

College readiness and the International Baccalaureate Diploma Programme in the United States

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The Diploma Programme

Offered during junior and senior years of high school, the Diploma Programme (DP) is designed to prepare students for success in higher education and other postsecondary pursuits. The DP requires studies in six subject groups and often enables students to earn credit at many leading universities in the United States and around the world. Additionally, the DP includes a core that enhances students' educational experience by challenging them to apply their knowledge and skills.

The DP's six subject groups include:

- 1. studies in language and literature (e.g. English literature, or language and literature)
- 2. language acquisition (e.g. Spanish, Mandarin, classical languages)
- 3. individuals and societies (e.g. history, economics, psychology, business management)
- 4. sciences (e.g. biology, chemistry, physics, computer science)

- 5. mathematics (e.g. analysis and approaches, applications and interpretation)
- 6. the arts (e.g. visual arts, music, film, theatre).

Typically, DP candidates' six subjects include three at higher level (HL; at least 240 hours) and three at standard level (SL; at least 150 hours).

The core requirements include:

- a series of student-driven experiences called creativity, activity, service (CAS)
- an extended essay (EE), an academic research paper on a topic of student choice
- a course called theory of knowledge (TOK) that emphasizes critical thinking.

International Baccalaureate (IB) World Schools may allow students to take individual DP courses rather than the entire programme. Assessment of DP subjects includes both work completed during the course and a final exam.

The DP and college readiness

Recent research provides evidence that the DP curriculum is designed to prepare students for success in college, which is supported by DP students' college outcomes.

Curriculum research

Ambitious K-12 academic standards in the United States aim to ensure high school students develop the literacy, mathematics and science skills necessary for college, careers and citizenship (Jones & King, 2012; Kamin, 2016; Next Generation Science Standards, 2013).¹ In 2022, Ecctis investigated the alignment of DP courses against influential frameworks designed for these purposes: the Common Core State Standards for English and mathematics, and the Next Generation Science Standards. The study revealed consistent and strong evidence that the demand of DP courses exceeded the demand of these frameworks. Ecctis found:

 DP HL English language and literature to be substantially more demanding than the analyzed Common Core frameworks in terms of volume of work, depth of knowledge and stretch areas

- DP SL and HL mathematics courses to be considerably more demanding than the analyzed Common Core frameworks in terms of volume of work and stretch areas
- DP SL and HL sciences to surpass the analyzed Next Generation Science Standards frameworks considerably in content depth, level of detail and demand.

Taken together, these findings suggest that DP students receive an education that prepares them for university success by meeting and exceeding the rigor of widely recognized college-preparatory frameworks.

Student outcomes research

Using National Student Clearinghouse data from 2016 high school graduates, Leake and Townsend (2024) found that **DP students enrolled, persisted and graduated at higher rates than national averages**. DP students also more frequently enrolled in "more selective" institutions. These findings held across racial and ethnic groups.

¹ We used the Common Core State Standards and Next Generation Science Standards as DP comparisons in the US where there is no national curriculum but most states have adopted and/or aligned their standards to these two standard sets.

Findings from these curricular and outcomes studies depict DP students as ready to succeed at US colleges and universities (figures 1 and 2).

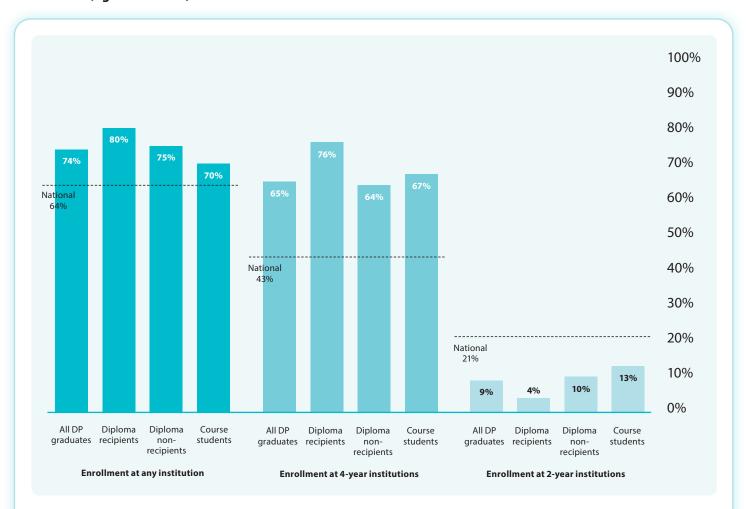


Figure 1. US DP graduates have higher immediate college enrollment rates than the US national average and favor 4-year institutions

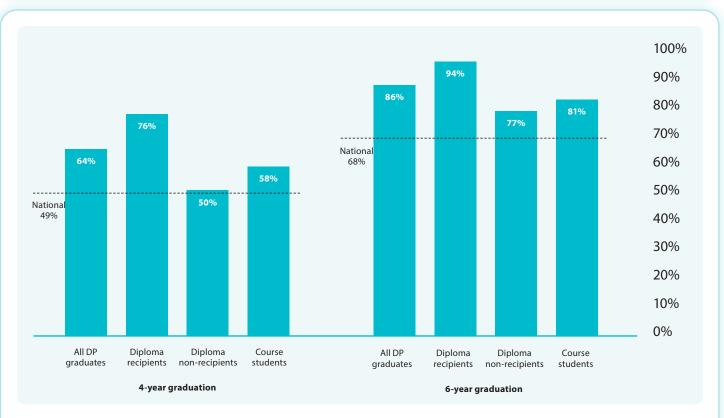


Figure 2. US DP graduates have higher 4-year and 6-year graduation rates compared to the US national averages



References

Ecctis. (2022). *DP country alignment studies: Alignment of the Diploma Programme with the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS)*. International Baccalaureate Organization. https://www.ibo.org/globalassets/new-structure/research/pdfs/ib-dp-country-studies-ccss-and-ngss-alignment-report-en.pdf

Jones, A. G., & King, J. E. (2012). The Common Core State Standards: A vital tool for higher education. *Change: The Magazine of Higher Learning*, 44(6), 37–43. https://doi.org/10.1080/00091383.2012.706529

Kamin, D. C. (2016). The Common Core State Standards for Mathematics and college readiness. *The Mathematics Educator*, *25*(special issue), 52–70. https://openjournals.libs.uga.edu/tme/article/view/2019

Leake, J., & Townsend, M. (2024). *Postsecondary outcomes of International Baccalaureate Diploma Programme graduates in the United States*. International Baccalaureate Organization. https://www.ibo.org/globalassets/new-structure/ research/pdfs/us-dp-postsecondary-outcomes-summary-eng.pdf

Next Generation Science Standards. (2013). Executive Summary. https://www.nextgenscience.org/sites/default/files/ Final%20Release%20NGSS%20Front%20Matter%20-%206.17.13%20Update_0.pdf

