

# Guide to the International Baccalaureate Diploma Programme



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

## Introduction to the IB Diploma Programme

The IB Diploma Programme (DP) is a rigorous, academically challenging and balanced two-year programme of education designed to prepare students aged 16 to 19 for success at university and in life beyond.

The DP provides opportunities to develop both disciplinary and interdisciplinary knowledge and understanding that meet rigorous standards. It is a truly international programme incorporating the best educational practices from around the world, while remaining free from the influence of any particular system or government. In addition to academic excellence, it encourages inquiry, caring, open-mindedness, intercultural understanding, and the attitudes necessary to respect and evaluate a range of viewpoints.

# **Reach and growth**

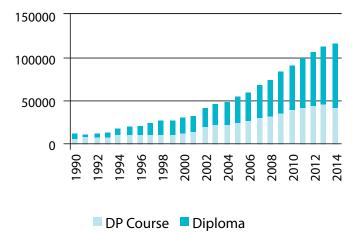
IB DP students represent a broad range of nationalities from schools in over 140 countries and reflect diverse experiences and perspectives. These experiences, in combination with the DP's emphasis on international-mindedness and academic rigour, provide students with a unique set of skills, attitudes and perspectives for success in university and life in the 21st century.

To date, more than 1.2 million students have participated in the DP since its introduction in 1968 and over 146,000 students worldwide received DP exam results in 2014.

The number of DP schools increased by over 40% from 2008 to 2014. Currently over half of those schools authorized to offer the DP are state-funded institutions.

| Countries with the most<br>DP exam takers in 2014 | Largest growth rates in<br>the DP exam takers from<br>2005 to 2014 <sup>1</sup> |  |
|---|---|--|
| UNITED STATES                                     | UNITED ARAB EMIRATES  |  |
| CANADA  | CHINA   |  |
| UNITED KINGDOM                                    | SINGAPORE   |  |
| NETHERLANDS                                       | HONG KONG   |  |
| CHINA   | INDIA   |  |
| AUSTRALIA   | COSTA RICA  |  |
| MEXICO  | ECUADOR   |  |
| INDIA   | NETHERLANDS   |  |
| SINGAPORE   | INDONESIA   |  |
| SPAIN   | TURKEY  |  |

The distribution of DP schools and students is striking in its geographical, cultural and linguistic diversity, and allows universities to recruit a broad range of students from diverse backgrounds while remaining confident in the quality and consistency of their pre-university academic experience and credentials.



<sup>1</sup> Of countries which had more than 500 DP exam takers in 2014

# DP course student and diploma candidate growth, 1990-2014

# The Diploma Programme model



DP students are prepared for effective participation in a rapidly evolving and increasingly global society as they develop physically, intellectually, emotionally and ethically and develop the skills and a positive attitude towards learning that will prepare them for higher education. The Diploma Programme model includes:

- **Courses from six subject groups,** ensuring breadth and depth of knowledge and understand-ing
  - each subject group offers a range of courses for students to choose from
  - three courses are taken at standard level (SL) and three at higher level (HL)
  - the study of at least two languages is required
- A compulsory core is comprised of three distinct components
  - the theory of knowledge course makes connections across traditional academic disciplines and explores the nature of knowledge
  - the **extended essay** requires in-depth research into an area of student interest
  - creativity, activity and service enhances personal and interpersonal development
- Approaches to teaching and learning and international-mindedness run throughout the programme, fostering positive attitudes towards learning, social responsibility and intercultural understanding.

# Standard level and higher level courses

DP students engage with a range of subjects to receive a comprehensive education encouraging them to see the connections between different academic areas. All DP subject areas, whether studied at higher level (HL) or standard level (SL), are integral to the programme, equally weighted and meant to span the two years of the programme. In most cases SL and HL courses consist of the same educational aims and foundational syllabus components. HL courses typically also include a range of optional elements designed to allow students to explore areas of interest in more depth. The assessment objectives are the same for both course types, and all IB exams are marked and standardized with the same level of rigour. SL courses 240 teaching hours.

# Approaches to teaching and learning

Approaches to teaching and learning (ATL) are deliberate strategies, skills and attitudes that permeate the teaching and learning environment of the DP. These approaches and tools, intrinsically linked with the IB learner profile attributes<sup>2</sup>, enhance student learning and assist student preparation for DP assessment and beyond. These cognitive, metacognitive and affective skills are grouped into five ATL categories: thinking, communication, social, self-management and research.

# The core

The Diploma Programme core is an integral part of the DP student's pre-university experience. The extended essay and theory of knowledge course contribute up to three points to the overall diploma score.

### **Extended** essay

The extended essay is an in-depth, externally assessed, independent research project into a topic of the student's choice. The extended essay is up to 4,000 words in length and promotes high-level research and writing skills, intellectual discovery and creativity.

 $^{\rm 2}$  Inquirer, knowledgeable, thinker, communicator, principled, open-minded, caring, risk-taker, balanced, and reflective

Several studies from the US, UK and Canada collectively provide evidence that the extended essay has a positive effect on students' confidence and engagement with research. DP students cite a long list of benefits from the extended essay including: confidence in university-level writing, improved study awareness, the ability to gather, organize and evaluate information, time management, and organizational skills.<sup>3–6</sup>

#### Theory of knowledge

Theory of knowledge (TOK) is a course on critical thinking that develops a coherent approach to learning that unifies the academic disciplines and relates to the nature of knowledge across the curriculum.

A 2014 study found that the sample of TOK students in Australia reported greater confidence in their ability to use critical-thinking skills than their peers who had not taken the DP. There were also apparent gains in the use of a wider array of critical-thinking skills between the two successive years of the DP.<sup>7</sup>

#### Creativity, activity, service

Creativity, activity, service (CAS) involves students in a range of experiential and service learning activities that enhance students' personal and interpersonal development. CAS encourages engagement in the arts, creative thinking, a healthy lifestyle, and a sense of responsibility for both local and global communities.

DP students throughout the Americas were found to participate in a wide range of CAS activities, including tutoring, assisting those in need, and fundraising. Students associated CAS with personal growth, developing an ethic of service, improved self-confidence, maturity, becoming more caring, open-minded and reflective, and better understanding one's place in the world. Alumni also reported continued involvement in service activities.<sup>8</sup>

"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<sup>9</sup>

## Assessment in the Diploma Programme

The DP uses both internally and externally assessed components to measure student performance. Written examinations at the end of the DP form the basis of the assessment for most courses, and typically make up about 80% of the student's final course grade (although internal assessment can account for as much as 50% of the grade for some courses).

The grades awarded for each course range from 1 (lowest) to 7 (highest), and are awarded based on the extent to which students master basic and advanced academic skills, such as:

- knowledge and understanding of content and concepts
- critical-thinking, reflective, research and independent learning skills
- applying standard methods
- analysing and presenting information
- evaluating and constructing arguments
- solving problems creatively
- intercultural skills and understanding and an international outlook.

Students can also be awarded up to three points for their combined results in TOK and the extended essay. CAS is not marked, but completion is a requirement for earning the diploma. The diploma is awarded to students who gain at least 24 points and meet minimum levels of performance across the whole programme.

#### **DP course results**

Students may choose to take only particular DP subject courses offered at their school (for example, mathematics HL or economics SL) rather than enrolling in the full Diploma Programme. A student may take as many or as few DP courses as they wish and their school allows. The award for each of these courses is not the diploma, but a series of scores from 1 to 7, referred to as Diploma Programme Course Results (DPCR).

Additionally, students who attempted the full Diploma Programme but did not meet all the requirements to earn the diploma also receive DPCR. Such a student has, however, been examined and assessed according to the same DP standards and principles and has taken part in a complete secondary education programme.

#### Consistency

The maximum possible diploma points total of 45 (six courses each earning seven points, plus three points for the core), is achieved by less than 1% of candidates, with about 5% of all full diploma candidates gaining more than 40 points. The average pass rate for full diploma candidates is consistently around 80% from year to year.

\*Billig, SH. 2013. Impact of participation in CAS on students' civic-mindedness and civic engagement. Denver, CO, USA. RMC Research Corporation.
\*ACS International Schools, 2012. http://www.acs-schools.com/ACS-Research

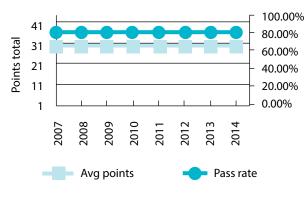
<sup>&</sup>lt;sup>3</sup>Aulls, MW and Peláez, S. 2013. Exploring the learning benefits and outcomes of the IB extended essay in preparing students for university studies in Canada: Student perceptions of the impact of the Diploma Programme and the extended essay on the academic demands of first year in university. Montreal, Quebec, Canada. Department of Educational and Counselling Psychology, McGill University.

<sup>&</sup>lt;sup>4</sup>Conley, D, McGaughy, C, Davis-Molin, W, Farkas, R and Fukuda, E. 2014. *International Baccalaureate Diploma Programme: Examining college readiness*. Bethesda, MD, USA. International Baccalaureate Organization.

<sup>&</sup>lt;sup>5</sup>Inkelas, KK, Swan, A, Pretlow, J and Jones, J. 2013. *Exploring the Benefits of the IB 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. <sup>6</sup>Wray, D. 2013. *Student perceptions of the value of the International Baccalaureate extended essay in preparing for university studies*. Coventry, UK. University of Warwick. <sup>7</sup>Cole, DR, Gannon S, Ullman J and Rooney, P. 2014. *Theory of knowledge (TOK): Exploring learning outcomes, benefits and perceptions*. Bethesda, MD, USA. International Baccalaureate Organization.

The number of students taking DP exams has increased from less than 3,000 in 1980 to over 145,000 in 2014. Over the same period, the average total points earned by diploma candidates has remained around 30 points, highlighting the consistency of DP assessment practices.

#### Average diploma points and pass rate, 2007-2014



#### Reliability

To ensure that student work is assessed fairly and consistently, nearly 8,500 trained examiners worldwide are involved in the assessment process, including the development, marking and moderation of assessments. Each subject has a chief examiner, usually an academic from higher education with international authority in their field, and a rigorous process is applied to the development and marking of assessments. Reliability of marking is ensured through working with qualified, experienced and well-trained examiners, and by introducing rigorous quality control measures, such as seed and standardization scripts, into the marking process.<sup>10</sup>



<sup>11</sup>Gray, SL, Scott, D and Auld E. 2014. Curriculum development in the International Baccalaureate Diploma Programme. The Hague, Netherlands. International Baccalaureate Organization.

<sup>12</sup>Conley, D, Ward, T. 2009. International Baccalaureate Standards Development and Alignment Project. Educational Policy Improvement Center, Eugene, OR, USA.

# Diploma Programme curriculum

# The curriculum development and review process

The aim of DP curriculum development is to produce excellent, internationally minded, research-based materials that support schools in enabling students to develop the attributes of the learner profile and to carry out the IB mission thereby providing an excellent preparation for life in the 21st century.

The IB goes to great lengths to ensure that curriculum development is research-based, consultative and collaborative, and driven by the IB mission and the international dimension of the programme. For all courses, the IB: collects comprehensive feedback from teachers, students, universities, and subject matter and educational experts; conducts a thorough analysis of existing assessment instruments; and undertakes a thorough literature review. High quality assessment plays a critical and ongoing role in curriculum development and is considered throughout the process.

In 2014 researchers compared the IB's process of curriculum development and revision with those of 13 countries, regions and jurisdictions around the world. The IB was one of the only systems to use a strongly defined and structured process of curriculum review, demonstrating coherence across all parts of the organization. Beyond an emphasis on language (literacy), mathematics, science, and traditional modes of teaching, the IB also promotes multilingualism, the social sciences, the arts, drawing interdisciplinary connections, a service component and international-mindedness.<sup>11</sup>

# How does the DP curriculum and assessment compare to other qualifications?

### Standards for college-readiness

The Education Policy Improvement Center (EPIC) created a set of academic-content standards in eight DP subject areas, and determined the degree to which these standards aligned with the widely-accepted college-readiness standards: Knowledge and Skills for University Success (KSUS).

- DP standards in all subject areas had a high degree of alignment with the KSUS.
- There was complete alignment in several subject areas, and many DP standards were more advanced than those required for success in entry-level college courses.
- DP standards address key cognitive strategies identified by college instructors as central to success (that is, critical thinking, intellectual inquisitiveness and interpretation skills)<sup>12</sup>

<sup>&</sup>lt;sup>10</sup>Standardization scripts ensure examiners apply markschemes according to set standards, and randomly assigned "seed" scripts alert the IB if examiners mark outside set limits of tolerance.

#### **Comparing DP courses to other qualifications**

A number of studies have examined in detail the curriculum and assessment components of particular DP courses against similar courses for other qualification systems in a variety of contexts.

- Comparing DP standard level (SL) courses to equivalent Advanced Placement (AP) courses, the Fordham Institute assigned the DP SL courses equal or higher grades than the AP courses examined, and concluded that "The ... curricula and exams are certainly much better than nearly all of the state standards and exams ... reviewed in years past".<sup>13</sup> In a separate study, students viewed the DP as a holistic programme to develop strong learners, while they viewed AP only as a means to obtain college credit in high school.<sup>14</sup>
- **Comparing DP courses to A levels,** both Ofqual and QCA found that assessments in both systems placed rigorous and comparable demands on candidates. The Ofqual report specifically credited the DP's higher level (HL) mathematics exam questions as allowing for excellent differentiation; the history assessments for allowing students to demonstrate higher order skills; and the English (language A) course for encouraging independent thinking and research skills.<sup>15 16</sup>
- Comparing the DP to the Australian Curriculum (AC) and Australian Qualifications Framework (AQF), Deakin University determined the DP curriculum to have a greater international focus, generally provided greater depth and supported the development of critical knowledge and skills. Additional benefits of the DP curriculum included real-world application, clear global dimensions, and development of intercultural understanding. Teachers interviewed as part of the study generally believed that the DP is more rigorous and provides better university preparation than the AC.<sup>17</sup>
- Comparing DP course material and assessments to the Indian Central Board of Secondary Education (CBSE) and Council for the Indian School Certificate Examination (CISCE), researchers at the University of Delhi found that, in comparison, the stated aims and objectives, curriculum and assessment of the DP courses were often more comprehensive and exhaustive, more likely to encourage multiple perspectives and appreciation of different contexts, and more likely to develop analytical, critical and evaluative abilities.<sup>18</sup>

"The Diploma Programme incorporates the best elements of national systems, without being based on any one." Qualifications and Curriculum Authority, UK, 2003<sup>19</sup>

#### An holistic programme

Significantly, while these comparisons are supportive of individual DP courses, the DP as a whole, unlike many other qualifications, is a comprehensive and holistic programme requiring students to study a range of subjects, and undertake the Core components. Thus DP students are exposed to a much more comprehensive approach to education going beyond the established rigor of the individual courses.

# **Student aspirations and destinations**

The DP has long been considered a rigorous and high quality preparation for university study, and students often choose the DP because they believe it is a pathway into the world's best universities.

<sup>19</sup>QCA, 2003.

<sup>&</sup>lt;sup>13</sup>Byrd, S, Ellington, L, Gross, P, Jago, C, Stern, S. 2007. Advanced Placement and International Baccalaureate: Do they deserve gold star status? Washington, DC, USA. Thomas B Fordham Institute

<sup>&</sup>lt;sup>14</sup>Conley, D, McGaughy, C, Davis-Molin, W, Farkas, R and Fukuda, E. 2014.

<sup>&</sup>lt;sup>15</sup>Office of Qualifications and Examinations Regulation (OFQUAL), 2012. International comparisons in senior secondary assessment.

http://dera.ioe.ac.uk/14715/

<sup>&</sup>lt;sup>16</sup>Qualifications and Curriculum Authority (QCA), 2003. Comparability between GCE and International Baccalaureate examinations. http://webarchive.nationalarchives.gov.uk/+/ www.ofqual.gov.uk/308.aspx

<sup>&</sup>lt;sup>17</sup>Dixon, M, Charles, C, Moss, J, Hubber, P and Pitt, P. 2014. The International Baccalaureate Diploma Programme: Alignment with the Australian Curriculum and Australian Qualifications Framework. Bethesda, MD, USA. International Baccalaureate Organization.

<sup>&</sup>lt;sup>18</sup>Geetha, T. 2009. Comparative Curriculum Analysis of the IB Diploma course and the CBSE and the CISCE for their senior school examination courses. Central Institute of Education, University of Delhi.

<sup>&</sup>lt;sup>20</sup>Lee, M, Leung, L, Wright, E, Yue, T, Gan, A, Kong, L and Li, J. 2013. A study of the IB Diploma in China: Programme's impact on student preparation for university studies abroad. Hong Kong. Education Policy Unit, Faculty of Education University of Hong Kong

<sup>&</sup>lt;sup>21</sup>IBO. 2011. DP destination survey. Bethesda, MD, USA. International Baccalaureate Organization.

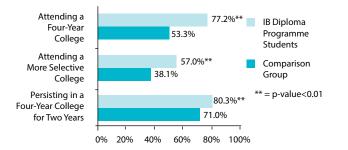
<sup>&</sup>lt;sup>22</sup>Higher Education Statistics Agency. 2011. IB Students studying at UK Higher Education Institutions: How do they fare? UK. HESA.

<sup>&</sup>lt;sup>23</sup>Caspary, K. 2011. Postsecondary enrollment patterns of IB certificate and diploma candidates from international high schools. Research Brief. Menlo Park, CA, USA. SRI International.
<sup>24</sup>Caspary, K. 2011. Postsecondary enrollment patterns of IB certificate and diploma candidates from U.S. high schools. Research Brief. Menlo Park, CA, USA. SRI International.
<sup>25</sup>Coca, V, Johnson, D, Kelley-Kemple, T, Roderick, M, Moeller, F, Williams, N, and Moragne, K.

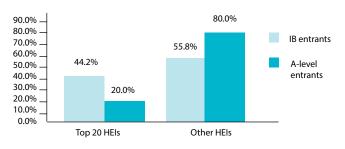
<sup>2012.</sup> Working to My Potential: Experiences of CPS Students in the International Baccalaureate Diploma Programme. Chicago, IL, USA. The Consortium on Chicago School Research.

Several studies in a variety of contexts, including the US, UK, Australia, Mexico, and China, provide strong evidence that DP students do in fact go on to higher education at higher rates and enter into more selective institutions than their peers.<sup>20-24</sup> These general trends have even held up when controlling for student demographic characteristics.<sup>25 26</sup>

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



Full-time first degree entrants at UK universities by qualification type, 2008/2009. Source: HESA, 2011

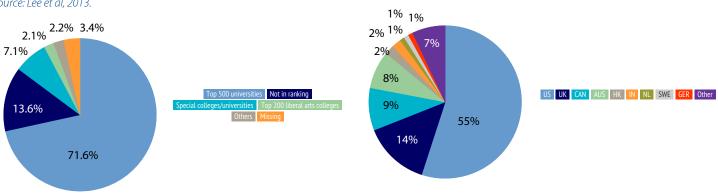


Destinations of IB student transcripts by country. Source: IBO, 2014.

In 2014, the 100 most popular destinations for IB students to send exam results received nearly 100,000 transcripts (nearly 60% of all transcripts sent by the IB). Eleven of these destinations were central admissions bodies or education boards. Of the remaining 89 higher education institutions:

- 28.1% were ranked in the top 100 of all 3 major university ranking systems<sup>27</sup>
- 58.4% were ranked in the top 100 of at least 1 system
- 78.7% were ranked in the top 200 of at least 1 system

#### University destinations of DP graduates from schools in China, 2002-2012. Source: Lee et al, 2013.



# **College readiness**

IB graduates are truly college ready. The DP fosters a variety of academic and non-academic knowledge, skills and abilities important for success during the transition from high school to college.

Numerous research studies have revealed that one of the most positive impacts of the DP is how well prepared and confident students feel in undertaking further studies.<sup>28–35</sup>

For example, at the University of British Columbia, first-year former DP students were at least 20% more likely than their non-DP peers to rate their research skills, ability to read and comprehend academic material, ability to make and prepare a presentation, and ability to write clearly and effectively as "very good" or "excellent".<sup>36</sup>

DP students generally report feeling the DP is worthwhile, feeling pride in undertaking the programme and that it has contributed to them developing into well-rounded people who value education.

<sup>27</sup> Times Higher Education, QS international and Shanghai Jiao Tong University <sup>28</sup>ACS International Schools. 2006–2014. University admissions officer survey. http://www.

<sup>26</sup>ACS International Schools. 2006–2014. University admissions officer survey. http://www.acs-schools.com/ACS-Research <sup>26</sup>Cace. V. Labaran, D. Kallay, Komple T. Badarick, M. Maallar, E. Williams, N. and Marazana, K.

<sup>30</sup>Cole, DR, Gannon, S, Ullman, J and Rooney, P. 2014.

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<sup>31</sup>Conley, D, McGaughy, C, Davis-Molin, W, Farkas, R and Fukuda, E. 2014.
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<sup>32</sup>Culross and Tarver. 2011. "A summary of research on the IB DP: Perspectives of students,

teachers, and university admissions offices in the USA". Journal of Research in International Education. Vol 10, issue 3. Pp 231–243. <sup>33</sup>IRO 2011

<sup>34</sup>Lee, M, Leung, L, Wright, E, Yue, T, Gan, A, Kong, L, and Li, J. 2013.

<sup>36</sup>S Bluhm, M. 2011. First Year University Experience of IB Graduates. San Antonio, Texas, US. IB Conference of the Americas.

<sup>&</sup>lt;sup>26</sup>Shah. S, Dean, M and Chen, YC. 2010. Academic performance of IB students entering the University of California System from 2000–2002. Geneva, Switzerland. IBO
<sup>27</sup>Times Higher Education, OS international and Shanghai Jiao Tong University

<sup>&</sup>lt;sup>29</sup>Coca, V, Johnson, D, Kelley-Kemple, T, Roderick, M, Moeller, E, Williams, N, and Moragne, K. 2012.

<sup>&</sup>lt;sup>35</sup>Taylor, M and Porath, M. 2006. "Reflections on the International Baccalaureate Program: Graduates' Perspectives". The Journal of Secondary Gifted Education. Vol 27, issue 3. Pp 21–30.

"Although the IB programme 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, US<sup>37</sup>

DP students commonly report feeling well equipped to engage and succeed in college coursework and are more comfortable and academically adjusted during their first year at university.

Benefits of the DP that alumni cite include:

- motivation
- work habits, organization, time management
- high levels of academic self-concept
- familiarity with an interest in research
- the ability to take multiple perspectives
- strong analytical writing and comfort with college level writing
- deeper understanding of the structure of knowledge, large concepts and how content connects across disciplines.

Teachers, administrators and university staff also report that DP students develop the traits needed to succeed in university to a greater extent than their non-DP peers.<sup>38–43</sup>



37IBO. 2011.

<sup>38</sup>Coates, H, Rosicka, C and MacMahon-Ball, M. 2007. Perceptions of the IB DP among Australian and New Zealand universities. Melbourne, Australia: Australian Council for Education Research.

<sup>39</sup>Jenkins, C. 2003. Perceptions of the International Baccalaureate Diploma Programme: A report for in inquiry carried out in 2003 at UK universities and institutions of higher education. Geneva, Switzerland. International Baccalaureate Organization. <sup>40</sup>ACS International Schools. 2006–2014.

<sup>41</sup>Culross and Tarver. 2011.

<sup>42</sup>Lee, M, Leung, L, Wright, E, Yue, T, Gan, A, Kong, L and Li, J. 2013.

<sup>43</sup>Dixon, M, Charles, C, Moss, J, Hubber, P and Pitt, P. 2014.

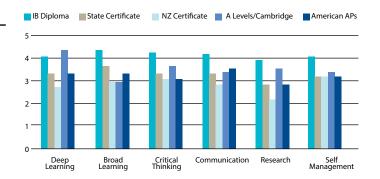
# What admissions officers think of the DP

UK admissions officials were asked: How well do you think each of these three exam systems develops the following qualities in students? The IB diploma was rated more highly than the other qualifications in all but one area. Source: ACS International Schools, 2014

| υκ  | A Levels                          | The IB<br>Diploma |    |
|---|-----------------------------------|-------------------|----|
|   | Important or very important score |                   |    |
|   | %                                 | %                 | %  |
| Encouraging independent inquiry   | 40                                | 51                | 40 |
| Developing in-depth subject expertise                                     | 50                                | 37                | 50 |
| Developing business skills  | 20                                | 37                | 22 |
| Developing ability to cope with pressure                                  | 40                                | 44                | 39 |
| Nurturing an open mind  | 26                                | 49                | 29 |
| Developing self-manage-<br>ment skills                                    | 35                                | 53                | 42 |
| Encouraging citizenship   | 32                                | 59                | 30 |
| Nurturing communication skills  | 35                                | 45                | 37 |
| Encouraging creativity  | 36                                | 43                | 36 |
| Developing global aware-<br>ness and connectivity                         | 26                                | 53                | 27 |
| Developing an entrepreneur-<br>ial or positive approach to<br>risk-taking | 19                                | 31                | 18 |

"The [DP] students seem to be better able to cope with the transition from school to university than are many of our other students." University admissions officer from Aus/NZ<sup>44</sup>

Aus and NZ admissions officers were asked how well they perceived various courses of study in developing student capabilities in a variety of areas. The IB diploma was ranked more highly than all other qualifications in all but one area. Source: ACER, 2007.



# DP student postsecondary performance

In addition to enrolling in top tier institutions, DP students are more likely to graduate from those institutions, and some evidence suggests they have stronger academic performance while enrolled.

#### Persistence and graduation rates

A range of research indicates that DP exam results are not just useful in gaining university admission, but also a predictor of continued success at university.<sup>45–47</sup>

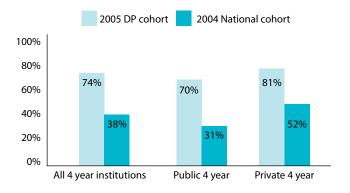
Former DP students have been found to be more likely to persist in university from one year to the next, and more likely to earn a degree in comparison with non-DP students. These results were consistent in a variety of state and national contexts and some studies introduced rigorous controls on demographic variables.<sup>48,49</sup>

In one study examining University of California students, the positive impact of the DP was especially pronounced among students from lower income families.<sup>50</sup>

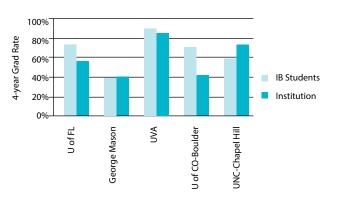
A series of studies analysing the US NSC data collectively provide strong evidence that participation in the DP leads to higher postsecondary graduation rates on a national level.<sup>51–53</sup>

- US DP students are significantly more likely to receive a bachelor's degree within four years than the US national average (64% versus 36-38%).
- These rates were even higher for those who earned the full diploma (74%), took the DP outside of the US (75%) and who scored more than 28 points (82%).
- Graduation rates for IB students were usually higher than the institutional averages (19 out of 20 institutions for US students, and 16 of 20 for international students).
- 76% of diploma candidates from US high schools with high percentages of low-income populations earned a bachelor's degree.

# Four-year graduation rates for US DP students compared to US national average by institution type.



*Graduation rates compared to institutional averages at five most popular US institutions for US DP students, 2001/2002 cohort. Source: SRI, 2011* 



<sup>44</sup>Coates, H, Rosicka, C and MacMahon-Ball, M. 2007.

- <sup>45</sup>Conley, D, McGaughy, C, Davis-Molin, W, Farkas, R and Fukuda, E. 2014.
- <sup>46</sup>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.

<sup>47</sup>Lee, M, Leung, L, Wright, E, Yue, T, Gan, A, Kong, L and Li, J. 2013.

<sup>49</sup>Green, F and Vignoles, A. 2012. An empirical method for deriving grade equivalence for university entrance qualifications: An application to A levels and the International Baccalaureate. Oxford Review of Education. Vol 38, Issue 2, pp 473–491. <sup>50</sup>Shah, S, Dean, M and Chen, YC. 2010.

<sup>51</sup>Caspary, K. 2011a

<sup>52</sup>Caspary, K. 2011b

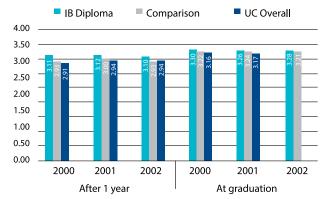
<sup>53</sup>Halic, O. 2013. Postsecondary Educational Attainment of IB Diploma Programme Candidates from US High Schools. Geneva, Switzerland. International Baccalaureate Organization.

<sup>&</sup>lt;sup>48</sup>Coca, V, Johnson, D, Kelley-Kemple, T, Roderick, M, Moeller, E, Williams, N and Moragne, K. 2012

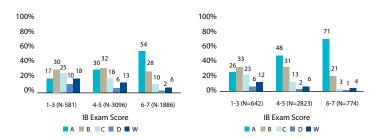
#### Academic performance

In addition to a greater likelihood of earning a degree, there is substantial evidence that participation in the DP is positively associated with postsecondary grade performance. DP students have been shown, in some cases, to earn higher marks than their peers while at university and performance in the DP has emerged as a strong predictor of tertiary performance and a tendency to enroll in more advanced courses. <sup>54-56</sup>

DP students' average GPA in the UC system compared to a matched comparison group and the UC student population overall. Source: Shah, Dean and Chen, 2010.

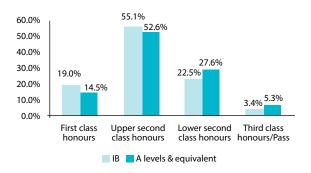


First subject-specific college course grade distribution for DP students at the University of Florida (SL exams, left; HL exams, right). Source: Caspary and Bland, 2011



In addition to increased likelihood of earning a higher award, one UK study also found IB students to be more likely to continue their studies beyond an undergraduate degree and to be employed in graduate level jobs and in higher paid occupations.<sup>57</sup>

# Percentage of full-time first degree qualifiers earning degree classes at UK institutions, 2008/2009. Source: HESA, 2011.



## **Beyond Academics**

It's not just strong academic skills that DP students bring to university campuses. The IB aims to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. The DP develops curiosity, critical thinking, self-motivation and a sense of community.

#### The IB learner profile

The IB learner profile encourages students to become inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced and reflective. This ethos embedded in all IB programmes has translated into real-world impacts lasting long after participation in IB programmes.

#### Participating in campus life

At the University of British Columbia, upon entry DP students were more likely to indicate they planned to be involved with faculty research, study abroad, and undertake a practicum or internship. After the first year, DP students were found to be considerably more likely to have participated in student leadership activities, student clubs or organizations, volunteer work, and tutoring/teaching other students.<sup>58</sup>

#### International-mindedness

The IB's unique focus on international-mindedness also makes meaningful contributions to postsecondary success and is seen as relevant to students' internationally oriented university pathways and career aspirations. In one US state, DP and AP students were asked to write about international understanding. The DP students' definitions were found to include more elements, be more complex, richer in ideas and language, to express personal values, and expressed the belief that particular courses in school had enhanced their international understanding.<sup>60</sup>

#### **Civic-mindedness**

IB programmes encourage students to see the connections between global and local issues. As a result, IB students have been shown to have greater interest in and understanding of their local government structure and policy-making processes as well as greater likelihood to engage in community development projects.<sup>61 62</sup>

#### Long-term dispositions

Twenty-three in-depth interviews with a range of DP alumni who participated in the programme between 1968 and 2014 revealed some profound and long-lasting effects, including influences on academic and career trajectories, a broader perspective on the world, critical thinking and analytical skills, and positive dispositions towards lifelong learning. A common thread throughout the interviews was the DP's potential to powerfully shape the lives of students.<sup>63</sup>

These are just some of examples of what DP students can contribute to the university campus and community.

# How university polices recognize DP students

The evidence overwhelmingly suggests that DP alumni have a great deal to offer receiving universities and colleges. Despite a diverse range of backgrounds and nationalities, DP students all share a desire to take on one of the most challenging academic programmes available to them.

A strong IB recognition policy is an effective way for universities to acknowledge their achievements and attract IB students from around the world.

IB recognition policies assist institutions in recruiting:

- students who are well prepared for the academic rigours of higher education
- students who will be engaged in campus life and the community
- internationally-minded students with a global outlook.

Published policies from institutions around the world:

- 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 and 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.

For an institution to develop an effective recognition policy, they should consider:

- the current admissions policies towards IB students
- performance of DP alumni already at the institution
- how DP courses can meet requirements for different faculties
- how TOK and the extended essay can be considered in admissions decisions
- additional considerations or incentives for high performing DP students, such as designated scholarships, honours courses or research opportunities
- the role of DP language courses in meeting language proficiency requirements
- whether admissions decisions can be made from anticipated IB grades submitted by the students' schools
- what information is available on the university website for recruitment and admission of IB students.

<sup>54</sup>Caspary, K and Bland, J. 2011. First college courses taken by Florida IB students. Research Brief. Menlo Park, CA, USA. SRI International.

- <sup>55</sup>Shah, S, Dean, M and Chen, YC. 2010.
- <sup>56</sup>Green and Vignoles. 2012.
- <sup>57</sup>HESA. 2011.

<sup>58</sup>Bluhm. 2011.

<sup>59</sup>Sriprakash, A, Singh, M and Qi, J. 2014. A comparative study of international-mindedness in the IB Diploma Programme in Australia, China and India. Bethesda, MD, USA. International Baccalaureate Organization. <sup>60</sup>Hinrichs. 2003 <sup>61</sup>Saavedra, AR. 2014. Academic civic-mindedness and model citizenship in the International Baccalaureate Diploma Programme. Bethesda, MD, USA. International Baccalaureate Organization.

<sup>62</sup>Billig, SH. 2013.

<sup>63</sup>Wright, K. 2015. International Baccalaureate programmes: Longer-term outcomes. Bethesda, MD, USA. International Baccalaureate Organization.



## Additional resources and support

The IB makes a concerted effort to work directly with universities to supply the information and support needed to effectively develop policies for recognizing the achievements of Diploma Programme students.

- The IB can provide detailed curriculum and assessment material for faculty to review, and IB staff are available to answer any questions.
- Briefs explaining each DP course and other elements of the programme are available at: http://www.ibo.org/en/university-admission/.
- IB World Schools or associations are a great source of information about DP students.
- IB alumni on campus can provide personal insight into their experiences.
- The IB provides a great deal of research on the impact of our programmes online at: http://www.ibo.org/en/about-the-ib/research/.

# Questions? Contact us at recognition@ibo.org



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