



## RESEARCH SNAPSHOT

### An analysis of the development of positive academic mindsets in diverse International Baccalaureate World Schools

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

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### Background

Recent research shows that students with a “growth” mindset rather than a “fixed” mindset are more likely to be effective learners and attain good academic outcomes (Dweck, 2006). A growth mindset involves the belief that it is possible to be a successful student based on effort and not just innate qualities, such as intelligence. Additionally, academic mindsets are the “beliefs, attitudes, or ways of perceiving oneself in relation to learning and intellectual work that support academic performance” (Farrington *et al*, 2012).

This study examined the ways in which International Baccalaureate (IB) Diploma Programme (DP) schools and classrooms foster and develop students’ non-cognitive skills and, specifically, **positive academic mindsets**. Based on the study’s findings, this snapshot exemplifies some of the school practices that can foster students’ growth mindsets, sense of belonging and self-confidence.

### Research design

The study was conducted using a multiple case study design, and was implemented in four schools—two in the United States and two in Peru. Data were collected using student surveys (n=1,066) and by conducting school visits that included interviews (n=43) and observations (n=16).

### Findings

#### School and classroom strategies that foster a growth mindset

All four IB World Schools that participated in this study shared **the belief that success is mainly a product of effort**. The majority of students surveyed (79%) reported

that their IB programme emphasized hard work as a way to succeed. However, opinions were divided among students with regards to teachers’ approaches, with roughly half reporting that they were praised for effort and half reporting they were praised for intelligence. Below are some approaches that support students’ development of growth mindsets based on the findings of the study.

- Promoting a school-wide message that encourages students to consider themselves capable of achieving at high levels. For example, not having entry requirements for participation in higher level (HL) DP courses and encouraging students to try the DP if they are willing to put in the effort.
- Working to create a school environment in which students are challenged but are also encouraged and supported, or as one principal put it, “*the right amount of dissonance – struggle without deflation*”.
- Offering a variety of options for DP students, ranging from taking one class to pursuing the full DP.
- Providing support classes for students with special needs.
- Providing staff resources for students (such as guidance counsellors, social workers and psychologists) to help students tackle more challenging coursework like that required in the DP.
- Putting support structures in place—for instance, a department of learning support—to offer both academic support and social-emotional counselling.
- Providing a set of structured experiences that allow students to grow intellectually, for example, structuring the extended essay process in a way that helps students to build a belief that they can tackle a difficult, long-term project.

## School and classroom strategies that foster a sense of belonging in school

Over half of the students surveyed (54%) reported that they **felt a sense of belonging** within the school community. DP students often experience a sense of kinship and pride from undertaking rigorous coursework together. Additionally, in all schools, warm relationships between students and teachers were highlighted as especially important in developing a sense of belonging. Below are a few recommendations for fostering students' sense of belonging.

- Providing structures that create supportive groups for students that can be sustained over time. For example, assigning students to "homerooms" at the beginning of their secondary school years with a lead teacher who stays with the student cohort until graduation. The lead teacher can then keep track of how individual students are doing both socially and academically and can intervene when necessary.
- Encouraging students to participate in clubs and activities that promote a connection to the school and to each other.
- Creating opportunities for students to work in groups, facilitating a sense of community and connection.

## School and classroom strategies to promote student self-confidence

IB coursework can appear daunting for some students. Below are some examples of how schools can help students to develop their **self-confidence** to enable them to take on academic and other challenges.

- Encouraging students to pursue interests and learn more about themselves through arts, sports and creativity, activity, service (CAS).
- Encouraging students to take on leadership roles in student government, clubs, sports or other activities, allowing them to gain confidence in various roles and situations.
- Fostering self-knowledge by offering opportunities for students to reflect on areas of strength and embrace areas that they would like to develop.
- Providing opportunities for independent decision-making and student choice through elements of the DP such as theory of knowledge, the extended essay and CAS.

## References

Dweck, CS. 2006. *Mindset: The new psychology of success*. New York, NY, USA. Ballantine Books.

Farrington, CA, Roderick, M, Allensworth, E, Nagaoka, J, Keyes, TS, Johnson, DW and Beechum, NO. 2012. *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. Chicago, IL, USA. University of Chicago Consortium on Chicago School Research.

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](mailto:research@ibo.org).

To cite the full report, please use the following. Barnett, E, Avila, O and Aklog, F. 2017. *An analysis of the development of positive academic mindsets in diverse International Baccalaureate World Schools*. Bethesda, MD, USA. International Baccalaureate Organization.

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