



Global key findings from research on the impact of International Baccalaureate programmes

International Baccalaureate (IB) Research 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 a brief overview of key findings from recent studies that were commissioned or conducted by IB Research.

PYP studies

A study across five countries (**Russia, China, Mexico, the UK and Kenya**) explored student, teacher and parent **experiences with the PYP exhibition**—the in-depth, culminating project of the PYP. Study participants found the exhibition to be a pivotal experience that helped students to develop critical thinking skills, international-mindedness and learner profile attributes. Additionally, parents valued the exhibition for fostering “real world” skills, such as evaluating information and reflectiveness (Medwell et al 2017).

Researchers examined **student performance** in 14 state and private schools in **New Zealand** as well as **curriculum alignment** between the PYP and the New Zealand Curriculum (NZC). Analysis of a national standardized test indicated that achievement in the PYP schools generally exceeded achievement in non-IB schools with similar student populations. The study also found that the PYP and NZC are largely compatible, although there were a few points of difference, specifically the emphasis on international-mindedness, inquiry and action in the PYP (Kushner et al 2016).

MYP studies

As a result of the growing interest in the MYP in **Spain**, researchers explored the experience of **implementing the MYP** alongside the Spanish national curriculum in eight private schools. School leaders indicated that the MYP contributed strongly to school transformation by introducing a wide range of pedagogical practices and embedding interdisciplinary learning. Heads and coordinators also suggested that the MYP supported the development of important skills, such as critical thinking, inquiry, teamwork, research and communication (Valle et al 2017).

Within a large school district in the **United States**, researchers investigated the impact of **MYP participation on high school course enrollment and achievement**. The findings

indicated that former MYP students were 34% more likely than non-MYP students to take at least one DP or Advanced Placement (AP) exam in high school. Furthermore, MYP enrollment significantly increased the likelihood of earning at least one “college-ready” score¹ on a college preparatory exam (by 39%) (Wade and Wolanin 2015).

Researchers investigated the **impact of middle years curriculums on student outcomes in the DP**, comparing students from 22 schools across **China, Hong Kong, India, Indonesia and Japan**. Former MYP students performed significantly better than non-MYP students in the total DP points earned, as well as in subject exams in language and literature, language acquisition, individuals and societies, and mathematics. The MYP students also reported using higher-order thinking skills more frequently than the non-MYP students (ACER 2015).

DP studies

Interim findings from a long-term study highlighted the **high school and post-secondary outcomes of low-income DP students** from **US** public schools. Compared to their non-IB peers, DP students generally perceived their classrooms as more rigorous, participated in more extra-curricular activities and had higher educational aspirations. Preliminary findings about DP alumni indicated that this group of students transitioned smoothly to college, had strong study skills and demonstrated self-efficacy and resilience (Aldana and Mayer 2017).

Researchers investigated the impact of **creativity, activity, service (CAS)** by exploring the perceptions of those involved in the programme, past and present. Coordinators, students and alumni surveyed from **across the world** believed that CAS helps students to become better at “taking on new challenges”, “learning to persevere” and “developing better interpersonal skills” (Hayden et al 2017).

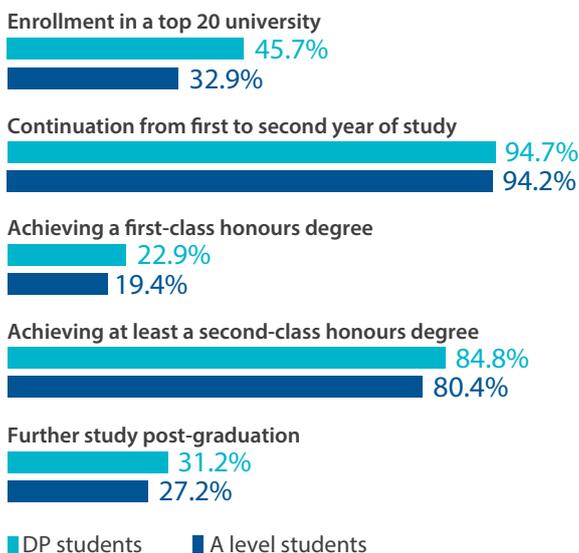
¹ A “college-ready” score is defined in this study as a three or higher on an AP exam or a four or higher on a DP exam.

In **Turkey**, researchers investigated the **university outcomes** of DP graduates and their non-IB peers at Turkish universities. Compared to non-IB students, DP graduates generally had higher subject grades (in all subject areas examined), overall grade point averages and graduation rates. DP alumni also reported feeling well-prepared for university studies, particularly with regard to English language skills and academic skills, such as writing and managing independent work (Ateşkan et al 2015).

To examine the higher education outcomes of students in the **United Kingdom**, researchers explored the **university enrollment and achievement** of statistically matched groups of DP and A level students.² DP students were significantly more likely than their A level counterparts to attend a top 20 university in the UK and to receive a first-class honours degree. Additionally, DP graduates were somewhat more likely to enroll in further education after completing university (HESA 2016).

FIGURE 1. University enrollment and outcomes for DP and A level students.

University enrollment and outcomes



² This study used propensity score matching in order to compare IB students with similar non-IB students. This allows the researchers to better isolate and identify the impacts of the IB programme specifically, as the two groups are similar otherwise.

References

Aldana, U and Mayer, A. Interim Report Phase 2: Study of IB students' high school and postsecondary experiences: US public schools serving students from low-income households. Unpublished report.

Ateşkan, A, Onur, J, Sagun, S, Sands, M and Çorlu, MS. 2015. *Alignment between the DP and MoNEP in Turkey and the effects of these programmes on the achievement and development of university students*. Bethesda, MD, USA. International Baccalaureate Organization.

Australian Council for Educational Research (ACER). 2015. *The International Baccalaureate (IB) Middle Years Programme (MYP): Comparing IB Diploma Programme outcomes of students who complete the MYP and other middle years courses of study*. Bethesda, MD, USA. International Baccalaureate Organization.

Hayden, M, Hemmens, A, McIntosh, S, Sandoval-Hernández, A and Thompson, J. 2017. *The impact of creativity, action, service (CAS) on students and communities*. Bethesda, MD, USA. International Baccalaureate Organization.

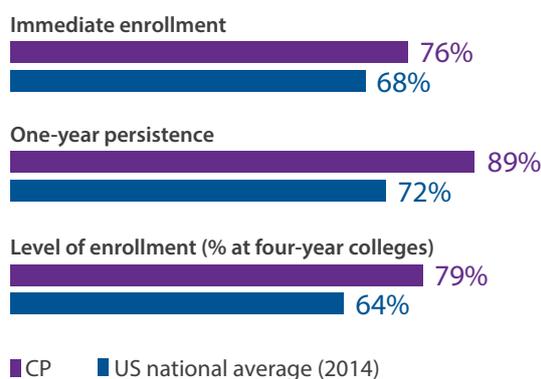
Higher Education Statistics Agency (HESA). 2016. *International Baccalaureate students studying at UK higher education institutions: How do they perform in comparison with A level students?* Bethesda, MD, USA. International Baccalaureate Organization.

CP study

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 secondary 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 came back for a second year (Mack et al 2017).

FIGURE 2. Immediate enrollment, one-year persistence and level of enrollment of CP graduates compared to the US national average.

Higher education outcomes of CP graduates and all US high school graduates*



* Figures of 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 taken from National Student Clearinghouse Research Center.

For more information, please contact research@ibo.org or visit <http://www.ibo.org/research>.

