PIIE promotes equality of educational opportunities and pedagogical practices. This program aims to strengthen teaching and learning processes, support the development of school pedagogical initiatives, foster teacher professionalization, promote the development of learning communities, and implement inter-institutional and inter-sectoral networks.³⁸ At the time of writing the present report, 1,099 schools and 631,869 students participated in PIIE. The schools receive teacher training, technical assistance, a library, school uniforms, computers and \$ 5,000 per year for improving the locale or educational materials. PIIE organizes meetings of representatives from the participating schools for sharing experiences. Other Ministries, such as the Ministries of Work, Social Development and Health, and the National Commission for the eradication of child labor, work in a coordinated manner with PIIE. The election of schools is made on the basis of the students’ *social vulnerability index*, the same one that was approved by the Federal Council of Culture and Education. Participating schools are required to report monthly inventories on dropout and repetition and the Ministry’s National Directorate of Information and Evaluation on Educational Quality generate research on the program. Furthermore, one document³⁹ provides abundant information on indicators that are relevant to how the PIIE beneficiary schools began. PIIE is interesting to the extent that it uses indicators to define which schools should be selected for the intervention and then uses monitoring indicators such as dropout rates, but also given the participatory nature of the intervention in which the schools themselves can decide how to invest the resources allocated by the State.

b. Brazil: The INEP

The National Institute for Educational Studies and Research Anísio Teixeira is an autonomous public agency linked to the Ministry of Education that has existed since 1937 and has functioned in its modern version since 1997. The general objective is “to promote studies, investigations and evaluations on the Brazilian educational system with the objective of subsidizing the formulation and implementation of public policies for the educational arena based on parameters of quality and equity as well as producing clear, reliable information for managers, researchers, educators and the

³⁷ See <http://redteleform.me.gov.ar/piie/>.

³⁸ For more details, see *Documento Base. Programa Integral para la Igualdad Educativa*, on the PIIE web portal.

³⁹ See Documento de Insumo – Argentina. Proyecto Hemisférico Elaboración de políticas y estrategias para la prevención del fracaso escolar. Available at <http://tq.educ.ar/fracasoescolar/documentos/Argentina.pdf>.

general public.”⁴⁰ INEP collects data via the school census (annual), the higher education census (annual), the evaluation of graduation courses (for granting diplomas), institutional evaluation (in higher education), the national system for higher education accreditation (SINAES, includes the evaluation of institutions, courses and student performance), the national secondary education test (ENEM), the national examination of youth and adult competencies (ENCCEJA), and the national basic education evaluation system (SAEB, conducted every two years). INEP was also in charge of the administration and analysis of the PISA test in Brazil and participates in the UNESCO World Educational Indicators Project.

It is important to point out the role of the Committee for Producers of Educational Information (**COMPED**), created and chaired by INEP. It represents an organization that brings together 15 institutions that seek to develop an “articulated system for the dissemination of educational information.” For example, COMPED supports the publication of resources that contribute to initial and continuing teacher education. It also conducts studies and publications on the state of knowledge in specific areas such as teacher education, literacy, childhood education and evaluation.

INEP also maintains the Educational Information and Library Center (**CIBEC**) that takes responsibility for disseminating the information. CIBEC has a Thesaurus of educational terms specialized in Brazilian documents. CIBEC creates its own publications through documents and the Internet and facilitates database access for researchers and other interested parties.

Among the countries in the present study, Brazil is the only one that has an office linked to the production of educational indicators that is independent of the Ministry (INEP; although there is an unimplemented law that creates a similar entity in Peru) and is also the only country that has an office devoted specifically to discussing the uses of empirical information (COMPED).

c. Ecuador: Social Contract for Education

The Social Contract for Education is an institution born in 2002 out of the agreement reached between representatives of public and private institutions in favor of education. These include the association of municipalities, prefectures, national and international NGOs, and UNICEF. The points of agreement were achieved based on a series of citizen consultations and public debates with diverse actors. The consultations were carried out based on a foundational document elaborated by the Ministry of Education (“Third Consultation on 21st Century National Education”). The Contract acts on the basis of the agreements of a promotional committee, which has a chairman and an executive secretary. The Contract stipulates 3 goals: access to and permanence of all Ecuadorians in 10 years of quality basic education, adopt educational quality standards, and situate Ecuador as one of the countries with the best basic education index in the region. It also has 7 strategies, which include providing equitable conditions for all students, establishing a policy of incentives and corrective measures on the basis of an objective, transparent evaluation system, supporting the neediest families, and guaranteeing economic resources to fulfill the Contract. It is interesting to note that the Contract stipulates the current situation

⁴⁰ See <http://www.inep.gov.br/institucional/>.

through a series of relevant indicators for each one of the goals and strategies.⁴¹ The concrete objective proposed for 2005 was the universalization of the first year of basic education (5-year-old students), targeted at meeting the Contract's first goal. The diagnosis shows that 100,000 5-year-old students are not registered in the educational system. The objective is to cover all of them by 2007. Since this objective was proposed through a partnership between the Contract and the Ministry of Education, additional resources were achieved via pressure on Congress and the Ministry of Economy. The contract's agreements and goals are not mandatory in nature, but turn out to be very influential given the high profile of its members and the dissemination they achieved for their work (via, for example, newspapers with national circulation).

d. Paraguay: Directorate General of Educational and Cultural Planning (DGPEC)

The DGPEC was created within the framework of the Paraguayan educational reform that has been implemented since the middle of the last decade. Its principal objective is "To promote, coordinate and support planning processes, maintaining the Information System for Continuous Statistics (SIEC); facilitating the use and analysis of the information produced by the SIEC and the National Educational Map, within the framework of the definition and evaluation of the sector's policies, plans, programs and projects; and building and coordinating planning (macro-micro) processes and methodologies."⁴² The SIEC is a unit of the DGPEC that defines itself as "... the group of intervening entities, human resources, procedures, hardware and software that coordinate data processing and administer the statistical information for the education sector, interrelated in a coordinated manner, and that allow the normal implementation of the efforts to collect, process, disseminate and use said information."⁴³ Its objectives are "to improve the quality, reliability, availability and timeliness of the statistical information, to provide the educational levels that are involved in the processes to administer the statistics... with the sufficient capacity to process and use the data, to strengthen the decision-making process on the basis of adequate information use, and to disseminate the information according to the characteristics of the diverse users both within and outside of the sector." As can be seen, there are considerations related both to methodologies and to capacity-building for information use. The SIEC is responsible for the annual collection of data from the statistical form, which includes initial, basic, secondary, permanent, higher non-university and university educational centers; it also has departmental units of statistics in each department of the country. The SIEC has several publications available on its web portal related to the evolution of recent educational indicators and the situation of teachers at the diverse educational levels. The Educational Map contains specific information on the educational centers, including the geographic location of and access routes for the educational centers. The DGPEC also includes the Department of Planning, sectoral analysis and studies, and a unit of analysis that enables the information generated to be processed within the same directorate that promotes the progress of educational reform. Finally, the DGPEC offers educational information to the people who request it.

⁴¹ See <http://www.mec.gov.ec/n2/contrato/p1.htm>.

⁴² Taken from <http://www.mec.gov.py/dpendencia/depei/webc5/index.htm>.

⁴³ Taken from the Manual del SIEC, see <http://www.mec.gov.py/dpendencia/depei/webc5/index.htm>.

e. Peru: National Education for All Plan 2005-2015.

The aforementioned Plan was developed by the Ministry of Education on the basis of consultations with the National Education for All Forum, which brought together representatives from 50 public and private institutions interested in the educational field. The Forum was established in 2002 and the Plan was published in 2005. The Plan discusses the problems of quality and equity in Peru within the framework of the six objectives of the World EFA Forum in Dakar (organized by UNESCO). In the diagnosis, there is a detailed description of Peru's educational situation based on the quantitative indicators related to each Dakar objective. The six objectives relate to "achieving quality educational service," "guaranteeing equity in education," "expanding and improving protection of the pregnant mothers and comprehensive care—nutrition, health and education—for girls and boys from fertilization forward," "ensuring that all girls and boys... complete free primary education of good quality," "providing comprehensive secondary education of good quality," and "promoting the equitable access to basic education of good quality for all young people and adults" (p. 16). A strategic framework and action plan was prepared using the diagnosis. They have two primary lines of action: sensitization, aimed at "promoting the public and political debate on educational problems and the policies that aim for educational quality with equity" (p. 19); and monitoring of the policies, targeted mainly at promoting an active role for civil society representatives in monitoring the Plan. The indicators related to achievement of the Plan should be produced by various public agencies and published on the Internet or in the Plan's publications. In order to facilitate the monitoring process, the Plan includes a matrix that summarizes the objectives and outcome indicators. Furthermore, the Plan was developed in a manner that was consistent with other related documents, such as the commitments assumed within the framework of the National Agreement, the Action Plan for Childhood and Adolescence, the Plan for Equality of Opportunities and the General Education Law approved in 2003. It represents without a doubt a document that does not have antecedents in Peru in terms of the participatory process with which it was developed and the concrete commitments assumed by the State for improving Peruvian education.

f. Uruguay: Participation in the PISA Program

Uruguay did not participate in the first PISA evaluation, but it did participate in the second one (2003). Perhaps more than the other countries participating in this evaluation, Uruguay has sustained a program for analyzing and publishing its results that has published 8 reports to date in less than a year following the release of the data. The ANEP Director-General of Research and Evaluation has prepared these reports.⁴⁴ As will be recalled, PISA measures the literacy level of fifteen-year-old students enrolled in school in reading comprehension, science and mathematics. The first national report explains in detail what PISA measures⁴⁵ and provides information on Uruguay's results in the context of other Latin American countries and of the comparable OECD population. It also analyzes the situation within the country, showing in particular the differences according to the grade reached by the fifteen-year-old student. Finally, it compares the achievement of students in different

⁴⁴ See reports at http://www.anep.edu.uy/gerenciagrl/ger_inv_eva/pisa/publicaciones.htm.

⁴⁵ This is expanded on in three reports, one for each area evaluated, which are available at the same web portal.

programs. These analyses take into account context variables such as educational investment, teacher salaries, socioeconomic differences and differences in achievement within each country.

As was mentioned before, PISA surveys were administered to teachers and students, which proved to be very useful in interpreting the achievement data. Thus, report No. 1 discusses the condition of Uruguayan professors in the international context. No. 2 addresses the condition of the educational centers' infrastructure and equipment (includes information on the annual number of class hours). No. 3 discusses the educational policy alternatives with regard to the impact of socio-cultural contexts on learning. No. 4 examines the educational climate in its secondary education centers. No. 6 (5 is not available on the web portal) analyzes the mathematics contents of the PISA evaluation and the contents of the curricula in Uruguay. No. 7 studies the implications for educational policy of Uruguayan students' results on the PISA tests. Finally, No. 8 is dedicated to the cognitive processes in the evaluation of the PISA mathematics culture. In addition to the publications, the reports have been presented and discussed at numerous meetings with teachers, directors and others. Based on these publications and its experience in analyzing and disseminating the national tests, Uruguay is without a doubt an example of interest with regard to the development of a culture of evaluation that uses data from educational achievement tests. In any event, it should be noted that the experience is recent and that the impact these publications could have on the definition of policies has not been established.