



Key findings from research on the impact of IB programmes in the Americas region

The International Baccalaureate (IB) Research department collaborates with universities and independent research institutions around the world to produce rigorous studies examining the impact and outcomes of the IB’s four programmes—the Primary Years Programme (PYP), Middle Years Programme (MYP), Diploma Programme (DP) and Career-related Programme (CP). This resource provides an overview of key findings from recent studies from the Americas region that were commissioned by IB Research or conducted by external researchers.

A mixed-methods study examined the **PYP’s impact on school climate** in public elementary schools in the **United States (US)** (California). The study found numerous improvements to school climate that most participants attributed to the PYP. Participants at every school reported increased attention to social-emotional learning and the whole child, as well as greater use of transdisciplinary instruction and teacher collaboration due to the PYP. Additionally, the quantitative data showed statistically significant improvements post-authorization on six school climate outcomes: perceived safety, caring relationships, fairness, parent involvement, bullying and victimization (Boal and Nakamoto 2020).

Researchers explored the **views of PYP students, administrators and teachers** through a mixed-methods case study in **Colombia**. In interviews, students identified teachers as the primary drivers of their positive learning experiences. An accompanying survey revealed that the overwhelming majority of PYP students enjoyed being a student at their school (89.3%) and were proud to be a student of their school (90%) (Lester and Lochmiller 2015).

In a large **US school district**, researchers compared the high school outcomes of former MYP and non-MYP students to investigate the impact of the **MYP on high school course enrollment and performance**. Compared to similar¹ non-MYP students, former MYP students were 34% more likely to take at least one DP or Advanced Placement (AP) exam in high school. Additionally, MYP enrollment significantly increased the likelihood of earning at least one “college-ready” score² on a college preparatory exam, by 39% (Wade and Wolanin 2015).

A mixed-methods study explored the **implementation and outcomes of the DP in public schools** in three Latin American countries—**Costa Rica, Argentina (Buenos Aires) and Peru**. The study indicated that teachers across

the three countries were highly motivated, largely due to the characteristics of the programme and the opportunity to work with engaged students. Overall, students had very positive views of the DP, particularly for helping them to develop research and critical thinking skills, and to foster close relationships with teachers (Beech, Guevara and del Monte 2018).

Researchers examined the **post-secondary outcomes of DP students in the US** through a large quantitative study. The DP student cohort included DP course students (students taking one or more DP exams), DP candidates (students pursuing the full DP), DP candidates who received the diploma, and all DP students (combined). Findings showed that 82.2% of all US DP students enrolled in college immediately after graduating from high school, compared to 66% of all US high school graduates (figure 1). Of the DP graduates who enrolled in college immediately after high school, 88% returned to the same institution the following year, compared to 80% of all US students (Pilchen, Caspary and Woodworth 2020).

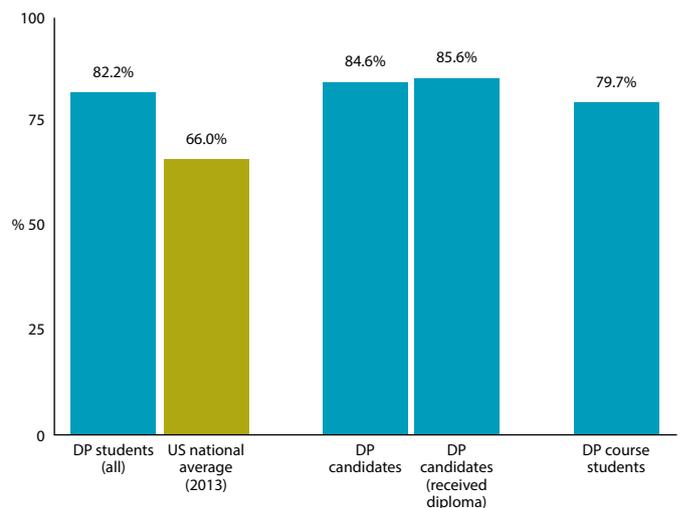


Figure 1. Immediate university enrollment of DP students compared to the US national average (2013)

¹ A statistical technique called propensity score matching was used to compare the high school outcomes of former MYP students with demographically similar non-MYP students.

² A “college-ready” score is defined in this study as a three or higher on an AP exam, or a four or higher on a DP exam.



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A long-term study investigated the **high school and post-secondary experiences and outcomes of DP students in US public schools** (California) serving students from predominantly low-income households. The study indicated that DP students generally experience more rigorous classes, are more motivated, and are more engaged than their non-IB peers. Using data from the University of California system, findings showed significant positive effects of DP participation on college retention rates and five- and six-year graduation rates. Lastly, DP alumni reported that the DP helped prepare them for college coursework, particularly in the areas of writing, critical thinking, study skills, and time management (Aldana, Mayer and Ee 2020).

A researcher conducted a large quantitative study in **Chicago Public Schools (US)** ($n = 20,422$) to investigate whether **DP enrollment** had an impact on **high school performance and the probability of high school graduation and college enrollment**. The study used propensity score matching to compare similar groups of DP and non-DP students based on demographic characteristics and previous academic performance. Findings showed that DP participation had a small positive impact on students' ACT score (college entrance exam). Additionally, DP participation increased the probability of graduating from high school (by 20%) and enrolling in college (by 38%) (Saavedra 2014).

IB Research conducted a study to examine the **higher education pathways of all CP graduates in the US** from 2013 to 2015. The study found that 81% of CP graduates enrolled in university sometime after high school, with 76% enrolling immediately. Additionally, 79% of students who enrolled in higher education chose four-year over two-year colleges, compared to 64% of students nationally. Regarding university persistence, 89% of CP graduates who enrolled in university returned for their second year (Mack, Halic and Burd 2017).

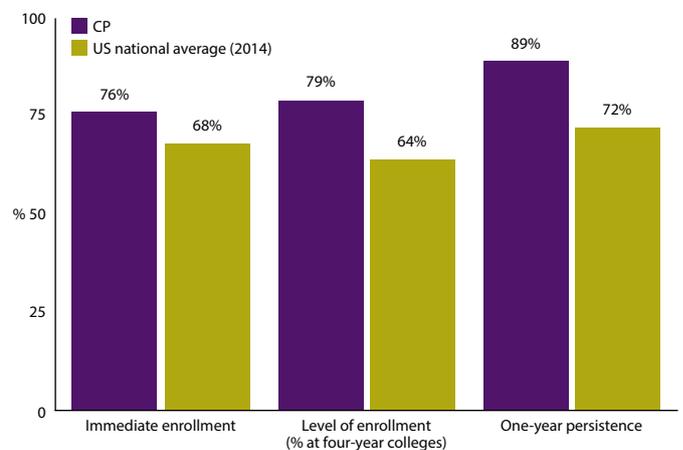


Figure 2. Immediate enrollment, level of enrollment and one-year persistence of CP students compared to the US national average³

³ Figures for immediate enrollment of the national cohort are taken from US Department of Education, Digest of Education Statistics 2015, table 302.10. Figures for persistence of the national cohort are from National Student Clearinghouse Research Center: <https://nscresearchcenter.org/snapshotreport-persistence/retention22/>.

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