

Introduction

Background

Education is internationally recognized as a fundamental human and social right.¹ In other words, it is considered a basic and indispensable element to guarantee dignified life conditions to all human beings. Specifically, Article 13 of the United Nations International Covenant on Economic, Social and Cultural Rights states that “primary education shall be compulsory and available free to all”, and that “secondary education in its different forms, including technical and vocational secondary education, shall be made generally available and accessible to all by every appropriate means”.

According to Katarina Tomasevski, first United Nations Special Rapporteur on the right to education, in order to guarantee this right and evaluate its compliance in a country, it is necessary to consider four dimensions (also known as the four “A”s):

1. **Availability:** refers to the presence of schools at all levels, close to the population that needs it, and in enough number and with sufficient capacity to cover the entire population.
2. **Accessibility:** there should not be any social, cultural or physical barriers to education in any sector of the population.
3. **Adaptability:** refers to the ability of education to adapt to changes in society, as well as the specific needs of the students.
4. **Acceptability:** the schools and programs have to be perceived by students and parents as being of high quality. It states that the students have to feel comfortable, safe and respected.²

The need to have enough and adequate school infrastructure is a vital need in this context. To ensure compliance with the right to education, the countries need to have enough number of

¹ Universal Declaration of Human Rights, Article 26 (1948), and United Nations International Covenant on Economic, Social and Cultural Rights, Article 13 (1966).

² Tomasevski, Katarina. Right to Education indicators. 2001.

spaces dedicated to it, designed to be accessible to everyone, as well as adequate environments for learning, taking into account the current educational trends.

In this context, the Inter-American Development Bank launched the project “Learning in Twenty-First Century Schools” in 2011, a technical cooperation between Latin American and Caribbean countries focused on analyzing the situation and the challenges of the school infrastructure in the region. It also aims to propose solutions and move forward in the creation of sub-regional construction standards.³ Such cooperation, originally planned for the 2011-2014 period (Phase I), was immediately extended to 2018 (Phase II). The objective of the second phase is to primarily support the participating countries to improve their planning capacity and school infrastructure management projects.

As an initial input of Phase II, the IDB requested Fundación IDEA to develop a comparative study on the planning and management processes for new construction projects and maintenance of school infrastructure in 12 Latin American and Caribbean countries. This study, presented in this document, serves as a starting point to identify good practices, problems and common bottlenecks in these countries. It also identified specific areas of attention that need to be prioritized in order to conduct a more in-depth analysis, and develop specific recommendations to improve the processes and management mechanisms.

Scope of the Study and Methodology

This study presents a mapping of the planning and management of expansion and renovation models and processes of the public school infrastructure in 12 countries of Latin America and the Caribbean, specifically: Argentina, Barbados, Chile, Costa Rica, Guatemala, Honduras, Jamaica, Mexico, Panama, Peru, Trinidad and Tobago, and Uruguay. These countries were selected because they are active participants in the Phase II of the project “Learning in Twenty-First Century Schools”. This study also compares the mentioned processes, offering a first indication of the practices that seem to be more or less successful, as well as the most common challenges faced by most countries.

³ Gargiulo, Carlos. Learning in Twenty-First Century Schools, Note1. Series Introduction. December 2014.

The study was the result of a collaborative process between Fundación IDEA, the IDB and the representatives (Technical Liaisons) of the participating countries, which followed the steps described below.

To start, a **conceptual framework** was designed for the mapping, analysis and comparison of the planning, construction and maintenance process of school infrastructure. Based on this, the different types of processes for analyzing critical stages and key elements (components defined as critical to achieve the highest levels of quality and efficiency) of each one were identified. This framework was initially defined based on the relevant literature review, and was later adjusted during the project to allow for a better contextualization of the reality in the region.

Specifically, we identified and analyzed four types of processes which are described below:

1. Planning processes for the construction of new infrastructure

We included all the stages for the planning of construction of previously non-existent school spaces – including new buildings as well as new additions to existing buildings. We explored all the stages, from the identification of needs to the approval of budget for specific works, outlining them in four macro-stages (to facilitate comparison between countries):

1. Needs assessment
2. Prioritization of interventions
3. Development of the project (includes the definition of a design and a detailed budget for each project)
4. Approval of the project (and allocation of budget)

Also, we identified the following key elements:

- a. The existence of a national policy with clear objectives regarding school infrastructure.
- b. The use of an institutionalized strategy to identify and prioritize needs.
- c. The availability and use of georeferenced information of demographic data and school infrastructure to identify and prioritize needs.
- d. The availability of efficient identification, acquisition, and/or legal land ownership that is suitable for construction of schools.
- e. The availability to have specific rules and criteria for the design of school infrastructure.

- f. The availability and use of prototypes and outlines that help estimate the costs for the design of school infrastructure.

2. Construction processes for school infrastructure works

We analyzed the stages of the construction process of new infrastructure, starting with the bidding preparation process or another type of contract for the project, until the formal completion and delivery of the work. We defined four macro-stages:

1. Defining the terms of the contract
2. Selecting and hiring of suppliers
3. Implementing and supervising
4. Works delivery

The key elements identified for these processes are:

- a. The existence of efficient procurement and bidding processes
- b. Local capacity (in the entire territory) of contractors with the adequate technical capabilities
- c. Participation of the community in the decision-making process as well as development of the project
- d. The existence of supervising processes during development and monitoring of resources

3. Routine maintenance processes

We considered all those processes and mechanisms used to guarantee that the school infrastructure receives continuous minor maintenance (preventive and corrective) that facilitates the lengthening of its useful life. We included all kinds of maintenance that do not require a significant budget (they can be handled through an annual general budget assigned to the schools), or highly specialized technical intervention (these interventions can be implemented or contracted directly by the school principal or the school community). These can include replacement of windows, minor electrical or plumbing work, painting of walls, etc.

For this case, we did not identify macro-stages, but we did identify the following key elements:

- a. The availability of an annual budget, assigned to the school administrations for routine maintenance interventions.
- b. The availability of training programs for principals and/or local communities for the identification and management of routine maintenance needs.
- c. The existence of effective mechanisms to verify expenses.

4. Extraordinary maintenance

We identified all the works and maintenance processes of the existing infrastructure – both preventive and corrective – that due to the level of complexity or cost require or justify the intervention of education authorities from outside the community.

It was found that, in most of the countries the maintenance works that require a significant budget are managed in a very similar way as the construction processes of new infrastructure, with only one difference in the detection of needs stage. Therefore, the analysis of these processes was primarily centered in exploring the differences in this stage in particular.

However, it was also noted that several countries have shorter and simpler alternative procedures for the management of low complexity processes, and/or that require a limited budget. ⁴ In order to analyze these processes, the following macro-stages were defined: 1) Identification of needs; 2) Allocation of resources; 3) Implementation of interventions; 4) Verification of expenses.

Once the conceptual framework was defined, each country was described in a Technical Factsheet, designed to include context information of each country (socioeconomic data, general description of the school system and the internal decision-making structure, data regarding the current status of the school infrastructure, context and political priorities regarding school infrastructure), as well as specific information of each process defined above.

The factsheets were initially filled based on the information available to the public, and later with the information collected through a series of teleconferences with the countries' Technical Liaisons. Each factsheet was later validated by the Technical Liaisons of each participating country and the representatives of the IDB. In some cases, at the suggestion of the Technical Liaison, other experts were included in the calls and in the information validation process.

⁴ The maximum amounts that can be used for these modalities vary between countries, but have a range between 35,000 and 100,000 USD.

The information collected was summarized in a comparative study presented to the IDB and Technical Liaisons during the 8th Regional Workshop organized by the IDB during the Technical Cooperation “Learning in Twenty-First Century Schools”.⁵ During this workshop, and in the following weeks, the participants had the opportunity to review, comment and complete the information presented in the study and the data sheets. These contributions were incorporated into the final version of the study.

Limitations of this Study

This study was limited to consider the models and processes used in the public sector; with the exception of processes implemented through Public-Private Associations for the provision of education by the government, the processes implemented by private entities were not considered. Also, due to the time and resource limitations, only processes administered at the national level were analyzed, without considering all the mechanisms designed and administered at the regional and local level.⁶

Initially, the aim of this study was to analyze the processes concerning to primary and secondary school. However, when considering the available information, the scope was limited to the processes used for mandatory school levels in each country and managed directly by the government institution that the Technical Liaison is representing.⁷

It is important to note that, although the information included in this study was validated with the countries’ Technical Liaisons, no additional field or documentary validation process was performed. Therefore, there is a possibility of room for error or subjectivity in the information presented, attributable to the perception of the people interviewed.

⁵ This workshop took place in Antigua, Guatemala, from September 29th to October 1, 2015.

⁶ This implies a significant limitation in the case of countries with federal structure in which the school infrastructure management processes are managed by sub-national entities (Argentina, Mexico and Peru).

⁷ In general, these conditions have the same result. However, in the case of Mexico the study was focused on basic education (preschool, primary and secondary), and leaving out high school education (which is also mandatory in this country), because it is managed by different government agencies.

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