

Key findings from research on the impact of the IB Middle Years 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 IB-commissioned and independent research relating to the MYP.

A study within a large, socio-economically diverse school district in the **United States** explored **student engagement and performance** in five MYP schools in comparison to five non-MYP schools. Using state assessments as a benchmark, the results indicated that a higher percentage of MYP students achieved proficient or advanced performance on mathematics and science assessments than did the matched comparison group (Wade 2011).

	MYP schools			Comparison schools	
	Grade	N	Per cent	N	Per cent
Mathematics Proficient or advanced	6	1,058	85.7***	1,090	82.6
	7	1,300	82.8**	1,115	78.9
	8	1,243	78.7***	1,228	73.1
Reading Proficient or advanced	6	1,034	90.9	1,071	90.8
	7	1,254	88.8	1,091	90.0
	8	1,208	88.7	1,182	88.2
Science Proficient or advanced	8	1,343	77.5***	1,293	72.0

*p < .05; **p < .01; ***p < .001.

Table 1. Percentage of students scoring proficient or advanced on mathematics, reading and science in MYP schools and non-MYP schools, 2009–2010 (Wade 2011).

In a subsequent study within the same **US** district, previous enrollment in the MYP appeared to have a positive impact on students' **global-mindedness**. Former MYP students responded more positively to statements in a global-mindedness survey than students who had attended a non-MYP school (Wade and Wolanin 2013).

Examining **student performance** on the International Schools' Assessment (ISA), this **global** study by the Australian Council for Educational Research (ACER) explored PYP and MYP student performance—in comparison with non-IB students—in mathematics,

reading, and expository and narrative writing. The data from a total of 50,714 international students, 68% of whom were IB students, suggested that the PYP and MYP cohort performed better than their non-IB peers in all four assessment areas and at many grade levels. MYP students scored particularly well in grades 9 and 10 mathematics and reading, as IB student averages were significantly higher than OECD Programme for International Student Assessment (PISA) means for these subjects (Tan and Bibby 2012).

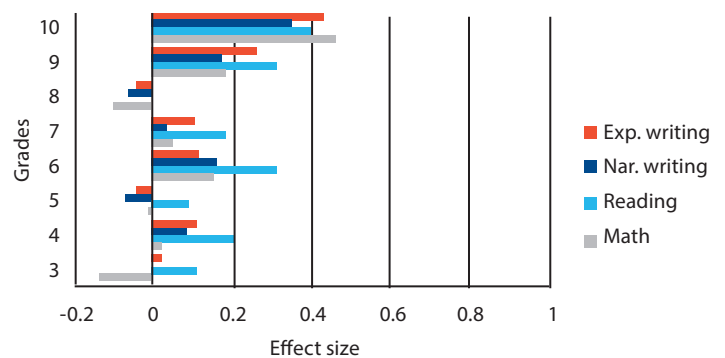


Figure 1. Effect size of difference in performance between IB and non-IB students by grade (Tan and Bibby 2012).

Researchers from the National Foundation for Educational Research (NFER) conducted a curricular comparison of the MYP, the GCSE (General Certificate of Secondary Education) and IGCSE (International General Certificate of Secondary Education) in the **United Kingdom**. Findings suggested that the content of the curricula was largely similar, although the MYP offered greater curricular flexibility and was more interdisciplinary in nature. Additionally, the study found that, in comparison with non-MYP students, MYP students generally rated higher in certain **non-academic attributes** such as international and civic-mindedness as well as global awareness (Sizmur and Cunningham 2013).

To read summaries or the complete reports of research projects conducted or commissioned by the IB Global Research department, please visit <http://www.ibo.org/research>, or contact research@ibo.org.

Key findings from research on the impact of the IB Middle Years Programme

In a study exploring the influence of the MYP on **student performance** and **teacher pedagogy** in the **United States**, teachers reported that on the whole they believed the MYP benefitted students by encouraging higher order thinking and educating the whole child. Teachers also suggested that the MYP improved teacher pedagogy by encouraging collaboration and teaching beyond tested material (Kobylnski-Fehrman 2013).

A quasi-experimental study was conducted in the **United States** to investigate the **science performance** of PYP and MYP students (n = 50) in comparison with their non-IB peers (n = 50). This study, based on the Colorado Student Assessment Program (CSAP), found statistical differences in science performance between IB and non-IB students. IB students outperformed the comparison group on the CSAP across all three grade levels (Healer 2013).

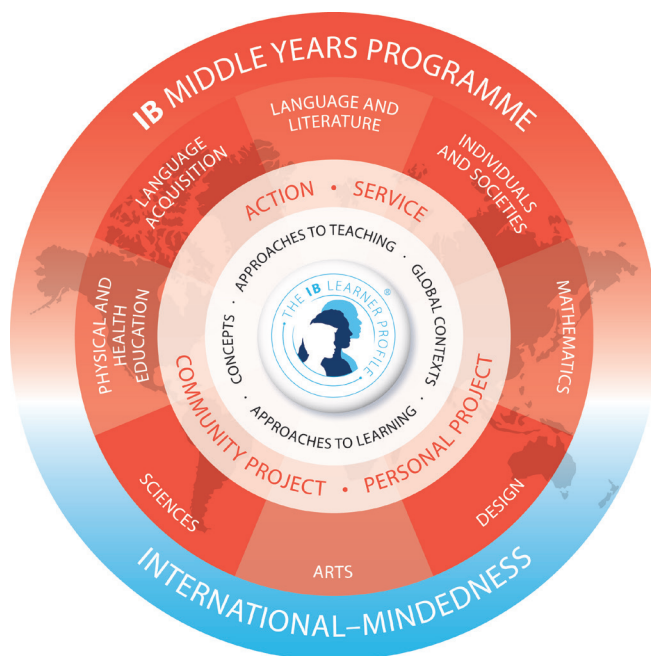
	5th Grade 2006		8th Grade 2009		10th Grade 2011	
	M	SD	M	SD	M	SD
IB scores	600.28	39.147	551.20	44.202	543.28	41.007
Non-IB scores	581.32	45.256	528.46	47.315	523.08	58.707

Table 2. Means and Standard Deviations of IB and non-IB CSAP science scores during the years 2006, 2009 and 2011 (Healer 2013).

Systematic observation was employed in 85 classrooms within 8 Texas PYP and MYP schools in the **United States** to investigate **instructional practice** and **student behaviors**. Observations revealed generally active and engaging instruction and positive student learning behaviors. Further, IB students were “on-task” 87% of the time, in comparison with a similar study of

general education students who spent 73% of the time “on-task” (Alford, Rollins, Stillisano and Waxman 2013).

Exploring the influence of accelerated academic programmes on student **stress** and **psychological well-being**, this external study gathered and analyzed data from 134 IB Grade 9 students in the **United States**. Although IB students self-reported higher levels of stress than their peers in general education, the emotional well-being of IB students was statistically similar to, and in some cases better than, the psychological functioning of their non-IB counterparts (Suldo and Shaunessy-Dedrick 2013).



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

Alford, B., Rollins, K., Stillisano, J., & Waxman, H. (2013). “Observing classroom instruction in schools implementing the International Baccalaureate programme”. *Current Issues in Education*, 16(2)

Healer, M. I. 2013. “A quasi-experimental quantitative study of the effect of IB on science performance”. (Order No. 3573948, University of Phoenix). *ProQuest Dissertations and Theses*, 102. Retrieved from [http://search.proquest.com/docview/1442456284?account id=50153. \(1442456284\)](http://search.proquest.com/docview/1442456284?account id=50153. (1442456284)).

Kobylnski-Fehrman, M. J. 2013. *The International Baccalaureate Middle Years Programme and its effect on students in poverty*. Georgia State University. http://digitalarchive.gsu.edu/eps_diss/104/.

Sizmur, J and Cunningham, R. 2012. *International Baccalaureate Middle Years Programme (MYP) in the UK*. Slough, Berkshire, UK. NFER.

Suldo, S. M. and Shaunessy-Dedrick, E. “Changes in stress and Psychological adjustment during the transition to high school among Freshmen in an accelerated curriculum”. *Journal of advanced academics*, 24(3), Pp 195–218.

Tan, L and Bibby, Y. 2012. *Performance Comparison between IB School Students and Non-IB School Students on the International Schools’ Assessment (ISA) and on the Social and Emotional Wellbeing Questionnaire*. Melbourne: Australian Council for Educational Research.

Wade, Julie. 2011. *Student Performance and Student Engagement in the International Baccalaureate Middle Years Programme*. Bethesda, MD: International Baccalaureate Organization.

Wade, J and Wolanin, N. 2013. *Continuation Study of Student Performance and Engagement in the Middle Years Programme*. Bethesda, MD, USA. International Baccalaureate Organization.

To read summaries or the complete reports of research projects conducted or commissioned by the IB Global Research department, please visit <http://www.ibo.org/research>, or contact research@ibo.org.