



Diploma Programme implementation in public schools in Latin America: The cases of Costa Rica, Argentina (Buenos Aires) and Peru

Research summary

Summary developed by IB Research, based on a report prepared by:
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Background

The aim of this study was to analyse the implementation of the International Baccalaureate (IB) Diploma Programme (DP) in public schools in Costa Rica, Peru, and Buenos Aires,¹ Argentina. The study also explored the DP's impact on schools, teachers and students in these contexts.

Although the development and growth of the DP has its origins in private schools, in recent decades, it has been adopted in a growing number of public schools internationally (Resnik, 2015). Particularly in Latin America in the last decade, the DP has been introduced in public schools through a variety of unique institutional designs, across different countries (Resnik, 2016). The focal cases in this study: Costa Rica, Buenos Aires and Peru, add to the growing body of research exploring approaches to implementation and effects of DP initiatives in public schools.

Research design

This study involved a mixed-methods design. The qualitative component included document analysis as well as interviews with IB staff, officials from ministries of education, and other applicable organizations. Additionally, case studies were conducted in nine schools (three in each country) where the researchers interviewed 18 school principals and DP coordinators (two in each school), and 27 teachers (three in each school). Researchers also conducted a focus group with students in each school, and observed 27 classes (three in each school). The quantitative component of the study included analysis of a student survey ($n = 1,121$) and data on student demographics and performance on DP exams ($n = 6,786$). The fieldwork for this study was conducted in 2017. Thus, the research findings do not reflect developments that may have been implemented more recently.

¹Argentina is a federal country in which each province and the city of Buenos Aires manage their own educational systems. The project of introducing 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.

Findings from Costa Rica

Background

In Costa Rica, the DP initiative in public schools started in 2005 with one school, and has slowly but steadily expanded, with the aim of reaching 20 schools by 2020. The project was initially led by the Association of IB Schools in 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 schools 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 school sitting for IB examinations in 2017.

Support framework and structure

The two key organizations involved in the governance and support of the DP initiative in Costa Rica are ASOBITICO and the MEP. The relationship between the MEP and ASOBITICO have evolved favourably over time. Since 2016, there has been a gradual shift in responsibilities in which the private sector, which started as the main supporter and manager of the programme, is transferring "IB know-how"² and responsibilities to the state.

ASOBITICO provides crucial assistance to schools, such as supporting the authorization process, developing coordinators and coordinator networks, and providing teacher training. The MEP has been instrumental in aligning the national curriculum and DP subjects, and providing financing, infrastructure and resources. All DP schools in Costa Rica offer a single curriculum, with the same DP subjects, which contributes to simplified professional development, resource efficiencies, and knowledge sharing. In its current state, the DP appears to be very stable and sustainable in Costa Rica, and the collaboration between private and public sectors has been key to this success.

Impacts of the DP

Schools

Overall, those interviewed in Costa Rican schools agreed that the DP has had a positive impact on

school enrollment, prestige, ties with the community, school management, educational quality and material conditions. School stakeholders reported that the DP had improved educational quality, especially with regard to teaching and assessment practices and learning outcomes. The impact of the DP in schools was also apparent in the achievements of IB graduates, such as alumni receiving international scholarships, and performing well in local universities. Regarding material conditions, IB coordinators and teachers referred to significant improvements in infrastructure, facilities and equipment since starting the DP authorization process. Libraries, laboratories and classrooms were expanded and enriched, and internet access was improved. These resources were provided by the MEP, ASOBITICO, and other actors from local communities.

Teachers

In spite of additional demands on time and workload, DP teachers were highly motivated to teach in the IB programme. According to most interviewed teachers, the DP renewed their passion for teaching. In particular, they felt that DP approaches to teaching and learning are engaging for both teachers and students. DP teachers appreciated the DP's emphasis on developing student skills for inquiry and research, and having the opportunity to work with highly motivated students. As an executive from ASOBITICO remarked:

"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 organization."

DP teachers also valued the opportunity to engage in continuing professional development, to further their own growth by becoming examiners or professional development workshop leaders, and to connect with others in the broader IB community.

However, one important feature of the IB project in Costa Rica is that participating teachers have to opt out of the regular teaching career. Unlike teachers in the national Costa Rican public school system, DP teachers are not tenured, 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.

²The researchers refer to "IB know-how" to denote knowledge of: how to implement the DP, IB teaching and learning approaches, the expectations of the DP for teachers and students, and how to prepare for DP examinations.

Students

Students in Costa Rica reported that they chose the DP because they were seeking an intellectual challenge, and because they believed the DP offered a high-quality education and provided strong preparation for university. In addition, the survey results indicated that students had very positive views of how the DP prepares them for research, university, critical thinking, life, communication, and understanding the world.

A recurrent theme was the transformation that students experience during their time in the DP. It was evident in the classes and in conversations with teachers that students develop strong academic writing and communication skills. Students also reported strengthening their inquiry and self-regulation skills. These are extremely important competencies that are critical in the transition from secondary school to higher education.

Students also shared that they 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, and that their perspectives were valued. Students appreciated having direct access to their teachers, who they described as caring and attentive.

Strengths and challenges

A clear strength of the programme's implementation in Costa Rican public schools is the private–public alliance between ASOBITICO and the MEP—ASOBITICO provides the “IB know-how” and the MEP provides the regulatory framework. A second strength of the initiative is the network of support for participating schools that has been created among coordinators, teachers and students across schools. This network has generated a strong sense of belonging, has facilitated peer learning, and has led to continuous improvements.

In Costa Rica, the DP is generally only offered to a limited number of students (30–60) depending on the school. Researchers noted a separation of IB students and teachers from the general student body. This noticeable division sometimes created tensions within the school.

Other challenges include teacher and coordinator workload and student stress. Students reported working long hours at home and on weekends to meet the expectations of the programme. Notably, students who participate in the DP in Costa Rican public schools must complete an extra year of schooling, reportedly to adapt to the IB style of learning and teaching prior to starting the DP.

Findings from Buenos Aires, Argentina

Background

The initiative to introduce the DP in public schools in the city of Buenos Aires was led by the city's Ministry of Education. The programme formally started in 2013 with the implementation of the DP in 11 public schools. The DP is financed by the Ministry of Education, including initial teacher professional development and materials. Students within these schools have to apply, and show good academic standing and positive predispositions to be considered for the programme. Only a small number of students in the participating schools enroll in the DP—an average of 9 students per school sat for IB exams in 2017. The DP is implemented in three different types of schools in Buenos Aires: technical schools, normal schools and academic schools.

Support framework and structure

In 2012, a Ministerial resolution was signed, defining the general terms of reference for the DP to be implemented in public schools in Buenos Aires. In spite of this initial governmental support, the DP initiative in Buenos Aires is weakly institutionalized. More recently, the Ministry has appointed three leaders overseeing distinct networks of IB coordinators: one each for technical schools, academic schools and normal schools. While this new configuration has contributed to support for coordinators, it is still loosely connected to the authorities in the Ministry. In addition, the fragmentation of a small network of IB public schools into three smaller networks has atomized the project.

School staff generally felt that support from the Ministry has been declining over the years and, furthermore, the quantity and quality of “IB know-how” in the Ministry has been reduced, as the original officials were replaced by new employees who were less acquainted with the IB philosophy. Thus, it is primarily the teachers and coordinators who are sustaining the initiative, with limited and informal support from the local IB association (ACBIRP) and private IB World Schools.

Impacts of the DP

Schools

Coordinators, school heads and other staff reported that implementing the DP has helped to support planning, create a better balance between student retention and educational quality, and attract new students to the public school system. Teachers valued the DP for updating content knowledge, improving

teaching practice, and raising expectations for students. While DP classes remain fairly teacher-centric, students did appear to have greater voice and engagement was relatively high. However, more work, training and support is needed in order to fully transform learning and teaching approaches.

Teachers

Unlike in Costa Rica and Peru, DP teachers in Buenos Aires are able to stay within the established national career path for teachers. They are also paid somewhat extra for planning, assessing and providing individual attention to students. However, most teachers reported that this additional amount is not sufficient to cover the workload required. The DP is perceived as a way for teachers to develop professionally by becoming teacher trainers or teaching experts.

Challenges for teachers and schools included recruiting and replacing DP teachers, time pressure caused by the workload and the fixed schedule of the DP, and inadequate support from the Ministry of Education. Nevertheless, many teachers found the high level of DP student engagement helped to drive their own motivation, and appreciated the feedback from the IB on student examination performance.

Students

Student survey results indicated that the top two reasons for pursuing the DP in public schools are preparation for university and a higher quality education. Of the skills examined in this study, the development of research and critical thinking skills were valued most highly by students. Overall, DP students in Buenos Aires had a positive view of the preparation they were receiving in the programme, although perspectives were not as positive as those of students in Costa Rica and Peru. Students also reported experiencing challenges with the workload, long school days, misinformation about course and examination requirements, and being treated differently as IB students by some peers and teachers. While the programme is fairly new, the impact of the DP on students is more limited than in Costa Rica and Peru.

Strengths and challenges

In the context of a general crisis of secondary education in Argentina—relating to educational quality, high dropout rates and poor academic outcomes (Terigi, 2008)—the main strength of the DP in Buenos Aires is providing a viable alternative to the local curriculum. DP teacher motivation and commitment is another strength that can support implementation.

The primary challenges in Buenos Aires are the declining state support and the lack of “IB know-how” inside the Ministry of Education. These constraints derive mainly from the absence of clear goals and adequate planning, which has characterized the project from the beginning. Furthermore, in-service teacher training, teacher turnover and access to pedagogic materials were not initially considered by the Ministry of Education as future needs. Thus, findings indicate that, at the macro level, the sustainability of the initiative is unclear.

Another considerable challenge is the lack of alignment between the local baccalaureate and the DP. As a result, DP students have to study two separate, and quite different, programmes simultaneously. This contributes to a heavy student workload in terms of school hours and after-school work.

Coordinators and teachers also felt that they are not paid enough to cover all of the programme’s requirements. In addition, teachers are selected through the regular system of teacher assignation, and schools cannot select DP teachers. This puts the programme at risk, in a context marked by high teacher turnover and lack of in-service teacher training.

Findings from Peru

Background

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 generation of 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 and academic development 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 highly competitive process. Unlike in Costa Rica and Buenos Aires, all students at COARs are enrolled in the DP.

In 2014, the Ministry 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 schools were going through the process of authorization at the time of data collection.

Support framework and structure

Rather than developing a new academic curriculum for COAR schools, founders chose to implement the DP, which is recognized by prestigious universities and the international community. Since COARs emerged

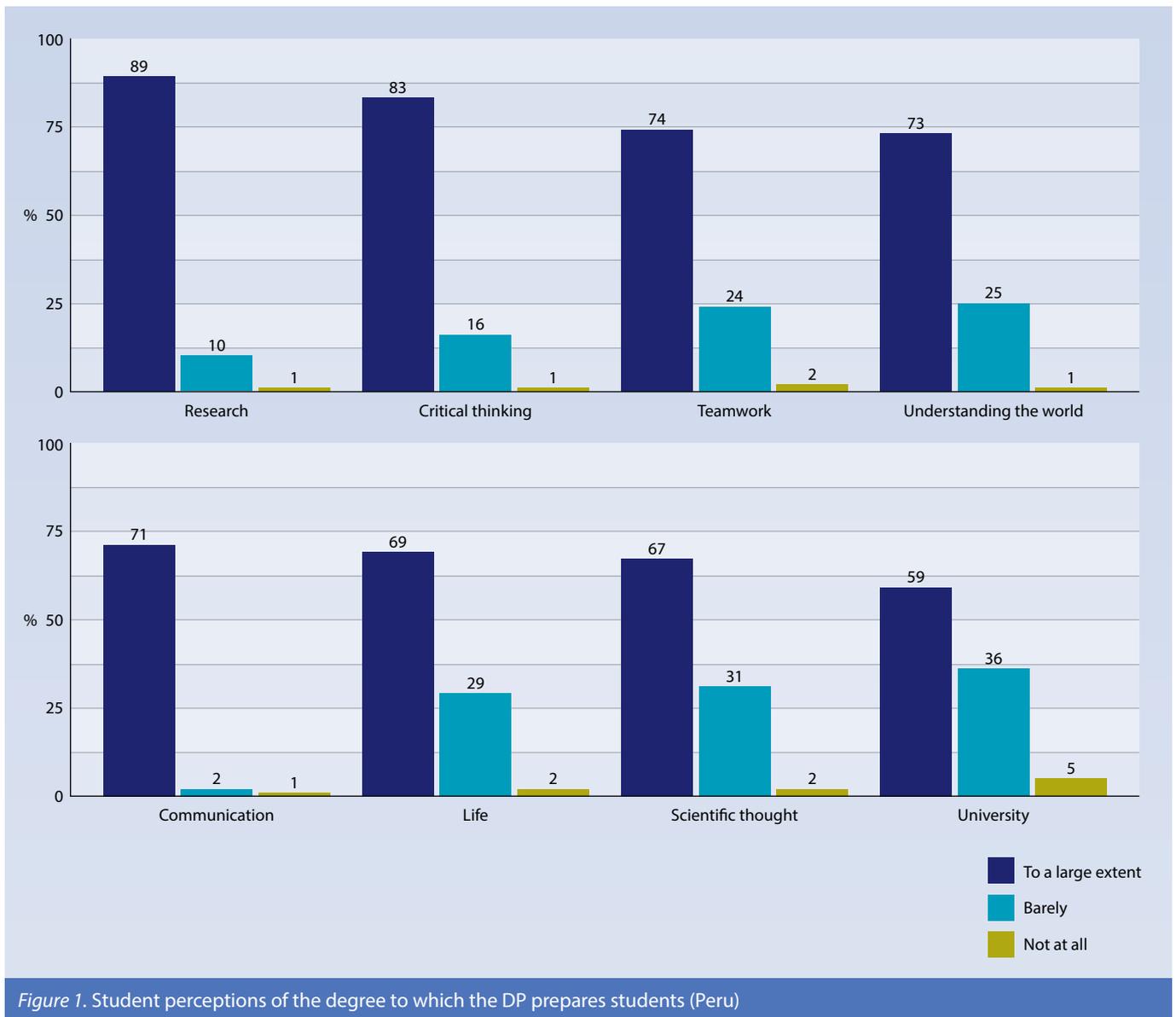


Figure 1. Student perceptions of the degree to which the DP prepares students (Peru)

as new schools, this made the process of authorization and implementation much easier, given that there was no need to negotiate with existing curricula or school cultures.

The COAR project is overseen by the Directorate of Basic Education for Students with High Performance and Achievement (DEBEDSAR). This is a large division that regulates, supports and evaluates COARs, centralizing “IB know-how” within the state. This organization constitutes a solid and all-encompassing support framework that is key to running the project. It defines the curriculum, oversees the student, teacher and principal selection process, provides all materials, and manages in-service training for teachers. Each school receives at least one visit from DEBEDSAR per month, providing oversight and support down to the subject–teacher level. The COAR system is highly centralized and vertically organized, and there are no formal horizontal networks between principals, coordinators or teachers.

Impacts of the DP

COAR teachers

As in the case of Costa Rica, there is less stability for teachers in COAR schools than in the national teaching track. COAR teachers do not have tenured positions, with contracts being subject to yearly renewal. This situation creates a challenge in terms of teacher turnover, since teachers are trained and gain experience, but then are faced with less stable teaching contracts.

COAR teachers and principals, like students, have a six-day work week. However, one of the main advantages of being a COAR teacher is that the same amount of time is allocated for teaching as for out-of-class planning, which is especially important for the DP.

In the interviews, teaching in a COAR school was described as both motivating and stressful. Teachers were motivated by the opportunity to work in a high-standard institution with students who are eager to

learn. They were also proud of providing some students from disadvantaged backgrounds with a life-changing educational opportunity. On the other hand, most teachers noted that teaching in a COAR school can also be stressful due to the long hours, workload and instability of the teaching positions.

COAR students

As in the other two countries, students identified high-quality education and preparation for university as the main drivers of their participation in the DP. Overall COAR students have very positive views of how the DP is preparing them for doing research, thinking critically, teamwork, understanding the world, communication skills, life, scientific thought and university (see Figure 1, page 5). Peruvian students had the most positive views of all aspects included in the survey when compared to their peers in Costa Rica and Buenos Aires. Preparation for university received the lowest score from students. This is related to student concerns about limited preparation for the university entrance exam. The university entrance exam is mostly based on memorization, which doesn't align with the DP philosophy, emphasizing the development of critical thinking and other higher-order competencies.

Students did appreciate being able to choose their own education track within the DP, engaging in hands-on projects, and having class discussions. Nevertheless, students raised some concerns about the demanding schedule, and the drawbacks of studying in a boarding school, such as: perceived isolation, limited family time, and lack of privacy. These factors contributed to student stress in the Peruvian context.

Strengths and challenges

Strengths of the DP initiative in Peru include that the project has been institutionalized in the public administration, and is run by a large team with "IB know-how" and solid professional capacities. Due to the teacher selection process, the DP in Peru also benefits from high-quality teachers, coordinators and principals. Findings indicate that the COAR project is stable and has growing support from the central government, regions, and local communities.

The initiative in Peru has three main challenges. The first one relates to teachers' working conditions, and the need to recruit and retain 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, which could put sustainability at risk. Finally, although some action has been taken, student stress is an ongoing concern.

Summary (comparative analysis)

Motivations for introducing the DP in public schools

Motivations to introduce the DP in public schools in the three sites related to equity, school improvement and innovation. Study participants in Peru and Costa Rica also mentioned the goal of fostering leadership skills among students, thereby contributing to the country's future.

Country models of offering the DP in public schools

The ways in which the DP was introduced into schools was quite different in each of the three cases. In both Costa Rica and Buenos Aires, it is the schools who make the decision to participate in the programme. Similarly, in these two cases the DP is an option for select students and teachers that decide to participate. In Buenos Aires and Costa Rica, the DP is implemented in parallel with the local education system, which can create challenges for students and staff. Conversely, in Peru, COAR schools are new institutions that offer the DP as a fundamental part of their design. These institutions were created as full DP schools, and all students participate in the programme and exams.

DP teachers

A common trend across the three cases is that teachers were very motivated and committed to being a part of the DP. This motivation related to characteristics of the IB programme and the opportunity to work with highly engaged students. Most teachers indicated that the IB had reinvigorated their passion for teaching. Features of the DP emphasized by teachers included the curricular style of the IB, based on promoting thinking skills and openness to learning, as opposed to the memorization of factual knowledge. Also highly valued by teachers across cases was the detailed feedback that they received from IB examiners. Teachers felt energized by the need to continually develop their teaching practices. However, most teachers also noted that teaching the DP was much more demanding than working in the national education programme.

DP students

In all three cases, the DP in public schools is a selective programme that attracts some of the highest performing and most motivated students. Overall, students in the three educational systems had very positive views of the

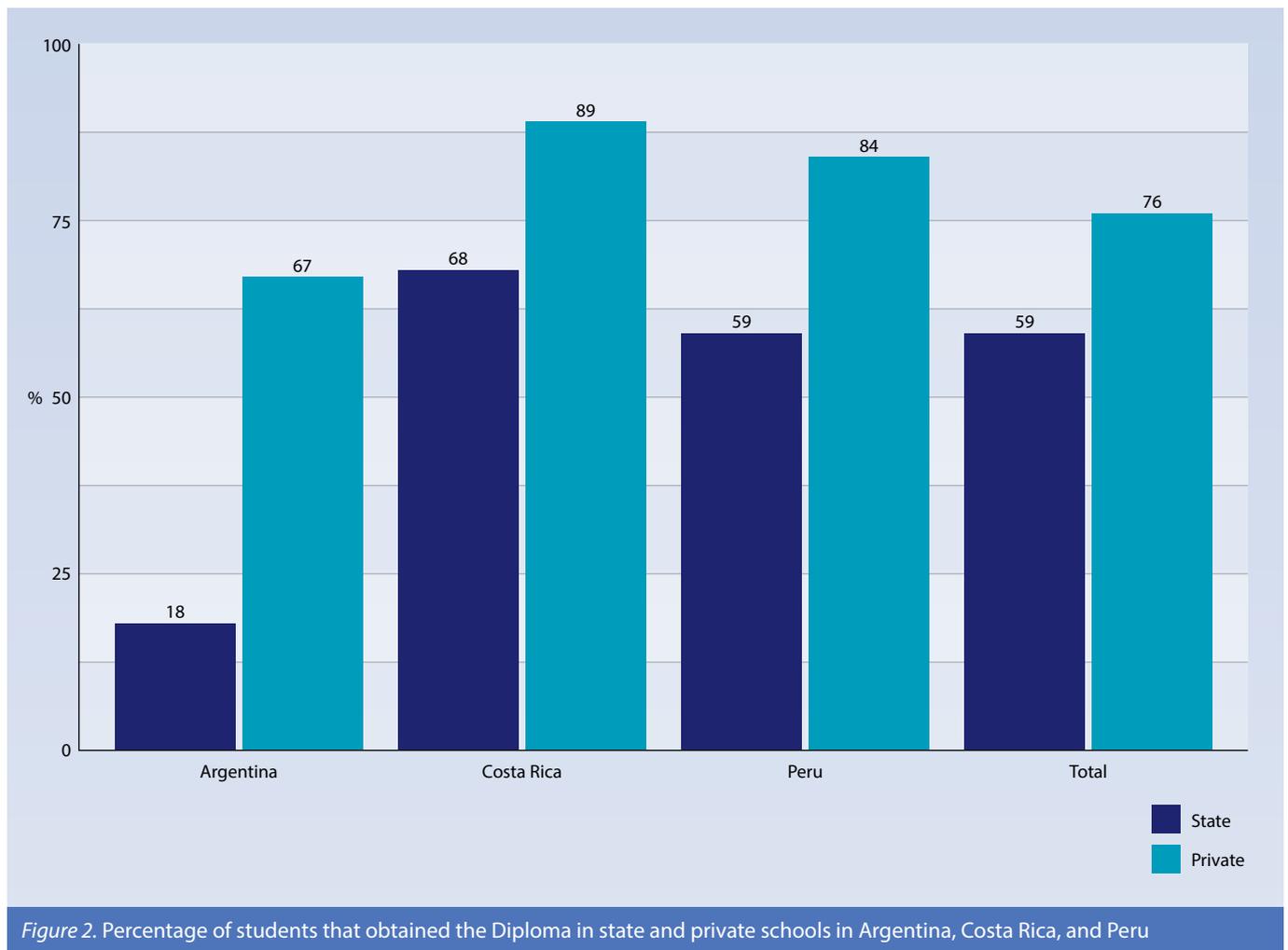


Figure 2. Percentage of students that obtained the Diploma in state and private schools in Argentina, Costa Rica, and Peru

DP. They tended to appreciate the kind of learning style promoted in the DP as well as closer relationships with teachers.

While students valued their experience in the DP, in all 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 often requires a re-adaptation of learning styles. In all contexts, students had to spend additional time in school and doing school work: in Costa Rica, students are required to spend an extra year of schooling in order to participate in the DP; in Buenos Aires, students must pursue the challenging DP in addition to the local curriculum; and in Peru, students study six days a week, often with long hours, within a boarding school system.

Student achievement

This section presents DP student examination results from 2017. Differences arise by country and sector (public and private) in terms of how many students obtain the Diploma (Figure 2). 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%). 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 could be related to lower student achievement. Costa Rican public schools outperform public schools in the other countries, with 68% of students obtaining the Diploma. Compared to private schools, however, state schools in all three countries have lower Diploma pass rates.

Overall, differences in performance in IB exams are consistent with findings about the design and management of the DP in state schools in each country. The Costa Rican initiative, which recorded the highest student achievement in IB exams, has managed to develop a consistent and extensive network of support for public DP schools through ASOBITICO and the MEP. The Peruvian COAR schools also show relatively good student performance. Even though it is a very recent initiative, the programme is well planned and is providing ample “IB know-how” to schools and teachers. Meanwhile, the project in the city of Buenos Aires appears to need major enhancements in terms of leadership, support mechanisms and IB expertise in the Ministry.

Recommendations

Based on the findings of the study, the researchers made a number of recommendations. For the full list of recommendations, see the full report.

Costa Rica

- Consider addressing the issue of the “two cultures” in IB state schools by finding ways to further integrate the IB programme with the national baccalaureate.
- Consider developing a systematic process of evaluation of the initiative to provide information for continuing improvement.
- Consider options to expand the programme, given the success of the initiative and the demand from families and other stakeholders.

Buenos Aires

- Consider developing a solid and stable structure of support for public DP schools, ideally within the existing structure of public administration.
- Consider investing in teacher training and access to materials for IB teachers.
- Evaluate the possibility of bringing in the local IB association (ACBIRP) as a partner in the project.
- Consider revising the way in which the IB curriculum is integrated with the local curriculum, aiming to reduce the workload for students that choose the DP.

Peru

- Consider addressing the issue of transition into university for graduates of the COAR network.
- Seek further methods to attend to student well-being and alleviate stress.
- Consider revising the hiring practices for DP teachers to avoid high turnover, as many teachers are faced with the dilemma of losing tenure in the national system.



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This summary was developed by the IB Research department. A copy of the full report is available at: www.ibo.org/en/research/. For more information on this study or other IB research, please email research@ibo.org. To cite the full report, please use the following: Beech, J, Guevara, J and del Monte, P. 2018. *Diploma Programme implementation in public schools in Latin America: The cases of Costa Rica, Argentina (Buenos Aires) and Peru*. Bethesda, MD, USA. International Baccalaureate Organization.