

## Key findings from research on the impact of IB programmes in the Asia-Pacific region

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. Areas of inquiry include, but are not limited to: **student**, **school and systemic outcomes**; **programme implementation**; and **programme standards and alignment**.

Researchers examined the impacts of the **early years** of the Primary Years Programme (PYP) at four case study schools—two in **Singapore** and two in **Melbourne**, **Australia**. Findings suggested that literacy skills at all sites were fairly well developed; that children were performing similarly or better on a measure of school readiness than a sample of Australian children; and that children were developing learning skills at significantly higher rates than a comparative sample (Morrissey et al. 2014).

A study by Deakin University in **Australia** explored the **science literacy** of year 6 PYP students in comparison to a national sample by administering the 2012 National Sample Assessment in Science Literacy (NAP-SL). The findings showed that 83.3% of PYP students performed at or above the suggested proficiency level (3.2) for year 6 students. This compares favourably with the national sample, in which 51.4% of year 6 students were at or above the 3.2 level (Campbell et al. 2014).

Distribution of year 6 student performance					
Percentage of national sample (2012) in profi- ciency level	Proficiency level	Percentage of PYP students (2012) in proficiency level			
0.3%	Level 4 and above	1.0%			
9.0%	Level 3.3	22.6%			
42.1%	Level 3.2	59.7%			
39.6%	Level 3.1	7.1%			
9.0%	Level 2 and below	2.6%			

Table 1. National sample and PYP proficiency levels

A study by Flinders University examining the **social-emotional well-being** of Middle Years Programme (MYP) students in **Australia** suggested that, on the whole, MYP schools are helping to build the empathy,

global self-concept, peer relationships, self-reflection, resilience and confidence of MYP students. Only a small proportion of MYP students showed poor levels of well-being (8.4%), while over half of MYP students were "flourishing" (55.3%) (Skrzypiec et al. 2014).

Teachers and administrators in five case study schools in **China** were confident that the Diploma Programme (DP) provided first-rate **university preparation**, as a result of the breadth and rigour of the programme. The quantitative portion of the study found that, between the years of 2002–2012, 71.6% of the DP graduates attended one of the world's top 500 universities (n = 1,612) (Lee et al. 2014).

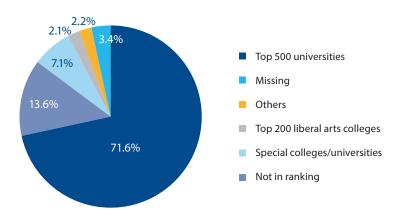


Figure 1. University destinations of DP graduates from 2002-2012 by university type and ranking

Researchers from Deakin University explored how the DP **aligns** with the standards, principles and practices outlined in the **Australian Curriculum**. With a few exceptions, the DP curriculum generally provided greater depth than local alternatives while also supporting the development of critical knowledge and skills. Most teachers also believed that the DP is more rigorous and provides better preparation for university studies (Dixon et al. 2014).

<sup>&</sup>lt;sup>1</sup>According to the authors of the report, "'flourishing' involves functioning effectively and feeling good about oneself" (Skrzypiec et al. 2014).





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Investigating critical thinking skills among DP students in Australia, a study by researchers from the University of Western Sydney revealed apparent gains in the use of an array of critical thinking skills between the two successive years of the DP. Additionally, at university, DP graduates had statistically significant higher mean scores than non-DP graduates on three measures of post-secondary school success: ATAR (Australian Tertiary Admission Rank) score, academic self-concept and anticipated university outcomes (Cole et al. 2014).

Measure	Secondary school	N	Mean (SD)	Comparison of means
ATAR score	DP graduate	94	94.13(6.79)	t(290) = 4.76* p < 0.001
	Non-DP graduate	267	89.29(12.07)	
General academic self- concept (10-item scale)	DP graduate	99	6.25 (0.96)	t(380) = 4.24* p < 0.001
	Non-DP graduate	283	5.75 (1.02)	
Anticipated university outcomes (6-item scale)	DP graduate	99	3.43 (0.43)	t(380) = 2.25* p < 0.001
	Non-DP graduate	283	3.32 (0.47)	

A study conducted by researchers from the University of Melbourne explored how the **learner profile** is interpreted, adapted and implemented in nine DP schools in **Hong Kong, India** and **Australia**. Many students valued the learner profile for its long-term impacts in terms of future education and career paths. As one student explained, "I don't think we will realize the full value of the LP and IB until many years from now. The LP attributes are not always for now, but for the rest of your life" (Rizvi et al. 2014).

Researchers from the University of Sydney and the University of Western Sydney analysed the concept of **international-mindedness** within three different country contexts: Australia, China and India. IB students, teachers and parents perceived internationalmindedness to be highly relevant to students' university trajectories and career aspirations. Many participants expected that the traits of internationalmindedness, particularly being globally mobile, multilingual and interculturally aware, would benefit IB graduates in their post-school pathways (Sriprakash, Singh and Qi 2014).

NB: (\*) indicates statistical significance

Table 2. Mean differences in ATAR, academic self-concept and anticipated university outcomes by cohort

This information sheet provides a brief overview of key findings from recent research commissioned by the IB Global Research department, and does not attempt to represent all research on the IB available in the field. As with all research, findings must be placed within the particular contexts in which the studies took place. To read more in-depth summaries of the studies or the complete reports, as well as projects currently under way, please visit: www.ibo.org/research.

Campbell C, Chittleborough G, Jobling W, et al. 2013. Science literacy in the International Baccalaureate Primary Years Programme (PYP): NAP-SL outcomes. Melbourne, Australia. School of Education, Deakin University.

Cole, DR, Gannon, S, Ullman J, Rooney P. 2014. Theory of knowledge (TOK): Exploring learning outcomes, benefits and perceptions. Sydney, Australia. University of Western Sydney.

Dixon, M, Charles, C, Moss, J, et al. 2014. The International Baccalaureate Diploma Programme: Alignment with the Australian Curriculum and Australian Qualifications Framework. Bethesda, MD, USA. International Baccalaureate Organization.

Lee, M, Leung, L, Wright, E, et al. (2013). A study of the International Baccalaureate 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.

Morrissey, A, Rouse, E, Doig, et al. 2014. Early years education in the Primary Years Programme: Implementation strategies and programme outcomes. Bethesda, MD, USA. International Baccalaureate Organization.

Rizvi, F, Acquaro, D, Quay J, et al. 2014. International Baccalaureate learner profile: A comparative study of implementation, adaptation and outcomes in India, Australia and Hong Kong. Bethesda, MD, USA. International Baccalaureate Organization.

Skrzypiec, G, Askell-Williams, H, Slee, P and Rudzinski, A. 2014. International Baccalaureate Middle Years Programme: Student social-emotional well-being and school success practices. Bethesda, MD, USA. International Baccalaureate Organization.

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.

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