



RESEARCH BRIEF

Academic buoyancy and resilience for diverse students around the world

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Introduction

This policy paper presents findings from a wide range of literature on academic resilience in primary and secondary education to help shape the approach schools can take to support diverse students. We focus on different types of challenges that students experience and the different aspects of academic buoyancy and resilience that shape students' ability to succeed despite the setbacks and adversity they face. In Part 1 of the full paper, we describe key insights from research on academic buoyancy and resilience. In Part 2, we present promising practices to improving students' academic resilience skills. In Part 3, we provide recommendations for International Baccalaureate (IB) stakeholders, meant to strengthen and reinforce the IB programme's potential to develop students with academic buoyancy and resilience. This research brief, which was extracted from the full paper, highlights high-level findings. To learn more, please refer to the full policy paper.



What is so important about having academic resilience?

Every student faces setbacks and challenges in school. Perhaps, a student forgets to study for a major test in science class. Will she be too overwhelmed with anxiety about the embarrassment and the threat to her term grade to approach her teacher for help? Or will she have the composure to relax her strong emotions and feel the confidence to address the mistake, set a goal, and make a plan to regain the grade she wants? Academic buoyancy is the ability to fail well, fail forward, and bounce back from the inevitable challenges experienced in school. Though everyone deals with setbacks, some students face much more serious adversity in their school experience. For many students, demands for academic resilience not only stem from school but also relate to challenges at home. Chronic underachievement, housing insecurity, stress from the traumas of poverty, biases of others, and other forms of inequity and oppression take a toll; academic resilience can play a major role in reaching goals successfully. Students may also take on serious academic challenges and face mounting stressors that demand different types of academic resilience. All students face challenges of some type and academic resilience plays a role in overcoming setbacks.

What role do teachers play in academic resilience?

Modeling and messaging from teachers and peers foster academic buoyancy and resilience. Teachers can normalize the experience of mistakes and failure with stories of their own, anecdotes of others, and consistent encouragement. Teachers can practice skills with students to identify and manage difficult





emotions and to make and execute plans to address challenges and overcome setbacks. Teachers can learn about the traumatic experiences students face in and out of school and gain an understanding about the toll of that trauma on academic engagement. While holding high expectations, teachers can introduce strategies, such as mindful breathing exercises, to support those students, explicitly. In diverse classrooms, teachers can ensure that students from marginalized groups feel like they belong and are valued. Positive, consistent relationships unlock academic resilience for many students.

What does the research tell us?

We systematically collected research from 2000-2020 as a starting place for generating the main research insights presented in Part 1 and to identify the promising approaches presented in Part 2. Here are some of the key findings from Part 1.

- Resilience is an ordinary part of the process of human adaptation in the face of adversity and academic resilience draws on different aspects of general resilience in life.
- Characteristics, such as self-efficacy and emotional regulation, contribute to academic resilience.
- Minor versus major adversity distinguishes the academic buoyancy needed to deal with small issues and the academic resilience necessary to withstand major challenges.
- How learners reframe negative emotional experiences is a key to unlocking resilience.
- Metacognition and self-regulating learning strategies are important for coping with mistakes to enhance students' tenacity and tolerance to negative situations.
- School climate based on trusting relationships, active listening, cultural responsiveness, and openness is key to supporting marginalized students facing the greatest adversity.

In summary, a growing body of research illustrates that academic buoyancy and resilience support students' healthy acceptance of and response to challenges in and out of school. Resilient learners have meaningful goals, manage their emotions when they experience setbacks, and accept what they can and cannot control in the learning experience. Academic resilience is built on individual characteristics—composure, confidence, coordination, commitment, and control. Those processes develop through strong relationships in school and explicit instruction, messaging, and modeling across learning environments.

What does academic buoyancy and resilience look like in practice?

Modeling academic resilience requires teachers to understand, embody, and communicate the experience of dealing with setbacks and failure. Teachers can illustrate adaptive responses to show how our mindset, ownership of mistakes, and ability to adjust our approach integrate to shape our resilience. Teachers can learn something new and challenging alongside their students and foster psychologically safe conditions for risk-taking. Managing fear of failure and anxiety plays a role in shaping academic buoyancy, so developing students' emotional intelligence and ability to cope effectively with negative emotions is key. Over time, the intensity of the fear and anxiety lowers with active emotional coping. Schools around the world develop students' positive sense of self and well-being through mindfulness programs.

Goal-setting is also key to academic resilience and relevant to any learning environment. Goals are most likely to enhance commitment when they are specific, challenging, and co-generated with the learner. Students that feel autonomy will be more motivated to pursue goals. Teachers foster a sense of autonomy and control by centering on students' interests and preferences, letting students determine the learning pace and process, explaining the value of what they are learning, and remaining open to students' questions and opinions. Importantly, teachers can only facilitate a resilience-building learning environment if they are cared for by their school leaders and colleagues. Teachers need supportive relationships, skills for stress management, and training to become the best models of academic buoyancy and resilience for their students. Resilient teachers develop academically resilient students.

How do growth mindset, metacognition, and academic resilience work together?

Given the recent increase in attention around social and emotional learning in education, the IB commissioned three policy papers focused on key interrelated social and emotional learning topics that are most closely aligned to the work of IB: metacognition,





growth mindset, and academic resilience. Research illustrates how these three factors work together in teaching and learning. Failure, setbacks, and mistakes are a natural and inevitable aspect of school and academic learning. Adaptive responses to the stress of setbacks draw on growth mindset thinking about ability, the metacognitive knowledge and skills to make adjustments and be strategic, and the academic resilience to persevere with confidence, composure, and control. Metacognition skills may be critical for learners to implement a growth mindset when stressed and to manage emotions when failure makes them want to quit.

When teachers message and model a growth mindset in the face of setbacks in their own learning, they illustrate a self-regulatory process that underpins the academic resilience students need in their own lives. Recognizing one's fixed mindset dialogue and adjusting to make room for growth mindset thinking is a metacognitive process that sets the stage for academic resilience. Goal-setting and consistent reflection on progress toward those goals are also important metacognitive processes that influence growth mindset and, in turn, academic resilience. Goals emphasize the link between effort, strategy, and progress in learning. Reciprocally, mindset beliefs and thinking will influence how teachers and students use metacognitive knowledge and skills. It is important to understand how these three factors of growth mindset, metacognition, and academic resilience interact in typical academic experiences across grade levels and content areas. They do not function in isolation.

What do we recommend for International Baccalaureate stakeholders?

Our recommendations build from research and practices to strengthen and reinforce IB's existing supports for the development of academic resilience in students.

1. Know the adversity and trauma students (and their teachers) face

To reframe student behavior and to highlight the positive emotions and power of trusting and caring relationships must begin with understanding the experiences and effects of trauma and adversity. Getting to know students personally and valuing who they are sets the conditions for a healing-centered learning environment, cultivates buoyancy and resilience, and focuses on strengths without reducing students to their trauma.

2. Teach emotional understanding and regulation to all students

Every program developed to support students' academic resilience includes some aspect of emotional regulation.

Emotional regulation can have a wide array of benefits related to academic resilience, helping students adjust their response to stress, anxiety, and other negative emotions experienced regularly in school. Schools can adopt an existing program or adapt available exercises and routines for their classroom. It is important that teachers learn and practice emotional understanding and regulation alongside their students, at every grade level. Practices and routines that teachers incorporate into their lives become a model.

3. Identify the needs and culturally adapt programs to fit

Emotional learning, mindfulness, and resilience-building programs are available for schools around the globe. Before adopting a program, schools need to give careful attention to adapting the approach to the local cultural context. School leaders, teachers, and parents/guardians should understand the unique needs of their students and adapt the messages, the models, and the modality of delivery to optimize relevance and representation.

4. Help students envision their future self in and beyond school

The practice of envisioning, setting, monitoring, and celebrating goals can play a critical role in academic resilience, especially for students from marginalized racial and ethnic backgrounds. Envisioning a future self and identifying goals and setbacks that are likely along the way can prepare students with strategies and provide a way for students to integrate their values and identities into the classroom experience. Schools can build this process into students' academic life at different levels and ask students to reflect on their progress, regularly.

5. Track students' academic buoyancy within and across classes

Schools can use existing surveys to track students' academic buoyancy and other aspects related to academic resilience, such as supportive relationships, sense of control, and optimism. Beyond surveys, teachers can ask students to reflect on how they are adjusting and managing to stress in and out of school through quick daily check-ins. Teachers can also monitor for unhealthy and avoidant responses to setbacks, such as chronic absenteeism and procrastination.

6. Students should practice coping strategies to deal with setbacks

Students can use self-coaching statements, such as *You can do it*, and self-consequences, such as arranging rewards or punishments for reaching goals or not. Students need models of academic resilience in their lives and can seek them out, proactively. When faced with strong emotional responses, students can use emotion knowledge and regulation to manage them, rather than just venting to a friend or parent. Students can also become aware and metacognitive about patterns of avoidant or self-sabotaging behaviors that often arise when they face a setback. Habituating coping strategies is key to academic resilience.

Conclusion

Practices, policies, and programs to develop academic resilience fit well into existing aspects of IB, such as the IB learner profile, Universal Design for Learning, and IB approaches to learning, where learning to fail is an explicit aim. Recent research on practices and programs provide new opportunities for IB to ensure all IB students develop academic resilience skills to be successful in school. To develop academically resilient students begins with care and compassion and the recognition that it takes courage to face failure, bounce back, and take on new risks and challenges in the guest for learning and growth.

This research brief was extracted from the full policy paper. A copy of the full paper 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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