



# Guide to the International Baccalaureate Diploma Programme

### Introduction to the IB Diploma Programme

The IB Diploma Programme (DP) is a rigorous, challenging and balanced two-year universitypreparation programme for students aged 16 to 19. It aims to support schools by providing outstanding research-based education, developing both disciplinary and interdisciplinary knowledge and understanding. This guide seeks to outline the main components of the programme while summarizing key research on impact and outcomes of participation.

The DP is a truly international programme developed in consultation and collaboration with educators from around the world. It incorporates the best educational practices from different systems while remaining free of influence of any particular one. At its heart, the DP is driven by the IB mission to create a better world through education.

DP students are prepared for participation in a rapidly evolving and increasingly global society as they develop intellectually, emotionally, physically and ethically, while acquiring the skills that will prepare them for further education and life in the 21st century.



International Baccalaureate<sup>®</sup> Baccalauréat International Bachillerato Internacional

## The Diploma Programme model

The DP promotes language and literacy, multilingualism, the social sciences, science, mathematics, the arts, interdisciplinary learning, service learning and international-mindedness. It encourages students to be knowledgeable, inquiring, caring and compassionate, and to develop intercultural understanding, open-mindedness and respect for others' views.

The full IB Diploma Programme can be undertaken in English, Spanish and French, with elements available in Japanese, German, Chinese, Arabic, and Turkish. The same quality and rigour is in place regardless of the language of study.

The DP model includes over **30 courses from six subject groups**, ensuring breadth and depth of knowledge and understanding.

- Students select one course from each subject group (the arts may be replaced with another subject).
- At least two languages are studied.
- At least three courses are taken at <u>higher level</u>
  (HL), generally 240 hours of instruction. Standard level (SL) courses are typically 150 hours.
- All courses are designed to span two years, assessed with the same level of rigour and equally weighted.

A **compulsory core** comprises three distinct components, and is an integral part of the DP student experience.

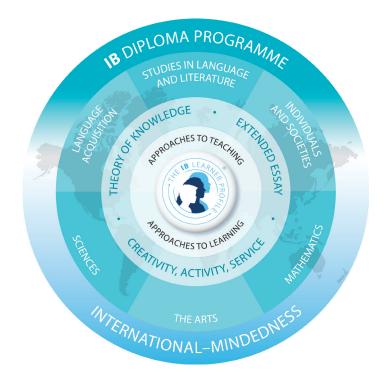
- **Theory of knowledge (TOK)** is a course on critical thinking that makes connections across the academic disciplines and explores the nature of knowledge.
- The extended essay (EE) is an in-depth, externally assessed, independent research project into a topic of the student's choice. Up to 4,000 words in length, it promotes high-level research and writing skills, intellectual discovery and creativity.
- **Creativity, activity, service (CAS)** involves students in a range of experiential and service learning activities that enhance personal and interpersonal development. CAS encourages engagement in the arts, creative thinking, a healthy lifestyle and a sense of social responsibility.

<u>A variety of studies</u> suggest that the DP core plays an important role in improving student confidence in critical thinking, engaging with research, university-level writing, time management, and the ability to gather, organize and evaluate information. Personal growth, an ethic of service, maturity, open-mindedness, reflection and a better understanding one's place in the world were also cited as important benefits.

CAS gave me a good insight on being a valuable citizen, the extended essay taught me to manage the type of essays required at college level, and TOK made me a more critical thinker. These are all qualities I obtained week-in week-out ... (Former student, ACS International Schools)

<u>Approaches to teaching and learning (ATL)</u> and <u>international-mindedness</u> run throughout the programme, fostering positive attitudes toward learning, social responsibility and intercultural understanding. ATL, in particular, explicitly emphasizes thinking, communication, social, self-management and research skills.





### **Reach and growth**

More than 1.5 million students have participated in the DP since its introduction in 1968. In 2015, over 150,000 students sat DP exams globally—more than four times the number in 2000. DP students represent a broad range of nationalities and come from schools in nearly 150 countries, over half of which are public state-funded institutions.

Countries with the most DP students in 2015	Fastest student growth rates from 2010 to 2015
United States	United Arab Emirates
Canada	Peru
United Kingdom	China
Netherlands	India
China	Denmark

The distribution of DP students is striking in its geographical, cultural and linguistic diversity. This diversity, in combination with the DP's emphasis on international-mindedness and academic rigour, provides DP students with a unique set of competencies for success in university and life in the 21st century.

Through the DP, universities can recruit a broad range of students from diverse backgrounds while remaining confident in the quality and consistency of their academic qualifications.





### **Assessment and reporting**

The DP utilizes a variety of assessment techniques and components to measure student performance; it represents one of the most rigorous, valid, reliable and balanced wide-scale educational assessments available.

Written examinations marked by professionally trained examiners, along with internal assessments by the students' teachers, form the basis of the assessment for most courses. Exams are in May or November, depending on the school's calendar. Results are released in July or January, respectively.

#### Scoring and reporting

After all assessment components are marked and weighted, <u>students receive a final score ranging from 1 (lowest) to 7 (highest)</u> for each course. HL and SL courses are weighted equally. The core's extended essay and TOK are each marked on an A (highest) to E (lowest) scale, and their combined results can account for up to three additional points. CAS is not marked, but completion is required to earn the diploma.

Scores are based on the extent to which students master basic and advanced competencies, such as:

- knowledge and understanding of content and concepts
- critical-thinking, reflective, research and independent learning skills
- analysis and evaluation of information, creative problem solving, and construction and presentation of arguments
- intercultural skills and understanding, and an international outlook.

The diploma is awarded to students who meet minimum requirements, including: earning at least 24 points overall, completion of the core and a minimum grade of 3 in at least four subjects. All students are recognized for any individual components successfully completed.

The maximum a student can earn is 45 points: 6 courses × 7 points, plus 3 points for the core. Around 80% of full DP students earn the diploma, and the average score is 30 points. Relatively few (less than 1%) achieve the full 45 points, demonstrating the excellent differentiation of ability provided by DP assessments.

**Diploma Programme course results** are awarded to students who take individual DP courses (for example, mathematics HL or economics SL) but do not enroll in the full DP. A student may take as many or as few DP courses as their school allows. Students earn course results (1 to 7) for each course taken.

DP course results are also reported for students who attempt the full programme but do not earn the diploma. Such students have, however, participated in a secondary education programme and been assessed according to the same rigorous DP standards.

**Transcripts** for full DP or DP course students are sent in hard copy or electronically to the students' chosen institution(s). IB transcripts report the student's name, school, IB programme, courses taken, language of instruction and final score for each course; for full DP students, the total point score, additional points for the core, marks on core components, and extended essay subject area are also recorded.

# Consistency and reliability

While the number of DP students increases yearly, the average total score has remained consistent, highlighting the reliability of DP assessment practices. To ensure that student work is assessed fairly and consistently, nearly 9,000 trained examiners worldwide are involved in the assessment process, including the development, marking and moderation of assessments. Each subject has a chief examiner with international authority in their field, and a rigorous process and quality control is applied to the development and marking of assessments.





# How does the DP curriculum and assessment compare to other qualifications and standards for college readiness?

A number of studies in a variety of contexts have compared the curriculum and assessment components of particular DP courses with those from other qualifications and measures of college readiness. DP courses have consistently fared well in these comparisons.

The Diploma Programme incorporates the best elements of national systems, without being based on any one. (UK Qualifications and Curriculum Authority 2003)

In <u>aligning the academic content standards of the DP</u> with the widely accepted college-readiness standards—Knowledge and Skills for University Success (KSUS)—the US Education Policy Improvement Center found the DP standards in all subject areas to either exceed or align with the standards required for success in entry-level college courses. Additionally, DP standards address key cognitive strategies identified as central to success by college instructors.

When DP courses have been compared to equivalent <u>Advanced Placement (AP)</u> or <u>A level courses</u>, DP courses were generally found to be at a higher or equivalent level of rigour than their counterparts.

Studies have also compared components of the DP to local or national systems in <u>Australia</u>, <u>Germany</u>, India, <u>Switzerland</u> and <u>Turkey</u>. Aside from academic rigour, the DP was cited for its international focus and global dimensions, balance of breadth and depth, flexibility, development of analytical, critical and evaluative skills, and encouraging intercultural understanding and appreciation of different perspectives.

Taking one subject area as an example, recent studies compared DP maths courses with a range of high-performing systems from around the world. The curriculum and assessment of <u>DP maths compared favourably</u>. The DP offers both the greatest range of courses, including the most cognitively demanding, and uses one of the widest ranges of assessment methods. <u>With regard to postsecondary outcomes</u>, DP maths HL students were found, on average, to earn the best UK degree classifications compared to students with other qualifications, after controlling for academic and demographic variables.

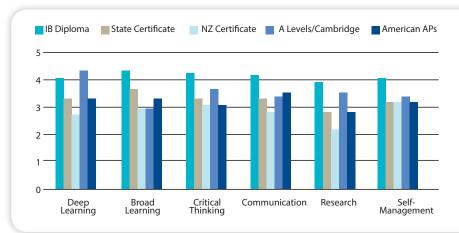
#### A holistic programme

Significantly, the DP is a comprehensive holistic programme requiring interdisciplinary thinking and discussion along with independent research and community service. Full DP students are, therefore, exposed to a much more comprehensive approach to education beyond just the established rigour of individual DP courses.

#### What admissions officers think of the DP

University admissions officers have long held the DP in high regard. <u>Annual surveys</u> over the past 10 years have consistently shown the esteem UK admissions officials have for the programme. Research in <u>the UK</u> and <u>Australasia</u> drew similar conclusions. The widespread practice in North America of granting DP students credit and/or advanced standing further demonstrates the positive perception of the DP among higher education officials.

Australian and New Zealand admissions officers' perceptions of university preparation. (Source: <u>ACER 2007</u>)





### **College readiness**

Highly selective institutions like Stanford, perceive IB students as strongly prepared, capable, ready to take on the challenges of the curriculum that we offer. (Debra Von Bargen, Assistant Dean of Admission, Stanford University, USA)

The DP focuses on the academic and non-academic knowledge, skills and abilities important for success in the transition from secondary to tertiary education. Surveys and studies across a wide range of contexts repeatedly demonstrate <u>how well</u> <u>prepared and confident IB students feel in undertaking university studies</u>.

In addition to pride in participating in the programme, <u>students commonly report feeling well equipped to adjust to, and</u> <u>succeed in, university coursework</u>. Specific benefits that DP alumni have cited include motivation, work habits, time management, academic self-concept, research capability and interest, writing and analytical skills, and the ability to draw interdisciplinary connections.

Much of the research on the college readiness of IB students comes in the form of comparative studies with alumni from other secondary programmes. <u>IB students consistently report feeling better prepared for university studies than their counterparts.</u> <u>Teachers, administrators and university staff</u> have also reported that DP students develop the traits needed to succeed in university to a greater extent than their non-DP peers.

Although the IB program is a tough and rigorous program, I would definitely recommend it to others because of the strong work ethic that it teaches one as well as the desire and love for learning that it creates within each of the students. It is challenging, but that is what makes it so great! (Former DP student, USA)



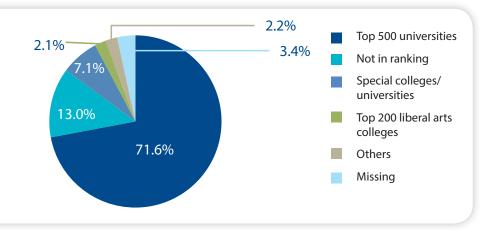


# Aspirations and destinations

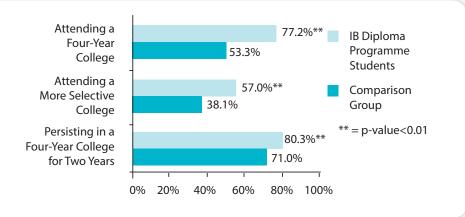
The confidence the DP students have in their academic abilities is also seen in the rates at which they move on to further to study, and in the higher education destinations they choose. In 2015, DP students sent transcripts to nearly 4,000 institutions in 99 countries. Although this diversity of destinations is striking, the majority of DP students tend to matriculate to a somewhat smaller pool of selective institutions.

Of the 20 higher education institutions that received the most IB transcripts (16% of all transcripts sent) 60% were ranked in <u>the top 100 globally by QS</u>. Because transcripts are often sent to verify results after admission decisions are made, this suggests that IB students not only have the confidence to apply to highly selective institutions, but are, by and large, being accepted to those institutions.

In a study examining the postsecondary destinations of DP students from schools in China, graduates overwhelmingly went on to highly ranked institutions. (Source: Lee et al. 2013)



*Likelihood of DP students at Chicago Public Schools to enroll in college compared to matched comparison groups. (Source: Coca et al. 2012)* 



<u>Research from a variety of contexts</u> provides further strong evidence that, collectively, DP students are more likely than their peers to enter higher education and enroll in a selective institution. <u>In the UK</u>, for example, IB students are nearly 60% more likely to attend a top 20 university than their A level peers after controlling for differences in academic ability. Even <u>studies introducing</u> rigorous controls on student demographic characteristics have reached similar conclusions.



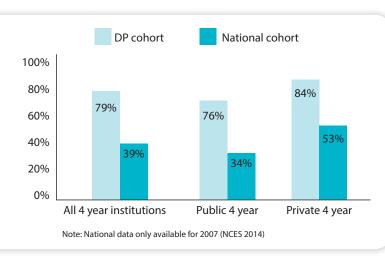
# Postsecondary performance

We have seen that IB students tend to go on to very highly regarded universities—and report feeling very well prepared to succeed in those instituions—but how do they actually fare once there? Evidence suggests that DP students are more likely to earn a degree, and often in less time, than their peers. These results were consistent in a variety of state and national contexts and with studies introducing rigorous controls on demographic variables.

#### Persistence and graduation

A series of studies <u>analysing US National Center for Education Statistics</u> data collectively provide strong evidence that participation in the DP leads to higher postsecondary graduation rates nationally. The most recent analysis, from 2015, shows that United States' DP and DP course students were significantly more likely to earn a bachelor's degree within four years than the US national average (79% vs. 39%). These rates were even higher for those who earned <u>the full diploma</u>.

Four-year graduation rates for United States' DP students by institution type compared to the national average. (Source: <u>Bergeron, L, 2015</u>)

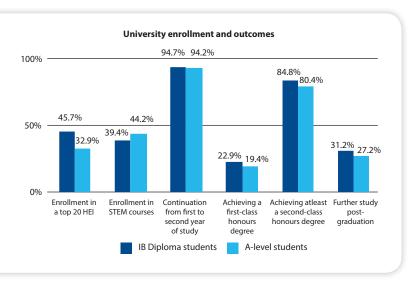




Analysis of the postsecondary outcomes of <u>DP graduates in four Turkish universities</u> also showed DP students as having stronger academic performance in their first year and a graduation rate nearly three times higher than their non-DP peers.

#### **Degree performance**

In the UK, IB students were significantly more likely than A level students to earn both first- or second-class honours degree classifications, after controlling for academic ability. Although little difference was found in terms of progression or completion, after completion the cohort of IB students was also more likely to pursue further studies or to be employed in professional, scientific or technical fields.

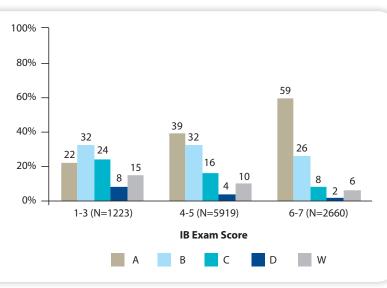


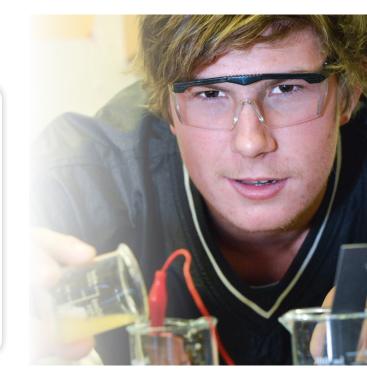
*Student post-secondary performance in the UK. (Source: <u>HESA 2016</u>)* 

Although there is less evidence related to other indicators of academic performance while at university, some evidence does suggest that participation in the DP is positively associated with postsecondary grade performance and a tendency to enroll in more advanced courses. DP students have been shown, in some cases, to earn higher marks than their peers and, as may be expected, higher marks in the DP were correlated with higher postsecondary marks, demonstrating the predictive ability of DP assessments.



Relationship between DP scores and first-year university course grades in the same subject area at the University of Florida. (Source: <u>Caspary and Bland 2011</u>)





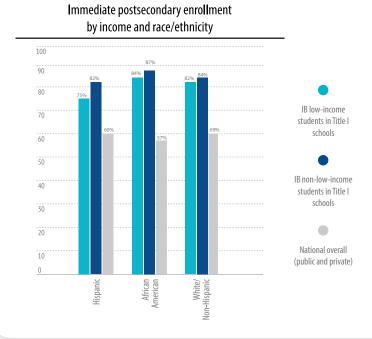
#### Serving under-represented students in the DP

Students from very diverse backgrounds and circumstances can benefit from participating in the DP. In fact, some research suggests that students from economically or socially disadvantaged backgrounds may benefit the most from participation.

In a study examining University of California students, the positive impact of the DP was most pronounced among students from lower-income families. Similarly, in a separate study, urban low-income and minority students from Chicago Public Schools were shown to benefit greatly in terms of university enrollment and academic self-concept. From the report:

... Indeed, <u>the IB program in Chicago</u> appears to have accomplished something very rare in urban education: it took economically and socially disadvantaged students and radically changed their long-term educational prospects by making them world-class learners with an arsenal of academic skills.

Analysis in 2015 revealed that low-income IB students from all ethnic backgrounds in the US were nearly twice as likely to enroll directly in an undergraduate programme compared to the national average of low-income students. The differences were the most pronounced among minority students. Additionally, 76% of DP candidates from US high schools with high percentages of low-income populations went on to earn a bachelor's degree. *Immediate postsecondary enrollment by race and income in the USA. Source: <u>IBO 2015</u>* 





### **Recognition and recruitment of IB students**

As you have just read, the evidence strongly suggests that DP students can contribute much to their universities and colleges. Although from a diverse range of backgrounds and nationalities, DP students all share a desire to take on one of the most rigorous secondary education programmes available, and to challenge themselves in new and interesting ways. A strong <u>IB recognition policy</u> is one of the most effective ways for higher education institutions to attract IB students from around the world. Strong IB recognition policies:

- actively encourage applications from DP students
- acknowledge achievement within individual DP courses as well as the programme as a whole
- value the DP core components: theory of knowledge; extended essay; creativity, activity, service
- offer advanced standing or transfer credits for achievement within the programme
- award a designated merit scholarship based on DP performance
- consider DP students for other institutional scholarships.

The best place for higher education institutions to showcase their policies and offerings to IB students, as well as for IB schools and students to provide information to interested colleges and universities, is the **IB Student Registry.** 

The IB Student Registry is a service provided by the IB to connect IB students with leading universities and colleges from around the world. Any higher education institution can build a free profile that highlights their academic programmes, campus life, as well as admissions criteria and special offerings for IB students. IB students can then use search criteria to help identify "best-fit" institutions. IB World Schools and students can also build profiles to connect with interested universities.\*

#### You can access the IB Student Registry at registry.ibo.org

#### Additional resources and support

The IB works directly with universities to supply the information and support needed to develop equitable and informed recognition policies. The following are great resources available to any university or college.

- Many resources and events can be found on the IB recognition pages.
- All research conducted or commissioned by the IB is available on the <u>IB research pages</u>.
- Detailed curriculum and assessment material is available for faculty review. Additionally, universities can receive student results electronically. Contact the IB for more details: <u>ibid@ibo.org</u>.
- Subject briefs explaining the curriculum and assessment of each DP course are available at <u>www.ibo.org</u>.
- <u>IB World Schools</u> and <u>Associations</u> are a great source of information about DP students.
- IB alumni on campus can provide personal insight into their experiences
- The IB's <u>university success blog</u> is a great source of articles and updates
- Higher education faculty and staff can sign up for the bi-annual <u>IB Higher Education Update</u>.

#### Want more information?

#### recognition@ibo.org

\*Note: Student profiles are only available to subscribing institutions, but IB World School profiles are freely available.

