

Key findings from research on the impact of the IB Diploma Programme

The International Baccalaureate (IB) Global Research department collaborates with universities and independent research organizations worldwide to produce rigorous studies examining the impact and outcomes of the IB's four programmes: the Primary Years Programme (PYP), the Middle Years Programme (MYP), the Diploma Programme (DP) and the Career-related Certificate (IBCC). Areas of inquiry include, but are not limited to: **standards alignment, programme implementation, student performance and the learner profile**. The findings below come from internal IB, IB-commissioned and independent research relating to the DP.

Investigating the **implementation and impact of the IB Diploma Programme** on state schools in **Ecuador**, a mixed methods study examined governmental and other support for schools, changes in school practice and student outcomes. The findings suggest that: the Ministry of Education is actively supporting the DP in Ecuador by leading school selection and providing financial resources; generally DP students enjoy well-organized, interactive and imaginative lessons; and the DP has a noticeable effect on teacher pedagogy. Although, students in DP state schools seem to be benefiting from the programme in terms of academic and non-academic outcomes, students in Ecuador's DP private schools generally performed better in most subject areas (Barnett 2013).

Using data from the IB student data system (IBIS) and the National Student Clearinghouse (NSC), the IB Global Research department explored the **university enrollment, retention and graduation** rates of 2005 Diploma Programme graduates in the **United States** (n=9,654). DP college graduation rates were consistently higher than institutional university rates. 92% of DP candidates enrolled in college and 74% graduated within four years (Halic 2013).

A study by the Higher Education Statistics Agency (HESA) in the **UK** examined the **characteristics and trends** of IB students (n=6,390), compared to A-level and other student groups with similar qualifications, at Higher Education Institutions (HEIs). Data from the academic year 2008–2009, with comparisons from 2007–2008, offers evidence that IB students were more likely to: enroll in a top 20 HEI; receive honours degrees or awards, in most subject areas; continue on to further studies; and be employed in graduate level positions and higher paid occupations (HESA 2011).

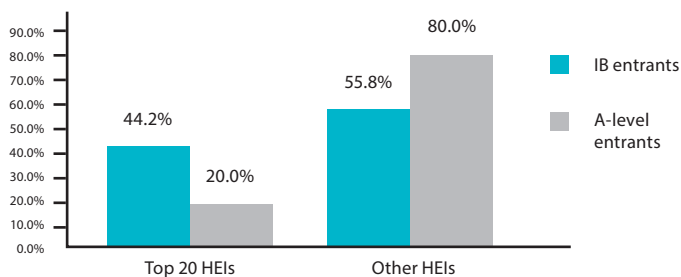


Figure 1: IB entrants were more likely to enroll in one of the UK's top HEIs.

A case study investigated the **enrollment, progression and achievement** of IB Diploma Programme graduates at two universities in **Australia**. The study tracked cohorts of students at the two universities (n=135 and n=19) over a five-year period, following enrollment in 2007; one of the universities also offered longitudinal data for a control sample of non-IB graduates. The results indicate that generally IB students were more likely than their non-IB counterparts to be offered admission and to graduate within five years, although students' GPA rates and plans for future education were similar (Edwards, Underwood 2012).

In the 1990s **Chicago Public Schools (CPS)** introduced the DP into 12 high schools throughout the city, mostly serving low income, racially diverse students with little or no history of college-going. Part of the Chicago Postsecondary Transition Project, this study sought to examine the impact of Chicago's IB programmes on **postsecondary outcomes and experiences of CPS graduates**, comparing DP and matched non-DP graduates. The sample included 18,075 CPS graduates between 2003 and 2007. Compared to similar non-DP graduates, DP graduates were more likely to enroll in college, to enroll in selective colleges, to stay enrolled and to perform better once there. Generally, DP students reported that they felt well-prepared to succeed in college coursework and described writing and mathematics preparation, motivation and time management as strengths (Coca, Johnson, Kelley-Kemple, Roderick, Moeller, Williams, Moragne 2012).

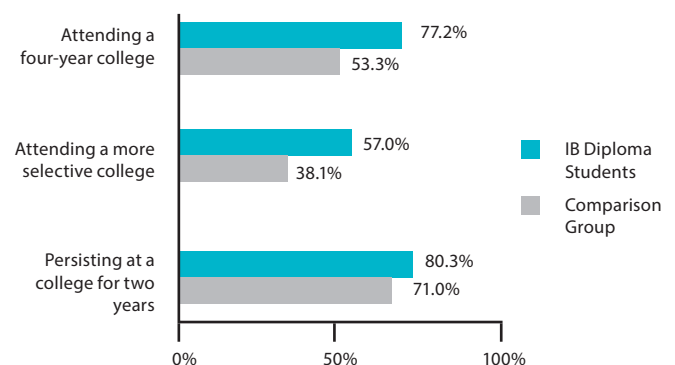


Figure 2: This figure compares former DP students and a comparison group on postsecondary outcomes.

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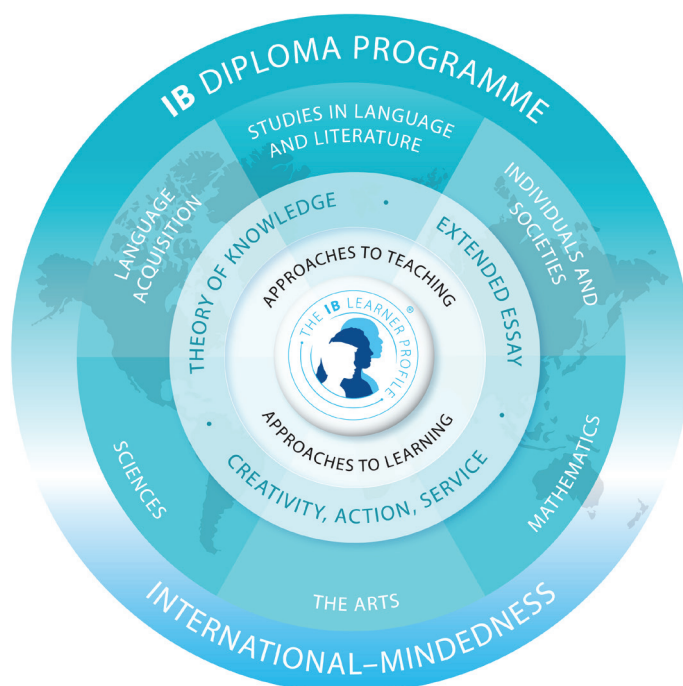
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In a separate working paper, Anna Rosefsky Saavedra of RAND explored whether participation in the DP had an impact on **ACT scores, high school graduation rates and college enrollment** for 20,422 CPS students from 2002–2008. The findings suggest that participation in the DP may boost ACT scores by up to 0.5 standard deviations, and increase both the likelihood of graduating from high school (by up to 17%) and enrolling in college (by up to 22%) (Saavedra 2011).

The relationship between **students' enrollment in the DP and their college preparedness** was further examined at four case study schools in **Mexico**. The results of the study suggest that DP students do indeed enroll in top-ranking universities in Mexico. DP students, teachers and administrators reported a high level of preparedness for college coursework although respondents did not believe the DP offered an admissions advantage to DP students in the Mexican tertiary system. The study also suggests that academically stronger students tended to enroll in the DP, reportedly due to a lack of satisfaction with other high school options (Saavedra, Lavore and Flores 2013).

To better understand how the **extended essay (EE)** prepares students for university-level research and academic success, a study was conducted at the **University of Virginia (UVA)**. Examining former IB students' (n=1,045) and former AP students' (n=1,046) perceptions of their high school research experience, a survey found that IB students were more likely to indicate they: felt prepared for college-level research; were proud of their research; intended to conduct future research; and believed research skills were important to their continued success. After controlling for background characteristics, the study also found a statistically significant relationship between the EE score and college grade point averages (GPAs) (Inkelas, Swan, Pretlow, Jones 2013).

The impact of the **extended essay (EE)** on preparation for university studies was also examined through interviews with 43 students and 14 tutors at two universities in the **UK**. Comparing A-level students' research experiences with those of former DP students, DP students were more positive about the value of the EE and their pre-university education. Overall, DP students reported that the EE strengthened their critical thinking skills and capacity for independent research. Some DP students, however, indicated that there were few opportunities at their universities to use the skills they had developed through the EE (Wray 2013).



This sheet aims to provide a brief sample of findings from recent research. It does not attempt to represent all research on the DP available in the field. As with all research, findings must be placed within the particular contexts in which the studies took place.

Barnett, E. 2013. *Research on the implementation of the Diploma Programme in Ecuador's state schools*. New York, NY, USA. National Center for Restructuring Education, Schools, and Teaching, Teachers College, Columbia University.
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Edwards, D and Underwood, C. 2012. *IB graduates in Australian universities: Entry and outcomes. A case study of two institutions*. Melbourne, Australia. Australian Council for Education Research.
Halic, O. 2013. *Postsecondary educational attainment of IB Diploma Programme candidates from US high schools*. Geneva, Switzerland. International Baccalaureate Organization.
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Inkelas, KK, Swan, A, Pretlow, J and Jones, J. 2013. *Exploring the benefits of the International Baccalaureate extended essay for university study at the University of Virginia*. Charlottesville, VA, USA. Center for Advanced Study of Teaching and Learning in Higher Education, University of Virginia.
Saavedra, AR. 2011. *The academic impact of enrollment in the International Baccalaureate Diploma Programs: A case study of Chicago Public Schools*. Santa Monica, CA, USA. RAND.
Saavedra, AR, Lavore E, and Flores G. 2013. *The International Baccalaureate Diploma Programme in Mexico as preparation for higher education*. Santa Monica, CA, USA. RAND Education.
Wray, D. 2013. *Student perceptions of the value of the International Baccalaureate extended essay in preparing for university studies*. Coventry, UK. University of Warwick.

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