



Educational aspirations of International Baccalaureate Diploma Programme students

Research summary

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Purpose

This study examined International Baccalaureate (IB) Diploma Programme (DP) students' post-secondary educational aspirations, using a large longitudinal dataset of DP students (2016–2018). Students were asked to indicate their educational aspirations at the beginning and end of the DP. The total sample for this study included 699 students who responded to both surveys; students were from 91 schools located in 32 countries.

Research design

Researchers analysed secondary data from an existing IB dataset in which DP students were sampled at the beginning of their DP participation (December 2016) and upon completion of their DP examinations (May 2018). Additionally, a coordinator survey supplied school-level data.

To investigate the educational aspirations of DP students, researchers focused on the highest degree a student expected to earn (high school, bachelor's, master's, or doctoral degree) and the selectivity of the university a student aspired to (average, good, very good or top-level university). The study included

both descriptive statistics of the overall aspirations of DP students and multilevel modelling, examining student- and school-level predictors of degree and university aspirations. The combined model identified factors which predicted the degree (doctoral degree or not) and university selectivity (very good/top-level university or other) aspirations of DP participants. Since DP students' aspirations were generally very high, researchers chose to focus on the highest educational aspiration category—modelling the effect on aspirations to a doctoral or professional degree. This allowed for enough variability in the outcome categories to detect significant results.

Findings

Descriptive statistics of DP students' educational aspirations

Findings showed that DP students had very high educational aspirations both at the beginning and end of the programme.

At the beginning of the DP, almost all students aspired to at least a bachelor's degree (97%) and most students (approximately 80%) aspired to at least a master's

degree. Moreover, a high percentage of students (42%) aspired to a doctoral or professional degree. Similarly, by the end of the DP, degree aspirations remained very high, with 98% of students aspiring to at least a bachelor's degree, 81% aspiring to at least a master's degree and 38% aspiring to a doctoral or professional degree.

Degree level	Beginning of DP	End of DP
High school degree	1.70%	1.70%
Bachelor's degree	17.3%	17.3%
Master's degree	37.5%	42.6%
Aspired to doctoral degree	42.4%	37.9%

Table 1. DP student aspirations for level of degree at the beginning and end of the DP by percentage.

Almost three-quarters of students (74%) aspired to a very good or top-level university at the beginning of the DP. At the conclusion of the programme, that percentage had decreased to approximately 61%. Recent research indicates that students' aspirations are not fixed and are constantly changing as students gain new information and experiences (DesJardins et al, 2019). This apparent decline in aspirations should not be interpreted as a negative outcome. Rather, students

are still developing and continuing to integrate their abilities and skills into a realistic strategy that aligns their educational expectations with their career interests (Schneider et al, 2017). As table 2 shows, students' university aspirations continued to be high over the course of the DP, but were likely moderated somewhat, as students gained more information about factors related to university admission and attendance.

University selectivity	Beginning of DP	End of DP
No plan to attend university	0.57%	0.14%
Average university	1.14%	4.69%
Good university	24.6%	33.7%
Very good university	52.2%	52.9%
Top-level university	21.5%	8.53%

Table 2. DP student aspirations for university selectivity at the beginning and end of the DP by percentage.

Key findings: Student- and school-level predictors of DP student aspirations

Multilevel modelling was used to examine the effect of student- and school-level characteristics on DP students' educational aspirations (doctoral/professional degree or not; very good/top-level

university or other). The analysis revealed several significant factors associated with students' aspirations at the beginning of the programme.

- The likelihood of aspiring to a doctoral degree at the beginning of the DP was positively associated with three variables: academic ability before the DP (odds ratio=1.34), parental expectations for academic performance (odds ratio=1.33) and proportion of first language students (odds ratio=1.01).
- The likelihood of aspiring to a very good or top-level university at the beginning of the DP was positively associated with several variables, including the following with the largest magnitude: father's education (odds ratio=1.72), academic abilities before the DP (odds ratio=1.47) and average grade before the DP (odds ratio=1.43).
- **The likelihood of aspiring to a very good or top-level university was positively associated with the proportion of DP teachers in a school** (coefficient=.01, se=.00, t=2.94, p<.01, odds ratio=1.01). This indicates that DP students from schools with a larger proportion of DP teachers and, implicitly, a larger DP student cohort, are more likely to have higher aspirations for attending a very good or top-level university, in comparison with students from schools with a lower proportion of DP teachers.

Conclusions

This study found that DP students had very high academic aspirations both at the start and end of the programme. By the end of the DP, 98% of students aspired to at least a bachelor's degree and 81% aspired to a master's, doctoral or professional degree; additionally, 61% of DP students aspired to a very good or top-level university. Aspirations shifted slightly at the individual level for some students as they got closer to high school graduation, yet overall levels remained very high. A closer inspection of which factors contributed to differences in aspirations at the start of the DP revealed that certain personal characteristics of students, such as parental education and prior academic achievement, accounted for much of the variance. Interestingly, the proportion of DP teachers in a school was positively associated with aspiring to a very good or top-level university, which suggests that offering more school-level opportunities to participate in the DP encourages higher student aspirations.

References

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- Schneider, B., Kim, S., & Klager, C. (2017). Co-Development of education aspirations and postsecondary enrollment especially among students who are low income and minority. *Research in Human Development*, 14(2), 143–160.

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

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