# DIPLOMA PROGRAMME IMPLEMENTATION IN PUBLIC SCHOOLS IN LATIN AMERICA: THE CASES OF COSTA RICA, ARGENTINA (BUENOS AIRES) AND PERU

Jason Beech

Jennifer Guevara

Pablo del Monte

Universidad de San Andrés-CONICET

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### **EXECUTIVE SUMMARY**

The aim of this study was to analyse the implementation of the International Baccalaureate (IB) Diploma Programme (DP) in public schools in Buenos Aires, Costa Rica and Peru, and its impact on schools, teachers, students, and on the State.

The study used a mixed methods design. The qualitative component included interviews with officials of the Ministries of Education in each educational system, and with officials of IB and other participating organizations. Relevant documents and legislation were also analysed.

Field work was also conducted in nine schools (three in each system) where we interviewed 18 school principals and IB coordinators (2 in each school), and 27 teachers (3 in each school). We conducted a focus groups with students in each school and observed 27 classes (3 in each school).

The quantitative component included the analysis of a survey for students and of data provided by the IB on students' performance in IB exams.

Motivations to introduce the DP in public schools in the three sites (Buenos Aires, Costa Rica and Peru) were related to equity – understood as giving students in public schools opportunities that have been exclusive of the most affluent members of society, and to innovation in secondary schools. The development of future leaders for the country was also mentioned in Peru and Costa Rica.

In Costa Rica, the project was promoted by a philanthropic organization: *the Asociación de Colegios del Bachillerato Internacional de Costa Rica* (ASOBITICO). As it evolved, the state got more involved in the project and is gradually taking over as the main organization in charge. A special position to oversee the IB project was created in the Ministry of Education. The collaboration between private and public sectors has been key in the design of the Costa Rican experience.

In Costa Rica, the project started small, with two schools, and has gone through a process of steady growth in small manageable steps. The initiative has clear goals and is based on careful and detailed planning.

The definition of a single IB curriculum for all public schools that is synthesized with the national baccalaureate contributes to a clear focus, efficiency and knowledge sharing among participants.

In Buenos Aires, the initiative is coordinated by the Ministry of Education and was deployed to the eleven participating schools at the same time. The goals of the project are unclear, and it is weakly institutionalized.

Each of the participating schools defined a different set of IB subjects to offer their students, resulting in eleven different configurations of the IB curriculum. This caused inefficiencies in teacher training and support mechanisms. There is almost no synthesis with the official curriculum of the City. Thus, students who sit for the IB exams must study for two separate full programmes.

In Peru, the DP for public schools is embedded within the *Colegios de Alto Rendimiento* (COAR), an initiative created by the Ministry of Education to educate future Peruvian leaders. The COAR initiative aims to offer high-performing secondary school students from public institutions an education of international standards that is offered in 25 boarding schools, one in each region of the country.

The COAR policy was born out of a pilot project that was key in validating the design of an educational model that was later escalated to all regions in Peru in two big and challenging steps.

Leadership is based on a very centralized and vertical design in which the state is responsible for most processes and decisions and follows closely the implementation of its policies in schools. The IB curriculum is defined by the state but gives some options to students and to schools.

One of the biggest challenges for successful implementation of the DP is the creation of support networks for schools and teachers and the availability of what we have called "IB know how": knowledge about how to manage the IB programme, and how to prepare students for the IB exams.

In Costa Rica IB know how is provided by ASOBITICO since the first steps of the initiative. The state and ASOBITICO have developed a dense and efficient network of IB schools that can be described as a learning organization that is permanently finding ways to improve the running of the DP and develop and share existing IB know how.

In Buenos Aires, support mechanisms depend on the Ministry of Education of the City. Support was stronger during the first years, with two people in charge of the project, but state support to schools, teachers and students has been diluting, and a solid network of support is still lacking.

In Buenos Aires, IB know how is limited. Even though Argentina is one of the countries in the world with more IB schools, these are mostly private schools. Officials in the state that oversaw the project did not have prior experience with the IB. A scheme to pair each public school with a private counterpart contributed to the transfer of some IB know how to coordinators and teachers in public schools but was limited in its impact and unstable.

In Peru, a special division with 47 employees provides solid and stable support, evaluation and control from the Ministry of Education. The division that oversees the COAR project replicates the organizational structure of COAR schools with a clear reference for each leadership team and teachers.

The Ministry of Education in Peru developed a determined and coherent strategy of buying in IB know how by hiring professionals with first-hand experience with the DP. The availability of IB know how from the first steps of the initiative was key in creating consistent support mechanisms for schools and teachers. Given the verticality of the organizational structure in Peru, IB know how flows mainly from the central state to schools.

Both in Costa Rica and Buenos Aires it is schools who decide to participate (although through slightly different processes). Schools are faced with the challenge of transforming into IB schools and have limited spaces for students who want to participate of the DP. In Costa Rica, on average, 25 students per school sat for the exam in 2017. In Buenos Aires, the average was 9 students per school.

In Peru, COAR schools are new institutions that have the DP as a fundamental part of their design. All students are prepared to sit for the DP exams. Thus, these are institutions that were created as full DP schools.

In the three sites, one of the strongest impact of the DP that was found was teacher motivation. Teachers were highly motivated and committed to be part of the DP. Even when they noted that it was hard work, and that the monetary retributions were not enough to pay for the extra work load, the majority of teachers found teaching in the DP very stimulating and were very committed to the programme, noting that it had revived their passion for teaching.

While Costa Rica and Peru created a separate track for IB teachers in which they are subject to annual contracts, losing stability, in Buenos Aires teacher in the DP are kept within the local teaching career. Teacher turnover is a challenge in the three cases.

In Costa Rica and Peru teachers receive permanent training, feedback and support and have access to IB online resources. In Buenos Aires teachers who started the programme from the beginning had one training session, mostly an introduction to the IB. They had no training at all if they joined the DP after the first year, since no provision for further training was made. Access to IB online resources is limited.

Students that participate of the DP in the three educational systems had a very positive view of the programme. They sought in the DP a higher quality education and better preparation for university. They tended to value the kind of learning style promoted by the IB and the closer relationship they develop with teachers.

In the three cases, the IB in public schools is a selective programme that attracts some of the best performing students and, specially, some of the most motivated to learn. Promoting an interest in the programme among more students is a challenge in Buenos Aires and in some schools in Costa Rica. In

Peru, the COAR system has generated a lot of interest in Peruvian families. It has become a highly selective aspirational programme for students.

In the three cases, student stress is a problem that was highlighted by students, teachers and state officials. The IB is a very rigorous and challenging academic programme that requires a re-adaptation of learning styles that is not always easy.

In Costa Rica, students must stay in school for an extra year, and spend long hours in school and studying at home. In Buenos Aires, added to the difficulties in adapting to the IB style, students still must pursue the local curriculum since IB subjects were not aligned with local requirements. Consequently, they spend long hours in school. In Peru, the already challenging DP is complemented by many other curricular and extracurricular activities, resulting in long hours of study six days a week.

Average scores in IB exams are relatively higher in Costa Rica than in Peru and Argentina. This is the case for both private and public schools. Public schools in Argentina underperform in average those in Peru and Costa Rica. In the three cases, students from private schools outperform in average those taking IB exams in public schools.

In Costa Rica, the IB in public schools is a very consolidated project that has slowly but steadily become a central policy for the state since the inclusion of the DP within the National Development Plan.

The 20 target schools have already been selected and with the mechanisms of support and IB know-how that have been developed, the new schools should have good conditions for running the DP. Thus, in its actual state the IB seems to be very stable and sustainable in Costa Rica.

In Buenos Aires, the future of the IB in public schools is less certain. This is a very small initiative with few students participating. The project has not been institutionalized in norms, and changes in authorities in the Ministry of Education resulted in declining support for schools and teachers. The overall goals of the project are not clear, and there is no formal evaluation. At the moment (2017), the project is mostly sustained by teachers and IB coordinators in schools.

COAR schools in Peru are a very recent initiative that has in a very short period of time gained much legitimacy both at the level of the state and in the communities. This is a big and important project that is growing steadily and solidly, showing good results, and going in the direction of consolidation. The DP is a fundamental component of the COAR model that has unanimous support.

### **SECTION 1: INTRODUCTION**

The aim of this research project is to analyse the implementation of the International Baccalaureate (IB) Diploma Programme (DP) in public schools in Buenos Aires<sup>1</sup>, Costa Rica and Peru, and its impact on schools, teachers, students, and on the state. In particular, this study examines the trajectories of the introduction of the DP in these countries. This implies analysing how and why it was decided to implement these initiatives; how the initiatives were designed; the infrastructures and state capacities that were created for -or reassigned to- the project; and the ways in which the DP is being interpreted and enacted in schools. In addition, the project analyses the effects of these initiatives in terms of academic results, demographics, and how students, and teachers perceive the DP.

This final report provides the International Baccalaureate Organization (IBO) with information that can guide decisions and courses of action to help the states and schools in Buenos Aires, Costa Rica and Peru in the processes of adopting the DP. It is also expected that the analysis offered in this report could be used to inspire future projects with states in Latin America and other regions. In this sense, the possibility of doing a comparative study between very different approaches in three countries has been especially relevant. It provided the opportunity to compare how different ways of introducing the DP in state schools are working in particular contexts. The comparative approach is specifically useful in documenting and understanding: (a) different political and policy strategies -objectives, infrastructures, support, and demographics-; (b) the ways in which the DP is being interpreted and translated into practice in schools in each of these countries; (c) what works –what can be learnt from these cases for future initiatives- and what does not work across and within each country, what needs to be adjusted, what new capacities or support mechanisms must be created in the state, in the IBO and/or in schools; (d) differences in results and how they are related to specific policy strategies.

The IB initiatives in Argentina, Costa Rica and Peru present a huge opportunity and a big challenge to the IB, to the states in these countries, to schools that are adopting the DP and to students and families that participate. The main focus of this research project is on the ways in which the challenges are being addressed at the level of schools, by trying to reconstruct the micro-politics at the school level, including a view on how the IB and the states are influencing approaches and practices in schools, and on how schools transform these mandates as they translate them into pedagogic practices. To analyse the impact of the IB initiative in school culture and practices we conducted this study in a sample of three schools in each country (nine in total). Each of these schools was analysed as a case, and the

<sup>&</sup>lt;sup>1</sup> Argentina is a federal country in which each province and the City of Buenos Aires manage their own educational systems. The project to introduce the DP in public schools is an initiative of the Ministry of Education of the City of Buenos Aires for some of its local schools.

comparison between the different cases in each country provided an account of the overall processes of interpretation and enactment of the DP in Buenos Aires, Costa Rica and Peru.

The comparison between countries is focused on the enactment of the DP in schools, but also on understanding the different ways in which each country has approached the introduction of the DP in public schools. Why and how was it decided to include the DP in public schools? What were the political and/or pedagogical aims of introducing the IB? How was the initiative designed? What infrastructure was created in the state? What kind of support facilitates the running of the DP in schools? What are the obstacles? What are the resistances?

In academic terms, this study aims at contributing to the visibility of the IB initiatives with Latin American states in the academic field in education. It is clear that we are experiencing an era in which state systems are searching for options to change and renew their educational systems and school models. Much of what is being experimented is based on global ideas that circulate in different ways, having an impact on state policies. In that sense, the IB DP is a global model that is attractive for states because it offers the possibility of changing teaching and learning practices in schools and at the same time introduces an international and global outlook to the curriculum. In that sense, the adoption of the DP in state schools can be seen as a case of educational transfer: the movement of educational ideas, institutions or practices across international borders. There is an important body of research in Comparative Education that has shown that as ideas, policies or educational models move from one context to another they are transformed as they interact with existing political, social and pedagogic cultures (Beech, 2011; Schriewer 2000; Silova 2012; Steiner-Khamsi 2000). These processes of transformation are often referred to as recontextualization (Beech, 2011), indigenization (Schriewer, 2000) or shape shifting (Cowen, 2009). Following these approaches, this research project has documented how the DP is transforming Argentine, Costa Rican and Peruvian schools, yet at the same time, schools —and the States— are transforming the DP. These are not two distinct processes, but should rather be seen as two sides of the same coin. Understanding the transformation of global models in different local contexts is currently one of the most salient themes in Comparative Education and in Education Policy. This study provides an important academic contribution to those fields.

# THEORETICAL FRAMEWORK

In order to approach the ways in which the DP is transforming schools and, at the same time, is being transformed by schools in Buenos Aires, Costa Rica and Peru we used Ball's approach, in particular his theory of "enactment" (Ball et. al., 2012). Ball refers in his work to the trajectory of policies. Although

it is debatable whether the regulations associated with the adoption of the DP could be defined as "policies" or not, for the sake of presenting Ball's theoretical approach we will use the concept of policies. In that sense the IB, in association with the City of Buenos Aires, Costa Rican and Peruvian States, defines a series of "regulations" or "policies" in terms of how schools should behave: the kind of knowledge that should be taught, how it should be taught (and learned), what kind of training teachers should have, and the knowledge that students should have acquired by the end of their trajectories. This is regulated through different mechanisms by the IB and the States —including the IB exams as strong drivers of school practices.

Ball's theory of enactment is aimed at overcoming the view that policies are simply established somewhere outside of schools, imposing certain practices to schools that only have to implement these external prescriptions. Trajectories of policies are much more complex. Policies can initially be formulated in the Ministry of Education, but the policy process only starts there. Policies are not static. "Policy is not 'done' at one point in time; in our schools it is always a process of 'becoming', changing from the outside in and the inside out. It is reviewed and revised as well as sometimes dispensed with or simply just forgotten" (Ball et. al., 2012, pp. 3-4). Thus, policies are constantly being interpreted, re-interpreted and transformed by the different actors that participate in the process. In particular, Ball stresses the importance of paying attention to the context of practices - its materiality, history and power relations - and the creativity of school actors when they interpret, translate and enact policies.

As policies move from formulation into practice, gaps and spaces for action and response are opened up. Policies are not transmitted into a vacuum, there are social, institutional, and personal circumstances that will affect the way in which policies are understood by those who (are supposed to) put them into practice. When practitioners are faced with a given policy text (i.e.: a curricular document), they are confronted with a number of problems that are involved in the "translation of the crude, abstract simplicities of policy texts into interactive and sustainable practices" (Ibid). These problems must be addressed in context. Ball also emphasizes the need to pay special attention to the materiality of schools. The quantity and quality of resources, such as the school building, classrooms, infrastructure, furniture, supplies and technologies will also have an influence on the possibilities for creativity that teachers have when enacting practices. Thus, the ways in which these problems are approached are localized: according to the context, different solutions will be offered to the problem of translating into practice a given prescription.

This perspective suggests that the adoption of certain transnational educational models, such as the DP, would have different practical effects in different contexts. In other words, in an analysis that

stresses agency and interpretation, it would be expected that different practitioners and institutions would interpret a given educational idea in different ways.

However, such an analysis might be "caught within an ideology of agency: by dealing with what is or can be done it misses the big picture" (Ibid.). Conflict, struggle and interpretation take place over a pre-established terrain. It is at this point that Ball introduces the notion of policy as discourse. Discourses are a system of possibility for knowledge: by creating the possibility for certain meanings and interpretations of the world, they constrain the possibilities for other meanings and interpretations to arise. In this sense discourses define certain "discursive limitations" (Ibid.), demarcating the pre-established terrain within which interpretations can take place. Practitioners may only think of possibilities of response and interpretation within the language, concepts and vocabulary which the discourse makes available to them (Ibid.).

Ball notes that the essence of this dual conceptualization of policies both as text and as discourse is that "there are real struggles over the interpretation and enactment of policies. But these are set within a moving discursive frame which articulates and constrains the possibilities and probabilities of interpretation and enactment" (Ibid).

Using Ball's conceptions for this research project, we can say that the IB and the Buenos Aires, Costa Rican and Peruvian States define a discourse, a language, a way of talking and thinking about schooling and how schools, teachers and students should behave and perform. This discourse enters schools through the prescriptions and actions of the states and the IB (written texts, teacher training, exams, resources, pedagogic support, etc.), and changes the way in which education, teaching and learning are conceptualized in these settings. However, within that discourse there are possibilities for action. Not all schools and teachers will interpret and enact the DP model in exactly the same way. To be sure, these differences in interpretations do not necessarily reveal a failure in the state of IB strategies; they are rather inscribed in the nature of the policy process itself.

# DP IN PUBLIC SCHOOLS IN ARGENTINA, COSTA RICA, AND PERU

The International Baccalaureate Diploma Programme is an assessed programme for students aged 16 to 19<sup>2</sup>. The programme focuses on students' physical, intellectual, emotional and ethical development through the study at least two languages, traditional academic subjects, a course on the theory of knowledge, and community service.

<sup>2</sup> Information available in the IBO website: <a href="https://www.ibo.org/programmes/diploma-programme/">https://www.ibo.org/programmes/diploma-programme/</a> [accessed on July 5, 2018].

The DP curriculum is made up of the DP core (Theory of knowledge; an extended essay; Creativity, activity and service) and different courses within six subjects groups (Studies in language and literature; Language acquisition; Individuals and societies; Sciences; Mathematics; Arts).

Students are assessed through direct evidence of achievement against the stated goals of the DP courses. There are two examination sessions each year. These are in May and November.

The IB uses both external and internal assessment in the DP. External assessment is carried out by examinations that form the basis of the assessment for most courses. They include: essays, structured problems, short-response questions, data-response questions, text-response questions, and case-study questions. Teacher assessment (internal) is also used for most courses. This includes: oral work in languages, fieldwork in geography, laboratory work in the sciences, investigations in mathematics, and artistic performances.

Although the DP was originally implemented in private schools, in the last decades it has been adopted in a growing number of public schools (Resnik, 2015). Particularly in Latin America in the last decade, the DP has been introduced in public schools through a variety of institutional designs in different countries (Resnik, 2016). In that sense, Buenos Aires, Costa Rica and Peru are examples of three clearly different origins, designs and —as we will show — enactments and effects of the DP initiatives in public schools.

Public schools that offer the DP in Peru are part of the *Colegios de Alto Rendimiento* (COAR), an initiative created by the Ministry of Education to educate the upcoming Peruvian leaders. The COAR initiative aims to offer high-performing secondary school students from public institutions an education of international standards. COAR schools intend to strengthen students' personal, academic, artistic and sporting potential through a holistic education that is offered in 25 boarding schools, one in each region of the country. In order to access these schools, students have to participate in a competitive process.

In Costa Rica, the DP in public schools started experimentally in 2005 in one school and has slowly but steadily expanded to other schools with the aim of reaching 20 schools by 2020. The initiative is led by the *Asociación de Colegios del Bachillerato Internacional de Costa Rica* (ASOBITICO), a philanthropic organization that aims at improving Costa Rica's secondary education through the implementation of the DP in public and private schools. The Ministry of Public Education (MEP) also has an important role in providing support to IB public school in collaboration with ASOBITICO. Within each participating school, some students follow the DP, while others continue in the National Baccalaureate. The

number of DP students per cohort varies in each school, with an average of 25 students per participating school sitting for IB exams in 2017.

The initiative to introduce the DP in public schools in the City of Buenos Aires is led by the Ministry of Education of the City. The programme formally started in 2013 with the authorization process of 11 public schools, although one school already offered the DP since 1988<sup>3</sup>. The DP is financed by the Ministry of Education. Not all students in participating schools follow the DP. Students within these schools have to apply and show good academic results and predisposition to be considered for the programme. There is no predefined quota, and an average of 9 students per schools sat for IB exams in 2017.

# **RESEARCH QUESTIONS**

- 1. About the origins of the initiative:
  - 1.1. Why and how was the decision to include the DP in public schools made?
  - 1.2. What are the main objectives?
  - 1.3. How was this initiative related to other more general policies or initiatives?
- 2. About the design of the initiative:
  - 2.1. Which schools participate in the initiative? How are they selected? How is the process of authorisation?
  - 2.2. Which students participate? How are they selected?
  - 2.3. How is the initiative financed?
  - 2.4. What is the timeline for the initiative?
  - 2.5. How is the DP articulated with the local curriculum and other local legislation?
- 3. About infrastructure and state capacities:
  - 3.1. What kind of infrastructure was created in the state?
    - 3.1.1. Which new positions were created?
    - 3.1.2. How do existing personnel adapt to attend to the needs of the DP initiatives?
  - 3.2. What were the changes in legislation?
  - 3.3. What administrative capacities were created in the state to support the initiatives?
  - 3.4. What pedagogic capacities were created in the state to support the initiatives?
  - 3.5. What are the challenges that the state and IBO administrators identify in supporting schools that are part of the initiative?
- 4. About the impact of the DP in schools:
  - 4.1. What are the effects of the DP in terms of:

<sup>&</sup>lt;sup>3</sup> There was also another state school offering the program in Vicente López, Buenos Aires Province.

- 4.1.1. Teaching practices?
- 4.1.2. Students' learning activities?
- 4.1.3. Assessment practices?
- 4.1.4. School culture and organization?
- 4.1.5. School administrative practices?
- 4.2. What tensions exist between the mandates of the DP and national educational requirements, legislation, traditions, pedagogy and culture? How do schools, teachers and students negotiate these tensions?
- 4.3. How are support mechanisms (from the state and IBO) valued by administrators and teachers?
- 4.4. How are the DP initiatives valued by:
  - 4.4.1. Students?
  - 4.4.2. Teachers and school leadership?
- 4.5. What do each of this type of actors identify as the key benefits of the DP?
- 4.6. What are the biggest challenges for the enactment of DP for teachers, administrators and students?
- 4.7. What are the obstacles for enactment of DP?
- 4.8. What are the resistances for the enactment of the DP?
- 4.9. What kind of material and pedagogical resources are available?
- 4.10. What are the learning results of students as measured by their performance in the IB exams?
- 4.11. How do these results compare to other schools in these countries and others?
- 4.12. What are student cohort sizes?
- 4.13. What are the DP students' postsecondary plans? How do IB DP students perceive the DP prepares them for university in terms of: research skills, critical thinking skills, research, teamwork, understanding the world, communication, and scientific thought?

### **METHODS**

This study adopted a mixed methods design, using multiple ways to explore the research questions. This approach allowed for an in-depth comprehension of the projects being analysed, and provided a means for triangulation of information coming from different sources. The qualitative component included interviews, focus groups, document analysis, and observations of classes and other activities in schools. The quantitative component included surveys, and the analysis of available student data on performance and demographics.

In order to address questions 1, 2 and 3 (about the origins, design, infrastructure and state capacities of the initiative), we conducted 16 interviews with high officials of the Ministries of Education that participated in the design and the running of the initiatives in each educational system, and three

interviews with IB staff that had been involved in these projects. We also analysed 18 relevant documents - policy legislation, budgets, and other documents produced by the States or other relevant actors to inform or support schools.

Question 4 (about the enactment of the DP in schools), was addressed through case studies in three schools in each country (9 schools in total). Schools were selected based on suggestions of local officials and accessibility to researchers<sup>4</sup>. In the case of Costa Rica we decided to include some of first schools to incorporate the DP in order to access institutions with more experience in the implementation of the programme. In Peru we visited the Colegio Mayor, a de facto pilot project for the COAR initiative that has been offering the DP since 2011, and two of the 12 COARs that were funded in 2015. In Buenos Aires, since all schools that were part of the initiative started at the same time, this was not a factor that was considered for selecting schools. Finally, questions about student achievement in IB exams were addressed through the analysis of the IB database for three countries.

When analysing the enactment of the DP in schools the focus was placed on three dimensions: (a) discourses – how are teachers, students and administrators thinking and talking about the educational process; (b) materials – what new material arrangements, such as financial resources, laboratories or other learning spaces, learning materials, etc. are being used or are needed; and (c) practices – what kind of teaching, learning and administrative practices can be observed in schools.

Fieldwork was conducted between April and October 2017. The field work in Costa Rica and Peru implied two field trips to each country. During the first field trip to Costa Rica in April 2017, the principal researcher interviewed state officials, members of ASOBITICO, participated in a meeting of IB coordinators, defined schools selection, and organised the logistics of field work in schools. In the second visit in July 2017 the three investigators visited the three schools, and completed interviews in ASOBITICO and the Ministry of Education. The field work in Peru was delayed given the constraints created by severe floods in most of the coastal areas of the country in the first half of 2017. The first visit to Lima in August 2017 was made by the principal and the second researchers. They interviewed staff in the Ministry of Education and visited the COAR in Lima. The second trip, in October 2017, included the three investigators that did the field work in a remote school located in the Andean Highlands (selva alta) and another school in the coastal area. Since the research team was located in Buenos Aires, the field work in this City extended throughout the whole period.

Data was collected through student surveys (N=1,121), interviews with school principals and

<sup>&</sup>lt;sup>4</sup> In Costa Rica and Peru IB schools are distributed along the national territory. School selection had to consider the feasibility of organizing visits to two or three schools within a reasonable time frame. Consequently, schools in very remote locations were not included. In Peru we did include a school in quite a remote location

coordinators of each school (18 in total), 9 focus groups with students (one in each school), 27 individual interviews with teachers (3 in each school), and 27 class observations (see Table 1). General observations covered the school surroundings, infrastructure, and everyday life of school actors. They also included participation in relevant events when possible, such as the presentation of the DP programme to parents, or meetings of IB coordinators.

Questions 4.10 and 4.11 were addressed through the analysis of data from the IB's internal data system that gathers student background and assessment data for all students who sit for IB examinations. The analysed dataset included the exams results from May and November 2016 and 2017 in Argentina, Costa Rica, and Peru (N=6,786). The database included information on the candidate's age, gender, nationality, mother tongue, and subjects taken.

Table 1. Summary of data collection

Organization/ Country	Collected Data
IB	3 interviews:  Outreach Development Manager, IB Americas University Recognition Manager, IB Americas DP School Services Manager
Buenos Aires	20 interviews:
	<ul> <li>Secretary of innovation and educational quality, Ministry of Education, Argentina</li> <li>Ministry of Education, City of Buenos Aires (2 interviews)</li> <li>Association of Colleges of the International Baccalaureate of Rio de la Plata (1 interview)</li> <li>School principals (3 interviews)</li> <li>DP coordinators (3 interviews)</li> <li>DP teachers (9 interviews)</li> </ul>
	3 focus groups with students
	9 class observations
	2 relevant documents
	79 students surveyed in 3 schools: 15 respondents in School A, 24 in School B and 40 in school C.
Costa Rica	26 interviews
	<ul> <li>Ministry of Education, Costa Rica (6 interviews)</li> <li>ASOBITICO (4 interviews)</li> <li>School principals (3 interviews)</li> <li>DP coordinators (4 interviews)</li> <li>DP teachers (9 interviews)</li> </ul>
	3 focus groups with students
	9 class observations
	7 relevant documents
	124 students surveyed in 3 schools: 53 respondents in School A, 35 in School B and 36 in School C.
Perú	21 interviews:
	<ul> <li>Ministry of Education, Peru (6 interviews)</li> <li>COAR principals (5 interviews)</li> <li>DP coordinators (3 interviews)</li> <li>DP teachers (9 interviews)</li> </ul>
	3 Focus groups with students
	9 class observations
	9 relevant documents
	915 students surveyed, 548 respondents in School A, 182 respondents in School B and 189 respondents in School C.

# **DATA ANALYSIS**

The analysis of qualitative data was based on thematic and discourse analysis techniques, using Atlas.ti software to manage the large amount of data collected.

Each of the selected schools was initially analysed as a case. Then, the comparison between the different cases in each country added to the data of the macro level provided an account of the overall processes of enactment of the DP in Buenos Aires, Costa Rica and Peru. In a third stage a comparative analysis between findings in each country was conducted looking for similar trends and the specificities of each initiative.

The quantitative analysis, based on the survey and the IB internal data system employed descriptive techniques, and was managed through Stata and SPSS software.

### STRUCTURE OF THE REPORT

The report is divided into three main sections. After this first introductory section the findings of the research are presented in the second section, that is divided into a different subsection for each of the three cases. The third section is the conclusion that presents the comparative analysis of the enactment of the DP in public schools in Costa Rica, Buenos Aires and Peru.

# **SECTION 2: FINDINGS**

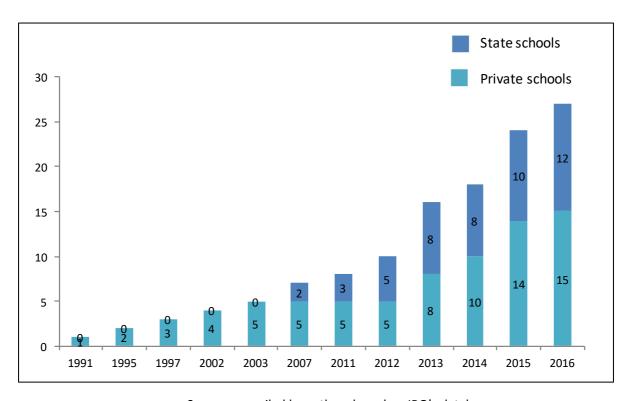
### THE DIPLOMA PROGRAMME IN COSTA RICA

Until recently, the Diploma Programme in Costa Rica was an option available only to some of the most expensive private schools. In 2005 the Ministry of Public Education (MEP) decided to introduce the IB in the Liceo de Costa Rica, a landmark public school that graduated some of the most important political figures in the country. This first pilot project resulted from an initiative of the Central American Education and Culture Coordination that promoted experimenting with the IB in the region as an option to improve academic standards in secondary education.

In parallel to the experience with the Liceo, a group of philanthropic individuals linked to private IB public schools in the country started a project aimed at promoting the DP in other public schools in the country. This initiative started with Colegio Palmares in the province of Alajuela. By 2007 both the Liceo and Palmares were authorized by the IB to offer the DP. In 2008, the Association of IB schools in Costa Rica (ASOBITICO) was founded with the aim of supporting these two schools and replicating the experience with the goal of implementing the DP in 20 public schools.

Evidence collected suggests that ASOBITICO and the MEP have developed an efficient structure of support for schools, teachers and students, and a growing network of IB educators that has contributed to a strong sense of community among all those involved. Since 2016, the project has gone through a gradual shift in responsibilities in which the private sector, that started as the main supporter and manager of the programme, is transferring know-how and responsibilities to the state. The fact that the state is in the process of taking full responsibility for the financing of the project and most of its management, that ASOBITICO continues to provide expertise, the promising student results, and the institutionalization of the project in the National Development Plan and other official documents are indicators of sustainability of the DP implementation in public schools in Costa Rica.

Figure 1. Number of DP schools in Costa Rica



Source: compiled by authors based on IBO's database

Colegio Bilingüe de Palmares Liceo Gregorio José Ramírez Castro Colegio de Bagaces Liceo de Cariari Liceo San Carlos Liceo Nuevo de Limón Liceo Poás Liceo de Puriscal Liceo de Costa Rica Liceo Moravia Liceo Tarrazú Liceo Sinai

Figure 2. Geographical distribution of public schools with DP in Costa Rica

Source: compiled by authors based on IBO's database

# Motivations for implementing the DP

In terms of the motivations for introducing the DP in public schools in Costa Rica, interviewees mentioned the search for equity as the most important driver. Equity is understood as giving students in public schools the same opportunities that more affluent youth have in private schools. Statements supporting this view came from members of ASOBITICO, from the MEP, and from teachers and school personnel that were very proud of being able to provide opportunities to students from disadvantaged backgrounds. As a teacher said "the son of a local farmer obtained the same diploma as the son of an ambassador from another country".

Nevertheless, the link of the project with the principle of equity is also controversial. Officials in MEP noted that critics pointed to the high investments made in IB schools vis a vis other schools, especially those in very disadvantaged contexts. To this point, members of the MEP responded that the rationale for the project was to expand the array of options to the diverse student population in the upper secondary school. For example, a member of the Higher Council of Education explained:

This is very justifiable from the perspective of education policy. The IB is an offer for talented students. There are scientific schools for certain people, artistic schools for others... and we have the IB. (Member of the Higher Council of Education)

Thus, attention to talent and the aim of diversifying educational options for communities were also important motivations. On the other hand, many teachers and coordinators noted that students in schools were not necessarily selected for the IB based on their grades. Commitment and motivation are the main qualities that are considered, and teachers mentioned many times how proud they were of graduating many students from underprivileged backgrounds.

Another reason to promote the implementation of the DP had to do with fostering leadership skills amongst students. In this case, leadership was understood as the contribution of the IB to generating leaders that could have an influence on the country's future.

# Support framework and governance of the initiative

Through visits to schools, interviews with staff and students, and observation of classes and infrastructure, we documented the kind of support that schools receive to implement the IB. This ground level data was also triangulated with information obtained through interviews with MEP and ASOBITICO officials, documentary analysis, and the participation in a meeting of IB coordinators, principals, MEP and ASOBITICO.

The two key organizations in the governance and support framework of the DP initiative in Costa Rica are the MEP and ASOBITICO. Evidence suggests that both organizations have improved the support they give to schools as the project progressed and more schools got involved. Furthermore, the links and synergy between MEP and ASOBITICO have evolved very favourably. As a result, by the time we visited schools in Costa Rica (2017), the overall feeling in schools was that they had abundant support.

ASOBITICO had a key role in promoting the initiative and in its success and stability. Almost every person we talked to, from a member of the Higher Council of Education to teachers and students, stressed the support that the organization gives to the project. There are many examples of this kind of statements. A coordinator of one of the schools explained the role of ASOBITICO in the following way: "We do not have any complaints with ASOBITICO, because whatever we need, we send an email to them, and very quickly they try to solve it". Then she went on to give examples of how they solved material problems, such as the need for calculators, and how when they noticed that they were systematically having problems with a specific task in which the students were not performing as expected, ASOBITICO found an expert that could go to the school and advice teachers on how to solve the problem.

The expertise of the Executive Director of ASOBITICO who was an IB coordinator in one of the first public schools is a key element of the support that the Association provides to schools. Different interviewees agreed that he understands very well the culture of the public schools, the logic of the IB, and the challenges involved in synthesizing both. Based on this experience he leads the support of ASOBITICO to new schools during the authorization process. They even organize a mock verification visit to help coordinators and staff manage their anxieties.

ASOBITICO also has a role in helping schools select their coordinator. Again, their experience is important in advising head teachers about the kind of characteristics and personality that is needed for a successful coordinator. The head of the school selects the coordinator, but ASOBITICO has to give their "blessing" to the candidate. The Executive Director of ASOBITICO explained the kind of "sincere" conversation they have with the candidate:

You are going to coordinate this. Your team is going to be heaven or is going to be hell. You want to be successful, we want you to be successful. We want students to succeed, that means that you need to have the best teachers, regardless of whether you personally like them or not, that is not relevant here; you need to have on board people who want to be there, because you cannot force anyone, but you have to convince them. (Executive Director of ASOBITICO)

ASOBITICO works closely with coordinators. One of the key ways in which they provide support is by promoting a network of coordinators. They meet once a month to discuss their needs, share

experiences, and agree on certain common strategies to run the programme in their schools. In addition, they are permanently in contact through online networks and, as far as we could perceive in our visits, they have created strong personal and professional ties. In this sense, ASOBITICO acts as a coordinator of coordinators and in that way, contributes to a certain degree of standardization in the running of the DP in all public schools that is an important factor in the success of the initiative. Coordinators define a single calendar for all schools, so that all IB students in public schools organize activities related to the DP in a similar time frame. They also exchange experiences and learn from each other, defining good practices for all schools and helping coordinators of new schools. ASOBITICO also gets the results from students' exams from schools, analyses it, and gives feedback to each coordinator to help them make the necessary adjustments. In the meeting of coordinators in which we participated, we perceived a strong sense of community and a feeling that they were all together in the same project working for all students in all schools to succeed.

Our interviewees in schools and in the MEP suggested that the provision of teacher training was one of the main contributions of ASOBITICO to the project. Given ASOBITICO's involvement with the project, they are aware of the needs of coordinators and staff and plan accordingly to respond to these needs by hiring instructors from different countries to come to Costa Rica and offer the kind of training that teachers need. These are partially funded by the organization and partly by the school communities and/or teachers. Due to the growth of the programme, ASOBITICO became an IB authorized training provider, which allowed them to be more independent from the IB and be very active in providing training for teachers.

The other main organization promoting the initiative and supporting schools is the MEP. Interviewees from the first schools to incorporate the IB noted that in the first few years, the MEP did not participate much. Furthermore, the bureaucratic regulations of the public administration sometimes clashed with the needs of the DP, and head teachers had to take risks, such as sending teachers out for training without authorization, given the difficulties in obtaining it on time. However, as the project grew, so did the involvement of the MEP, and by the time we did our field work (2017), coordination between the MEP and ASOBITICO was very well organized, and school staff felt they had strong support from both sides. Furthermore, the state was taking up many of the responsibilities that had previously been in the hands of ASOBITICO, including most of the financing of the programme.

Even if from the perspective of the first schools, the involvement of the MEP was marginal, it is clear that in the first instances the MEP did support the initiative, at least by allowing ASOBITICO to work with public schools, paying for teachers' extra time needed for the IB, and regulating the curricular choices for all public schools in Costa Rica. Subjects of the DP were aligned with subjects of the

national curriculum. Students that obtained the IB Diploma only needed to pass Social Sciences and Civic Education in the national tests in order to obtain the national baccalaureate degree. With the growth of DP public schools, the Higher Council of Education of Costa Rica (the country's highest authority in Education) defined a single curricular option for all IB public schools in Costa Rica. It includes the following subjects: Literature, English, History, Information Technology in a Global Society, Biology, Mathematical studies, Mathematics, Theory of Knowledge, Creativity Activity and Service (CAS), and Extended Essay (see Table 2). The standardization of curricular choices within the IB and a reasonable integration with the National Baccalaureate are fundamental in the success of the initiative, since it contributed to facilitating synergy between participating teachers, schools and students, to efficiency in the use of resources used for teacher training and provision of pedagogic materials, and it gives a clear and narrow focus to the project.

Table 2. Subjects of DP schools in Costa Rica with corresponding IB group.

IB group	Subject
Studies in Language and Literature	Literature
Second Language acquisition	English
Individuals and societies	History
	Information Technology in a Global Society
Experimental sciences	Biology
Mathematics and computer sciences	Mathematical Studies
	Mathematics
Core subjects	Theory of knowledge
	Creativity, Action and Service (CAS)
	Extended Essay

Source: compiled by authors based on Procedure Manual for implementing the International Baccalaureate in public schools in Costa Rica (2011)

The partnership between ASOBITICO and the MEP was formalised in 2012 with an agreement between the two institutions that defined the responsibilities of each institution. The agreement

established that it was the MEP's responsibility to appoint the required personnel, to procure the minimum conditions of infrastructure, to guarantee a time frame for teachers to be trained, to pay the annual fees of the participating schools, and to define which schools can choose to implement the DP. ASOBITICO's responsibility was to provide technical advice and support to schools, assume the costs of IB implementation in several specific areas (laboratory equipment and libraries, mailing of student assessments, training of the teaching staff, among others) and organize teachers' training workshops. In addition, both institutions developed a document with procedural guidelines for state schools that would become IB schools. In the meeting in which we participated in April 2017, state authorities, members of ASOBITICO, head teachers and coordinators of public IB schools discussed the details of an updated version of these guidelines that was being produced in collaboration among all involved actors and was then approved by the MEP.

In 2012, a new position was created in the MEP to oversee the IB in public schools: National Coordinator of the Diploma Programme of the International Baccalaureate. All interviewees in schools and in ASOBITICO noted that since 2012 the support of the MEP had increased in parallel to a more thorough understanding of the DP. The creation of the new position of National Coordinator has been very important in this process. IB coordinators in schools noted that the communication with the MEP was much better and more fluid since they can communicate with the National Coordinator. The IB has been institutionalized through a gradual process in which several norms have been defined. This process of institutionalization has made the running of the project more fluid in terms of issues such as the appointment and payment of teachers, the provision of infrastructure and material resources, and authorizations for teachers to attend workshops and even to travel when they are doing work for the IB abroad.

Currently, ASOBITICO and the MEP have agreed that the MEP will start paying for the main costs of the DP. From the perspective of the MEP, this is almost a natural evolution of the project in which it is the responsibility of the state to guarantee the continuity of a project that they evaluate as being highly successful. As the Director of Curriculum said: "...this is a star programme and the benefits are visible. We cannot stop supporting it. People are motivated, the Minister is motivated... we have to keep moving forward."

From the perspective of coordinators in schools, the fact that the MEP is the one paying for the main costs of the programme was a very good sign and a guarantee of stability. A coordinator that we interviewed explained:

This hybrid ended up very well. At first it was ASOBITICO that came with everything, they managed the programme. Now the MEP pays a lot of money because they see it as something that works. They objectively see the good results. They feel it is a

programme that will continue for a long time... and personally this gives me a sense of stability. All of us have a feeling of a lot of stability knowing that the MEP pays for this (IB Coordinator, Costa Rica).

"This gives us more stability, because ASOBITICO, being an association, it can be dissolved", said another IB coordinator. Thus, the overall feeling among most constituencies was that the Costa Rican state has taken ownership of the project, a move that contributes to its stability and continuity. Furthermore, even if ASOBITICO recedes in its financial contribution, it is still present to support the programme with its know-how and some financial contributions. Nevertheless, as we will further discuss, this shift of responsibilities might generate a challenge for the sustainability of the project.

In addition to the main support from the MEP and ASOBITICO, there are other actors that constitute the network of support to Costa Rican public schools that implement the DP. Schools obtained the support of community organizations, municipalities, churches, and businesses. Furthermore, the participation of students in the DP involves some costs, such as paying for trips or some school supplies. Since some families cannot pay for those costs, schools have organized different mechanisms to support those students. In some schools, parents created a foundation to support the project and students in need. They collect funds in different ways. In other schools, we were told that teachers, students and other members of the community provided funds to help those that cannot pay. The links with the overall community are also created through the involvement of students in community service, especially in the context of Creativity, Activity and Service [CAS]. In this way, the overall communities felt proud of their IB students and the contributions they were making.

# The enactment of the DP in schools

School staff were very much involved in the decision of bringing the DP to their school. However, according to interviews with school staff, the decision process was not necessarily easy or straightforward, given the presence of resistances and criticisms. Those in favour argued that the DP would improve education quality and equity. In terms of quality, the case was made that the DP would make a difference not only for those who undertook the programme, but also for students that remained in the national baccalaureate. With respect to equity, teachers believed the programme gave middle and disadvantaged sectors access to a high-quality education that was only accessible to the richest families in the country. The underlying idea was that schools should offer "something more" for those who are willing to go beyond the national public education. Another important claim was that the DP was a path for teachers and students to break free from the limitations of the national

baccalaureate examination. The IB examination was an opportunity to alter the rules of teaching and learning in Costa Rican schools.

According to interviewees in schools, MEP and ASOBITICO, critics argued that the DP was a programme that created an elite of students and an elite of teachers who would work under privileged conditions. On the one hand, the argument was that the selection and separation of a group of students threatened education equity creating 'a school within a school'. On the other hand, teachers work appeared to be privileged in terms of salaries and teaching conditions. Moreover, the fact that the DP in Costa Rican public education added an extra year to schooling was strongly criticized, especially by some parents who interpreted the extra year in school as an unnecessary delay in students accessing university or the labour market.

How did schools overcome this division? Each of the schools we visited created a different solution, but overall it was solved through consultation and participation of the community. For instance, one school created a commission of teachers that was opposing the programme. The group had to gather information and analyse strengths and weaknesses of the DP. Those teachers visited IB private and public schools, reviewed the DP materials, and organized a series of meetings to discuss the idea. Participants of this process say that once it was finished those in the commission considered the DP to be an attractive alternative. Another school brought the decision to a vote. Those in favour won by a minimum margin.

Once the decision to be part of the IB was made, schools must apply to become an IB school by sending a form to the MEP who does the first screening based on size (at least 500 students), geographical location, and available infrastructure. Then, officials from the MEP visit the school and meet with staff, students and families to explain what becoming an IB school implies for all of them. If the school is accepted by the MEP, it can then apply for the sponsorship of ASOBITICO who makes the final decision.

The Executive Director of ASOBITICO, explained how they approach schools:

ASOBITICO visits the school. And what do we do? We tell them how horrible the process is, all the hard work that they will have to do, how they are going to suffer and no one will pay them for their work.... Are you sure you want to work with us? Because that is what awaits for you during the next three years. Then, if the school is authorized, and for the moment all schools that we have sponsored have been authorized, then you will start to be paid for your work in the IB. (Executive Director of ASOBITICO)

Once schools were accepted to be part or the project they start to prepare for the authorization process with the help of ASOBITICO. In some schools, teachers actively participated in the authorization process, while in other schools the process was led by principals and coordinators.

The selection of the teaching staff was key in the incorporation of the DP in schools, since not all teachers in the school participate in the programme. In the three schools we visited, coordinators would favour teachers with a permanent position in the school to reduce turnover. In some schools, teachers' selection was open to those interested, in others it was the DP coordinator who invited teachers to be part of the project. When coordinators were asked about what they sought in potential IB teachers they focused on motivation and commitment as the main characteristics they looked for. For them, this commitment was evident if teachers showed disposition to work outside working hours—for instance by attending a training course during school break—, or were willing to pay for IB training courses. ASOBITICO recommended schools to train two or three teachers per subject to be prepared in case of turnovers or other unexpected issues. The decision to have a single curriculum with the same IB subjects for all schools contributed to simplify the training process, to efficiency in the use of resources and, as the programme grew, to the creation of dense networks of teachers of the same subject in participating schools.

### The coexistence of the DP and the National Baccalaureate in schools

One of the main features of the IB initiative in public schools in Costa Rica is that the DP is offered to a limited number of students (30 to 60 maximum, depending on the school). When we visited schools, the coexistence of two bachelor programmes inside one school was evident and, although it had some practical advantages in keeping all IB classes together, it also was somehow problematic in terms of dividing the school community. Firstly, the DP and the National Baccalaureate [NB] were divided in terms of school infrastructure. In one of the schools, staff and students named the separate infrastructure 'the Olympus', since it was located in a more elevated ground, away from the NB. IB students were not only be in separate classrooms, but usually in separate sections of the building. They had working spaces specifically disposed for them, as well as exclusive resources, such as one laptop per student and exclusive WIFI access. The library and laboratories were formally shared with NB students. IB teachers were also allocated in separate offices —NB teachers did not always have offices.

"The very fact of being named differently —International Baccalaureate instead of National Baccalaureate— creates a gap (...) Colleagues who do not teach International Baccalaureate see us as if we were from another planet" (IB teacher, Costa Rica)

This noticeable division was also present in teachers' and students' relationships, sometimes creating tensions among them. In the focus group with students in one school they noted that the IB group was humorously identified as 'The IB Independent Republic'. Changes in schedules, classes, and breaks also created a separation among students. Another issue that created a division was the uniform of students. In most schools, students of the IB would had a different uniform to those in the NB. The IB uniform had a different colour and had the IB logo which made the distinction very visible.

As far as we could gather from our participation in coordinator meetings, interviews with school staff, MEP and ASOBITICO, the separation of IB students from the rest was a challenge for all schools participating in the project. Officials in MEP and ASOBITICO were aware of the need to devise strategies to overcome the division and integrate as much as possible the IB project within each school. The schools we visited organised different activities to strengthen the ties between students of the IB and NB and, in some cases, with teachers. For instance, CAS projects, especially those that had an impact within the school, would serve as opportunities to share a goal and a series of activities between IB and NB teachers and students. In one of the schools, IB students used the same uniform as their NB classmates.

# The impact of the DP on schools

Overall, our interviewees concurred that the DP had a positive impact on schools' enrolment, status, ties with the community, school management, material conditions, and educational quality. Offering the DP increased the schools' prestige. Teachers and staff felt that the community was proud of having an IB school. The impact of the DP in schools was visible in the achievements of IB graduates, such as international scholarships, and good performance in local universities. The impact on enrolment depended on where the school was located and its proximity to other IB schools. Two out of three schools reported to have experienced a significant increase in enrolment since families were able to choose the DP —including those who could afford to pay for tuition in a private institution.

Moreover, our interviewees mentioned the impact of CAS projects in strengthening the ties between the school and the community. In this dimension, the DP seemed to help open the school to their community and consolidate a positive image of the institution and the students.

The appointment of the DP coordinator reorganized leadership in schools. In the meeting of coordinators and principals in which we participated, the distribution of power between principals and coordinators was one of the issues in the agenda and generated some heated discussion. Principals usually have all the formal power and responsibility in the public system, and therefore the idea of a "middle management" is not very common. Thus, it was difficult for some principals to accept

that someone who was formally a teacher was making so many decisions without much consultation. On the other hand, it was evident that the DP requires a coordinator that can make decisions without having to consult the principal. From what we could gather, more experienced schools had found an acceptable balance, while newer schools were having more difficulties in negotiating the formal power of the principal with the less formal position of the coordinator

Regarding material conditions, our interviewees referred to significant improvements regarding infrastructure, facilities, and equipment since they started the DP authorisation process. Libraries, laboratories, and classrooms were expanded and enriched. Schools were set up with WIFI connectivity —although most of them experienced broadband issues—. Furthermore, schools received equipment such as TV, video and audio recorders, graphic calculators, and laptops.

These resources were provided by the MEP, ASOBITICO, and by different actors from local communities. According to the MEP officials we interviewed, IB public schools were given some priority over non-IB schools in terms of resources, especially since the aim of having 20 IB schools was included in the National Development Plan. Besides, school actors referred to the help of the community —which includes parents, and local businesses— in equipping schools when the Ministry of Education or ASOBITICO were not able to cover for the costs.

Although overall infrastructure in schools was good, it was not equivalent in the three schools we visited. One of the schools, as we mentioned, had a set of buildings specifically built for IB students. They also had a good library and laboratory in the buildings that were not specific for the IB students, given that they were shared with the whole school (although it seemed that the IB students were the main users). In another school, a new building for the IB programme was being constructed and almost finalized, by the time we visited. According to school authorities, they had been asking the MEP for that building since 2009. Nevertheless, the overall infrastructure of the school was very good, the coordinator had an adequate office, they had a very big library, good laboratories and the classes that were used by IB students were in very good condition.

In the third school the situation was different. The school was in a poorer area and its buildings were in worst conditions than the others. They had dedicated an area of the school to IB students, but the classes were small, and doors, desks and furniture were old and worn. The library was small and quite basic (at least when compared to the ones in the other two schools). The principal who had recently been appointed to that school was worried about the condition of classrooms for IB students: "they are dirty, badly designed...they are not adequate for students...they are too small and students are crammed, the desks are uncomfortable. That is what I found here". When we asked him about a possible solution, he said that it was the MEP that should provide a better infrastructure for them. A

project to build a bigger and better library was being defined. Thus, overall, the infrastructure in schools was good and improving, but there was a very clear difference with one of the schools in which the need for better material conditions was evident.

The materiality of the IB in schools was significant. In all of them the IB logo was visible alongside the schools' names. Plus, we found several signs displaying the IB learner profile, and other IB related information around different parts of the school buildings, as well as the IB logo in all the materials handed to DP students.



Figure 3. IB Graffiti on a wall of a public school in Costa Rica

Source: Photograph taken by the research team

Finally, interviewees reported that DP had improved educational quality, especially regarding teaching and assessment practices and learning outcomes. However, when discussing the improvement of educational quality in schools one important aspect to consider is whether DP has driven changes in the school as a whole, or exclusively for DP students. Our fieldwork suggests that the possibility of impact on the NB is limited for several reasons, but particularly due to the NB examination. Since the NB exit exam resorts to factual information, DP teaching practices are less likely to prepare students for that final test. IB Teachers reported the feeling of constraint: even when they mentioned having introduced 'something different' in their NB classrooms —e.g. a role playing activity— none of these 'innovations' could become a central part of the learning experience, since they are not aligned with the kind of learning that the NB exam requires. For example, teachers mentioned that in subjects such as social studies, teaching for a critical perspective such as the IB promotes does not prepare students for the NB exam that expects students to memorize "the right answer".

# The impact of the DP on teachers

One important feature of the IB project in public schools in Costa Rica is that teachers that participate have to opt out of the regular teaching career. Teaching positions in the DP in Costa Rican public schools are interim, which means teachers can be dismissed at any time by the principal or the coordinator. Therefore, IB teachers have less stable working conditions than their peers in the national system. Some of our interviewees in the MEP, ASOBITICO and in schools thought that this system is fundamental for the project, because it provides some guarantees of the commitment of teachers that participate. However, they also acknowledged that in certain situations, very good teachers were "lost" for the IB because they were not satisfied with the instability and preferred to return to their permanent positions in the national baccalaureate.

DP teachers are paid four extra hours for planning and marking exams for every four hours of assigned to teaching in the classroom. Even though this is an advantage in relation to the situation of teachers in the regular teaching career, the level of personalization and continuous assessment that is needed in teaching the DP requires more time and most IB teachers we interviewed mentioned that they worked more than that. Coordinators, and staff in the MEP and ASOBITICO also noted that teaching the DP is a very demanding task that is not fully covered by those extra hours.

Thus, all our sources suggest that the main driver for teachers who participate in the IB in public schools is related to other motivations. Interviewed teachers were greatly involved in the DP, and highly motivated to work in the IB. According to most of them, the DP renewed their passion for teaching. They felt the core of the DP is aligned with their original motivations to get into teaching, and that the type of teaching and learning practices that the DP favours are engaging for both teachers and students. A teacher told us about the first time he visited an IB school and observed an IB class: "wow, this is what I want. This is the kind of teaching that I thought I would do in schools when I was studying to become a teacher in university". Essentially, they highlighted students' activity: compared to students in the NB, the DP's approach is aimed at the development of skills for inquiry and research, as opposed to an education based on the transmission of facts that must be memorized. It is also worth noting that within the DP, teachers work with a selection of highly motivated students, which creates the ideal conditions for teachers to enjoy their work.

I think that teachers are tired of always doing the same thing. They know that they can do things better and are bored of a system that constrains them, that frames them, in which they don't believe, that frustrates them, doesn't recognize them, doesn't value them. The IB is a space where one, as a teacher, has freedom, in spite of the rules there is a space of freedom, of flexibility, there is recognition, an academic challenge, there is

a process of becoming a professional again. A professional that studies, that updates, that does research, that positions himself, that can transcend his country and support an international organisation (...) In the other system you are judge, lawyer, psychologist, a whole lot of things. It became an administrative system, too many papers to fill in, we've lost the essence of being educators and have become perfect administrators. But not educating educators. All that frustration disappears here [in the DP]. (Executive Director of ASOBITICO)

A vital ingredient to teachers' involvement in the DP is in-service training. ASOBITICO and the MEP collaborated in offering teachers the option to receive continuous training in July every year. Even when interviewees had mixed views on the quality of the training in which they participated, the possibility of updating and re-examining their practices was highly valued. Plus, the extra hours teachers are paid for planning can be included as an opportunity for self-training and professional development.

Furthermore, the DP creates new paths for teachers' professional development. In the context of a predominantly flat teaching career, the IB offers teachers an upgrade through the possibility of becoming examiners and workshop facilitators. For interviewees, this constituted an opportunity in terms of income, professional growth, and travelling. The latter was surprisingly relevant for teachers: not only they appreciated the possibility of travelling to other countries, but they also highlighted the possibility of visiting IB schools in other places and be in contact with other IB teachers.

The DP helped me find the kind of professional development I wanted. I am also teacher trainer in TOK for the IBO, I am also advisor, reader and evaluator. I wouldn't have all of this if I was still with the NB. I would be repeating the same classes and doing the same exams. (IB teacher, Costa Rica)

Finally, another source of motivation for teachers was the feedback the DP gives to teachers once they upload internal examination grades. Many teachers expressed it had been the first time in their careers that they received feedback on their performance. In this aspect, the DP guidelines and feedback mechanisms seemed to have a positive effect on teachers' motivations to choose and continue to teach in the programme.

Our fieldwork showed that DP teachers in Costa Rica work collaboratively, used a variety of teaching strategies, conducted a personalized monitoring of students and explicitly prepared them for the IB exams.

Regarding collaboration, in Costa Rica the IB know-how seemed to be distributed around the network comprised by IB teachers and coordinators, and ASOBITICO members. Thus, teachers' teamwork did

not only include their own schools, but also other public schools in Costa Rica, and even private schools. Interviewees mentioned they counted on teachers that taught the same subject in other public schools for research and lesson planning, problem solving, emotional support, and even friendship.

Regarding teaching strategies, teachers had widened their repertoire. They continued to hold a central place inside the classroom, but combined those moments with others focused on non-directive research, group debates and exchange, and exercising.

### The DP in the classroom

Based on class observations, and interviews with school staff, students and officials from MEP and ASOBITICO we can provide an analysis of a typical IB classroom in public schools in Costa Rica. Of course, the description that follows is not completely representative of every DP class in the country, but rather of the kind of situations that we could repeatedly observe and were confirmed in interviews. An important caveat is that we visited some of the more established schools. It is quite possible that in schools that have recently started with the IB the situation might be different.

Small group size of 10 to 15 students per class is one of the characteristics of DP classrooms in public schools in Costa Rica. This favours a personalized approach to teaching and learning and helps to promote student participation and discussion.

IB teachers are extremely rigorous and start to have a special sensibility towards their students because they get to know them, understand where they come from, what problems they have, who they are. Since groups are not of 30 students or 40 but only 15, they know each other, familiarize, identify with each other. There is a more authentic kind of support. (Executive Director of ASOBITICO)

In a group of 30 and in a very short period of time it is very difficult to be able to establish a close relationship. But IB is another world. I can realize that something wrong is going on with a student only by hearing her voice. I see their faces or look into their eyes and know that something is going on (IB teacher, Costa Rica)

Classrooms are equipped with a LED screen, power sockets, and Wi-Fi connection. Students are organized in a semicircle in small group tables, while teachers could be found at the front or moving around the classroom. Students work with their laptops, some of their own and others provided by the school in commodatum. It is also worth noting that DP classes extend beyond the classroom with activities, such as data collection, library work, laboratory inquiries, and CAS projects.

Classes are two-hours long —as opposed to 40 minutes in the NB—, which facilitates working with non-directive approaches and a varied set of teaching strategies. The classes we observed offered students a dynamic environment that combined different type of activities. For instance, a class would include a teacher's presentation, students' practice, data collection or guided research, group discussions, and exam practice. The latter was predominant, and included in-class training, study of assessment criteria, descriptions of the various parts of the exam, mock examinations, feedback oriented to prevent mistakes in the exam, among others. For example, in a TOK class in which we participated, a student asked if he could use the content of TOK in the exams of other subjects. The teacher picked up on this issue and explained that it was very important to use TOK content in other exams, since it would give them extra points. She noted that students in the previous year had lost "points" in exams because they did not use what they learnt in TOK in other subjects. This type of discussion centered on specific strategies for exams was very common in the classes we observed.

Thus, the exam constitutes the pedagogic organizer of the class and is usually the focus of class discussions. This has a double, and to a certain extent contradictory, effect. On the one hand, it contributes to focus teaching and learning on the kind of deep learning that the IB promotes. On the other hand, training for the exam narrows the limits of what can and should be taught and learnt and adds a flavour of instrumentality to the IB classes. Nevertheless, the strong focus on the IB exam in classes in public schools in Costa Rica is an indicator of the strong impact that the DP is having on teaching and learning strategies.

Another feature of the DP classes that we observed was the close relationship between teachers and students. Teachers emphasize they get to know students, and students value having direct access to the teachers. The relationship seems to boost the teaching and learning process, and favour a personalized follow up of each student's learning process.

Overall, the resulting DP class seems to partially alter some of the basic features of secondary schooling in Costa Rica, such as the academic distribution of time and space, student-teacher relationship, class size, the kind of knowledge that is promoted, teaching and learning styles and assessment practices. These changes are related to a combination of factors: a small group of highly motivated students with strongly committed and motivated teachers in a context with clear and precise goals and the support and training that schools and teachers receive.

# The impact of the DP on students

In Costa Rican public schools there is a limited number of seats available for the DP. Each school has its own selection process, led by IB coordinators and teachers. However, under the leadership of

ASOBITICO and the MEP, public schools are progressively building consensus on the criteria and processes for student admission. Although with slight variations between schools, the admission process includes a day camp experience, and interviews with the candidates and their families.

To be eligible for the admission process, students need to have fully passed the 10<sup>th</sup> academic year; they cannot have pending academic subjects. However, our interviewees agreed on the notion that academic performance was not the most important criteria to select DP students. They argued that excellence in NB did not guarantee success in the DP. This is related to differences in teaching and assessment in both programmes. To succeed in the DP, students must transform their strategies and habits. Therefore, coordinators and teachers give preference to 'commitment' and 'effort' as the best predictors of success in the DP. They also take into account whether DP candidates have full support from their families.

Moreover, the admission phase provides an input to divide the groups. In Costa Rica, coordinators and teachers believe heterogeneous groups —in terms of performance, interests, and personalities—create the best environment to teach and learn in the DP.

Students who participate in the DP in Costa Rican public schools stay for an extra year in school (year 7). The justification for the extra year in school is based on the notion that students need more time to adapt to the IB style of teaching and learning. Although this probably contributes to the good academic results of students, it also acts as a discouraging factor for some students that eventually opt not to enrol in the DP, and was also moderately questioned by some of the IB students we talked to.

### Why do students choose the DP?

Overall, the students that we interviewed said that when they chose the DP, they were seeking 'something more'. In the focus groups there was consensus around the idea that the NB was either dull or easy, and the DP created an intellectual challenge, or even a motivation to go to school. When students speak about the NB, they would describe it in similar terms as coordinators and teachers. For example, the notion that the IB moves students out of their "comfort zone" was very present in the words of students and teachers.

In responding to the survey, Costa Rican students specially highlighted the high-quality education offered by the DP and preparation for university as their main drivers to choose the programme (see Figure 4). Overall, students had a very positive view of the DP in terms of how the programme is preparing them for research, university, critical thinking, life, communication, and understanding the world (see Figure 5). Their perceptions in terms of preparation for work and for team work were still

positive, and surprisingly students did not value so much the preparation for scientific thought. This last result is quite surprising when compared with the kind of abilities we perceived in students in focus groups, classes we observed and in informal conversations during our visit.

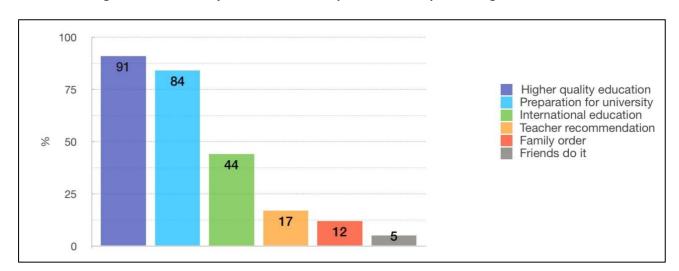


Figure 4. Reasons why students decide to pursue the IB Diploma Programme<sup>5</sup>

Source: survey conducted with Costa Rican students.

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<sup>&</sup>lt;sup>5</sup> Respondents could choose multiple answers. Therefore, answers add up to more than 100%.

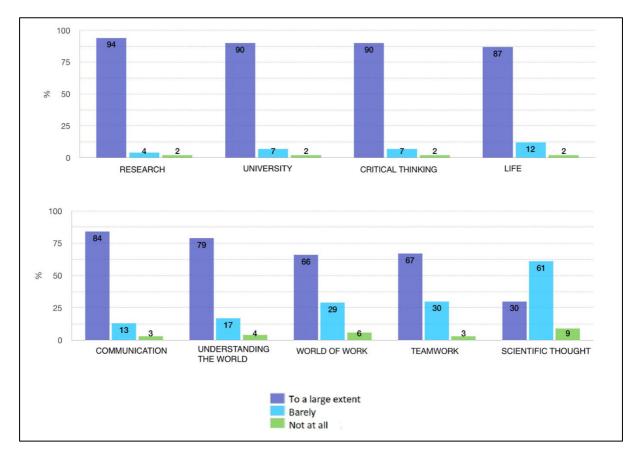


Figure 5. Main areas in which the DP prepares students

Source: survey conducted with Costa Rican students

## Being a DP student in Costa Rica

A recurrent theme in interviews with staff from ASOBITICO, coordinators, teachers and students themselves, was the transformation that students experience during their time preparing for the DP. Teachers and students described this change as moving (far) away from their comfort zone. They described how, in the IB, students are expected to become autonomous in their studies. Success in the DP also requires advanced written and oral communication skills, which, according to our interviewees, were not much developed in the NB. They described this transformation as shifting from 'swallowing' information to constructing knowledge.

So, it's not only academic. It's not swallowing subjects. It's not going to an exam to vomit. It's a kind of knowledge that you like, that if someone asks you, you will know. My parents sometimes ask me to stop speaking at home because I arrive home and talk about the things I've learnt at school. I speak a lot, and it's like "ok, ok, ok, why can't you stop talking about it?" Because I like it. I had never experienced this thing of coming back from school and talking about all the subjects because I like them. (Student, Costa Rica)

The interesting thing is the transformation that has taken place. For example, they asked for a 300-word written essay when I applied to the IB and it seemed impossible. Before one used to think of 4000 words and say "I'll never be able to do it". And now I feel "I'm over the word limit". (Student, Costa Rica)

In the focus groups with students it was evident that they recognized and valued this change. Firstly, they valued acquiring a critical perspective to analyse reality. They described this ability in terms of being able to consider different perspectives on a social problem or issue, as well as moving away from stereotypes and prejudices.

It is extremely important to change and gain a wider perspective. Because there are many social issues, many stereotype, prejudice, that we have and we naturalize. So, in Literature of the IB I've realized of all the gaps that exist socially and in terms of gender. (Student, Costa Rica)

They had a high esteem for Theory of Knowledge. Although they noted that, at first, they found it difficult to understand what the subject was about, they later appreciated the more open approach to knowledge it provided. They also highlighted feeling proud of their personal growth. This change was mostly driven by CAS. Even though the NB also required community service, students noted that it is based on isolated activities, and was quite superficial when compared to CAS. On the contrary, the CAS format, that included documenting and reflecting on their actions, made a difference in students' education in Costa Rica, and was highly valued by them.

What is more, it was quite evident in the classes we observed and in conversations with teachers that students developed academic writing and oral skills. According to staff in schools and ASOBITICO these seemed to be among the most valued learning outcomes once students enter university. IB students developed the capacity to write independently, to create an argument and a personal interpretation based on the literature. They learn about the importance of considering different perspectives, understanding knowledge as a social construction that is unstable, incomplete and open to diverse interpretations. They also developed abilities related to citations, copyright, and avoiding plagiarism. These are extremely important competencies that are critical in the transition from secondary education to higher education. In the focus groups, the extroversion and vocabulary span of students was noticeable, as were their criticality and openness to different perspectives. Inquiry skills and self-regulation were also highly valued by students and very valuable in university. Students highly valued their overall experience with the DP.

These significant transformations in students implied a big effort on their side. Most interviewees (including students) mentioned the stress and pressure that students feel during their time in the DP

as a problem that needs attention. In focus groups students reported working long hours at home and on weekends to meet the expectations of the programme. Some even mentioned situations in which some students had physical consequences of stress, and coordinators we interviewed were aware of these issues. For example, the Executive Director of ASOBITICO and coordinators we interviewed commented that in their regular meetings they share strategies to mitigate stress, and they even decided that coordinators and faculty would cancel classes for a day and take students outside school for recreation when they perceive the general level of stress is too high.

Nevertheless, students reported going through this process with plenty of support from coordinators, teachers, families, and their peers. They valued coordinators and teachers for being caring and receptive to their needs. Schools pay special attention to students' wellbeing. Families were also warned to watch out for their children's stress. Both in focus groups and in surveys we could find out that students also highlighted the role of their peers in supporting them along the DP.

Finally, students experienced a transformation in their relationship with teachers, both inside and outside the classroom. They felt the DP allowed them to have a voice in class: the class was described as a place where their perspectives were valued. Students reported the same teacher behaved differently in an NB and in a DP class. This was even recognised by teachers themselves. The DP curriculum seemed to favor a different relationship between teachers and students. They also recognised teachers to be more caring, attentive, and comprehensive.

The best thing that has happened is the change in the teacher-student relationship in relation to the methodology and teaching. The student has a desire to learn. If they are in the program it's because they want something better, something of quality. So, that makes the whole classroom dynamic to be different. Because it's different when you go to a class with many students that are there because "they have to", from when they say "I'm in this program because I know that it's harder but of a better quality and is a better education for life" (IB teacher, Costa Rica)

Thus, overall, we found that the DP is having a strong impact on the schools implementing the programme and on the teachers and students that participate in the DP. The programme is very well established in the participating Costa Rican public schools. In the next section we will explore the impact of the IB on the overall educational system and on Costa Rica in general.

#### Impact of the IB beyond participating schools

One way in which the impact of the IB extends beyond participating schools is through its graduates.

One of the coordinators told us that he received a letter from the University of Costa Rica

congratulating them for the academic level of their students. The Executive Director of ASOBITICO highlighted the interest of international corporations in hiring IB graduates:

We are contacted by companies asking for students who are finishing their university courses to hire them (...) for example, Citibank has just asked us for 40 IB alumni who are in their last years at university to hire them. Why? Because they started hiring five [IB alumni] for six months, and they were very pleased, so then it was 10, then 20, now it's 40. (Executive Director of ASOBITICO)

Another interesting effect is that the IB project has contributed to some changes in the relations between public and private schools and boosted the IB in the private sector. When the DP was first implemented in public schools, teachers from the public sector visited private schools to receive help. The situation has shifted, and now it is very common for private schools to visit some of the more established public IB schools to learn from them. Furthermore, there are some indicators of the development of an IB community that overcomes the distinction between public and private, including both kind of schools. For example, students in public schools mentioned how they had the chance to meet with their counterparts from private schools in TOK and CAS fairs, and other events and could establish a good relationship with them. Although this does not necessarily permeate the whole educational system, it is an interesting outcome, considering the distance that exists between schools, teachers and students in these two sectors.

In 2017, there were more public than private IB schools authorised in Costa Rica, but this is a situation that will soon change, since many private schools have applied or are applying for authorization in the last few years and it is expected that by 2018 there will be 26 authorized private schools and 20 public schools.

It is also interesting to analyse the impact of the IB in relation to the National Baccalaureate, in terms of the way in which it conceptualizes the work of teachers and students, knowledge and assessment. Almost everyone we talked to in the MEP and in schools could see the benefits of the IB curriculum when compared to the more traditional curricular approach of the NB.

However, most of our interviewees mentioned that even if changes at the level of the official curriculum were made, it was very difficult to have an impact on teaching and learning practices because the exams of the NB are still based on a more traditional curricular vision. This exam is strongly embedded in the Costa Rican culture and is difficult to change. A member of the Higher Council told us how the removal of the exam that students had in 6<sup>th</sup> grade was a huge cultural battle because it was seen by many social groups as a relaxation of the quality of education. And consequently, she noted that it was very difficult to foresee big changes in the NB in the near future. Thus, even if those that are in close contact with the IB, value its curricular approach and see it as source of inspirations for the kind of changes that they think the whole system should go through,

they are also aware that the NB in its current form is a "very closed system" specially guarded by the exams.

#### **Sustainability**

The project of DP implementation in public schools in Costa Rica is currently growing with new schools that are going through the process of authorization, and others that have been authorized but have not yet presented students for the exams. The positive result, in terms of the transformations that are happening in schools and for teachers, students and communities, are encouraging.

Analysis of student results from the 2017 exam sessions show positive outcomes. In IB state schools in Costa Rica, 99% of students have applied for the full IB Diploma. Of those students, 68% obtained the IB Diploma, with an average of 27 total points. Costa Rican students in public schools had the best performance when compared with their Peruvian and Argentine counterparts. In Argentina 18% of students that sat for the Diploma obtained it with an average total of 16 points, while in Peruvian state schools 59% of students that applied for the Diploma obtained it with an average total of 25 points. Yet, on average the results of Costa Rican IB students in public schools are lower than the results of IB students in private schools, where out of the 90% of students that were enrolled for the full IB Diploma, 89% of them obtained it with an average of 31 total points (see comparative section for more details on students results).

The initiative that started with a major involvement and leadership of civil society and a minor participation of the state has evolved favourably in its governance with a consistent articulation of both sectors. The fact that the state has included the target of 20 IB public schools in the National Development Plan and taking up further financial responsibility are solid indicators of the stabilization of the project. A member of the Higher Council of Education was eloquent when talking about the status of the IB in Costa Rica:

Today, after 9 or 10 years I can tell you that everybody in the Higher Council knows about the IB... It is an issue that is installed in the daily routines of the MEP, in the Planning Department, in the Human Resources Department, in the Department of Curriculum. (Member of the Higher Council of Education)

Thus, the IB in secondary public schools in Costa Rica has been stabilized in the MEP, in schools and, as far as we could grasp, in the overall Costa Rican community. The 20 target schools have already been selected and it is not difficult to foresee that with the mechanisms of support and IB know-how that has been developed, the new schools should have good conditions for running the DP. Thus, in its actual state the IB seems to be very stable and sustainable in Costa Rica.

However, as part of the process of stabilization, the project will face some challenges in the next few years that could be key in defining an even stronger stabilization, but at the same time entail a certain level of risk. One of these challenges is the displacement of financial responsibilities from ASOBITICO to the state. Overall, this shift should generate more stability and sustainability, but in a country with limited financial resources, moments of financial instability in the state could affect investments in the programme. Political changes (for example an eventual government that does not support the IB) are also a potential risk, but Costa Rica has one of the most stable political cultures in Latin America, and the role of the Higher Council of Education is a guarantee of certain continuity in political orientations.

Another challenge is the process of change that is taking place in ASOBITICO, as the founding members take a step down from leadership positions in the organization. The process seems to be very well planned and has the aim of giving more sustainability to the Association, and making it less dependable on individuals. Nevertheless, it is a challenge that must be overcome.

### Strengths and challenges

The experience in Costa Rica has many strengths that have consolidated along with the project over the years. Firstly, the initiative has clear goals from the beginning and ASOBITICO had the means to achieve them. This initial framing was accompanied by a detailed planning: the project started small and keeps growing steadily towards its goals.

A second clear strength is the private-public alliance between ASOBITICO and the MEP. ASOBITICO provides the know-how and (in the beginning) the financial support. The MEP provides the regulatory framework (centralised curricula, inclusion in the national development strategy, recognition as a secondary school modality). They are also, progressively, taking over in terms of funding. Their complementary roles contribute to the project sustainability.

A third strength of the initiative is the network of support for participating schools. ASOBITICO provides ongoing guidance to schools since they express interest in taking part in the programme. However, the most interesting feature of this support is the community they have created among coordinators, teachers and students of the different schools. This network has generated a strong sense of belonging between school actors, it has favoured peer learning and has led to continuous improvements.

Although the project seems to be growing at a sustainable pace, some challenges remain to be considered. The first is the tension created by the coexistence of two parallel programmes in the schools that offer the DP. Although coordinators and teachers are fully aware and seem to be working

to ease the tensions, the integration of the school remains a challenge. The second challenge is teachers' and coordinators' working conditions, since they need to opt out of the regular teaching career to become DP teachers.

#### THE DIPLOMA PROGRAMME IN THE CITY OF BUENOS AIRES

The project of implementing the Diploma Programme in public schools in Buenos Aires is an initiative of the Ministry of Education of the City of Buenos Aires, launched in 2013. However, the DP has a long tradition in Argentina, mostly in private schools and three state schools (one in the City and one in the Province of Buenos Aires).

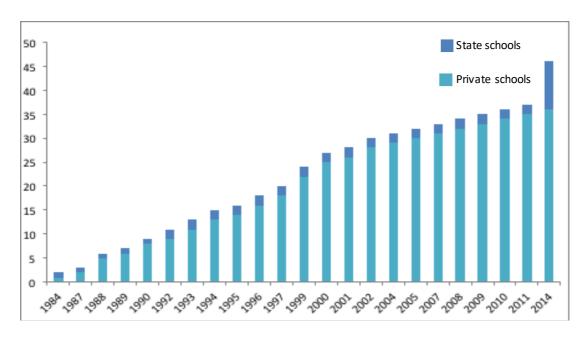


Figure 6. Number of DP schools in Argentina

Source: compiled by authors based on IBO's database.

The project started with the implementation of the DP in 11 public schools. However, one school dropped out and another one had been already offering the DP since 1988 and was included within the overall initiative.

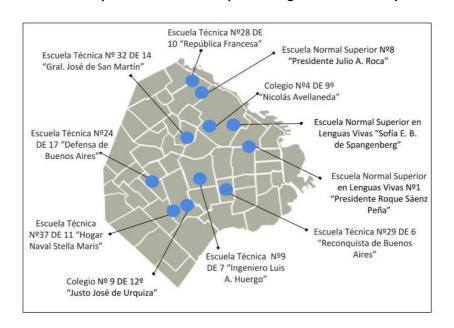


Figure 7. Distribution of public schools with Diploma Programme in The City of Buenos Aires

Source: compiled by authors based on IBO's database.

The schools that incorporated the DP are not evenly distributed across the City. Six of the 11 schools concentrate in three of the wealthiest districts in the north of the City, and the remaining five in central-southern districts where there is a more diverse population in terms of socioeconomic background. There are no schools in the southern districts of the City, which are the most disadvantaged.

An important characteristic of the schools that were selected is that they are comprised of three different kind of schools: six technical schools, three normal schools (institutions that also have a tertiary level for training teachers) and two academic schools. In the case of technical schools, this is a separate track that is geared toward vocational education but at the same time has a strong academic tradition for the teaching of sciences. These schools have a full day schedule that covers both morning and afternoon shifts, doubling the number of hours of academic secondary school. The variety in types of schools is relevant because it creates a challenge in terms of having to synthesize the DP with three different curricular configurations. In addition, these types of schools depend of different administrative authorities

The implementation of the DP in Buenos Aires takes place in the context of a general crisis of secondary education in Argentina (Terigi, 2008). Concerns over the quality of secondary schools have grown in the last few decades due to high student dropout rates, and the disappointing student outcomes throughout the country. Secondary schools have enormous difficulties in retaining

students: only 5 out of 10 students who enrol eventually graduate in a timely manner (DiNIEE, 2015). Moreover, national standardized tests show that half of the students in their last year of secondary school are below the basic level in Language and Mathematics (Ibid). This context poses challenges to the initiative and, at the same time, provides an opportunity to generate some of the changes that are being promoted at the level of official discourse.

Another potential challenge for the DP implementation is the way in which teachers are assigned to schools. Teachers work a few hours in many schools, and turnover from one year to the other is high (Terigi, 2008). In addition, the fact that there is no exam at the end of secondary education nor university entrance exams has several consequences for the initiative. First, it weakens the capacity of the state to steer teaching practices in school in terms of what and how it is being taught. This affects any attempt to introduce changes in schools, including the implementation of the DP. Second, the idea of IB exams is countercultural and very foreign to the school culture in Argentina, where teachers and students are not used to having an external agency certifying their performances, and consequently are not accustomed to preparing for external exams. Third, in Argentine schools, passing secondary education subjects with a 6 (the minimum approval grade) or with a 10 (the maximum grade) makes no difference in practical terms. In this context, students have little incentive for choosing and remaining engaged in an academically challenging programme. Another contextual situation that affects the implementation of the DP in the City of Buenos Aires is the fact that the programme is being promoted in parallel with a reform called Nueva Escuela Secundaria (New Secondary School) that requires major changes in curriculum and teacher assignment in schools. Finally, it is important to mention that the Minister of Education that promoted the initiative, and most of its senior team, moved to the National Ministry of Education when the Mayor of Buenos Aires became President of Argentina in December 2015.

According to interviews with high officials of the Ministry of Education, it was the Minister of Education of the City who made the decision to implement the DP in public schools. After participating in an IB conference in Washington DC, he was impressed by the "IB pedagogical model" and asked his Secretary of Innovation and Planning to run the project. In terms of motivations to introduce the DP in public schools in the City of Buenos Aires, the notion of equity was salient. As in Costa Rica and Peru, promoters of the project that were interviewed interpreted equity as giving students in public schools opportunities to access a high quality education that has only been available for affluent families. The Secretary of Innovation and Planning that was originally in charge of the initiative also mentioned that they were motivated to show that students of less advantaged backgrounds could perform as well as the students in the most privileged socioeconomic situations. They also believed that teachers that participated in the programme would have an influence on other schools by

introducing the kind of innovative practices that they would acquire through their involvement with the IB.

In 2012, a Ministerial Resolution was signed, defining the general term of references for the project to be implemented in public schools in the City of Buenos Aires. It establishes that the DP would start in 2012 and a timeline including the different actions and steps in the process of authorization and implementation. The norm establishes the responsibilities of the Ministry and of the IBO. Overall, the Ministry is responsible for funding the initiative, including teacher training and provision of materials, such as models of exams, books, etc.

### Support framework and governance of the initiative

One visible characteristic of the initiative in Buenos Aires is that it is weakly institutionalized. There is no regulatory framework to organise it other than the mentioned terms of reference signed between the IB and the City. Expectations and responsibilities of the programme were fulfilled due to the commitment and enthusiasm of individuals. The role of coordination at the Ministry of Education, in its various levels, has not been institutionalized (nor stabilized). Originally, the Secretary of Innovation and Planning created a division that oversaw what they called "special projects". These were mostly innovation projects that experimented with external educational models to promote changes at school level. Within this division, two people worked full time on the IB project. In an interview with the (now former) Secretary she told us how she interpreted the IB as a project that required "high maintenance" to be sustainable, and told us how the Minister, herself and the team where on top of the project, meeting with directors, teachers and students and providing support.

The decision to run the project from the Secretariat of Innovation and Planning is an example of the kind of exceptions to the established logic of public administration that were made. These exceptions had significant effects on the project. In the first years, they helped to overcome some bureaucratic obstacles and boosted the initiative, but with changes in authorities, they weakened the sustainability of the project. In the tradition of the Ministry of Education in the City, the Secretariat of Planning is not directly in charge of schools. Thus, when the new administration reorganised the Secretariat of Planning in 2016, closing the "special projects" division, the IB project came under the supervision of the Director of state Managed Schools, that oversees more than 1000 schools. In this context, a project that involves 11 schools was not given as much attention and resources as it had before. Furthermore, the Director of state Managed Schools retired in the first months of 2017, and while we were visiting schools, coordinators, and principals were lost in terms of who was their counterpart in the Ministry.

Some changes in management in the IB further complicated the situation. While the IBO had an office in Buenos Aires, the organization provided much formal and informal support to the initiative. At every level of the project, interviewees highlighted that IB personnel from the office in Buenos Aires would often visit schools, interacted regularly with the state authorities that were involved, and were open to finding solutions to the needs of schools and the state. Since the closing of the office in Buenos Aires, both the state authorities and schools were no longer familiar with whom their counterpart in the IB was. The situation had improved by the end of 2017 when we interviewed the new Director of state Managed Schools who had been in touch with corresponding IB officials.

With the changes in authorities, as the "special project" division was closed, it was decided to appoint three IB coordinators as leaders of three distinct networks of IB coordinators: one for technical schools, one for academic schools, and one for normal schools. According to our interviewees in schools, the decision to appoint three coordinators of coordinators was beneficial in a moment in which the overall state support was declining, because these individuals were closer to schools (in some cases it was one of the school coordinators that was appointed) and, at least for the network of technical schools, it created a real network in which coordinators exchange ideas, share experiences and support each other through email and other digital networks, and face-to-face meetings. However, even if this new configuration contributed to the support among coordinators, it is still weakly connected to the authorities in the Ministry. In addition, the fragmentation of the small network of IB public schools into three different smaller networks also atomized the project into three very small networks.

Thus, the overall feeling among coordinators, teachers and school principals was that the support from the state had been steadily declining, from a first phase with the Minister of Education as champion of the initiative, to a second phase with one of the officials in charge of the IB project as Director of state Managed Schools, a third with no clear leadership, and a fourth with a new Director that had been appointed while we were doing our fieldwork (2017). Not only did the centrality of the project and support from the state decline, but also the quantity and quality of the IB know-how in the state weakened, as new officials were less acquainted with the IB philosophy. Furthermore, the initiative is not currently listed on the Ministry's website, and there is no formal evaluation of its processes and results.

# The design and implementation of the initiative

Within this overall situation, three instances were key in the support and management of the state: the selection of schools, the authorization process, and overall support during implementation in schools.

Several interviewees in the Ministry and schools noted that although the initial plan was to follow a geographical criterion to select schools, the team in charge decided not to impose the programme on schools. This led to a workshop organized by the Ministry with the IB in which supervisors were informed about the programme and were asked to suggest schools that might be interested and able to implement the DP in terms of infrastructure, pedagogic conditions, principal's leadership, and interest of the teaching staff. The 30 suggested schools were invited to a new workshop, where principals were informed of the programme and its implications and were asked to express interest in the programme. According to our interviewees there was debate among principals, with polarized views on the programme. Some would associate it to private education and the marketization of education, others found it beneficial for their schools (for instance, to attract more students, or to improve the quality of their school and attract the middle classes back to public education). In the end, 20 principals expressed interest in implementing the DP in their schools.

After that first selection, the team in the Ministry cross checked the intentions of principals with viability criteria mainly in terms of infrastructure, leadership and conditions to develop a team of teachers working steadily in the process of authorization and, later, implementation. This process resulted in a final number of 11 schools that started the authorization process. All the actors involved in the process that were interviewed for this study, suggested reduction to the final number of selected schools happened almost "naturally", as schools withdrew when they realized that they did not have the human or material conditions to go on with the process of authorization. Several interviewees told us about one school that withdrew once the process had begun: although the principal was enthusiastic about including the DP in the school, the teaching staff did not support the initiative. The resistance of teachers was too big an obstacle and the head teacher decided to withdraw.

Although the authorization process generated many challenging situations, the definition of curricular options within the IB seems to be one of the most interesting to account for. On the one hand, the implementation of the DP happened in parallel to the implementation of the New Secondary School (NES). This reform reduced curricular options for schools that had to adapt to one of the options given by the new legislation. The DP did not fit any of these pre-defined options. Thus, an exception was made for the schools that participated in the initiative.

On the other hand, officials that were interviewed highlighted that the existing political culture in the Ministry of Education of the City at the time was based on the belief that decisions should not be imposed on schools, they were rather negotiated. Therefore, schools were given the freedom to select the IB subjects they preferred; a process that led to 11 unique IB curricular arrangements. Therefore, in Argentina the challenge of aligning the local curriculum and the DP curriculum was overcome through an exemption from the official curricular options, and each school developed a unique approach. Although this had the advantage of a better adaptation of the programme to the needs and resources of each school, it was very inefficient in terms of teacher training, the possibility of teachers moving from one IB school to another, and state supervision and support.

For example, one of the schools we visited was very proud of being the only school in the world to offer an IB subject called Design of Technology in Spanish. Even though the pride of the school authorities is understandable, from the perspective of planning the policy, it is evident that having such a rare subject in the school curriculum is a challenge for sustainability and efficiency.

Another issue in defining the IB curriculum for public schools in the City was the way in which the IB would be combined with the local curriculum. Very few of the IB subjects were integrated with existing local subjects, not more than one or two per school. Thus, students who chose the IB had to do the whole existing programme in their schools plus all the IB subjects. As a result, students who chose the IB had to follow almost two full programmes. Considering that students in typical Argentine schools take 12 to 14 subjects, this implied a very big effort.

During the three years of the authorization process, several challenges came up, linked to the designation of IB coordinators, and teacher recruitment, training and retention. School principals oversaw the selection of the DP coordinator. There is no formal position that could be equated with the role of the IB coordinator in BA schools. It had to be a teacher included in the programme *Profesor por cargo*, which means the teacher is hired for a set of working hours at the school that includes both teaching and institutional hours. There is consensus among our interviewees that this is not enough time to cover for the extra work that the position requires, although in one of the schools we visited there was an assistant coordinator that was assigned 5 hours a week. This constituted an important contribution to the running of the programme. In another school we visited, the coordinator had stepped down because he thought that conditions were not sufficient for the workload that the job implies. Nevertheless, he still contributed informally helping the new coordinator with different tasks. Thus, in two of the three schools we visited, the IB coordination was formally or informally taken up by two teachers.

The agreement between the IB and the Government of Buenos Aires included only one training workshop to certify teachers but did not foresee the problem of teacher turnover which is a significant challenge for the initiative. Around 300 teachers that were potentially going to participate in the DP were offered training during the process of authorization. However, this did not completely solve the need for training. The Ministry did not define specific profiles for teachers that were sent from schools to sessions and, consequently, some of the teachers that were trained retired the next year, others were promoted to other roles and others changed schools and abandoned the project. All constituencies that were interviewed noted that no more formal training was offered after the authorization of schools.

Replacing teachers was a challenge. Due to the fixed hiring conditions in BA, teachers cannot be chosen by principals or even supervisors. They obtain their teaching hours though a public competition in which the teachers with the most points can select from the positions that are available. Points are obtained through a standardized system based basically on seniority and in-service training. This system is quite problematic when trying to implement a programme like the DP that requires teachers to have a specific training and to get to know and understand the IB pedagogy and philosophy. Given the standardization of the system, there is no way to show that a given school offers the DP, and that a given position requires the teacher to be trained in the IB tradition. Coordinators and principals who were interviewed noted that even if that information circulated informally, teachers who apply do not necessarily know what being part of a school with the DP implies. These situations were not foreseen and led to some schools having to place teachers with no IB training teaching IB subjects. Some interviewees noted that since no more official training was offered, teachers and coordinators had to be creative in finding "IB know-how".

#### Searching for IB know-how in the private sector

An interesting support scheme that was established in Buenos Aires was the partnership between private and public IB schools that was developed between the state and ACBIRP, the Association of IB Schools in the River Plate that includes private schools that are part of the IB network in Argentina and Uruguay. Each public IB school was assigned an experienced private IB school as partner. Coordinators and teachers in schools that we visited valued the support they got from their private counterparts that, according to their accounts, were very receptive to their requests. In a context in which the IB know-how was scarce, private schools became a significant source of information and advice. In some cases, we were told that the link extended to joint projects that included students as part of CAS. However, coordinators in the public schools also told us that they were worried about taking advantage of the good will of their colleagues in private schools and tried to limit their requests.

Thus, the support of private schools was very important in transferring some IB knowledge to public schools, but it was limited, given its informality and the fact that it was based on the good will of private schools.

The difficulty with teacher training and the provision of IB know-how to teachers and coordinators was partially addressed with the voluntary contribution of ACBIRP that regularly offers IB workshops for teachers. However, even though most interviewed teachers had a high esteem for ACBIRP's good will they also noted that sessions were not strictly training sessions, but rather workshops in which teachers horizontally shared experiences. In some cases, teachers valued the information they could get, especially since they did not have much training before (or none) and did not have other sources from which to acquire IB know-how. However, they also mentioned that they had difficulties accessing these workshops because they were organized in private universities that were far away, sometimes they could not get the time off from work in other schools, and in most cases, they had to pay for the fees themselves. The head of ACBIRP noted in an interview that very few teachers from public schools participated in their workshops. According to our interviewees in the Ministry, the state explored the possibility of paying ACBIRP for training sessions but administrative issues became an obstacle. ACBIRP had to go through the process of becoming an official state provider to receive payments from the state, but they gave up half way through the cumbersome process.

Thus, schools had reasonable support from the state during the authorization process, but it was very dependent on individuals that eventually left their positions and consequently the support has been declining. It is mainly the teachers and coordinators who are sustaining the DP in schools with limited and informal support from ACBIRP and private schools.

#### The arrival of the DP in schools

Schools in the City of Buenos Aires had the option to choose whether they wanted to apply for DP authorization. In the three schools we visited interviewees noted that not everyone in the school was in favour of introducing the DP. Even though in the end supporters of the initiative prevailed, in the three schools some teachers were still against the programme. Overall, they thought that the IB was a private enterprise associated with marketization and globalization and were resistant to its involvement in public education. This interpretation might be associated with the fact that the IB in Argentina is mostly a programme in upper middle class private schools, but also with lack of effective communication. Nevertheless, it was clear in interviews with school staff that the IB was gaining more support from teachers as they became more acquainted with the DP. Once the different actors (state personnel, principals, coordinators and teachers) we interviewed got engaged with the pedagogic side

of the IB project they tended to praise the contribution that the IB made to their educational practices. Some interviewees noted that they changed their perceptions as they learned more about the organization and the initiative. For example, one of the coordinators emphasized as a positive feature that the IB was "ideologically open" and even contributed to bringing into schools important ethical themes that were not being included before. The IB model was seen as a "resource" that contributed to "the education that we've always wanted to offer" (IB coordinator, Buenos Aires). Other interviewees underlined the possibility that the IB brought in to address contents with "more profoundness" (IB coordinator, Buenos Aires). State authorities stressed that the IB was aligned with educational aims that have been expressed in legislation for a long time but were not being practiced, and had contributed to their realization.

As we mentioned, the definition of curricular options was left in the hands of schools. At least in the three schools we visited, it was mainly IB coordinators who overview this decision. It was a double challenge that needed to address the articulation with the local curriculum and the availability of teachers at the same time. Comments from our interviewees highlighted the complexity of this process, since it required considering the teaching staff already available in schools and willing to teach DP classes. DP coordinators and principals did not have any prior experience, neither did the available officials from the state. One coordinator emphasized the help he had from a Colombian colleague who had been sent by the IB to advise the school on how to prepare for the authorization process.

In the three schools we visited, the resulting curricular configurations were dependent on the coordinators' and principals' creativity, vision, and possibilities. In one of the schools, they could align one of the subjects from the local curriculum with the IB curriculum, which resulted in a better organization of school time and teaching staff, but it was only one out of many subjects.

The authorization process was also challenging in terms of infrastructure, since the IB required libraries to be enlarged and equipped, and connectivity issues to be solved. In general, the schools we visited (and, as far as we know, all the ones that were selected to participate) were in reasonably good material conditions to start with. Nevertheless, some improvements were needed. In some cases, schools solved these issues with funds from the Ministry, through a combination of support for IB schools, the use of specific funds for improving technical schools (available only to technical schools), and requests that schools could make in the context of the implementation of the NES. The state provided the calculators that the students used for mathematics. Some of the participating teachers and coordinators voiced some complaints in terms of provisions for libraries, the lack of some specific books that were needed for the programme, but these were isolated comments. The biggest challenge that participants talked about regarding material resources was the limited access to additional IB

online resources such as examples of previous exams. Access to high speed internet connection was mentioned as another challenge in the schools we visited.

Although overall infrastructure in schools was good, the technical schools we visited were in better conditions than the academic school. Recent policies in Argentina allocated extra resources to technical schools and left them better prepared to meet the DP implementation requirements. The three schools had a good library and adequate laboratories, both shared with non-DP students. Classrooms were equivalent to those assigned to the local programme and they were equipped with chalk blackboards, regular tables and seats. Coordinators had appropriate offices.

### The impact of the DP on schools

In 2015 the DP started to be offered in 11 public schools. Within the selected schools, each one autonomously defined how students were selected to be admitted into the programme. Although there is no predefined quota, students from year 10 applied and must show good academic results and commitment to be considered for the programme. Some schools organise meetings with parents as part of this process. The process is twofold: on the one hand students apply to be part of the DP, and on the other hand each school sets an admission policy to ensure that the students will be able to meet the expectations of the DP.

An interesting issue that came up consistently in conversations with school staff was the cultural differences between the IB and the public educational system in the City. An example of these differences that was emphasised by all coordinators that were interviewed, and some principals and teachers was the "clash" between a school culture in Argentina that is very flexible and permissive in terms of complying with deadlines and with rules in general, and the IB's strict procedures, regulations and deadlines. For coordinators and teachers, the fact that they had to plan their work for an exam that was going to happen in two years was very countercultural. Furthermore, in a culture in which most issues are open for individual negotiation, facing the IB as "only a webpage that is not open to conversation or negotiation, where everything is planned and organised with dates and deadlines" (IB coordinator, Buenos Aires) was very unusual. Even though some coordinators mentioned that this difference was a bit shocking at first, they all agreed that in the end the DP had contributed to bringing order to school and to their work. This was one of the aspects that they most value from the IB. In one of the schools we visited, coordinators stressed that this aspect of the DP had permeated other areas of the school, and that it had helped them to see the value of planning ahead, having clear deadlines and enforcing them.

With the IBO we never had a problem, it is super organised, it is a clock machinery, somewhere between the US and Switzerland. You send an email and within 24 hours you get an answer. It is great, it is almost something idyllic. You think "this cannot be true". You are never going to have a problem. You call, someone picks up the phone in English and in a few minutes they'll get someone who speaks Spanish and they solve your issues. (Head teacher, Buenos Aires)

Another relevant difference that was mentioned is the tension between the logic of inclusion and retention in the local culture and the high demand that the DP places on students. Coordinators and some teachers argued that the public system in Argentina has been moving towards a culture of "retention without quality" in which schools relax their expectations of students and prioritize inclusion (understood as keeping the student in the school) over quality. Again, they valued this aspect of the IB and thought that it had helped them reach a reasonable balance between the need to keep students in school and the need for quality, noting the tension was not an easy one to solve.

Finally, the implementation of the DP in public schools challenges the distribution of power in the public educational system. On the one hand, it affected the overall hierarchy in which information and decisions must move up and down through a formal system. IB schools communicated directly with the Secretary of Innovation and Planning, other officials and sometimes even the Minister. Supervisors were sometimes resistant to this configuration that left them out of the process. On the other hand, within the schools, the DP redistributed power between the director and the IB coordinator, sometimes creating tensions.

Overall, evidence from the schools we visited in Buenos Aires points to the difficult conditions in which the DP is implemented, which likely limited the impact of the programme. Yet, principals, coordinators and teachers involved pointed to some positive impact of the DP in their schools.

Our interviewees reported that more families were seeking the schools that implement the programme. In the Argentine context, this process might be related to the migration of middle classes away from public schools: the DP, a programme traditionally demanded by middle and upper-class families, could be playing a role in regaining students from the middle classes into the public system. Two of the schools we visited reported having increased the number of candidates. The schools were starting to receive students not only from the surrounding area but from other jurisdictions. One of the schools was proud for hosting a Latin American student that came to Buenos Aires to undertake the DP.

According to some interviewees, the DP also impacted positively on schools' status as perceived by the staff. When interviewees told the story of their schools, they reported being unhappy with the quality of education they were offering before the DP implementation. Their narrative focused on the

loss of status and quality. After implementing the DP, they became proud of being an IB school and realized they also have tangible results to lean on. Even when the number of DP students was small, those who obtained the IB diploma made the school proud of their results. This phenomenon is not only important in itself, but it is also relevant because it had a positive impact on teachers' motivation.

Finally, teachers reported the programme helped to recover the centrality of content knowledge and to revise teaching practices. According to many interviewees in schools, the DP introduced updated content knowledge and teaching practices to schools that were highly valued by teachers. Despite insufficient training, teachers were quite entrepreneurial in addressing the challenge of transforming their teaching practices to adapt to the requirements of the DP. The use of available documents, exchanges with private schools organized by ACBIRP, and access to the IB's Programme Resource Centre (previously Online Curriculum Centre [OCC]) were some of the resources that were used by teachers. They also reported finding independent resources and advice on the Internet. In Buenos Aires, IB teachers are a small group who have been receptive to the implementation of the DP, partly due to a previous disposition to introduce innovations in their teaching.

Teachers that we interviewed argued that the DP improved their expectations for student learning and success. Research shows teachers' high expectations on students learning is one of the keys to improve education quality (Rubie-Davies & Hamilton, 2006). Therefore, this reported impact is not to be underestimated, especially because interviewees report this change in relation to their perception of all students, not only those who undertake the DP: "I realized they can do a lot more than we usually expect from them. And that is also true for my non-DP students, why would I expect less from them than I do from the others? I know they can achieve a lot" (IB History teacher, Buenos Aires).

### The impact of the DP on teachers

An interesting feature of the case of the City of Buenos Aires is that the state has been able to run the DP in schools keeping teachers within the established teaching career (teachers do not need to move into ad hoc unstable working conditions as in Costa Rica and Peru).

As mentioned before, selected schools in BA were already in a programme that allowed teachers to be paid for out-of-class time —a total of 12 paid hours: 9 hours in class, 3 out of class. Therefore, the first teachers were hired in this scheme: DP classes would be taught with the 3 extra hours left by the position. But according to school staff that was interviewed, two problems arose: teaching positions in this special programme were insufficient to cover for all the DP subjects, and teachers felt the 3 extra hours were not enough for all the planning, assessment and individualised attention to students that the DP requires. Therefore, teachers of IB public schools got together and demanded the state

provided regular teaching hours to continue with the DP. After negotiations, schools were finally provided with regular teaching hours for some subjects. Therefore, teachers' working conditions vary from school to school, depending on the scheme they are in, but overall the state worked toward improving the working conditions of IB teachers. However, most teachers and coordinators noted that the schemes discussed above do not completely cover the time teachers needs to plan and follow DP students.

Although there are concerns around the workload of teachers who participate in the DP, an alternative career for IB teachers is being developed. Apparently, some teachers are committed to teaching the DP subjects partly because they see it as an opportunity for development in their careers, since they could eventually become teacher trainers within the IB. In Argentina, the teaching career is flat, and promotions mainly lead teachers to school management roles. The IB is seen as an alternative for teachers who are interested in developing professionally as teacher trainers or teaching experts.

As we mentioned, for principals and coordinators, finding teachers for the IB courses was a challenge. If teachers need a leave of absence or they quit their positions, schools have differential management resources to deal with the situation. In technical schools, principals have a certain level of autonomy to choose, at least within the available teaching staff in the institution, their replacement. This is also the case when they need to find a teacher specialized in unique subjects, such as "Environmental systems and societies", which are not directly aligned with any teacher training programme in Argentina. In this case, technical schools can choose a teacher from within their own staff with some freedom.

However, in academic schools, principals are subject to a more rigid system. Thus, in one of the schools we visited we were told about an issue with a substitute Biology teacher declined to teach IB classes. She had a disagreement with the DP philosophy, so she decided to follow the national curriculum. This resulted in the afternoon Biology teacher trying to compensate. There were no formal mechanisms available to solve this problem. Another issue arose when vacancies were not covered. In that same school the coordinator told us that students lost two months of classes until they could find a suitable teacher.

Overall, the teachers that we interviewed shared that teaching in the DP was a very rewarding experience, especially due to the perception that the students enrolled in the DP were more motivated and a relatively more homogeneous group which, in teacher's view made, a qualitative difference when compared with students in the mainstream classrooms. According to the accounts of teachers who were interviewed, this has had transformative effects in teachers' own motivation and experience and was a powerful driver of the teacher engagement.

As mentioned above, another feature worth mentioning is that teachers feel the pressure of the DP schedule. The structure and anticipation that is imposed by the examinations completely transforms teachers' workload. Interviewees admit not being used to complying with a fixed schedule, as the one the DP requires. This imposes extra pressure, but also a sense of order and a clear aim, which teachers appreciate.

However, teacher also felt that they are not being supported in sustaining the programme: "what you feel is that you are supporting something that is not valued by the Ministry of Education" (IB teacher, Buenos Aires). Even when teachers and coordinators value the DP for its effects in the school and in their teaching experiences, they also feel isolated and unrecognized in their effort and commitment.

Another source of motivation for teachers is the signals and feedback they receive from the IB. Given the lack of external exams in secondary schools in Argentina, teachers never have an external evaluation of the outcomes of their work. Interviewed teachers reported being extremely motivated by the possibility of having someone objectively telling them how the students had performed. Furthermore, they appreciated the detailed feedback they received from the examiners in terms of the aspects of the exams that their students had resolved well, and those that required adjustments. Thus, the DP feedback mechanisms seem to have a positive effect on teachers' motivations to choose and continue to teach in the programme.

#### The DP in the classroom

Overall, DP classes that we observed in Buenos Aires were not particularly different from typical secondary school classes in the City. Group sizes vary depending on the modality: while in the two technical schools there were around 15 students per classroom, the academic school mixed DP and non-DP students to complete a 30-student classroom. The duration of the classes was variable. We observed forty-minute classes as well as four-hour classes.

We could document a change regarding the extension of the academic year in December and February to support students in their preparation for the DP exams. Furthermore, there were no classes for DP students during the months of the IB exams.

The teaching approach did not differ: the classes that we observed were mostly teacher-centred. The classes we observed had limited teaching materials, using chalk and blackboard most of the time. However, one noticeable feature was the fact that students were encouraged to have a voice in the

classroom. The level of student participation was considerable high. The interviewed teachers thought this was an important aspect of the DP experience.

The DP exams did not have a strong presence in the classes we observed; they did not seem to be drivers of the teaching and learning. When asked about what made the DP classes different than the regular classes in the City, most interviewed teachers focused on the depth and accuracy of content knowledge as the main features. The exam was not mentioned much.

Overall, the DP classes did not seem to differ very much compared with the non-DP classes. Although some conditions, such as time, grouping, and the distribution of voice, reflected the DP approach, the pedagogic approach did not seem to be transformed. The lack of training opportunities, the low institutionalization of the programme, and the absence of steering and support from the state might explain this weak adaptation to the pedagogic styles promoted by the IB.

### The impact of the DP on students

As we mentioned, each school defines its own selection process for students. However, in the schools we visited the number of students participating in the IB was quite low (less than 15 per year in all cases). According to the IB exam registration data, the average student cohort in state schools in Buenos Aires is 9. Thus, a relative low number of students are participating, which seem to be a generalised feature of the initiative. Furthermore, in the schools we visited, most students were not pursuing the full IB diploma, but isolated IB courses.

Student survey data also provided some insights on student motivations and views about the DP. When asked about why they decided to participate in the DP, preparation for university and a better-quality education were the most frequent reasons mentioned by students (see Figure 8).

100 80 Preparation for university Higher quality education Teacher recommendation 67 65 60 International education Friends do it % Family order 40 35 35 20 13 0

Figure 8. Reasons why students decide to enrol in the DP6.

Source: survey conducted with Argentinian students

Students in public schools in Buenos Aires have an overall positive view of the preparation that they are receiving as a result of their participation in the DP. However, their views are not as positive as those of students in Costa Rica and Peru. Preparation for research, critical thinking and university are among the most valued. Other aspects included in the questionnaire (Research, Critical thinking, and preparation for university) still had an overall positive evaluation from students, but most of the answers noted that the programme was barely preparing them in those domains (see Figure 9).

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<sup>&</sup>lt;sup>6</sup> Respondents could choose multiple answers. Therefore, answers add up to more than 100%.

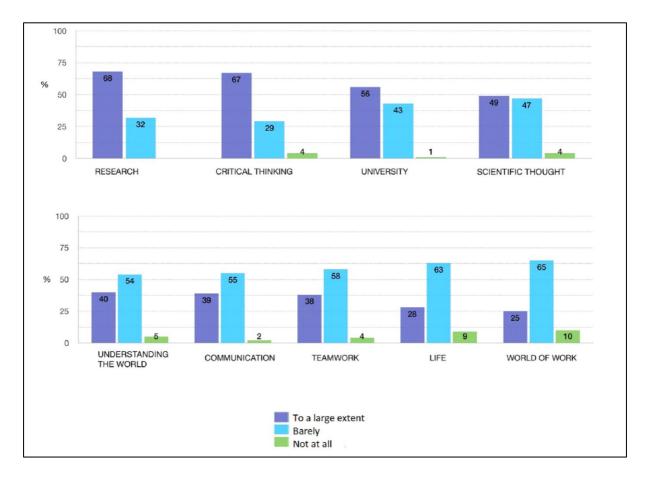


Figure 9. Main areas in which the DP prepares students

Source: survey conducted with Argentinian students.

The students that we interviewed thought that being a DP student in BA public schools was not easy. Challenges are mostly related to workload, lack of clarity in the expected goals, and their status in the school community.

The issues of [lack of] organization and time made it very difficult, nobody seemed to agree on anything, we had to follow our teachers demands, and ourselves make a mix and try to get the most of it. (Student, Buenos Aires)

As my classmates have just said, [the IB] was very difficult, mostly due to the timing the excessive school hours and the demands (Student, Buenos Aires)

Because the two curricula (IB and Argentine) are covered without integration, school time for DP students extends approximately from 7am to 6pm. During that period, they are inside the classroom most of the time. In one of the schools, students have lunch inside the classroom; they bought a microwave to make it easier for them to eat in half an hour, sometimes while they are still being taught. In the focus groups, students were quite critical about this situation. They reported they were

not able to keep up with the schedule, which led some of them to abandon the DP and choose to sit for individual subject exams.

In terms of lack of clarity in the expected goals, students reported being misinformed in some aspects of the exam, such as the requirements and assessment criteria for the extended essay and the TOK presentations. Students did not blame teachers for these imprecisions. They understood that teachers were also new in the IB and were also learning about it, but also noted that these inaccuracies resulted in an increased workload for them. It is worth mentioning that the students we interviewed were the first cohort of DP students in BA public schools, which also partly explains this situation.

Finally, students reported being labelled as the "smart students" in the school. Therefore, they were treated differently by some students and teachers that did not participate in the IB. Students shared that non-DP teachers had higher expectations of them, despite the already high demands they faced from the DP.

Thus, we consider the impact of the DP in public schools in the City of Buenos Aires to be quite limited, when compared to Costa Rica and Peru. A situation of weak and decreasing support partly explains these limitations. On the other hand, it should be noted that the initiative in BA is quite new, only one cohort had sat for the exams at the time we visited these schools and it is likely the implementation will require several years to become stable.

Nevertheless, we did document some relevant impact in terms of the motivation of teachers, some changes in teaching strategies, and in the contribution that the DP as a non-negotiable external assessment made to the management and organizations of schools.

Another interesting feature of the case of the DP in publics schools in the City of Buenos Aires was the potential for diffusion of information to other aspects of schooling in these DP schools. The lack of external assessment and weakness of overall mechanisms of governance in the public system generates some problems. But at the same time, it creates a situation in which there is very little external control over the work of teachers. Therefore, teachers were free to transfer the improvements they were making in their IB classes to their teaching practices with their non-IB students without major systemic obstacles.

### Sustainability

As we mentioned, the project in the City of Buenos Aires is far from being stable and institutionalized at the state level. Mechanisms of support for schools are weak and they have been weakening further with time and specially with changes in authorities. For example, the project is not even featured on

the web page of the Ministry and as far as we could gather it is not among the priorities of the current administration. No formal evaluation of the initiative or follow up is being conducted by the Ministry. Furthermore, the number of schools that participate is small, in relation to the size of the educational system of the City, and within each school there are very few students in each DP cohort. Thus, at the macro level, the sustainability of the initiative in BA public schools is not clear.

In our view, the greatest hope for the future of the programme is the motivation we observed in school authorities and teachers. However, even when teachers and coordinators are motivated, they are also frustrated with the lack of support and the feeling that the project mainly depends on their own personal efforts.

## Strengths and challenges

The initiative in Buenos Aires is relatively recent. The analysis shows it has some strengths and several challenges. The main strength of the project is that it provided an alternative to the local baccalaureate in a context marked by a severe crisis of secondary education. The DP seems to offer a viable pathway for improvement in a context of reform of secondary education.

A second important strength of the programme in Buenos Aires is the commitment of the DP teachers. The DP has had a strong impact on teachers' motivation: they feel involved in a meaningful experience that gives them back the joy of teaching.

However, some problems in the design, leadership and implementation of the initiative translated into significant challenges. The main challenge is the declining state support and lack of IB know-how inside the Ministry of Education. This constraint derives mainly from the absence of clear goals and the lack of adequate planning, which characterised the project from the beginning: in-service teacher training, teacher turnover and access to pedagogic materials were not initially considered by the Ministry of Education as future needs.

Another visible challenge is the lack of synthesis between the local baccalaureate and the DP. Students have to study for two separate (and quite different) programmes. Consequently, they are overloaded in terms of school hours and after-school work. This shortcoming is likely linked to a shortage of students that are willing to take on the DP: in the city of Buenos Aires the average number of candidates per school is 9.

This also translates into lower student achievement on IB exams, in comparison to the two other countries. In 2017, 79% of the DP students in public schools in Argentina have applied for the full IB Diploma. Of those, only 18% obtained it, with an average of 16 total points. By comparison in Costa

Rican public schools 68% of students that sat for the Diploma obtained it with an average of 27 total points and in Peru, 59% of IB students in public schools that sat for the Diploma obtained it with an average of 25 total points. The comparison with private schools in Argentina is also unfavourable; in these schools89% of students apply for the Diploma and 67% obtain it, with an average of 25 total points. (see comparative section for more details on students results).

Finally, the coordinators and teachers that we interviewed felt that they were not paid enough hours to cover for all the programme's needs. Therefore, the programme depends on teachers' motivation and commitment and students might not receive the personalised support they would need to succeed in the programme. Plus, teachers are selected through the regular system of teacher assignation and schools cannot select teachers. This puts the programme at risk, in a context marked by high teacher turnover and lack of in-service teacher training.

#### THE DIPLOMA PROGRAMME IN PERU

#### Main features of the DP initiative in Peru

The Diploma Programme in public schools in Peru is part of a broader project called *Colegios de Alto Rendimiento* (High Achieving Schools), known as COAR. The COAR initiative was created by the Peruvian Ministry of Education to educate academically outstanding students from public schools. COARs are highly selective boarding schools in which students spend six days a week receiving an holistic education, aimed at shaping students' personal, academic, artistic and physical potential to prepare the future Peruvian leaders with an international mind-set.

There are currently 25 COARs, one in each region of Peru, enrolling around 6,700 students. In 2014, the COAR network started the authorization process to offer the DP in 13 schools, and in 2017 the first cohort of students sat for the IB exams. The other 12 COAR were going through the process of authorization in 2017 at the time of data collection.

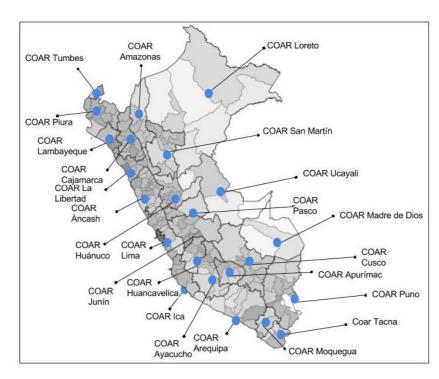


Figure 10 Distribution of COAR in Peru

Source: compiled by the authors based on the IBO's database.

The history of the DP in Peru can be traced back to 1987, when the first private IB school was authorized. Since then, the programme grew steadily in the private sector. In 1998, schools serving the children of high ranked officials in the military started offering the programme. These schools are

considered to be public schools, although they have a particular status, since they do not depend directly from the Ministry of Education. In 2010, the Colegio Mayor in Lima became the first regular public school to offer the DP. The Colegio Mayor was the first school designed to serve exclusively high achieving students (even though the name COAR started being used later). It would later become the model, and source of inspiration for the other COARs.

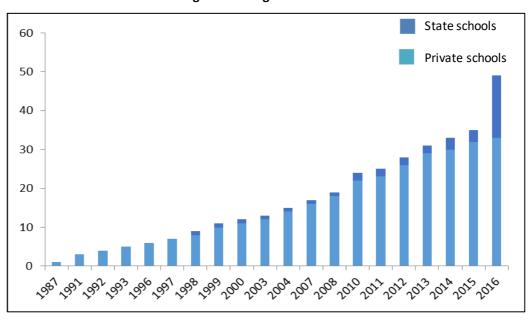


Figure 11. DP growth in Peru

Source: compiled by the authors based on the IBO's database.

COAR schools only admit Peruvian students from public schools (students coming from private schools cannot apply) for their last three years of secondary education. To apply, students must be among the top students<sup>7</sup> in their school or have an outstanding performance in national competitions in diverse disciplines, such as mathematics, philosophy or sports. The selection process involves the evaluation of cognitive, emotional and social abilities. COARs are boarding schools that fully cover all student expenses, with no cost to their families.

Within its model of holistic education, the COAR initiative incorporated the DP curriculum. However, the IB not only influenced the COAR project in its academic component. The COAR network has its own student profile, which is very clearly inspired by the IB's learner profile<sup>8</sup>. The first of three years

<sup>&</sup>lt;sup>7</sup> As will be further analysed in detail, the exact meaning of "top students" has changed over the years.

<sup>&</sup>lt;sup>8</sup> The IB learner profile describes a broad range of human capacities and responsibilities that go beyond academic success. The IB aims to develop learners who are inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, reflective. Similarly, COAR students are meant to be: constructors of their own learning, critical, conscious to act in defense of integrity and dignity of people, compromised

of study in COAR is designed to bring students to similar levels of performance and to prepare them for the DP. The following two years implement the DP curriculum. Students go to class from Monday to Saturday undertaking as much as 60 hours of classes a week. Studies are organized in regular courses (Language, Mathematics, Sciences), elective courses (Dance, Music, Oratory, and Sports); foreign language (English), and personal tutoring. Extra-curricular activities are varied and include, but are not limited to, mentoring, debate sessions in English and Spanish, robotic workshops, and coding classes.

The leadership of each COAR schools is composed of three directors. The general director, the academic director, who also serves the role of DP coordinator, and the director of wellbeing, who oversees all aspects related to the boarding school, discipline and coordinates psychological and emotional support for students.

To understand the context in which the COAR project was designed, it is important to consider that Peru has experienced in the last two decades a period of sustained economic growth that had an impact on the country's social and educational development.

Peru's economy has been grown steadily since 2000. The GDP has increased from 52 billion USD in 2000 to 192 billion USD in 2016, with an average growth of 6% between 2010 and 2016 (World Bank, 2017). Economic growth has contributed to a significant reduction of poverty rates, from 25,8% in 2012 to 20,7% in 2016, as well as a decrease in extreme poverty rates from 6% in 2012 to 3,8% in 2016 (CEPAL, 2017).

Economic growth and social development had a significant impact on education. On the one hand, as many families overcome poverty and have renewed access to certain material and symbolic goods, they usually increase their educational aspirations. This situation creates a significant challenge for the educational system that must attend to these new demands for access and quality. In the case of Peru, the availability of funds in families, added to the mismatch between the demands of the new middle classes and the provision offered by the state, resulted in substantial growth in private school enrolments, that increased from from 13% to 26% from 1998 to 2014 (Balarin, 2015:8).

On the other hand, economic growth has fuelled educational investments. Although the percentage of the GDP allocated to education has fluctuated since 2000, it has increased steadily since 2011, starting at 2.6% at its lowest in this period, to 3.9% in 2015 (Unesco Institute of Statistics). Both the

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citizens, upright with their own principles and values, knowledgeable of their reality and engaged as transformative agents in their community, confident, empathic and capable of valuing diversity, formed in the diverse dimensions of human development, ecologically conscious.

increase in the GDP and the share allocated to education have resulted in a significant increase in government expenditure in education.

More investment in education and an improvement in the socioeconomic conditions of students and their families has also resulted in better educational outcomes. The gross graduation ratio in upper secondary school has had a substantial increase, going from 71.3% in 2013 to 84.5% in 2015. In terms of learning outcomes, Peru has improved its PISA results. Although it has not managed to climb up the rankings, Peru showed some of the most significant improvements in Latin America in the period. For example, in 2009 in the average score for reading literacy was 370, for mathematics 365, and for sciences 369. In 2015 the average for reading literacy was 398, mathematics 385 and sciences 397 (Rivas, 2015).

Secondary education in Peru begins at year 7, when students are 12 years old, and is divided into two cycles. The first has two years, and finishes when students are 13-14 years old. The second cycle lasts three years and students are expected to finish it when they are 16-17 years old. Students of the DP in Peru are 16-17 years old when they sit for the IB exams, so they are a year younger than Costa Rican and Argentine DP students.

Basic education is organized in three modalities of "basic education": Regular, Alternative and Special. Regular Basic Education (EBR) refers to common initial, primary and secondary education. Alternative Basic Education is targeted at young and adult students who have not concluded compulsory education and who cannot reintegrate in the mainstream system due to their (over)age, or if they need to balance study and work. Special Basic Education offers inclusive education aimed at students who have special educational needs, either disabled students or gifted/talented students.

COAR education is part of the second cycle of secondary education within the Special Basic Education modality, on the basis that it is geared towards the special need of talented and high-performance students. When students from public schools finish the first cycle of secondary education they have the choice of applying to study in a COAR.

Access to Higher Education in Peru depends on a university admission exam that test for "receptive and memoristic knowledge" (Mastro Vecchione, 2011:13). This has fostered the emergence of many courses to prepare for university exams, which can be provided by universities or private institutions that are outside the formal system of education of Peru. These courses often have a fee, being a source of income - even to state universities - as well as a barrier to access in higher education (idem:50). Peru has both public and private higher education institutions, with public universities being free of cost for students (only a small fee is paid for minor administrative procedures and health insurance).

To summarize, the COAR model is implemented in a context of economic expansion and social and educational development. The COARs are completely new schools and consequently the implementation of the DP does not involve the negotiation of pre-existing curriculum, teaching and learning styles, and school cultures. Nevertheless, COAR students have been taught in the EBR for many years and consequently the need to adapt to the IB style of teaching and learning, which is challenging. Furthermore, the fact that IB exams differ substantially from the Peruvian university admission exams is another challenge for the project.

#### The COAR model

The first public school to offer the DP was the Colegio Mayor Secundario Presidente del Peru in Lima. The initiative to create this school came from President Alan García. He had lived in France and was interested in developing a public school for talented students, similar to the ones he had seen in France. The initiative occupied a privileged place among Peru's educational policies.

The goal was to create an innovative model that mirrored higher education in terms of its organization, could respond to the needs of the most talented students in the public system, and prepare the future leaders of the country. In an interview with one of the founders, she said that rather than creating a new academic curriculum for the new school they thought it was better to find an existing model that was already proven and had the approval of the national and international community. They found that the DP was recognized by prestigious universities and they were attracted by the IB's international reputation and learner profile which aligned philosophically with their views. One of the founders' personal knowledge of IB was key in the final decision.

The decision [to incorporate the Diploma Programme] was because we needed a pedagogic proposal that, first, was adequate for our vision of the student profile of our model. So, we found IB. Second, we wanted to try models that were accredited, that guaranteed that prestigious universities would recognize it as a good model. And third, in Peru we had confidence [in IB] because there were schools highly valued by universities that recognized the DP as a very good programme... I know IB, I have worked with it, and what I valued was that it provided what we needed (former official of the Ministry of Education of Peru)

The Colegio Mayor enrolled its first cohort in 2010 and started offering the DP in 2011. It rapidly gained reputation and became highly recognized in the Peruvian community. Families started to apply for a place in the school from most regions in Peru. Only 100 students were selected to undertake the DP. The rest of the Colegio Mayor students (300 in total) followed the DP curriculum, but were not

registered for the IB exams. In November 2017, for the first time, all students in the third year of the Colegio Mayor sat for the DP exams.

In 2013, a new Minister of Education was appointed. The Colegio Mayor had gained so much prestige that many students from all over Peru were applying, and many very good students had to be rejected due to the limited number of seats available. The COAR initiative was born out of the decision to create a school for high achieving students in every region, based on the model of the Colegio Mayor.

Once the initiative started escalating, the Colegio Mayor became the COAR Lima, and its former Director assumed the leadership of the initiative. Thus, as we will further explore, the experience of the Colegio Mayor has been fundamental in shaping the COAR project. First, the Colegio Mayor served as a kind of pilot project (even if it was not originally designed in that way) that provided a relatively small and controlled context to experiment with what would become the COAR model, including the DP. It became a model and example to be followed for other COARs. Given its high student performance, it also set the bar quite high for other schools and is an example that shows that it is possible to achieve good results with the DP in these conditions. In addition, the Colegio Mayor has become a source of IB know-how that has been well utilized by the state. The Colegio Mayor has provided several officials that work in the Ministry to support COAR schools with their IB know-how, including the leader and founder of the COAR network. It is also usually the place where teachers and school authorities of the COAR schools go for training and meetings. The experience of the IB in some of the military schools has also provided some IB know-how to the COAR project. Some of the officials in the team that oversees the project in the Ministry come from these schools.

[Hiring professionals with IB experience] was deliberate. I have worked in IB schools, with three programmes, primary, middle and DP. In private schools. And we definitely needed to bring people who knew, so we brought the coordinator of the Naval School. We brought her not only because she had been coordinator, but also because she had experience working in a public school. (Official from the Ministry of Education of Peru)

Once the COAR project was initiated, the Ministry of Education started negotiations with the regional governments, resulting in a first group of 13 regions willing to move forward. To start their own COAR, each region needed to provide temporary infrastructure and a site for the definitive infrastructure that would be funded by the national government. The initiative started with 13 regions in 2014 and was being escalated to the other 11 in 2017, encompassing all regions in the country.

Since the COARs emerged as new schools, the authorization process was not specially challenging, since they followed the criteria required by the IB from the beginning. This made the process of authorization and, later, implementation much easier, given that there was no need to negotiate with

an existing curriculum, school culture, etc. Another relevant feature of the COARs is that all students are enrolled in the DP. This is very different to Costa Rica and Buenos Aires where a subset of students in each school participates of the DP.

Each COAR enrols approximately 300 young students, except for Colegio Mayor that enrols 900. The boarding regime is a key component of the COAR model. According to officials and founders that were interviewed, the decision to make COARs boarding schools was based on two different aims of the project. One is the rationale of regional and territorial equity. In Peru 23% of the population lives in rural areas. That is more than 7 million people. The percentage is much higher in the most remote regions. Furthermore, the rural population is usually poorer than their urban counterparts. Peru is a very big country and most Peruvian regions have a very rugged territory with limited roads. Thus, if COARs did not have the boarding regime they would only cater for students from the capital cities of regions (or cities in which the COAR is located if it is not the capital city), leaving those in the most challenging socioeconomic conditions outside. In the schools we visited, most students remained in the school during the weekend as well. Some were from other regions and were not able to travel home. But even those from the same region in many cases lived far from school and were not travelling home each weekend. In the absence of the COAR's boarding system, the student population in these schools would be drastically different than the current one, in terms of their territorial origins and probably socioeconomic background.

The second aim of including the boarding school as a component of the COAR project is promoting a holistic education for COAR students. Through the boarding system, the COAR project intends to influence most aspects of students' everyday life such as nutrition, hygiene habits, controls the kind of cultural goods they consume, and provide, them with a comprehensive academic education.

There are several issues that were mentioned by different actors as motivations and justifications of the COAR project. Since the DP in Peruvian public schools is embedded in the COAR project, justifications and critiques involve the whole COAR initiative, not the DP in itself.

The main motivation for the COAR project, as expressed in official documents and in the voice of officials who were interviewed for this study, is the transformation of Peruvian society through the education of the future leaders of the country. The notion of COARs as educational cradles of future leader was very established among school authorities, teachers and students themselves.

From a different perspective, the COAR is also legitimized by officials of the Ministry of Education that were interviewed as a project that attends to diversity, by providing an educational opportunity that adapts to the needs of talented high-achieving students. The COAR project is overseen by the DEBEDSAR (Directorate of Basic Education for Students with High Performance and Achievement) that

is managed by the same directorate as special education. From this perspective, the COAR project is linked with the idea of inclusion, since it is designed as an option provided by the state to students who are not only unrecognized in their specific needs by regular education, but also often do not have the means to access education for high achievers.

Strongly related to the above, the COAR project is associated with equal opportunities since it is aimed exclusively for students that come from the public system, giving access to high quality education and, eventually, to a path towards occupying leadership positions in society to students from low socioeconomic backgrounds. COARs compensate for socioeconomic inequalities by giving access to students from different backgrounds and by providing a boarding school system that covers nutrition, learning materials, access to cultural events, and educational and socioemotional support to its students. Furthermore, in a system where basic education enrolment in private education has increased from 13% to 26% from 1998 to 2014 (Balarin, 2015:8), the COAR project is also seen as a way of strengthening the status of public education.

The argument is that you are giving opportunities to a group that is showing potential which currently cannot be developed to the maximum in the regular system. So with this model you are covering a void to be able to develop those capabilities to the maximum. We are not creating elites because all have the same opportunities, there is one COAR per region, the idea is to reach all students giving the same opportunities even in the farthest regions of the country. No one is being excluded, but it is a model for students with certain characteristics. (Official from the Ministry of Education of Peru)

In addition, the COAR project is justified as a policy aimed at reducing regional inequalities within Peru by creating one school in every region and taking a high quality educational model to the most distant and rural regions of the country. Furthermore, with the aim of promoting interculturality and exchange among students from different regions, the COAR project originally kept 40% of their quotas for students from other regions. In 2017, it was reduced to 30% and we were told that for 2018 they would be further reduced to 20%.

The COAR project has not gone without opposition. From different actors and at different levels, objections and critiques have been raised. On the one hand, officials in the Ministry of Education that were interviewed noted that criticisms focus on the elitist character of the initiative. It aims at improving public education only for outstanding students by creating a privileged education pathway for a specific group. For some people who oppose the initiative this raises questions in terms of educational equity in Peru.

On the other hand, interviewees highlighted that the project has been criticized for investing too many resources on a limited group of students. The state spends ten times more for a COAR student than for an EBR student. According to data provided by the Ministry of Education, 60% of the extra cost is related to the boarding school system that includes staff, maintenance of facilities, food, etc.

The separation from families and everyday life has also raised some criticisms. Both professionals and students at COAR have mentioned the problems of the separation from families and their communities, pointing to emotional difficulties, having an overloaded schedule and lack of free time. Institutions have well planned and staffed schemes to attend to the needs of students, but separation from families and emotional support are still significant challenges.

Even if the COAR project has its critiques, it seems to be very well established inside the Ministry, it has survived three changes of Minister, and as far as we could gather from our visit to three schools, it has created many expectations and influenced aspirations of families and students in Peruvian regions.

# Support framework and governance of the initiative

COAR schools are overseen by the DEBEDSAR (Directorate of Basic Education for Students with High Performance and Achievement), a division with the Directorate of Special Basic Education that was specifically created to run the COAR project. This is a big division, with 47 employees that regulates, supports and evaluates COARs. The COAR is a highly regulated and a vertical project in which the DEBEDSAR defines many detailed aspects of school life. It also makes a close follow up of schools and provides material and technical support. In this sense, the governance and support framework that has been created is an indicator that the COAR project is central among the education policies in Peru.

The DEBEDSAR centralizes the IB know-how in the state and in the COAR project. As we mentioned, many of the officials in this Directorate had previous first-hand experience in the DP. The organization of the DEBEDSAR mirrors the administrative structure of the COARs. The DEBEDSAR has a general division, an academic division, and a wellbeing division, corresponding to the three leadership roles in COARs. In this way, each school leadership role has specific support from the Ministry. Similarly, the Directorate has specialists in the different disciplines that are taught in the COARs, who are the reference for teachers. This organization constitutes a solid and all-encompassing support framework that is key in the running of the project.

My main responsibility is to have as broadest a vision as possible. My first responsibility is securing the authorization processes and the development of the DP. The administration and coordination of IB (...) is not a straightforward process for someone

who has never seen it. I have to give support, but that does not exclude other complementary responsibilities. When I visit schools, although I work with the Academic Directorate and the IB coordination, I also have to see how the General Directorate is aligned to the aims of the DP and to give support to teachers who can have questions or observe lessons to share or discuss with specialists. (Coordinator at DEBEDSAR)

Every year the DEBEDSAR creates guidelines for all COARs. So, the Ministry defines the curriculum (details are provided in the next sections) and establishes comprehensive norms about issues such as how students can use the internet, the use of cell phones, the kind of workshops that the school can offer students, the schedule of students, etc. It also regulates the process of student selection and the ways in which vacancies are allocated.

DEBEDSAR also participates in the selection of staff. Principals are selected, evaluated and, if necessary, removed by DEBEDSAR. In the case of teachers, DEBEDSAR publishes the call for applications, makes a first screening that is sent to schools, who make the final decision. Thus, the Ministry centralizes an important component of the processes of staffing. It also centralizes in-service training for teachers and other professionals that work in the COAR project. This general overview gives the state the possibility of organizing human resources management in such a way that they can develop careers within the COAR project, by following the trajectory of professionals and identifying certain profiles for promotions, defining themes for training, etc. For example, in the schools we visited, one of the general directors that had recently replaced her predecessor had previously been director of wellbeing in that same school. In another school, the new academic director was previously a teacher in that same institution.

One of the main control and support mechanisms is the visit of personnel from the DEBEDSAR to the schools. Every school receives at least a visit per month. Officials rotate schools, depending on what the DEBEDSAR defines as needs of each institution. In addition to the visits, if school staff need support, each principal or subject coordinator can reach out for their DEBEDSAR counterpart by phone or email. For example, while we were visiting the Colegio Mayor one of the officials from DEBEDSAR was giving advice to an IB coordinator in a remote region, providing detailed instructions on how to upload exams on to the IB platform. The combination of first-hand knowledge about the IB, previous personal contacts and the use of technology seemed to be fundamental in providing support to schools.

DEBEDSAR is based in Lima but I've received visits throughout the entire year, even 9, 10 times (...) Every month and a half I have a specialist from an area staying for three or four days to observe lessons, supervise, to see student work talk with the coordinator, revise the guides. Since they gather the experience of all COAR, they provide you with the pedagogic proposal. (IB coordinator, Peru)

The COAR system is highly centralized and vertically organized. Information, requests and know-how move from the state to specific schools and from schools to the Ministry. Even though the idea of a COAR network is mentioned in documents and in the discourse of different constituencies, there are no formal horizontal networks between principals or other professionals. Since professionals meet in workshops and other events, they sometimes exchange experiences and information through informal social networks, but this is not for the moment promoted by the state. Recently, DEBEDSAR organized an exchange experience between principals from the more experienced COAR (those that started in 2014) and the newcomers (which began in 2017). Principals never met; they only swapped roles in each other's school.

DEBEDSAR also provides for all the material needs of COARs and their students. They give students several sets of uniforms (every day, sports, special occasions, etc.), laptops, backpacks, pencil cases, and all the materials that are required for teaching and learning.

### COAR schools

COAR schools are gated campuses that can only be accessed with authorization. The campuses have buildings, open spaces, sports pitches, dorms. These premises are transitory, since most COAR permanent campuses have not been yet constructed. Schools are running in borrowed buildings that in many cases used to belong to other schools and were conditioned to temporarily host the COAR. Within this temporary infrastructure, we found schools in quite unequal conditions: one of the schools we visited is the Colegio Mayor that has an outstanding complex. Another school, in the Amazon area had very good facilities, while the last one, on the coast, was in a much worse situation in terms of infrastructure, especially considering that students spend 6 days a week in the premises. The site was quite small and so were classrooms and dorms. The three schools were clean and very well maintained. Differences between schools can be related to the regional governments' differential capacities to offer a temporary infrastructure in a relatively short amount of time.

The schools we visited have different buildings for offices, classrooms and dorms. All classrooms have a whiteboard, a projector, an audio system, and individual desks and chairs which were organized either in groups or in semi-circle. There is a desk and chair for the teacher in one end of the classroom. The entrance to the dorms have a small hall with chairs for monitors or staff. This hall leads to the common rooms. Dorms have common bedrooms, toilettes, and shower rooms. The bedrooms have bunk beds and individual lockers. There are no common rooms for leisure or study, and bedrooms are not spacious, so there is no space other than for sleeping and personal hygiene. COARs have offices for the heads of the school, which can be shared or individual, and also have meeting rooms for

teachers, which are used for collective work. The quality of the library and laboratory depend on the host building.

Buildings often show big posters with the values of the COAR (Creativity and Innovation, Inclusion, etc.), as well as posters with the IB year schedule. Also, students' work is displayed, e.g. paintings hanging on walls and outdoor chess tables, which were a product of a CAS project. We were told by teachers and students who were interviewed that given the difficulty to leave the COAR schools for students, and certain discomfort of students in having to spend so much time within the school, many CAS activities are aimed at improving the material conditions of schools and the wellbeing of students.

Although there is internet available throughout the campuses via Wi-Fi, the internet provision can vary between regions, so some COARs have intermittent or weak connectivity, which can be a difficulty in terms of access to information. On the other hand, students are not allowed to use their mobile phones in the campus – though some COARs have agreed to allow the use of mobile phones a few hours a day for students to talk with their families. Finally, in terms of communications, there is an on-line platform where parents can see information on their children's performance and is a means of communication with the schools.

## **COAR** leadership

As it has already been mentioned, COAR schools have an administrative structure composed by a triad. The general principal oversees the school as a whole, and the academic and the wellbeing principal oversee their respective departments.

The Academic Department "guarantees the quality of the pedagogic process through systematic reflection on the objectives and processes of teaching" (Resolution 274-2014). They also function as DP coordinators, but have a higher rank and more responsibility than a typical DP coordinator. The academic heads that we interviewed said that their work consisted in managing the administration of the DP in the school, building an IB ethos and supporting teachers to improve their practices in line with IB's principles. They also mentioned their participation in the recruitment of teachers.

My first responsibility is to guarantee the DP, that teachers have access to all the information of the DP. So, we try to communicate via mail everything that comes from IBO. Workshops, news, the reports for coordinators (...) The second has to do with the management of core subjects. Since last year we have noted that as a weakness. It's because I manage 91 teachers, so make them understand that they have to generate the connections with the core subjects is not easy (...) The third has to do with administration, enrolment, loading the productions. If it hadn't been for the team that I have I would have been working until dawn with that task (...) And fourth, working with the Extended Essay, which is also very demanding. (Academic Director, Peru)

The head of the Wellbeing Department leads the work of the team of psychological support to students and wellbeing services, such as catering, laundry and cleaning, which are outsourced to a private company. One of the participants defined the role in the following way:

My main function is to oversee the wellbeing of the students. In every sense. Guaranteeing that they have good quality services, in their nutrition, following up their health issues (...), emotional support (...). I was worried because I would be responsible for the upbringing of adolescents, they spend more time here than in their homes (...) Guaranteeing psychological support, the support of tutors. Overseeing their habits in dorms, in relation to hygiene, how they treat each other, their diet. That's done by monitors. (Head of Wellbeing, Peru)

Although the wellbeing principal is officially the CAS coordinator, in the schools we visited, CAS was delegated to other teachers or professionals, to reduce principals' workload.

### Teachers in the COAR

COAR principals and teachers go through a selective recruitment process. The recruitment of principals is centralized by the DEBEDSAR. The call for applications is communicated through the website of the Ministry of Education, but most of our interviewees learnt about it by word of mouth. Applicants must send their application form on line, which includes their CV and a cover letter. The selected applicants go through an evaluation and must write an essay. Finally, they are interviewed by the DEBEDSAR staff. Teachers —and the rest of the COAR professionals— go through a similar process. The DEBEDSAR publishes the available vacancies, makes a first selection and sends the information to the respective COAR. Candidates are then interviewed by the COAR leadership, who make the final decision. Since none of these devices assess teaching performance, one of the COAR we visited asked candidates to demonstratively teach a class.

The work of COAR principals and teachers is not regulated or aligned with the mainstream teaching career. They do not have tenured position, with contracts being subject to yearly renewal. COAR principals and teachers usually maintain their tenured EBR positions and request leaves for up to 2 years to serve in COARs. After that time, teachers must choose whether to resign their stable positions and stay in the COAR system or go back to the EBR. This situation creates a challenge in terms of teacher turnover, since teachers are trained, gain experience and develop a commitment with the institution, but are then faced with the possibility of losing stability and being subject to unstable working contracts

COAR teachers and principals have a work week of 48 hours from Monday to Saturday. One of the main advantages of the COAR positions is that teachers have the same amount of time for teaching

as they do for out-of-class duties. This is highly valued by teachers, as well as especially important for teaching the DP. In contrast, EBR teachers only have 4 weekly hours for extra-class workload.

Every COAR principal and teacher receives continuous training organized by the DEBEDSAR. Once they are hired, every COAR teacher attends an introductory three-day workshop which offers a general presentation of the COAR and DP models. Also, there are yearly trainings carried out by IB facilitators and DEBEDSAR professionals. The centralization of teacher training has two advantages. On the one hand, the DEBEDSAR can train principals and teachers that play the same role in different COARs. This contributes to efficiency and provides the possibility of exchanging experiences and strategies, focusing the training sessions on the specific challenges faced by COAR staff. On the other hand, the DEBEDSAR, that closely oversees each school, can diagnose, plan and assess the needs of the COAR system, gets to know individuals and can accordingly plan their careers (for example promoting teachers to management positions).

DEBEDSAR evaluates each COAR through a yearly evaluation of student's wellbeing and one of their academic performances. The results of these evaluations are used by the central authority to manage the whole project and to give feedback to principals who then use these results to work with their staff to make adjustments when necessary. DEBEDSAR also evaluates the schools through monthly visits and class observations which are followed by feedback to the IB coordinator, to the subject coordinator and to the teacher.

According to many of the teachers we interviewed, COARs have become aspirational institutions that attract motivated teachers due to the prestige associated with these institutions. The experience of the Colegio Mayor is key in generating this prestige that has extended to the other COARs. Thus, teachers are interested in working in the COAR project, to the point that they are willing to renounce to their stable positions in the EBR and, in some cases, to move across the country to become part of the project.

According to our interviewees, teaching in a COAR was described both as motivating and stressful. The main motivation was associated with teaching in a high-standard institution to high performing students who are eager to learn. Teachers that we interviewed were all also committed to the COAR initiative. They believe in the COAR model and expect their students to become future leaders of Peru. They were also moved by equity ideals, and proud of providing some students from disadvantaged backgrounds with what they saw as life-changing educational opportunities.

On the other hand, most teachers that we interviewed noted that teaching in a COAR can also be stressful. Despite the extended working week in schools, both principals and teachers mentioned that they have to work late hours at home to comply with their workload. Another source of stress that

was mentioned was the yearly targets defined by the Ministry and the possibility of losing the teaching post:

"Last year we had to reach specific bands [a measure of performance of students in IB exams] by the end of the year. We were implementing the evaluation of the Ministry of Education to assess the performance of students. We had to make a big effort, find the way to motivate them. That year I did get sick because of stress. Students had to reach band 3 minimum, no one could be band 2". (IB English teacher, Peru)

Our fieldwork showed that DP teachers in Peru work collaboratively but within clear hierarchies. For instance, teachers report to both their subject coordinator and their year coordinator. Each subject coordinator organizes a weekly meeting with his/her teachers, where they discuss pedagogical approaches and make decisions regarding students' learning. Subject coordinators regularly observe classes and provide teachers with feedback. Year coordinators operate similarly, but with less frequent meetings. It is worth mentioning that full time dedication contributes to collaborative work. Teachers have mentioned collective work as a characteristic of their everyday work and have valued it positively.

Since teacher turnover is high and the first COAR schools are less than three years old (by mid-2017), only a few teachers have established IB know-how. Thus, most teachers lean on support from the DEBEDSAR officials, mostly via digital networks.

## The COAR DP classroom

The COAR classroom shares some characteristics with the COAR institution. It is a highly structured and competitive environment. Detailed planning of each class is expected. When principals, coordinators or DEBEDSAR officials observe a class, they expect to see the plan and discuss it with the teacher. Most teachers we observed had the exact number of minutes each activity should last in a power point presentation. This made the DP classes highly structured and not very open to emerging topics. Teaching plans are ambitious in terms of time and students' activities. Classes seem to be designed to make an intensive use of time, and students' energy. For instance, in one of the classes we observed ten different planned activities took place in only thirty minutes. This busy schedule keeps students busy and productive during class time.

Class size is big, with 32 to 35 students per class. Desks and seats are sometimes organized in small groups of 6 students, while other times they are placed in a semicircle, with the teacher in the centre. Classrooms are fully equipped with a LED screen, and Wi-Fi connection, although the latter might not always work. Students use their laptops, which are provided by the COAR system. Neither the

organization of the classroom, nor the classroom size modify the rigid environment of COAR classes. This environment seems to be given by a rather formal relationship between teachers and students. Thus, interactions are highly structured. Usually teachers are the ones who ask the questions, and students answer. Nevertheless, teachers stimulate students' participation most of the time and they expect them to be fully active during class. Interactions are mostly mediated by the topics and kind of reasoning expected in the IB exams: students' answers are analysed by teachers in terms of how they would be considered in the IB examinations.

The duration of classes is variable. We observed 40-minute classes, as well as 4-hour classes. They are rich in teaching strategies and highly demanding for students. We observed classes that offered an active environment that combined diverse types of activities and assessments. For example, a class can include a teacher's presentation (usually a PowerPoint presentation), exercising in small groups, semi-structured discussions, self-assessment and peer-assessment, mock examinations, and feedback oriented to prevent mistakes in the exam.

We did not observe activities in which students had to leave the classroom. This is not surprising, considering the COAR does not favour freedom of movement among students. For instance, students are supervised when they go to the bathroom or their rooms. The fact that they are not able to leave the premises is a limitation in terms of teaching and learning, especially regarding CAS projects.

Another feature of COAR classes is their competitive environment. Competition constitutes an entry feature in the COAR system, as it is embedded in the selection process. It is also part of the COAR identity, since it is destined to serve high achieving students. Thus, it is not surprising that competition is present within the classroom and is promoted by teachers.

### Students in the COAR

To be admitted in the COAR, students must go through a very competitive process that is centrally managed by the DEBESAR and carried out nationally every year. Eligibility criteria has been modified since its first regulation in 2014. Currently, the eligibility criteria are:

- have Peruvian nationality or residence,
- have been within the ten<sup>9</sup> best GPA in their school in the first year of secondary school or have been within the first five positions in a national contest organized by the Ministry of Education in the previous two years,
- have been enrolled in a state school in the second year of secondary education,

<sup>&</sup>lt;sup>9</sup> Originally, it recruited only the three top students of the cohort.

- have had a minimum annual average grade of 15 out of 20 points in the first year of secondary school,
- be at least 15 years old,
- have the formal approval of their parents or legal tutor.

The admission process is very competitive and has three stages: application, first and second evaluation. Eligible students sit for admission exams on-site at their regional COAR. Staff from the COAR schools participate and work hard during the admission exams, but the whole selection process is centrally managed by the DEBEDSAR where the final decisions are made.

The first exam assesses cognitive and socioemotional abilities and represents 50% of the total evaluation. The second assessment involves participation in a group day out to assess social abilities and leadership potential (20% of overall mark) and a personal interview to assess communication abilities and motivation (30% of overall mark). Both are run by COAR staff with the overview of the DEBDSAR.

In the survey, when asked about why they decided to participate in the DP, Peruvian students emphasized preparation for university and a high-quality education as their main drivers. International education was also considered to be relevant (see Figure 12).

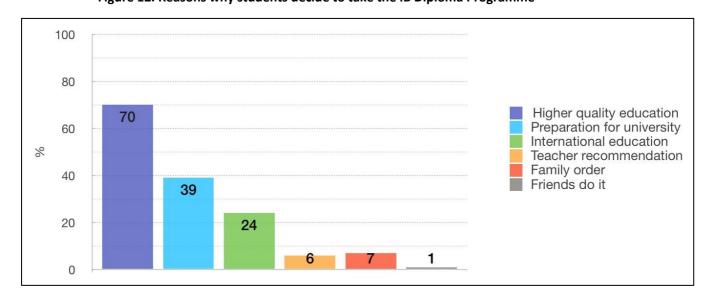


Figure 12. Reasons why students decide to take the IB Diploma Programme<sup>10</sup>

Source: survey conducted with Peruvian students.

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<sup>&</sup>lt;sup>10</sup> Respondents could choose multiple answers. Therefore, answers add up to more than 100%.

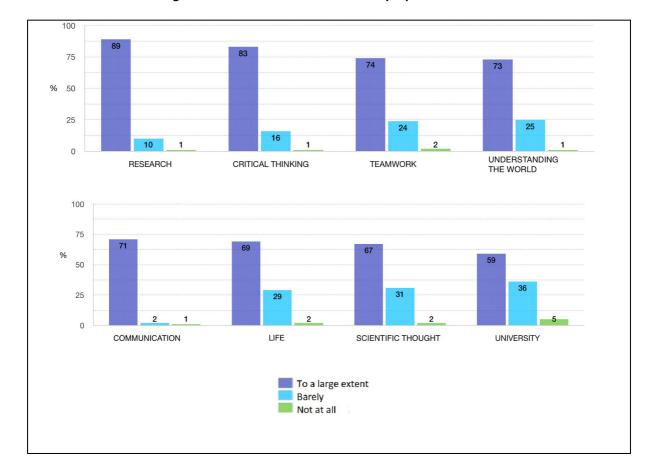


Figure 13. Main areas in which the DP prepares students

Source: survey conducted with Peruvian students.

Overall COAR students have a very positive view of the DP and how it is preparing them for doing research, thinking critically, teamwork, understanding the world, communication skills, life, scientific thought and university (see Figure 13). Peruvian students have the most overall positive views when compared with their counterparts in Costa Rica and Buenos Aires, in terms of having very good evaluations of all aspects (Research, Critical thinking, Teamwork, Understanding the world, communication, life, scientific though, and University) that we included in the survey. Preparation for university got the lowest score. This is probably related to concerns that students had about the contrast between the university entrance exams that are mostly based on memorizing factual knowledge and the kind of critical thinking and competencies promoted by the DP (more details on this issue are provided later).

## Being a COAR/DP student

The facilities in COAR schools are divided between the dorms and the school, and dorms are also divided between male and female students. When the school space is open for students to access, the

dorms space is closed, and vice versa. So, students leave the dorms in the morning and usually return past dinner time. There is monitoring staff that oversee the dorms zone, particularly in the evenings and at night.

From Monday to Friday students leave the dorms for breakfast at 6 am and then go to class at 7.45h. In some COAR they are allowed to do sports before 6 am. In others, they can call their parents before classes start. This is also a time for tidying up their lockers, separating clothes to send to the laundry, etc. Classes can finish at 17.20, 18.10 or 19. Between 17.20 and 19 the COAR offers extracurricular activities, support lessons, and tutoring sessions. On Saturdays, students also attend classes for 5 hours and have recreational activities. After class, students who live close by can leave the school to meet their parents in the afternoon and must be back in the COAR by Sunday afternoon. The rest stay in the premises and are supervised by weekend monitors.

The COAR schedule consists of 50 weekly teaching hours (50 minutes each) plus supplementary workshops. This extension almost doubles the EBR curriculum. Although the COAR curriculum is unique, all the subjects are aligned with the EBR subjects. The curriculum of COAR is not limited to the DP since it also includes other subjects and extracurricular workshops.

The first year of secondary school in the COAR functions as a transition from the EBR to the DP. The curriculum is the same as in the EBR with some additions, but overall the aim is to get students used to the IB model through DP style classes. This first year is also used to bring students to similar levels of academic competences. Although students who are selected for COAR are the best in their schools, there are differences between schools and individual students. For example, English language proficiency is an issue that requires much intervention to get all students at a similar level. During the first year, students also adapt to the boarding system.

The second and third years are focused on the DP, with a variety of curricular options. There are four tracks, two for sciences and two for humanities, as well as optional subjects. In the schools we visited, these tracks were adapted based on teacher availability and/or regional characteristics. In one of the schools they had not been able to find a suitable candidate to teach advanced physics, so they were authorised by the DEBEDSAR to offer another subject instead.

Each student chooses their own track and extracurricular activities. However, the choice of the DP subjects is supported by a series of workshops by the end of the first year with the participation of heads of academic and wellbeing departments, teachers, and psychologists, to help students select the best option for them. Although overall students are free to choose, school authorities do balance students' wishes with available resources.

Focus groups with students showed that they value the COAR experience. Firstly, they value the

possibility of choosing their own educational tracks and their own projects within the different subjects. Even when options are limited, the experience of choosing —subjects, projects, extracurricular activities, etc.— seems to be rewarding for COAR students.

Secondly, students highlight the variety of teaching strategies and the hands-on experiences they are exposed to. In the focus groups, they mentioned teachers are not exclusively writing on the blackboard; but, are rather are trying to stimulate their participation. One of the most valued feature of DP classes is the opportunity to have systematic class discussions. Plus, they were enthusiastic about the different projects they were involved in, which required experiments, in subjects such as Biology.

In contrast, students also raised some concerns, such as the demanding schedule, the isolation of boarding school life, and the lack of privacy. Students questioned the very demanding schedule and the extra-class workload. They feel they are not given enough time to study after class, since classes finish late in the afternoon and extracurricular activities are elective but not optional.

Personal relationships are also affected by the COAR experience. As mentioned before, only students who live close to the COAR can visit their families and local friends every weekend. Even when they can go back home during weekends, the extra-class workload makes it difficult for them to enjoy family time. The problem is more serious among those who have to remain at the COAR the whole semester. Some families manage to visit their children at COAR occasionally on weekends.

The lack of privacy is another point that student participants mentioned. Students expressed being uncomfortable since they shared rooms with their classmates, and they were supervised when they used their computers and cell phones.

The highly demanding schedule, the extra class workload, and the separation from families have immediate consequences in students' stress. Students admit being stressed. The COAR wellbeing division was aware of this issue and they have a strong focus on stress management. They try to support and assist students emotionally and help them manage stress.

However, the COAR system does not report relevant dropout rates. Probably both the selection process and the support mechanisms contribute to this.

Students also reflected upon the expectations that the COAR authorities and teachers have on them, in terms of becoming leaders in the future. Some students felt very comfortable with the idea of becoming future leaders, others questioned this idea and said they had other plans for their lives.

We have classmates here who want to be ministers of economy. Another wants to be President. (Student, Peru)

I'm very clear that I want to do international business. In five or six years I see myself working for my community. Even though I have learnt that I want to change the world, to change the world I don't need to be a leader, I don't need to be the President of my country. I can start by my family, start by the community that brought me up. As a graduate of that career my biggest aim will be to promote my locality. We have fruits and resources, why can't we share them with the world? So, we, Peruvians, can also be seen as entrepreneurs. (Student, Peru)

I want to enjoy the essence of things in themselves. I haven't decided what I want to study. But I love art, I love to enjoy the moment. I now feel too adjusted to parameters, and I don't want to be parameterized. (Student, Peru)

One of the biggest challenges faced by the COAR project is the management of graduates. Except for the Colegio Mayor, the first cohort of COAR students is expected to graduate at the end of 2017. The first issue is transition to higher education. As we mentioned, university entry exams test for memorized factual knowledge that students have acquired during the EBR. This is very different from the kind of study habits and knowledge that COAR students acquire in the DP. In focus groups, most students were very concerned about their preparation for these exams. They were quite confident that the skills and competencies they developed in the DP prepared them well for university study once admitted but had many doubts in terms of preparation for the admission exams. Furthermore, some of university entry exams were scheduled at the same time as the DP exams. On the other hand, seats at public universities are limited, and private universities charge fees that only few COAR students can afford. The Ministry is negotiating with universities, and some private institutions are starting to offer special scholarships for COAR graduates. However, these are partial solutions to a structural problem that needs to be addressed.

The IB prepares you to analyse a formula or to use it in a context, but the admission exam gives you less time and you need tricks to be able to answer. It's not about blaming, but I think that it's a problem and that it's about the kind of admission to university, which is different from when you are already studying in university. (Student, Peru)

The other concern that was mentioned in terms of "life after the COAR" by officials and schools staff that were interviewed is related to those students that come from very poor backgrounds and/or very remote rural locations. These students have much better living conditions in the COAR than in their own homes, and school authorities were worried about what would happen with these students once they graduate.

### *Sustainability*

The COAR project is very new and only by the end of 2017 it had the first cohorts of graduates. Results in terms of student performance in IB exams were positive. 90% of IB students in public schools applied for the full IB Diploma. Of those candidates 59% obtained the Diploma with an average of 25 total points. Considering the growth of the programme, which saw 12 new schools that had students taking IB exams in 2017, some from very isolated areas, this performance can be considered positive; not far from the performance of students in public schools in Costa Rica, where 68% of students enrolled in the Diploma obtained it, with an average of 27 total points. By comparison, in the private schools in Peru 96% of IB students applied for the full Diploma, 89% obtained it with an average of 29 total points. (see comparative section for more details on student performance in IB exams).

Furthermore, the project has benefited from the good results that the Colegio Mayor has had, both in terms of its graduation rates, performance in IB exams and prestige, and has taken good advantage of the standing gained by its initial institutional model. The project has been institutionalized in the public administration through a solid normative framework that supports the initiative and would require major agreements to change its trajectory. Furthermore, it is run by a big team with solid professional capacities that periodically regulates, supports and evaluates the schools. It has endured several changes in leadership in the Ministry of Education, and critiques and questionings seem to be receding. Thus, at the level of the central government the COAR project seems to be very stable, especially considering that it started in 2014.

The COAR project has also gained much support in the Peruvian regions. From what we could gather in our field work, it seems that regional governments are pleased to have a high-performance school for their citizens, and COARs are a source of pride for the communities. COARs have had an impact on the aspirations of students and families of Peru. This kind of support by the community is also very important in evaluating the sustainability of the project. Again, the prestige of the Colegio Mayor and trajectories of its graduates play a major role in the recognition of the COARs and the expectation it has fuelled in communities.

Thus, overall, the COAR project seems to be stable and growing in support both at the level of the central government, the regions, and in communities. In terms of the DP within the COAR it appears the IB programme has been naturalized as part of the COAR and the participants have not shared a single comment doubting the contribution that the DP makes to the overall aims of the COAR initiative.

Even within this generalized stability and good prospects for the future, there are certain key challenges that the COAR project will have to address in the near future. One challenge is the need to show good results and avoid any major political issue in the short and mid-term. As one of the high

officials in the Ministry told us, if the COAR has the kind of major effects that its promoters foresee in terms of leadership for Peru, these effects will be seen ten years from now or even later, when a significant number of COAR graduates can start to access leadership positions and have an impact on the Peruvian society. In the meantime, the prestige of the COAR and its support will depend on the possibility of showing good results in the DP, and in terms of the initial trajectories in higher education.

Another challenge for the sustainability of the COAR project is the development of an attractive teaching career track that is not so dependent on the commitment and good will of teachers. The project has an interesting feature in terms of having created a career structure for teachers that is not as flat as in the traditional educational system. Positions such as year coordinator, subject coordinator, and the three principals are a good way of motivating teachers and generating prospects of promotions. Furthermore, the IB contributes to opportunities for teachers in the COAR that can become part of the team of educators of the IB at a regional level.

However, there are two other issues that need to be addressed, the first one being salaries. Teachers we interviewed, systematically complained about not having enough compensation for the amount of effort and time involved in being a COAR/DP teacher. The other is the instability of COAR teachers and the restriction of leaves from the EBR that cannot extend for more than two years. This situation can potentially result in massive turnover of teachers when large numbers of COAR teachers face the decision to either lose stability and stay in the COAR project or return to their stable EBR positions. A project such as COAR requires well motivated and remunerated teachers. It is fundamental that as much as the COAR have become an aspirational institution for students and families, it consolidates the same effect on teachers.

Finally, a big threat to the COAR system and one of its major aims and source of support is the possibility of losing its component of social mobility and social equity. One of the most interesting features of the COAR project is that even when it selects the best students of the country, it only gives access to students from public schools. Consequently, many students from poor background have through COAR a huge opportunity to improve their life trajectory and probably even their families. If the COAR project continues in its successful path, its prestige and the opportunities it generates could start attracting the middle classes that could quite easily (under the current rules) co-opt the schools. School staff from the Colegio Mayor, for example, noted that they received some applications from middle class students who completed their primary education in a private school and moved to a public one in lower secondary to be eligible for the Colegio Mayor. Although these were isolated cases, such practices could become a threat to the equitable aspect of the project.

Thus, the project is growing steadily and solidly, showing good results, and with a committed and professional leadership both at the central level and, as far as we could perceive, in each COAR. As we will comment in the next section, it will probably face several challenges in the near future, but it seems to be moving in the direction of solid sustainability.

# Strengths and challenges

In Peru, the implementation of the DP in schools is recent, but it already shows important signs of strength. Firstly, the policy is inspired, framed and guided by the initial experience of the Colegio Mayor, which was key in validating the design and legitimising the initiative. The experience also provided the Ministry of Education with IB know-how, since they hired teachers with experience in the DP to provide guidance to very similar schools, the COARs.

Consequently, a second strength in Peru is the presence of consistent support mechanisms for the COAR centralised in the DEBEDSAR, a special division of the Ministry of Education. Each coordinator and teacher at the COAR has a specific guide in the DEBEDSAR who closely follows their work and assists them in all their needs.

A third strength is the quality of coordinators and teachers, which go through a selective process to become part of the COAR.

The initiative in Peru has three main challenges. The first one regards teachers' working conditions, and the need to keep recruiting and retaining some of the best teachers in the country. The second challenge is the elevated cost of the programme, mainly due to the boarding school system. The Ministry of Education spends 10 times more for each COAR student than it does for a student in the regular system. This is not only problematic in terms of equity, but it also puts sustainability at risk. If a budget cutback were to be made, the COAR system could be considered as an option. Finally, students' stress is a challenge all the school actors are aware of. Although some action has been taken, the challenge is still present.

SECTION 3: A COMPARATIVE ANALYSIS OF THE DP IN PUBLIC SCHOOLS IN COSTA

**RICA, BUENOS AIRES AND PERU** 

In this final section, we offer an overall conclusion by addressing comparatively the initial research

questions of this study, about the origins and design of the initiatives, the development of support

networks through which IB know-how is promoted, and the impact of the DP on schools, teachers and

students. In this comparative analysis of the implementation of the DP in public schools in Costa Rica,

Buenos Aires and Peru, we examine common trends in the three cases and specificities in terms of

how each initiative addressed the implementation of the DP in public schools.

Firstly, we suggest that the cases we are analysing are not separate isolated entities. We suggest that

the fact that these three educational systems in Latin America have decided to introduce the DP in

public schools within a relatively similar timeframe should not be seen as a mere coincidence.

Furthermore, Ecuador, that is not part of this study but has extensively introduced the DP in public

schools, can be included within this overall trend. A detailed analysis of the conditions that have

contributed to this trend exceeds this study, but some conjectures can be made. During the time

frame in which these policies were designed and initiated, Latin American economies have largely

benefitted from high prices in commodities and have grew steadily<sup>11</sup>. Implementing the DP requires

an investment, and the availability of funds is a necessary condition.

Also, our research has shown certain commonalities in terms of discourses that justified the interest

in introducing the DP in public schools, in the voice of interviewees at the level of the state and others

involved (eg. ASOBITICO). In the three educational systems, critiques of traditional secondary

education were widespread. Many interviewees pointed to the need to reform an encyclopaedic

curriculum based on a rigid classification of the school experience into many different subjects and on

memorization of factual knowledge. Linked to this diagnosis is the notion of innovation and

experimentation in the search of a new kind of secondary education that can better address the

challenges of the contemporary world. In this context, the DP has become an attractive model both

in terms of its curricular design and the kind of learning practices it promotes, and in terms of its capacity to have a significant and rather quick impact on teaching and learning practices through its

exams, teacher training and other management strategies.

<sup>11</sup> Argentina: <a href="http://www.imf.org/en/Countries/ARG#countrydata">http://www.imf.org/en/Countries/ARG#countrydata</a>

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Another feature that was common to these three cases, and at least partly explains the interest of Latin American public educational systems in the IB, is the search for equity. Latin America is the region with highest socioeconomic inequalities and differences are also persistent in educational opportunities. As we mentioned, the pursuit of equity was emphasised as one of the main drivers in the three initiatives that are being analysed. In these three countries (and in Latina America in general) the IB has historically been an option for families that can afford to pay for relatively expensive private schools. Thus, interviewees overall defined equity as providing students that attend public schools with opportunities that have been exclusive of the most affluent parts of society. The notion of educating leaders for the future development of each country was also present, but in varying degrees. It was very strong in Peru, still present in Costa Rica, but not mentioned in Buenos Aires.

A comparative perspective of the DP initiatives in public schools in Costa Rica, Buenos Aires and Peru also suggests that the DP as an educational model for the last years of secondary education has proven to be very flexible and adaptable to different policy designs and modes of implementation such as the ones that these three cases represent. In the next sub-sections, we will comparatively examine the fundamental aspects of these initiatives: design and leadership, support networks, the availability and distribution of "IB know-how", the impact on schools, teachers, and students, and results in IB exams. We then finish the report with some recommendations for the IB and for the three projects.

### **DESIGN AND LEADERSHIP**

The design and leadership of the initiatives to introduce the DP in public schools has been quite different in each of the analysed cases. In Costa Rica the project was promoted by a philanthropic organization with the authorization of the state. As it evolved, the state got more involved in the project and is gradually taking over as the main organization in charge, maintaining a strong and fundamental support from ASOBITICO. Thus, the collaboration between private and public sectors has been key in the design of the Costa Rican experience. Meanwhile, in Buenos Aires the decision to incorporate the DP was made by the Minister of Education. The project was designed, organized and sustained by the state with minor participation of private schools and the IB Association of Schools. In Peru, the implementation of the DP in schools is similarly being promoted by the state with almost no participation of the private sector, but as part of a very big and ambitious education policy (COAR) that is central for the Ministry of Education.

In Costa Rica, the project started small, with two schools, and has gone through a process of steady growth in small manageable steps. The initiative has clear goals and is based on careful and detailed planning that permeates the project from the macro level (the MEP and ASOBITICO), to the work of

schools, teachers and students. The definition of a single IB curriculum for all public schools that is synthesized with the national baccalaureate contributes to a clear focus, efficiency and knowledge sharing among participants. The IB project has slowly but steadily become a central policy for the MEP and for the country since the inclusion of the DP within the National Development Plan.

Meanwhile, in Buenos Aires, the initiative is coordinated by the Ministry of Education and was deployed to all participating schools at the same time. This approach was complemented by a political culture that avoided imposing the project and other decisions to schools, inviting schools to participate, and giving them freedom to define many details. Each of the participating schools has its own IB curriculum and there is almost no synthesis with the official curriculum of the City. Students who sit for the IB exams must study for two separate full programmes. The goals of the project are unclear, and it is weakly institutionalized: it is not associated with other education policies, and leadership has tended to solve the complexity of synthesising the needs of the IB with the formal educational system through exceptions to existing norms without creating new legislation to validate and support the inclusion of the DP. The project was important for the administration that promoted it initially, but with changes in authorities its centrality has diluted as it became one more responsibility of an official that oversees close to 1000 schools.

In Peru, the initial experience with the DP in the Colegio Mayor was key in validating the design and providing legitimation to the COAR project. Thus, the COAR policy is born out of a pilot project that was later escalated to all regions in Peru in two big and challenging steps. Leadership is based on a very centralized and vertical design in which the state is responsible for most processes and decisions and follows closely the implementation of its policies in schools. The IB curriculum is defined by the state but gives some options to students and to schools that can adapt the DP curricular framework defined by the state according to the availability of teachers and/or other local particularities. The DP has become a fundamental component of the COAR project to the point that it has blended into the model and references to COAR and DP were made indistinctly.

## **NETWORKS OF SUPPORT**

Our research has shown that to successfully implement the DP, schools and teachers need consistent and sustained support, from the authorization process and initial teacher training to pedagogic guidance and further training throughout the implementation process. The provision of material support is also key for schools to introduce the DP. Thus, the ways in which each project has been able to organize support networks has been crucial.

In Costa Rica, we documented a dense network of support that was originally created by ASOBITICO, with a growing participation of the state. ASOBITICO provides help and advice during the authorization process, teacher training, and material support. The state also has a strong and growing presence, mostly centred on administrative and material support. A specific position that oversees the IB project has been created in the MEP. The overall school communities also contribute in different ways to the initiative. A particular feature of the Costa Rican case is a strong sense of belonging to the IB project among coordinators, teachers, and students that is fostered through regular meetings and shared activities. The permanent network of coordinators, and instances in which students exchange the results of their work which also include private schools stand out as the most relevant experiences.

In Buenos Aires, support mechanisms depend on the Ministry of Education of the City. Support was stronger during the first years, with two people in charge of providing for the material and, to a certain extent, pedagogic needs of schools. During those initial moments, lack of adequate planning was an issue that resulted in some inefficiencies (for example with teacher training and curricular planning). Needs for the authorization process were overall addressed but the state did not consider further needs during implementation, such as continuous teacher training, teacher turnover, access to pedagogic materials, and details such as solving the logistics of sending exams to IB. Some attempts at creating a network with ACBIRP and private schools were made with some success, but overall the support of the private sector is informal and limited in its impact. With changes in government, since participating schools depend on three different sections of the Ministry of Education, three IB coordinators were appointed as leaders of three networks of IB coordinators: one for technical schools, one for academic schools, and one for normal schools. Even if this new configuration contributed to the support among coordinators, it is still weakly connected to the authorities in the Ministry and fragmented the project into three very small networks. Thus, state support to schools, teachers and students has been diluting, and a solid network of support is still lacking

Meanwhile, in Peru support mechanisms for the COAR are centred in the Ministry of Education. A special division with 47 employees provides solid and stable support, evaluation and control. An interesting feature is that the division that oversees the COAR project replicates the organizational structure of COAR schools with a clear reference for each leadership team. Similarly, disciplinary pedagogic support is provided by specialists that are a reference for the relevant teachers. Support and control mechanisms are based on monthly visits to schools and exchange of information and advice through phone and digital networks. There is a strong focus on providing support to the pedagogic work of teachers: for example, officials from the Ministry observe classes and give feedback to teachers and coordinators. The COAR network is vertically centred in the state, in the sense that horizontal exchange of information and advice is not promoted between teachers and principals of

different schools. It might happen informally, but overall the state collects information, assesses the needs of schools, principals and teachers and plans teacher training, and other kind of support devices. The significance of the COAR project in the Ministry has resulted in a consistent and remarkable support network that developed in only a few years to contribute to the implementation of the DP in thirteen schools in remote locations.

### **IB KNOW-HOW**

One of the biggest challenges for successful implementation of the DP is the availability of what we have called "IB know-how". The DP as an educational model is quite specific and different from traditional education in Latin America. Consequently, knowledge about how to manage the IB programme, and how to prepare students for the IB exams is fundamental for schools and teachers to adapt to what is expected from them in the DP. Furthermore, when the DP is being implemented in public educational systems, IB know-how becomes a major issue in a context of relatively high teacher turnover. Thus, the availability, development and diffusion of IB know-how has been key in these three cases, that have addressed this challenge very differently.

In Costa Rica, IB know-how was provided by ASOBITICO since the first steps of the initiative. The fact that the founders of the project and of ASOBITICO were principals and teachers of private IB schools with significant experience in the DP, contributed to the availability of solid IB know-how. Initially, the founders of the project acted as mediators between the public schools and private schools that had relevant knowledge. Later, with the foundation of ASOBITICO, the Association started to incorporate IB coordinators of the first public schools among its staff and leadership. They were aware of the challenges of synthesising public school culture with the IB and provided a significant contribution of know-how to the project. ASOBITICO also regularly hires IB educators from other countries in Latin America and they have become a certified IB provider. Thus, through the dense network of support that has been created, ASOBITICO has been able to develop and promote the exchange of IB know-how in Costa Rica both for public and private schools. The state has gradually acquired more IB know-how, mostly focused on organizational issues. Therefore, a relevant and very important characteristic of this case is the successful management of IB know-how. The network of IB schools in Costa Rica can be described as a learning organization that is permanently finding ways to improve the running of the DP and develop and share existing IB know-how.

In the initiative to implement the DP in public schools in Buenos Aires IB know-how is limited. Even though Argentina has more IB schools than Costa Rica and Peru, these are mostly private schools. Officials in the state that oversaw the project did not have prior experience with the IB, and when they

started to get acquainted with the programme they left their positions. The scheme to pair each public school with a private counterpart contributed to the transfer of some IB know-how to coordinators and teachers in public schools but was limited in its impact and unstable. Similarly, the fact that the IB office for Latin America was based in Buenos Aires helped, as IB officials committed to the project and actively visited schools and advised state officials. However, by 2017, the office was closed and that informal source of IB know-how was lost. Furthermore, weaknesses in planning teacher training, added to high teacher turnover has resulted in teachers with very little IB know-how and even teachers with no IB training at all teaching DP courses. We documented some cases in which teachers and coordinators were entrepreneurial in finding informal sources of IB know-how. Nevertheless, from the perspective of central planning, the availability of IB know-how is an aspect that needs to be addressed.

Peru has been very successful in addressing the challenge of developing and sharing IB know-how, but with a very different approach. The Ministry of Education developed an aggressive and coherent strategy of buying in IB know-how by hiring professionals with first-hand experience with the DP. The first principal of the Colegio Mayor had worked in the DP in private schools, and later, when the COAR project was created, the state hired several coordinators and teachers from the Colegio Mayor, military schools and private schools that offer the IB to be part of the team that oversees the running of the DP in COAR schools. Similarly, to what happened in Costa Rica, the availability of IB know-how from the first steps of the initiative was key in creating consistent support mechanisms for schools and teachers. Given the verticality of the organizational structure in Peru, IB know-how flows mainly from the central state to schools.

## THE DP IN SCHOOLS

The ways in which the DP was introduced into schools was quite different in each of these three cases. Both in Costa Rica and Buenos Aires it is schools who decide to participate (although through slightly different processes). Schools are faced with the challenge of transforming into IB schools. Also, in these two cases the DP is an option for some students and some teachers that decide to participate, and consequently the DP coexists with the existing local programme. Meanwhile, in Peru, COAR schools are new institutions that have the DP as a fundamental part of their design. All students are prepared to sit for the DP exams. Thus, these are institutions that were created as full DP schools.

Costa Rica started with two schools and grew in small steps with the aim of reaching twenty schools by 2020. Schools have to voluntarily apply in order to become part of the project. The state evaluates initial applications in terms of size, geographical location, and viability. Institutions that pass this first

instance are then evaluated by ASOBITICO that makes the final decision. Schools have limited spaces for students who want to participate of the DP. On average, 25 students per school sat for the exam in 2017. DP students have to stay in school for an extra year, and buildings have special classrooms and sometimes even separate buildings for the DP. The coexistence of two parallel programmes created some tensions in some of the schools. Officials and school personnel were aware of this issue and used different strategies to address it. Although most officials and school authorities praised the IB programme and thought it could have a positive impact on teaching and learning practices in the national baccalaureate. The contrasts between the type of knowledge that is tested in the final exams of the two programmes was a significant obstacle that limited the impact of the DP in the rest of the school.

In Buenos Aires, around 30 schools were invited to be part of the project, based on recommendations from supervisors. Ten schools voluntary decided to join the DP. Also, one school that offered the DP since 1988 was included within the project. In each school, the DP is an option for students who decide to participate. Very few students chose the DP. On average, 9 students per school sat for the IB exams in 2017. Thus, two programs coexist, but differently from Costa Rica, DP students in Buenos Aires follow both the local programme and the DP since very few subjects of the DP are taken as being equivalent to local subjects. This implies that students have to spend long hours in schools. Also, in Argentina there is no exam at the end of secondary education nor university entrance exams, consequently, students have little incentives for choosing and remaining engaged in an academically challenging programme. On the other hand, weak curricular control in schools in Buenos Aires made it easier for teachers who participate in the DP to transfer some of the styles of the IB into their local classes. Nevertheless, the impact of the DP in participating schools is quite marginal, considering the number of students that participate.

In contrast, in Peru, the DP has a significant impact on COAR schools. These are new schools designed as IB schools for high performing students. All students sit for the DP exams. Even though students in the first of three years are not formally preparing for the DP, the "DP style" of teaching and learning is still promoted to help students adapt to the programme. The DP is completely embedded in COAR schools.

### **TEACHERS**

Teachers are the fundamental actors in the implementation of the DP. A common trend in the three cases was that teachers that were interviewed were very motivated and committed to be part of the DP. On the one hand, this was related to working with high performing and motivated students. On

the other, with the characteristics of the IB. Most teachers stressed that the IB had brought back their passion for teaching and that it was the kind of education that they were looking for when they decided to become teachers. They mostly emphasised the curricular style of the IB, based on promoting thinking skills and certain openness of knowledge as opposed to the memorization of factual knowledge. They also liked the kind of involvement they saw in their students when they were challenged by the IB curriculum. Another issue that was highly valued by teachers in the three cases was the detailed feedback that they received from IB examiners. Teachers felt stimulated by the need to be permanently revising their practices. However, most interviewed teachers also noted that working in the IB was much more demanding than working in the regular local programmes, and that even though they had better work conditions, these were not enough to cover for the extra working load (the extent of the difference between retribution and work varied in each case).

In this context, in the case of the public systems in Latin America, attracting, training and retaining teachers for the programme is a big challenge that has been solved quite differently in each educational system. While Costa Rica and Peru created a separate track for IB teachers in which they are subject to annual contracts, losing stability, in Buenos Aires, teachers in the DP are kept within the local teaching career.

In Costa Rica teachers are selected by the IB coordinator in each school. They have to opt out of the regular teaching career of public teachers, and consequently they can be dismissed if they do not perform according to expected standards. DP teachers are paid for four hours outside class for every four hours of teaching. They receive permanent training and advice and participate in networks with other teachers of the same subjects in other IB schools. They have access to IB online resources. Some teachers have become educators in the IB system, meaning they become evaluators and/or teacher trainers in the system. They value the possibility of visiting other IB schools in and outside the country, this impacts on their motivation and professional development.

Meanwhile in Buenos Aires, teachers are selected through the regular system of teacher assignation by which teachers with the highest rank in the formal system have the right to choose available vacancies in schools. Thus, schools cannot select teachers. Furthermore, if teachers do not want to teach the DP curriculum, they are not obliged to. Although coordinators have found ways to select teachers for the DP (formally in technical schools – informally in others) recruitment is a significant challenge. DP teachers are still part of the regular teaching system, and consequently they do not risk their career stability by participating in the programme. Coordinators and teachers are paid for 6 and 2 extra hours, respectively. Teachers who started the programme from the beginning had one training session, mostly an introduction to the IB. They had no training at all if they joined the DP after the first

year. Access to IB online resources is limited. According to coordinators that were interviewed, teacher turnover is a significant issue.

In Peru, teachers must go through a selective process to become a COAR teacher. Teachers apply, then the Ministry makes a first screening and passes on the list of pre-selected candidates to schools that make the final decision. Teachers have the same amount of time for teaching as they do for out-of-class duties. They have a very demanding work load of 53 hours per week. Teachers must opt out of the traditional teaching career to work in a COAR, losing tenure. Contracts are renewed yearly. Teachers can ask for a leave of absence from the traditional teaching career, but only for two years. After that they must decide whether to stay in the COAR and lose stability or return to their stable position. This situation creates a potential risk of losing a significant number of teachers at the same time, once they are faced with this decision. Teachers receive permanent training and feedback and support from their coordinators in schools and officials from the Ministry of Education. They have access to IB online resources. As we mentioned, COAR DP teachers were highly motivated by the DP, but they also noted that the long working week, a strict system of evaluation, and unstable conditions generated a high level of stress.

### **STUDENTS**

Overall, students in the three educational systems had a very positive view of the DP. They sought in the DP a higher quality education and better preparation for university. They tended to value the kind of learning style promoted by the IB and the closer relationship they develop with teachers. Most of them also had a high esteem for Theory of Knowledge (TOK) and Creativity, Activity, Service (CAS) as subjects that promoted a deeper and more open understanding of human knowledge and contributed to their awareness of social issues and the need to participate in the construction of a better world.

In the three cases, the IB in public schools is a selective programme that attracts some of the best performing students and, specially, some of the most motivated to learn. In Costa Rica and Buenos Aires, selection takes place within the school and a limited number of students are accepted for the DP. Since only students from the schools that offer the IB apply, not all available vacancies are taken up (except for some of the more established IB schools in Costa Rica). Thus, promoting an interest in the programme among more students is a challenge in Buenos Aires and in some schools in Costa Rica. In Peru, the COAR system has generated a lot of interest among Peruvian families. It has become a highly selective and aspirational programme for students. Selection processes are managed at the central level (Ministry of Education), that assigns students to COAR schools.

Even though students valued their experience in the DP, in the three cases student stress is a problem that was highlighted by students, teachers and state officials. The IB is a very rigorous and challenging academic programme that, in the case of students from the pubic system in Latin America, requires a re-adaptation of learning styles that is not always easy. In the case of Costa Rica, students must stay in school for an extra year and, during the two years in which they prepare for the IB exams, they spend long hours in school and, later, studying at home. In Buenos Aires, added to the difficulties in adapting to the IB style, students still must pursue the local curriculum since IB subjects were not aligned with local requirements. Consequently, they spend long hours in school. In Peru, the already challenging DP is complemented by many other curricular and extracurricular activities, resulting in long hours of study six days a week. The boarding system adds to the anxiety of students. Thus, stress management has become a very relevant issue for central authorities and in schools in Costa Rica and Peru, while in Buenos Aires it was mainly in schools were some strategies to address the issue were sought.

### **STUDENT ACHIEVEMENT**

In this subsection, we present descriptive statistics of the DP students' exam results in 2017, based on data provided by the IB. We start by showing the numbers of schools, DP students and average number of DP students per school in private and public schools in each country (Table 3). We then present the number of students that apply for the full IB Diploma and separate IB courses in private and public schools in each country (Figure 14). We also present the results in terms of percentage of students that obtained the Diploma (Figure 15), average total points of Diploma candidates (Figure 16), and average grade of course takers (Figure 17).

Table 3. Schools and DP students in state and private schools in Argentina, Costa Rica, and Peru

		Argentina		Costa Rica		Peru		Totals and averages for the three countries	
		Private	State	Private	State	Private	State	Private	State
2017	# Schools	44	11	13	10	32	16	89	37
	# DP Students	1718	102	467	254	1321	1556	3506	1912
	Average # DP students per School	39	9	36	25	41	97	39	52

Source: compiled by the authors based on data from the IB database

Overall, considering the number of schools and candidates, the DP is more widely implemented in Argentina than in Costa Rica and Peru (Table 3). However, in 2017 the majority of DP students in Argentina were from private schools (94%). This is partly explained by the fact that in Argentina, at the time of the analysis, the number of private IB schools was four times larger than the number of public IB schools (44 compared to 11). Also, private Argentine schools have on average larger DP student cohorts than public schools (39 versus 9 students). In Costa Rica, the numbers of IB schools and students are also higher in the private sector, but the difference is relative smaller. Meanwhile, in Peru there are more private (32) than public (16) IB schools, but given the average number of IB students in public schools (97) that is much higher than in private IB schools (41), the total number of IB students is higher in the public sector (1,556) than in the private one (1,321).

100 90 21 80 70 60 50 99 96 91 90 90 40 30 20 10 0 Argentina Argentina Costa Rica Costa Rica Peru state Peru private state private state private ■ Diploma ■ Course

Figure 14. Percentage of Diploma and Course candidates in state and private schools in Argentina, Costa Rica, and Peru

Source: compiled by the authors based on data from the IB database

Figure 14 shows that most IB students in the three countries opt for the full IB Diploma, while very few take separate courses (Course candidates). Within this overall trend, Argentine state schools have the lowest percentage of students applying for the full Diploma (79%), followed by Argentine private schools and Peru state schools (90% each), and Costa Rican private schools (91%). Almost all students

in the Costa Rican private schools (99%) apply for the full IB Diploma. However, differences do arise by country and sector in terms of how many students do obtain the Diploma (Figure 15), and in the average total points (Figure 16).

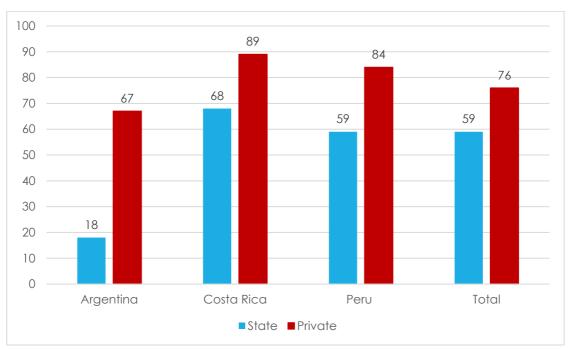


Figure 15. Percentage of candidates that obtained the Diploma in state and private schools in Argentina, Costa Rica, and Peru

Source: compiled by the authors based on data from the IB database

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Figure 15 shows differences in performance in each country and by sector, measured by the percentage of students that obtain the Diploma. The percentage of students in Argentine state schools that obtain the Diploma is considerably lower than in state schools in the other two countries (18% compared with 68% and 59%). By comparison, the worldwide percentage (Diploma pass rate) in the November 2017 IB examination session was 70% (IBO, 2018). Although no claim of causality can be made based on the data collected in this study, the weakness of support mechanisms for state schools in the City of Buenos Aires that we documented could be related to poor results in students' achievement. Argentine private IB schools also have the lowest percentage of students obtaining the Diploma (67%) when compared with private schools in the other two countries, while Costa Rican private schools have the highest rate of success (89%), followed closely by their Peruvian counterparts (84%). Costa Rican public schools also outperform public schools in the other countries with 68% of students obtaining the DP. The percentage of students obtaining the DP in Peruvian public schools

(59%) is lower than that in Costa Rica, but it is still a reasonably high considering that the majority of state schools in Peru were sitting their first cohort of students for the Diploma in 2017.

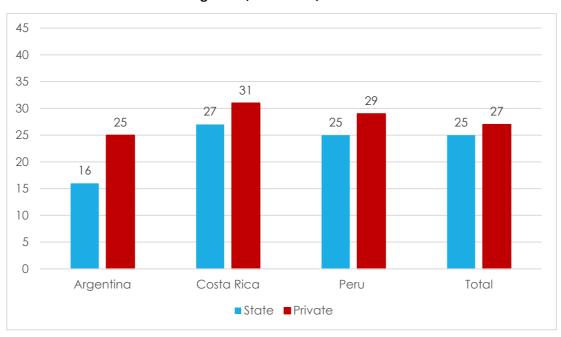


Figure 16. Average total points obtained by Diploma candidates in state and private schools in Argentina, Costa Rica, and Peru

Source: compiled by the authors based on data from the IB database

Another way to look at the differences in performance in each country and in private and public schools is by comparing average total points obtained by students that obtained the Diploma. As shown in Figure 16, average total points show similar trends as the percentage of students obtaining the Diploma. Again, Costa Rican students outperformed students from the other two countries, with an average of 27 points in state schools and 31 points in private schools. In Peru the average was 25 points in state schools and 29 in private schools, and in Argentina 16 points in state schools and 25 in private schools. By comparison, the worldwide average in the November 2017 examination session was 29 points (IBO, 2018).

Finally, although the percentage of students sitting for IB courses was quite small, it is worth analysing the results of these students by looking at the average exam scores (Figure 17). We found a similar trend, with students in Costa Rican schools outperforming their Peruvian and Argentine counterparts.

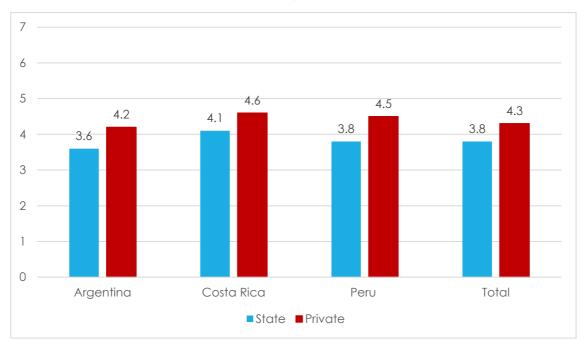


Figure 17. Average grade obtained by Course candidates in state and private schools in Argentina,

Costa Rica, and Peru

Source: compiled by the authors based on data from the IB database

Thus, overall, differences in performance on IB exams in each of the initiatives that have been analysed are quite consistent with the findings related to the design and management of the IB projects in state schools in each country. As we reported, the Costa Rican initiative that recorded the highest student achievement on IB exams among the three countries , is quite consolidated and has managed to develop a consistent network of support for IB public schools with ASOBITICO providing solid IB knowhow to schools. The Peruvian COAR schools also show relatively good student performance. It is a very recent initiative that is well planned and is providing IB know-how to schools and teachers. Meanwhile, the project in the City of Buenos Aires that appears to need major improvements in terms of leadership, support mechanisms and IB know-how in the state, did not show good student results in terms of IB exam performance.

## **RECOMMENDATIONS**

In this final section, we present some recommendations for the International Baccalaureate Organization, and for each of the initiatives that have been part of this study.

### **International Baccalaureate Organization**

 Should advice states on the importance of generating solid and stable support mechanisms for public schools.

In most educational systems in Latin America, state schools have a very low level of autonomy in terms of managing funds, human resources and making pedagogic decisions. Thus, many of the decisions that are usually taken by private IB schools, in the case of state schools have to be made by the state. Consequently, the state has to be very active in supporting public IB schools.

• Should advice states on the importance of buying in or developing IB know-how in the state or promote a solid alliance of the state with organizations of civil society that can provide that know how (such as local associations of IB schools).

### **Costa Rica**

- Should address the issue of the "two cultures" in IB state schools by finding ways to further integrate the IB programme with the National Baccalaureate.
- Should develop a systematic process of evaluation of the initiative to provide information for improvement and to document and further legitimize it.
- Should think about options to expand the programme, given the success of the initiative and demand from families and other stakeholders.

### **Argentina**

- Should generate in the state a solid and stable structure of support for IB schools, ideally inserted within the existing structure of public administration.
- Should buy in IB know-how in the state, either from private schools or from the one public school with a long trajectory in the IB.
- Should evaluate the possibility of bringing in ACBIRP as a partner in the project (inspiration could be found in the Costa Rican case).
- Should invest in teacher education and access to materials for IB teachers.

- Should revise the way in which the IB curriculum is integrated with the local curriculum, trying to reduce the total number of subjects for students that choose the IB.
- Should reduce the number of curricular options in IB schools in order to lower the number of IB subjects that require training and materials.

## Peru

- Should address the issue of transition into university of graduates of the COAR network.
- Should attend to the levels of stress of students.
- Should revise the hiring conditions of teachers to avoid having high turnover when many teachers are faced at the same time with the dilemma of losing tenure in the national system.

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