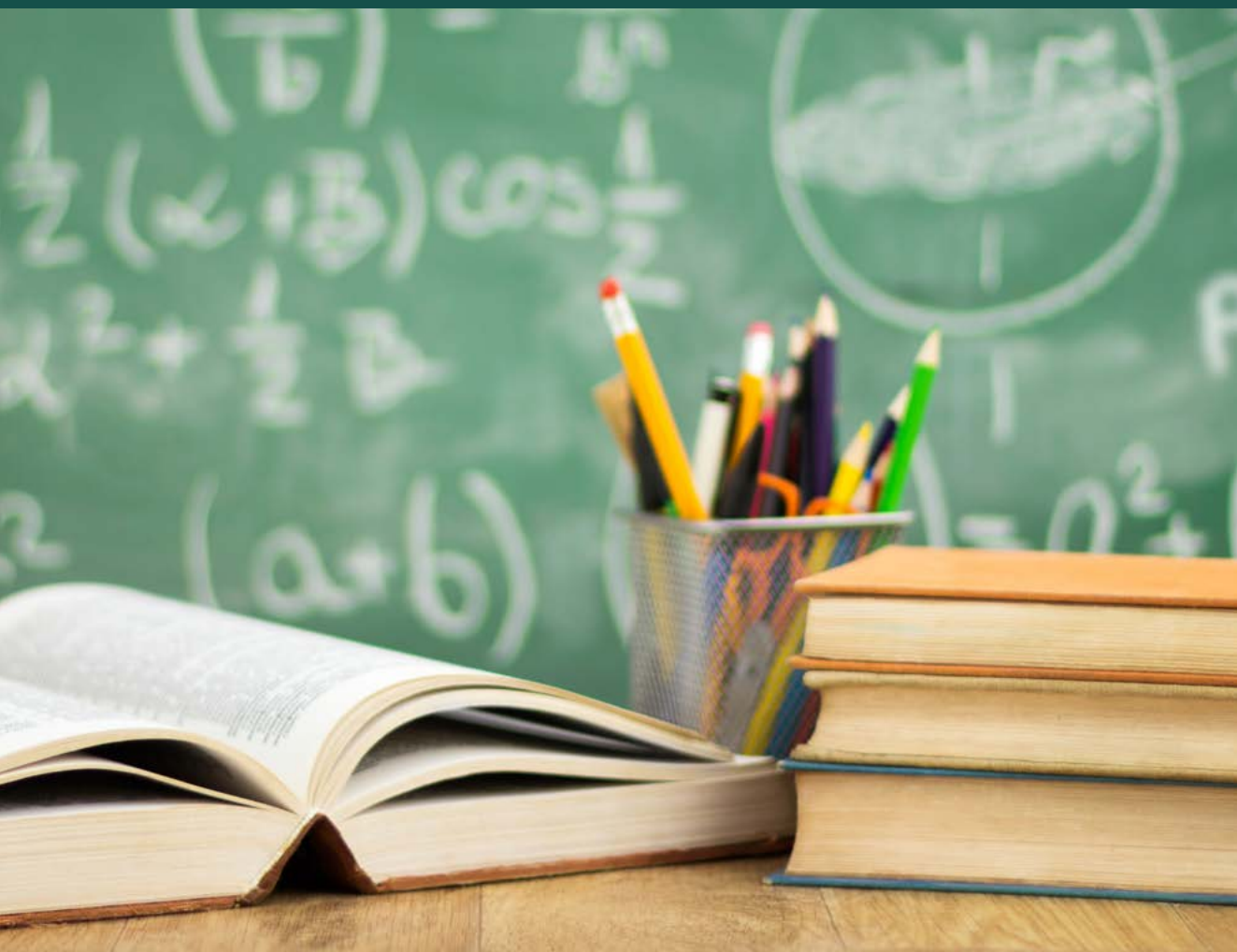


OLACEFS

ORGANIZATION OF LATIN AMERICAN CARIBBEAN  
SUPREME AUDIT INSTITUTIONS



# COORDINATED AUDIT ON EDUCATION INDICATORS

Latin America

## Juan Manuel Portal

Head of the SAI Mexico (Auditoría Superior de la Federación de México)

President of OLACEFS

## Jorge Bermúdez Soto

Head of the SAI Chile (Contraloría General de la República de Chile)

Executive Secretariat of OLACEFS

## Aroldo Cedraz de Oliveira

Chairman of the OLACEFS Capacity Building Committee (CCC)

## Membros do Conselho Diretivo

SAI Mexico - Presidency

SAI Chile - Headquarters and Executive Secretariat

SAI Paraguay

SAI Peru

SAI Dominican Republic

SAI El Salvador

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Organization of Latin American and Caribbean Supreme Audit Institutions

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Joint work with the participation of eleven Supreme Audit Institutions (SAIs) from the following OLACEFS member countries: Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Honduras, Mexico, Panama and Dominican Republic.

1. Education – Latin America. 2. Education – statistics – Latin America. I. Millennium Development Goals (MDGs). II. Education for All Program. III. Title.



# PRESENTATION

Dear reader:

It is with great satisfaction that we present the results of the coordinated audit on the generation of educational statistics within the ambit of the Organization of Latin American and Caribbean Supreme Audit Institutions (OLACEFS). The audit was coordinated by Brazil's Court of Accounts, the *Tribunal de Contas da União (TCU)*.

The subject relates to the data and indicators generated by those administrative units responsible for the statistics used for monitoring the education system in each country.

Eleven OLACEFS member SAIs participated in this joint task: Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Honduras, Mexico, Panama and the Dominican Republic.

Technical teams from the SAIs assessed the degree to which international best practices had been adopted by the agencies responsible for educational statistics, and the capacity of these agencies to produce data and information for monitoring the education systems of each nation and delivering data and indicators to international organizations for comparative studies.

A progress update will also be included in Goal 2 of the Millennium Development Goals (MDGs) and on the goals of UNESCO's Dakar Framework for Action on Education for All (2015).

The findings of the Coordinated Audit give an overview of the public institutions evaluated by participating SAIs as well as outlining the main challenges for improving processes for generating educational statistics in participating countries.

It is important to highlight that by promoting joint evaluations SAIs are fostering compliance with international agreements and, in this case, advancing improvements in the generation of educational statistics.

In conclusion, although the coordinated audit focuses on the period over which the Millennium Development Goals (2001-2015) were pursued,

the methodology used can be replicated to assess the administrative units producing data and indicators relating to the Sustainable Development Goals of the 2030 Agenda.

We thank the participating SAIs for their collaboration and offer our congratulations.

**CPC. Juan M. Portal**

Head of the SAI Mexico  
President of OLACEFS

**Aroldo Cedraz de Oliveira**

Head of the SAI Brazil  
SAI Coordinator



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## SUMMARY

This executive summary presents the findings of performance audits on generating education statistics, conducted by 11 Latin American Supreme Audit Institutions (SAIs) - Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Honduras, Mexico, Panama and the Dominican Republic. The project stems from the time when the Federal Court of Accounts of Brazil (TCU) was president of the Organization of Latin American and Caribbean Supreme Audit Institutions (OLACEFS), and their initiative to encourage coordinated audits amongst member SAIs.

It deals with the production of education statistics and takes into account the need to monitor and follow objectives and targets set nationally as well as the international commitments taken on by United Nations member countries.

Therefore, we assessed aspects relating to the adoption of best practices by the administrative units responsible for producing statistics on education, as well as the capacity to generate the indicators necessary for monitoring both national plans and commitments to the UN and UNESCO. We also assessed the behavior of indicators of the education goals achieved by participating countries in the context of the Millennium Development Goals and the Education for All Program over the period 2001-2015.

In terms of good practices it was concluded that of the twelve administrative units audited, two showed low adherence to practices recommended by the Statistical Office of the European Union (EUROSTAT), four showed medium adherence and six, high adherence.

In general, the countries possess systems for producing statistics, which are able to create the indicators necessary for monitoring the goals of national education plans, as well as the objectives, targets and indicators for international commitments, such as the UN's Millennium Development Goal for education and the targets of UNESCO's Education for All Program (Dakar Framework 2001-2015).

Finally, we found that data collection occurs at appropriate intervals for monitoring of education systems (generally every year). Almost all participating countries had made progress between 2001 and 2015 in terms of meeting goals set as part of international commitments aimed at increasing the rate of student inclusion in the education system, reducing illiteracy of the general population and promoting gender equality. However, indicators for measuring the quality of education systems still need improvement.



## BACKGROUND

Universal access to primary education, meeting the learning needs of youth and adults, improving adult literacy, fostering gender equality and improving the quality of education services are all targets that correspond to important commitments to the UN assumed by the eleven countries participating in the coordinated audit. Among them we highlight the Millennium Development Goals (MDGs) and the Education for All Program (EFA). Among the activities agreed upon, governments have committed to monitor systematically the progress in achieving the objectives and goals assumed.

To this end, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Economic Co-operation and Development (OECD) and the Statistical Office of the European Union (EUROSTAT) systematically collect administrative data in order to calculate education indicators and compare various aspects of education in different countries.

The World Education Forum, held in Dakar, Senegal in 2000, highlighted the importance of education statistics. In the text approved by the Forum and published by UNESCO – the part that deals with the Dakar Framework for Action - one of the goals set out to achieve the objectives of the program was to “monitor systematically progress towards EFA goals and strategies at regional, national and international levels “.

The importance of official statistics, not only in the field of education, had been highlighted many years before the World Education Forum in Dakar. In order to ensure that national statistical systems were able to produce adequate and reliable data in line with professional and scientific standards, in 1992 the Conference of European Statisticians developed and adopted the Fundamental Principles of Official Statistics.

In 1994, the United Nations Statistical Commission adopted the same principles. In 2013, the foreword of the document containing the principles was revised and the principles reaffirmed.

Subsequently, national statistical institutes developed standards, protocols and codes of good practice as instruments to implement the principles considered fundamental for carrying out statistical activities.



In 2001, EUROSTAT issued the Quality Declaration of the European Statistical System. The system's principles are based on the UN's official statistics principles, adapted to the European context. The Code of Good Practices adopted by EUROSTAT in 2005 was based around this declaration.

In 2007, the Statistical Conference of the Americas (SCA), held by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) recommended that countries in the region should promote awareness and discussion of the European Statistics Code of Practice with a view to adapting it to the reality of each country, and requested that EUROSTAT and ECLAC prepare an action plan to do this.

In November 2011, the final proposal for the Regional Code of Good Practice in Statistics for Latin America and the Caribbean was presented and approved at the Sixth Meeting of ECLAC's Statistical Conference of the Americas, signed in Bávaro, in the Dominican Republic

The European Statistics Code of Practice, based on the principles set by the UN, was used as a benchmark for editing the Regional Code of Good Practice in Statistics for Latin America and the Caribbean.

This confirms the importance of nations both setting goals and targets and of building capacity for scrutinizing, the data and the indicators needed to monitor national plans and international commitments.

Given that the production of official statistics is essential and inseparable from the processes of managing education policies and that it is an oversight object of common interests to its member countries, it became a priority topic for performing a coordinated audit within the scope of OLACEFS.

## WHAT DID THE SAIS EVALUATE?

The audit aimed to evaluate three points:

- 1) The adoption of international good practices by administrative units responsible for generating educational statistics;
- 2) The capacity to produce statistics to monitor the education systems in each country; the delivery of data and indicators to international organizations; whether the above activities are conducted in a timely manner; how the data and indicators are reported and disseminated;
- 3) The progress of countries regarding Goal 2 of the Millennium Development Goals (MDGs) and the targets of UNESCO's Dakar Framework of Action on Education for All (EFA).

## HOW WAS THE WORK CARRIED OUT?

The first audit issue was to assess whether the practices adopted by the units responsible for the production of education statistics were in line with those recommended by international statistical institutions, in particular the principles defined by the EUROSTAT.

The European Statistics Code of Practice is made up of 15 principles and 82 indicators. The indicators refer to the practices recommended to assess whether the principles are being followed. The principles and indicators are divided into three areas - institutional framework (principles 1 to 6); statistical production processes (principles 7 to 10) and statistical results (principles 11 to 15), as shown in Table 1:

**Table 1 - Principles of the European Statistics Code of Practice**

Institutional Framework	Statistical Production Processes
1. Professional independence 2. Mandate for data collection 3. Adequacy of resources 4. Commitment to quality 5. Statistical confidentiality 6. Impartiality and Objectivity	7. Sound methodology 8. Appropriate statistical procedures 9. Non-excessive burden on respondents 10. Efficient use of resources
	Statistical Results
	11. Relevance 12. Accuracy and Reliability 13. Timeliness and Punctuality 14. Coherence and Comparability 15. Accessibility and Clarity

Source: European Statistics Code of Practice

A document supporting the code - “Quality Assurance Framework of the European Statistical System” (QAF) – was produced to help implement the practices. It sets out activities, methods and tools for facilitating compliance with the established indicators.

The European Statistical System (ESS) prepared a peer review to be applied in national statistical offices in order to assess the implementation of the European Statistics Code of Practice. The procedure involves applying a self-assessment questionnaire with open and closed questions that cover all the principles and indicators. It is designed to assess whether the statistics are developed, produced and disseminated in accordance with the statistical principles set out in the code.

There are three answer options for the closed questions - “not implemented”, “partially implemented” and “fully implemented” - and the open question has a space for comments.

Given the need to evaluate the practices adopted for producing statistics in the countries participating in this project, the questionnaire was considered an appropriate parameter for assessing national statistical offices. Also, there were no similar documents found that referenced other codes of good practice, for example the Regional Code of Good Practice of Statistics in Latin America and the Caribbean.

However, the questionnaire is very extensive and due to the time limit of this project, it would be impossible to apply it in full. Thus, as part of the planning workshop of the coordinated audit, participants from all the countries involved held discussions aimed at adapting the questionnaire to the particularities of the project.

As a result of the discussions, the data collection tool was trimmed maintaining questions on all fifteen principles. The final document had 119 closed questions, divided into thematic blocks - “institutional framework” with 49 questions; “statistical production processes” with 25 questions; “statistical results” with 44 questions.

For better visualization of the degree of adoption of selected practices, a points system was assigned to the questionnaire answers, with 0 (zero) assigned to the answer “not implemented”, one (1) point to the answer “partially implemented” and 2 (two) points to the answer “fully implemented”. Scores for each principle awarded to the administrative units responsible for education statistics were calculated by adding the points earned and dividing this by the total possible score (238 points).

The second audit issue was to assess the capability of these administrative units to produce the data and indicators necessary for monitoring plans and commitments to international and national organizations, in particular Goal 2 of the Millennium Development Goals and the six goals of UNESCO’s Dakar Framework for Action on Education for All. There were also questions on deadlines, the historical comparability of indicators, disaggregation levels, methods of reporting and dissemination, delivery to international organizations and approval of results.

The third audit issue was to assess the evolution of the indicators used in order to monitor targets for the period 2001-2015 and to see to what extent countries had succeeded in achieving the objectives to which they had committed in relation to MDG Goal 2 and the six Education for All targets.

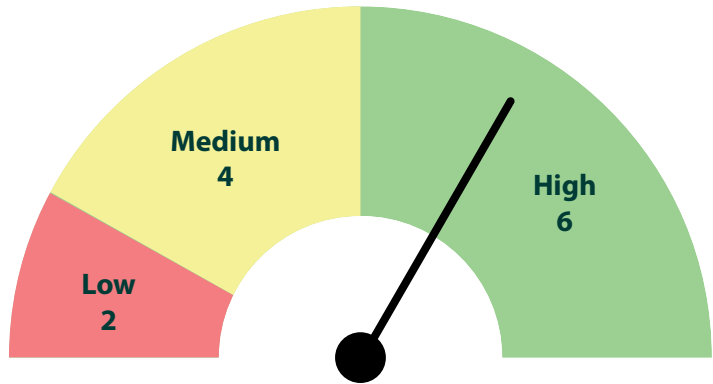
Each SAI was responsible for writing their national reports and tailoring them to the context of each country. For the purposes of consolidating the findings of the coordinated audit, each participating SAI answered a standard questionnaire prepared by Brazil’s SAI, which was responsible for consolidating the results in this executive summary.

With a view to publishing the summary, information supplied by 10 SAIs was included in the consolidation. In addition, the SAIs of Chile and Panama submitted conclusions regarding two administrative units responsible for the production of education statistics. Therefore, in the next chapter we present the results of twelve administrative units, and in the other chapters those of ten countries. In the audit planning workshop, SAIs agreed that the identity of countries would not be revealed in this consolidation.

# PRACTICES ADOPTED IN RELATION TO THE EUROSTAT PRINCIPLES

The twelve units responsible for producing audited education statistics, in ten Latin American countries, show different levels of adherence to EUROSTAT recommended practices. Based on the results of the audits the conclusion was that two units have a low degree of adherence to the practices, while four were classified as medium and six had a high level of adherence (Graph 1):

**Graph 1 - Degree of adherence of education statistical units to EUROSTAT practices**



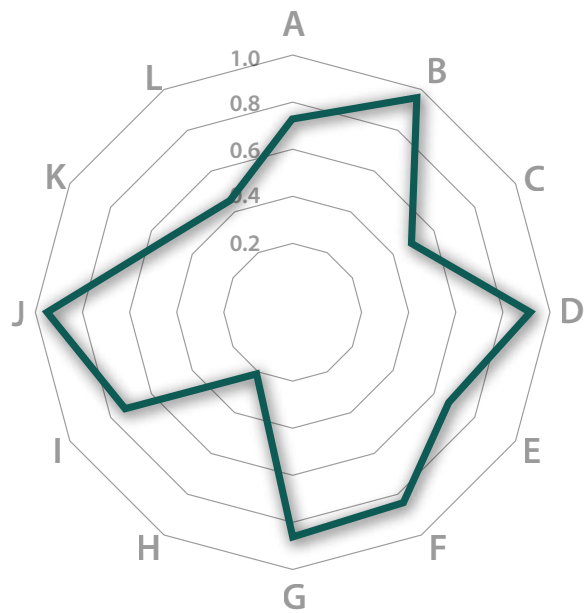
Source: Internal, based on information gathered by SAIs.

## Institutional Framework

With regard to the principles relating to the institutional framework, the European Statistics Code of Practice notes that institutional and organizational factors have a significant influence on the efficiency and credibility of the authorities that develop, produce and disseminate statistics. Principles relating to the institutional framework are professional independence, mandate for data collection, and adequacy of resources, quality commitment, statistical confidentiality and impartiality and objectivity of statistical information.

Graph 2 presents the summarized results of the Institutional Framework area of the twelve audited administrative units responsible for education statistics, showing significant variations among them. The scale of 0 to 1.0 represents the degree of adherence of the unit to the area of principles, 0 being non-adherence and 1.0, full adherence.

**Graph 2 - Results relating to the Institutional Framework**



Source: Brazilian SAI, based on data submitted by participating SAIs.

In Table 2, consolidated results are presented for each principle relating to the Institutional Framework.

**Table 2 - Consolidated results for institutional framework, by principle**

Principles	A	B	C	D	E	F	G	H	I	J	K	L
Professional Independence	0.75	1.00	0.31	0.79	1.00	1.00	0.94	0.44	0.88	0.94	0.88	0.50
Mandate for Data Collection	0.60	1.00	0.40	1.00	1.00	1.00	0.90	1.00	0.80	1.00	0.90	1.00
Adequacy of Resources	0.50	1.00	0.00	1.00	1.00	0.50	1.00	0.00	0.50	0.50	0.50	0.50
Commitment to Quality	0.71	1.00	0.50	0.96	0.61	0.86	0.79	0.00	0.54	0.93	0.14	0.18
Statistical Confidentiality	0.70	1.00	0.85	0.94	0.90	0.70	0.85	0.10	0.80	0.90	0.70	0.30
Impartiality and Objectivity	0.91	0.91	0.50	0.94	0.18	0.82	0.91	0.09	0.86	0.95	0.59	0.50
<b>Institutional Framework</b>	<b>0.74</b>	<b>0.98</b>	<b>0.52</b>	<b>0.93</b>	<b>0.68</b>	<b>0.85</b>	<b>0.87</b>	<b>0.21</b>	<b>0.74</b>	<b>0.93</b>	<b>0.56</b>	<b>0.42</b>

In the sample of twelve audited statistical units, the existence of a mandate for data collection and statistical confidentiality are the most consolidated principles according to the responses obtained through the questionnaire. Meanwhile, of the twelve statistical units, eight (67%) had an average or low degree of adherence to the adequacy of resources principle and five (41%) to the commitment to quality principle with a score of less than 0.66.

Resources made available to the statistical unit should be sufficient to cover the needs of, and make viable, the production of statistics. The low score for this principle relates to insufficient human, financial and computer resources and/or a lack of procedures to assess and justify the need for new statistics, given their cost.

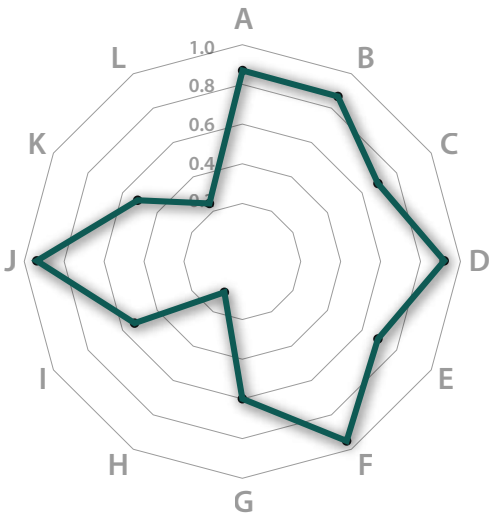
Low adherence to a commitment to quality affects the process of collecting, processing and disseminating statistics. The low score obtained here is related to shortcomings in the detailed planning of new and ongoing statistical operations and regular monitoring of statistical products generated, plus an absence of quality manuals and/or inadequate training of the personnel involved in the statistical production process.

## Statistical Production Processes

The Code of Good Practice of European Statistics notes that the processes used by the statistical authorities to organize, collect, process and disseminate official statistics must strictly comply with the standards, guidelines, and good European and international practices, and the credibility of the statistics is enhanced by the image of good management and efficiency. The principles relating to statistical processes are sound methodology, appropriate statistical procedures, non-excessive burden on respondents and efficient use of resources.

Graph 3 presents the summarized results of the Institutional Framework area of the twelve audited administrative units responsible for education statistics. The scale of 0 to 1.0 represents the degree of adherence of the unit to the area of principles, 0 being non-adherence and 1.0, full adherence.

**Graph 3 - Results relating to the Statistical Production Process**



Source: Brazilian SAI, based on data submitted by participating SAIs.



In Table 3, consolidated results are presented for each principle relating to the Statistical Production area.

**Table 3 - Consolidated results for Statistical Production Process, by Principle**

Principles	A	B	C	D	E	F	G	H	I	J	K	L
Sound Methodology	0.95	1.00	0.80	1.00	0.95	0.95	0.95	0.10	0.70	0.95	0.50	0.10
Appropriate Statistical Procedures	0.94	0.63	0.69	0.93	0.50	1.00	0.19	0.19	0.44	0.94	0.31	0.38
Non-excessive Burden on Respondents	0.67	1.00	0.67	0.50	1.00	1.00	0.33	0.00	0.50	0.67	0.67	0.00
Efficient Use of Resources	0.75	1.00	0.50	1.00	0.38	0.75	0.75	0.00	0.50	1.00	0.63	0.50
<b>Statistical Production Processes</b>	<b>0.88</b>	<b>0.88</b>	<b>0.70</b>	<b>0.93</b>	<b>0.72</b>	<b>0.94</b>	<b>0.60</b>	<b>0.10</b>	<b>0.56</b>	<b>0.92</b>	<b>0.48</b>	<b>0.24</b>

In the sample of twelve audited statistical units, the attribute with the best average score on the questionnaire relates to consistency and the methodological framework of the statistics produced, considered satisfactory in nine units (75% of the sample), of which seven obtained a rating higher than 0.9. In spite of the sound methodology used by the majority of the statistical units surveyed, the analysis by the SAIs picked up an opportunity for improvement in procedures, from the collection of data to its validation, given that six units (50%) reported an average or low degree of adherence to this principle, with a rating of less than 0.66.

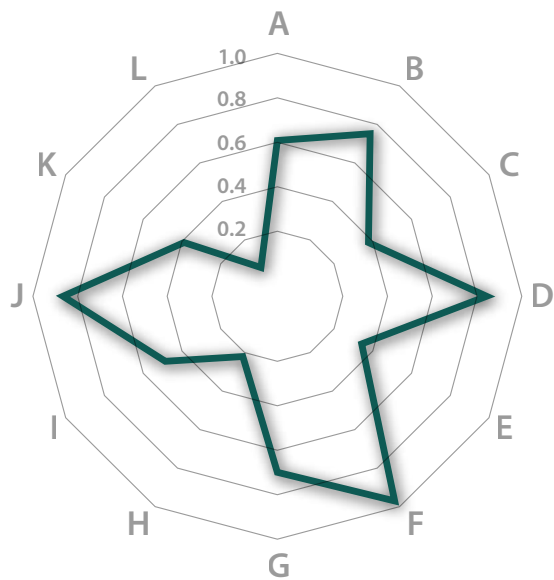
Of the other two attributes analyzed - though to a lesser degree - the SAIs also saw an opportunity for improvement in five (42%) of the twelve audited statistical units, both in terms of monitoring and reducing the data collection burden of respondents, as well as optimizing resources allocated to the units' routine administrative operations.

## Statistical Results

The European Statistics Code of Practice notes that available statistics must meet the needs of users, comply with European quality standards and serve the needs of European institutions, governments, research institutions, companies and the public. The principles relating to the statistical results are relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, and accessibility and clarity.

Graph 4 shows the summarized results of the Statistical Results area of the twelve audited administrative units responsible for education statistics. The scale of 0 to 1.0 represents the degree of adherence of the unit to the area of principles, 0 being non-adherence and 1.0, full adherence.

**Graph 4 - Results relating to the Statistical Results**



Source: Brazilian SAI, based on data submitted by participating SAIs.

In Table 4, consolidated results are presented for each principle relating to the Statistical Production area.

**Table 4 - Consolidated results of the Statistical Results, by principle**

Principles	A	B	C	D	E	F	G	H	I	J	K	L
Relevance - for users	0.63	0.75	0.31	1.00	0.19	1.00	0.75	0.19	0.63	0.75	0.00	0.13
Accuracy and Reliability	0.92	1.00	0.67	0.63	0.75	1.00	1.00	0.42	0.25	0.50	0.75	0.25
Timeliness and Punctuality	0.42	0.75	0.00	0.75	0.33	1.00	0.33	0.00	0.00	1.00	0.42	0.08
Coherence and Comparability	0.83	1.00	0.83	0.83	0.67	1.00	1.00	0.50	1.00	0.50	0.67	0.50
Accessibility and Clarity	0.55	0.68	0.39	0.86	0.27	0.93	0.64	0.23	0.59	0.93	0.41	0.07
<b>Statistical Results</b>	<b>0.61</b>	<b>0.77</b>	<b>0.39</b>	<b>0.85</b>	<b>0.36</b>	<b>0.97</b>	<b>0.69</b>	<b>0.23</b>	<b>0.50</b>	<b>0.82</b>	<b>0.40</b>	<b>0.13</b>

In the sample of twelve audited statistical units, attributes relating to accuracy, reliability, consistency and comparability of the statistics produced obtained the best average score on the questionnaire. In nine (75%) of the twelve audited units, the scores obtained indicate there are coherent and compatible statistics over a reasonable period, with seven units achieving a rating greater than 0.8. In eight (67%) of the twelve audited units, the SAIs had a high degree of adherence to the principle of accuracy and reliability, i.e. procedures are in place to reduce the risk of statistics not portraying reality.

The principles of timeliness and punctuality emphasize the need to define and comply with release schedules for statistics. They received the worst scores of the five principles in the statistical results area. Eight units (67%) had a low degree of adherence to this principle with a score equal to or less than 0.4.

Although the EUROSTAT Code of Conduct does not govern the countries participating in the coordinated audit, the principles provide a benchmark to identify opportunities for improvement in the production of education statistics. The analysis of adherence to international best practices by official statistical agencies was one of the structural components of this coordinated audit.

## MONITORING INTERNATIONAL COMMITMENTS

The essence of the six goals set by the Education for All Program (in effect from 2001 - 2015) was to achieve universal access to primary education, promote gender equality and improve the quality of educational services.

**Goal 1** – Education and early childhood care. Expand and improve early childhood care and education, especially for the most vulnerable and disadvantaged children;

**Goal 2** – The universalization of primary education. Ensure that all children - particularly girls and children in difficult circumstances - have access to free and compulsory primary education of good quality. **This goal coincides with Goal 2 of the MDGs;**

**Goal 3** – Need for youth and adult learning. Ensure that the learning needs of all young people and adults are met through equitable access to learning, life-skills and training programs;

**Goal 4** – Adult literacy. Achieve a 50% improvement in levels of adult literacy, especially for women, and equitable access to basic and continuing education for all adults;

**Goal 5** – Gender parity and gender equality. Eliminate gender disparities in primary and secondary education and achieve gender equality in education with a focus on ensuring that girls have full and equal access to good quality basic education as well as good performance.

**Goal 6** – Quality of education. Improve all aspects of the quality of education and ensure excellence of all so that everyone may achieve recognized and measurable learning outcomes, especially in literacy, numeracy and essential life skills.

The eleven countries participating in the coordinated audit are signatories to these commitments, agreed before the United Nations (UN) and incorporated in the Dakar Framework for Action. In Article 8 of the Framework, the governments pledged to monitor progress in achieving the EFA goals systematically.

This is the focus of the second issue of the coordinated audit. The audit team of each SAI had to verify whether the units responsible for the production of education statistics are generating and releasing data and indicators to measure progress on meeting EFA goals in their respective countries.

The work covered the first four levels of the International Standard Classification of Education (ISCED). This provided a reference classification, which facilitated the organization of educational programs - along with their respective certifications by level and field of study - in such a way that they are universally valid and applicable to the range of educational systems. The levels are as follows:

- a) ISCED 0 - early childhood education.** For children below the official age for admission to primary education (ISCED 1). Aims to develop linguistic, physical and emotional skills, allowing the child to expand their social interactions.
- b) ISCED 1 - primary education.** Aims to promote basic skills in reading, writing and mathematics, as well as create a basis for learning other subjects such as history, geography, science, music and art.
- c) ISCED 2 - lower secondary education.** Aims to encourage students to develop a wide range of subjects and prepare children and youth for more specialized studies in upper secondary education and more advanced levels.
- d) ISCED 3 - upper secondary education.** At this level, programs are more specialized, complex and in-depth than those offered in lower secondary education, providing the student with a wider range of options for continuing studies.

## Evaluation of indicators to show progress on EFA in each country

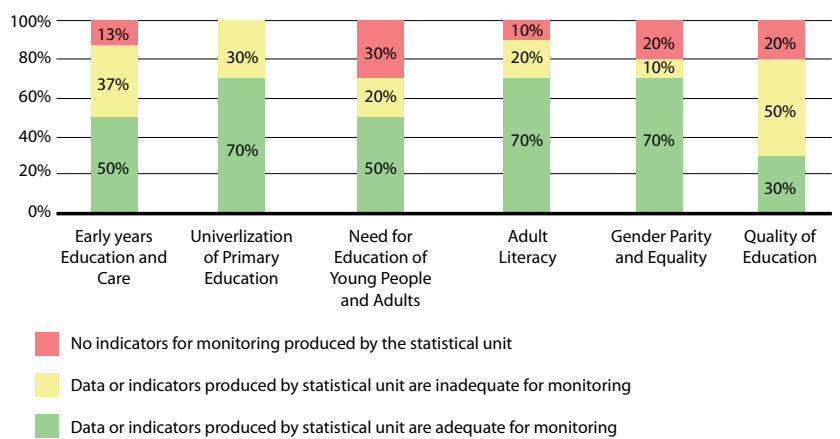
The United Nations Educational, Scientific and Cultural Organization (UNESCO) defined some eighty indicators associated with the EFA goals. Audit teams used this set of indicators as a reference at the work-planning workshop where they chose, by mutual agreement, ten indicators for verification purposes in the units responsible for education statistics in their countries.

The consolidated results in Graph 5 place the units responsible for education statistics, in relation to the level of maturity in the monitoring of the selected indicators, into one of two large groups:

- a) Satisfactory level of maturity. Six of the ten participating countries fell under this group, based on the findings of the audit teams from the consolidation form. These countries had sufficient data to monitor the selected indicators for all or of most of the EFA goals;

b) Unsatisfactory level of maturity. Four of the ten participating countries fell under this group, based on the findings of the audit teams from the consolidation form. These countries had no, or insufficient data to monitor the selected indicators for all or of most of the EFA goals.

**Graph 5 - Production of data and indicators for monitoring EFA goals**



Source: Consolidation form filled in by teams from the SAls participating in the audit.  
 Note: Analysis of indicators relating to Goal 1 (early childhood) was optional in the planning matrix. The table is made up from the following sample: feedback from eight SAls for Goal 1 and ten SAls for the other goals

Of the eight teams that analyzed Goal 1, four (50%) stated that the data produced by the statistical unit was not sufficient to monitor the indicators associated with the enrolment rate and the percentage of teachers with academic training required to teach at this level. Unlike the other goals, the focus of Goal 1 was defined as optional in the planning matrix, so the number of observations is lower.

For EFA Goal 2, which deals with universal access of children to primary education, the selected indicator was the net enrolment rate by gender. This indicator is a refinement of the gross enrolment rate, calculated using only persons of an appropriate age to attend primary school in its numerator. Of the 10 SAls who analyzed this indicator, three (30%) certified that the data produced by the statistical unit was not sufficient to monitor it. A broader view of this goal should take into account not only the fact that the child is at school, but also aspects such as passing the school year and proficiency, i.e., that they have succeeded in concluding

that level within the expected term and have acquired basic knowledge and initial key skills.

For Goal 3 it is difficult to define and monitor a quantitative level to be achieved. Furthermore, there is a lack of common understanding that learning activities should be included. Bearing in mind the indicators proposed by UNESCO to monitor this goal, the literacy rate of youth and adults between 15 and 24 years of age, by gender, was chosen as the measure for verification, exposing a clear gender issue. The absence or insufficiency of data for monitoring this indicator was certified by five (50%) of the ten SAIs who addressed this goal.

Goal 4 targets adults who do not have the basic skills to read, write and do simple arithmetic. Three indicators were chosen for the verification of this goal, namely: literacy rate of youth and adults (15 or older) by gender; proportion of youth and adults according to level of education, and by gender; and the completion rate of adult literacy programs and basic education by type of program and gender. The absence or insufficiency of data for monitoring this indicator was verified by three (30%) of the ten SAIs who addressed this goal.

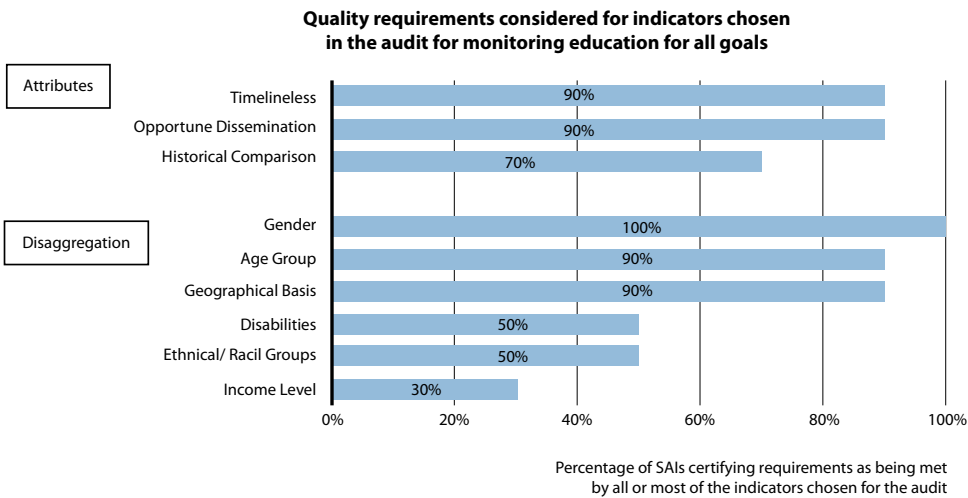
The inclusion of Goal 5 in EFA was motivated by a UNESCO study showing that in 2000 approximately 60% of the school-age population without access to primary school were girls. Thus, seeking gender parity and equality in primary and secondary education became an explicit part of the Dakar Framework. The indicator chosen for verification was women enrolled as a percentage of total enrollment by level of education. The absence or insufficiency of data for monitoring this indicator was verified by three (30%) of the ten SAIs who addressed this goal.

Finally, Goal 6 deals with factors that affect the results of student learning, in particular the issue of teachers, reflected in the ratio of students per teacher, the working conditions of teachers, the training and qualifications of teachers and their recruitment. The two indicators selected for verification by the audit teams were number and percentage breakdown of teachers by academic qualifications, by level of education, and by sex; and the ratio of students to teachers, by level of education. The absence or insufficiency of data for monitoring this indicator was certified by seven (70%) of the ten SAIs who addressed this goal, making it the most in need of attention in terms of monitoring.

## Attention to desired quality requirements in evaluating quality indicators

For issue 2, the regularity of data production, the historical comparability of results and the possibility of disaggregation of the indicators was also addressed, in order to properly reflect the most relevant socioeconomic dimensions of each country, as well as examples of cuts based on geography, specific groups of the population, income, etc. The analysis focused on the portfolio of the eleven indicators described in the previous section. The consolidated results are detailed in Graph 6.

**Graph 6 - Situation of data and indicators produced for monitoring EFA goals, as per desired quality requirements**



Source: Consolidation form filled in by teams from the SAs participating in the audit.

The opportune dissemination of indicators and their being up-to-date are dimensions related to the frequency of calculation of the indicator and its availability. Indicators with calculation discrepancies can conceal important seasonal variations, not being readily available when decisions are made. Compliance of these qualities by all or by the majority of the eleven pre-selected indicators was verified by nine out of the ten (90%) of the SAs that are part of the consolidation of audit results.

The historical comparison of the results, which allows comparisons of all or most of the eleven shortlisted indicators over time, was reported as being complied with by seven of the ten SAs.



An interest in the disaggregation of education indicators in order to understand the nuances of gender inequality (indices disaggregated by gender) is evident in EFA goals and is a recurrent concern of UNESCO. All teams confirmed compliance with this instruction regarding monitoring of EFA goals by the statistical units of the respective countries.

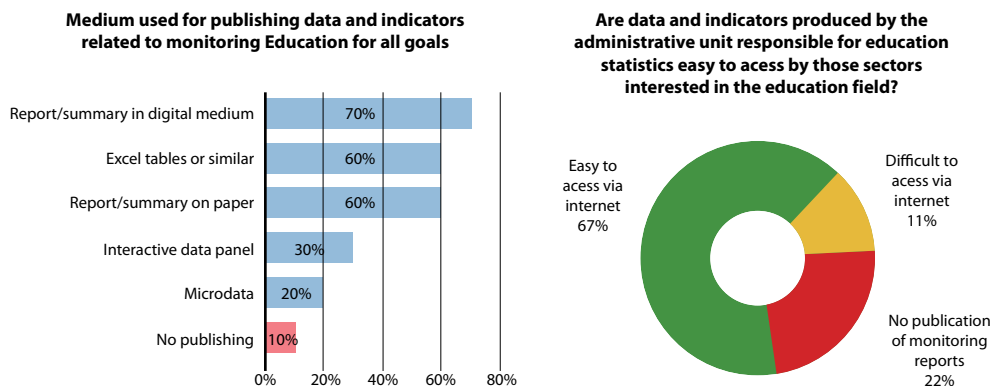
In addition to the issue of gender, disaggregated indicators for specific population groups according to their socioeconomic characteristics may reveal problems of equity in access to education, suggesting a need for targeted or affirmative education policies. Graph 6 shows that the number of statistical units producing disaggregated data for EFA monitoring is limited, considering disability, ethnicity/race and individuals' income levels.

The disaggregation of the chosen indicators in terms of geography allows for subnational units or smaller territories to be covered and can reveal significant variations in performance, for example within a region or state. We considered that nine of the ten SAIs that participated in the consolidation process complied with this point with regard to the selected indicators.

## **Publication of data and indicators**

When analyzing issue 2, we considered the publicity given to data and indicators produced to see if they are largely disseminated and of easy access by the social segments interested in the area of education. Only one of the SAIs participating in the consolidation reported that no information was published. In general, data is disseminated through reports or summaries, on paper or electronically. In most of the countries participating in the audit, the published indicators were easy to obtain through online consultation (Graph 7).

**Graph 7 - Publication and dissemination of data and indicators for monitoring EFA goals**



Source: Consolidation form filled in by teams from the SAls participating in the audit.

## Post 2015 Agenda - 2030 Education Framework for Action

In May 2015, the World Education Forum held in South Korea approved the Incheon Declaration to strengthen and expand the previous list of commitments to Education taken on by the international community by 2030. The guiding principles of the new agenda show a clear concern for quality education that is inclusive and equitable in terms of lifelong learning.

The opportunities for improvement in monitoring key indicators regarding progress of international commitments identified by SAls in this coordinated audit will be of significant support and a tool to encourage governments to improve their processes for generating education statistics. The contribution of SAls coincides with the provisions of Paragraph 18 of the Declaration of Incheon - the capacity of countries to develop national monitoring and evaluation systems to address and improve quality, levels of disaggregation and timeliness of reporting.



## RESULTS ACHIEVED IN THE PERIOD 2001-2015 (MDG/EFA)

The third audit issue attempted to verify the results obtained in each country between 2001-2015, vis-a-vis the Education for All (EFA) goals, which relate to early childhood care and education, universal primary education, development of skills of youth and adults, adult literacy, gender parity and equality and quality of education.

It should be noted that the aim of this publication is not to provide structured information on the indicators used by UNESCO in monitoring the Education for All program (an activity carried out by UNESCO itself and made available in annual reports monitoring EFA worldwide). Instead, the intention here is to present an overview of the results achieved so far by the various countries in relation to the objectives of this international commitment and to goal 2 of the Millennium Development Goals for universal primary education.

### **EFA Goal 1: Early childhood care and education**

EFA Goal 1 relates to early childhood care and education, specifically “expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children”.

An important indicator to assess care in this period of life is the infant mortality rate. One country reported a reduction in infant mortality from 27.4 (per thousand births) in 2000 to 15.3 in 2011.

Regarding the school attendance of children aged zero to five years, the same country reported that the rate of school/child care attendance increased from 10.6% in 2001 to 23.2% in 2013, for birth to three year olds, and 55% to 81.4% in the same period for four to five year olds. However, it was noted that despite the increase in attendance rates of these two age groups, the provision of childcare services for children from birth to three years old is still far from being universal and far from the goal set in the country’s national education plan.

Another country reported progress in both legal and administrative matters, having defined the legal and technical criteria for the provision

of care in early childhood and advances in recording enrollment, which shows an increasing trend in the number of students enrolled in preschool.

One country highlighted the existence of a national program for comprehensive care in early childhood and the creation of a national board in charge of it. The initiative seeks to include children in the education system, especially those who are most at risk of exclusion or are vulnerable. With the establishment of centers for early childhood care, children receive encouragement to develop physical, emotional and mental abilities.

## **EFA Goal 2 and MDG Goal 2: Universal Primary Education**

EFA Goal 2 relates to universal primary education and aims to “ensure that all children, particularly girls and children in difficult circumstances have access to, and complete, free and compulsory primary education of good quality”.

With regard to this objective, relatively few of the countries managed to achieve universality of education at this educational stage. However, most of the countries that failed to succeed in meeting the target made significant progress over the period 2000-2015, with the most recently released data showing that 90% of the population of this age group have access to the educational system.

The countries that submitted information on gender parity in this age group reported a balance between girls and boys in terms of access to education in early childhood.

One of the countries cited the passing of a general education law as an important factor for the improvement of its results. The law establishes the provision of free, quality education as a duty of the State. This measure can be found in the regulations of other countries.

Some countries outlined the care they provide to the population at this educational stage, such as vocational arts and sports initiation schools, enabling youth to receive basic education in parallel, combining their studies with art and sport. Another example is the existence of special schools with high social recognition and priority attention that cater to

youth with physical or mental constraints or behavioral disorders and improve their coexistence with society; and the existence of economic incentives such as the provision of teaching materials, books, computers that help increase coverage and retention of students.

### **EFA Goal 3: Education of Youth and Adults**

Youth and adult education youth is dealt with in EFA Goal 3, which aims to ensure “that the learning needs of all youth and adults are met through equitable access to appropriate learning and life-skills programs”.

With regard to this goal, one country reported that the rate of school attendance by fifteen to seventeen year olds had risen from 81.1% in 2001 to 84.3% in 2013. In spite of this increase, the figure is still a good deal below the 100% sought for this age group.

One country highlighted a significant increase in its literacy rate over the period, but the rate was already high, at 97.99% in 2004 rising to 98.24% in 2011.

Another country noted that the literacy rate amongst youth aged 15 to 24 is greater than 99%. School coverage for youth aged 12 to 16 is not satisfactory given that around 30% of this population is not enrolled in secondary education, even with the increase in the net rate at this school level from 51.6% in 2000 to 70.9% in 2015. Additionally, regarding secondary education in the same country, the dropout rate decreased from 11.2% in 2000 to 9.2% in 2015.

Also in the field of youth and adult education, there was a rise in enrollment for integrated professional education for youth, due primarily to government incentives.

Another country provided information on professional training for youth and adults, noting that there is coordination at national level to cater to this group. They also highlighted the existence of government programs for professional and continuous training. However, they underlined the challenge of intensifying efforts to increase the number of people over eighteen with basic or secondary education and the number of graduates in technical and occupational education.

Finally, another country also mentioned its schools for training youth to meet the demands of the local economy.

## **EFA Goal 4: Adult Literacy**

EFA Goal 4 refers to adult literacy with the aim of “achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults”.

The countries had improved in terms of adult literacy, although some have not met the target set. Only one country reported that it had achieved universal literacy.

Other countries have a high rate of literacy, with rates of 96.7% in 2011 in one of them, and above 97% in the same year for another. In the latter case, attainment of the proposed goal was highlighted, reporting that in 2000 the literacy rate of the population over fifteen was approximately 95%, while in 2011 it was 97.4%.

Other countries did not reach the proposed goal. One stated that between 2001 and 2015 there was a reduction in the illiteracy rate from 7.38% to 5.75%, beneath the target set. The same country highlighted the marked disparity between the illiteracy rate in urban and rural areas, being far higher in the latter.

Another country reported that the illiteracy rate amongst people of fifteen or more had fallen from 12.4% in 2001 to 8.5% in 2013, though failing to achieve the goal set. In this case, it was revealed that the population of this age group has a high rate of functional illiteracy. According to UNESCO, a person is functionally literate who “can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculations for his own and the community’s development.”.

## **EFA Goal 5: Gender Parity and Equality**

EFA Goal 5 is defined as follows: “Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality

in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality".

For this goal, there was significant convergence between countries, affirming the existence of gender parity and equality in educational levels. Variations in percentages between the enrollment of boys and youth of both genders, when apparent, were not significant.

One country reported that, in terms of gender parity and equality, there was a similar share of enrolment by boys and girls. This, taking into account gender distribution of the population in the respective age group, above all in the early grades where there was some disparity in older age groups with a prevalence of women amongst the population with higher schooling levels.

Another country stated that while national data indicated no gender disparity in educational levels, in 2014, at regional level, inequalities were observed when looking at students in urban and rural areas. In the case of the rural area, there was a higher percentage of male enrollment than female.

Another country noted that although there has been proven progress on this issue - for example with the creation of plans for equality and opportunities aimed at improving access and quality of education for women - there are still challenges such as bringing results amongst girls up to the level of boys in terms of knowledge in mathematics and science.

## **EFA Goal 6: Quality of education**

EFA Goal 6 deals with the quality of education and has the aim of "improving all aspects of the quality of education and ensuring the highest possible level of education, in order to achieve recognized and measurable learning outcomes, especially in reading, writing, arithmetic, and essential life skills".

The issue of quality is one of the most critical in most of the countries, demanding attention and government investment to improve the indices. However, there were positive points in the work undertaken.

Progress was noted in terms of the professionalization of teachers. One country pointed out that the percentage of teachers with a degree had increased from 86.3% in 2000 to 93.8% in 2015, regardless of study level. Another country noted that in 2014, 91% of public sector teachers had pedagogical training, while in the private sector this figure was 87%.

A big advance in one country was the increase in the percentage of teachers with higher education from 2000 to 2013, especially in the public sector, which rose from 45.9% to 80.1% over the period, compared with lower secondary education.

In general, the number of students per teacher decreased; a factor that can contribute to improved education. One country reported that between 2000 and 2015, in preschool and primary education there was a reduction from 20 and 26 students per teacher, respectively, to 15 in both cases. Whilst in secondary education, the 19 students per teacher fell to 14 over the same period.

There were other aspects identified as advances in the quality of education. One of the countries highlighted the new policies aimed at improving the quality of teaching, specifically the creation of a national system for the quality of education and institutes for quality management. There was also mention of a regulation providing administrative and economic improvements aimed at fostering teacher performance.

Another country highlighted investment in pilot schools through the provision of technology and equipment to improve teaching, such as language, computer science and robotics labs, and the development of a program to build model schools of excellence.

However, despite the progress reported, the issue of education quality deserves special attention from local governments, particularly regarding the need to improve the performance of students in national and international tests and to overcome inequalities of student performance in the public and private sectors, urban and rural areas and richer and poorer regions.





## CONCLUSION

Setting educational goals to be pursued by countries, and monitoring them, is an important mechanism adopted by international organizations such as the UN and UNESCO in order to promote improvements in the education systems of member countries. Furthermore, the development of statistical systems in these countries is essential to promote the production and dissemination of statistical reporting with internationally accepted standards.

With this in mind, this study evaluated the practices adopted by twelve institutes or administrative units responsible for the production of education statistics in Latin America. It also checked the capabilities of participating countries to produce data and information on education systems to monitor national plans and make data available to the UN and UNESCO to follow up on international commitments (Millennium Development Goals and the Dakar Framework of the Education for All Program), for the period 2001-2015.

Partial compliance with good practices and behaviors recommended by EUROSTAT shows that these units are on the right track to promote improvements in their statistical systems. It was observed that in general the countries possess the capability to monitor their education plans and produce the necessary data and information for following up on international commitments. There are evident improvements in education indicators in the region, though there is a way to go in terms of establishing quality standards.

Finally, it should be noted that following analysis of the reports of the Supreme Audit Institutions, recommendations were sent to the relevant administrative units aimed at enhancing the improvement opportunities identified, which can serve as a reference for decision making by authorities in charge of producing education statistics.

## ACKNOWLEDGMENTS

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Finally, this work is aimed at all those who, aware of the importance of statistics for providing public education policy makers and managers with relevant information, believe that improving the practices adopted by statistics units or institutes will contribute to improvements in their own education systems.



## Coordination



Federal Court of Accounts – SAI of Brazil

## Participants



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of the Republic of Chile



Office of the Comptroller General  
of the Republic of Ecuador



Office of the Comptroller General  
of the Republic of Colombia



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## **Complaints, Suggestions and Compliments:**

[ouvidoria@tcu.gov.br](mailto:ouvidoria@tcu.gov.br)

Phone: 0800 644 1500

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