



Research snapshot

Student pathways from middle school through high school and into post-secondary education:

Middle Years Programme student outcomes in a large United States public school district

Snapshot developed by the IB Research department based on a report prepared by:
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Background

While a growing body of research addresses the Middle Years Programme (MYP) curriculum and its implementation, few studies have explored the impact of the MYP on student outcomes. This study examined MYP students' academic progressions to high school and post-secondary education. Multiple regression modelling and propensity score matching methodologies were used to examine the outcomes of MYP students, while accounting for their prior academic achievement and demographic characteristics.

Sample and terminology

This study used student-level panel data from a large public school district located in the Mid-Atlantic (United States). The sample included 3,147 MYP students who attended seven schools as sixth graders in the 2006–07 or 2007–08 school years. After MYP, 163 students (5.2%) subsequently enrolled in the Diploma Programme (DP) as full IB Diploma candidates. This group is referred to in this study as “MYP+DP”, and was the primary focus of the analyses. The comparison group was composed of MYP students who did not enroll in the DP, and is referred to as “MYP non-DP”.

Findings

Progressions to the DP

The results show that MYP students who achieved higher middle school scores in mathematics, reading, and science were more likely to pursue the IB Diploma. Moreover, the probability to continue to the IB Diploma was higher for MYP students with higher attendance rates and for MYP students recording more service learning hours. Middle school achievement scores, particularly in science and mathematics, were strong predictors of high school success for MYP students who enrolled in the DP (MYP+DP), and that was the case for the MYP students who did not participate in the DP (MYP non-DP) as well. Middle school attendance was also predictive of high school GPA for both groups.

For MYP students who participated in the DP, the analyses examined the relationship between middle school achievement (scores in mathematics, reading, and science) and success in the DP, measured as participation and achievement on IB examinations. Reading scores significantly predicted a higher number of IB DP examinations taken in high school. Moreover, mathematics, reading, and science scores were positively associated with a greater number of DP examinations scoring 4 or higher. At the same time, participation in Free and Reduced-price Meals (FARMS) and special education classification during middle school were negatively associated with both the number of DP examinations taken overall and the number of examinations scored 4 or higher.

Subsequent high school academic achievement

MYP+DP students were more likely than MYP non-DP students to achieve higher high school GPAs, higher total PSAT scores, higher total SAT and ACT scores, and to record more service

learning hours. These results, however, are reflective of the demographic and prior academic characteristics of MYP students who enrolled in the DP, as a more economically advantaged and higher-performing group.

Post-secondary outcomes

Analyses of post-secondary data show a positive relationship between MYP+DP participation and immediate college enrollment, defined as enrollment within one year after high school graduation. MYP+DP enrollment was associated with a nine-percentage point increase in the probability of immediate college enrollment. However, there were no significant differences between MYP+DP and MYP non-DP groups in post-secondary enrollment within two years following high school graduation.

Limitations

Schools participating in the MYP likely differed from non-MYP schools in unmeasured as well as measured ways, and students that enrolled in the IB Diploma also likely differed from those who did not. Thus, there is no clear causal attribution to either the MYP or the DP. Further, it is possible that the demographic and prior performance composition of MYP students from this district in 2020 differs from that of students who enrolled in the MYP in 2006 or 2007. Finally, the IB changed the MYP in several fundamental ways in 2014 that may also limit generalizability of results.



This snapshot was developed by the IB Research department. A copy of the full report is available at <http://www.ibo.org/en/research/>. For more information on this study or other IB research, please email research@ibo.org.

To cite the full report, please use the following.

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