

Math Classroom Learning Conditions Measured by the Elevate Survey



Leverage student voice to improve the classroom conditions that catalyze learning

Research is clear: Students are more engaged and successful when they positively experience their learning environments. The **Elevate tool** from PERTS measures students' perceptions of their learning conditions and provides practical recommendations for research-based instructional strategies that support the unique needs of each class. These insights can be used to strengthen classroom practices that boost student engagement and learning for all students. The learning conditions and measures below were compiled and tested for use in mathematics classes and are intended to complement Elevate's **standard learning conditions**.



UCHICAGO Consortium
on School Research

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Elevate: Math Classroom Learning Conditions

1



AUTONOMY OVER PROCESS

Why it matters:

Students feel more motivated and learn more independently in classes where they are given opportunities to self-regulate and guide their own learning.

The Elevate survey questions:

- I can CHOOSE when to work alone, with a partner, or with a group.
- I can CHOOSE how to share my thinking by writing, drawing, talking, graphing, or other ways.

*Response options: Never, Hardly ever (a few times per year), Sometimes (a few times per month), **Often (every week)***, **Very often (many times per week)****

3



LEARNING FROM MISCONCEPTIONS

Why it matters:

Math is a subject that frequently requires deep conceptual revisions (Carey, 2009). Learning from and revising misconceptions is therefore key to the math learning process.

The Elevate survey questions:

- My teacher wants to understand our wrong answers as much as our right answers.
- I learn from my classmates' incorrect answers to math problems.

*Response options: Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, **Agree***, **Strongly Agree****

2



COLLABORATIVE LEARNING

Why it matters:

Students learn more in math classes where they learn collaboratively with peers.

The Elevate survey questions:

- I learn from other students' math ideas.
- I get to share how I worked on a math problem with my classmates.

*Response options: Never, Hardly ever (a few times per year), Sometimes (a few times per month), **Often (every week)***, **Very often (many times per week)****

4



MATH AFFINITY

Why it matters:

Numerous studies show that identification with a subject predicts engagement, achievement, and long-term interest in that subject.

The Elevate survey questions:

- I know I can be good at math.
- I enjoy learning math.
- I am motivated to work hard in math.

*Response options: Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, **Agree***, **Strongly Agree****

**Response options listed in green with an asterisk* are considered positive endorsements of a learning condition. Elevate [reports](#) present the percent of students who are experiencing each learning condition positively.*

5



RELEVANCE OF MATH

Why it matters:

Research shows that when students see how math matters for their life, they engage more deeply and learn more.

The Elevate survey questions:

Response options: *Strongly Disagree, Disagree, Slightly Disagree, **Slightly Agree, Agree*, Strongly Agree****

- The problem-solving skills I'm learning in math are important to my life.

Response options listed **in green with an asterisk* are considered positive endorsements of a learning condition. Elevate [reports](#) present the percent of students who are experiencing each learning condition positively.*

These learning conditions and measures were compiled and tested for use in mathematics classes. To learn more, see the acknowledgements and citations below.



Understanding the Elevate Survey

The Elevate survey helps educators measure students' perceptions of classroom learning conditions to catalyze engagement and learning.

- The survey is designed for students in grades 6–12.
- Reports are available for individual classes and groups, such as grade level, subject area, school, and more.
[Explore the Elevate reports.](#)

Practices to Improve Learning Conditions

The Elevate survey provides insights into how students perceive their classrooms' learning conditions. The nine core [Learning Conditions Practice Guides](#) offer educators recommendations for research-based instructional strategies to improve the learning conditions that the Elevate survey measures.

Explore the Practice Guides



[Autonomy Over Process](#)



[Collaborative Learning](#)



[Learning From Misconceptions](#)



[Math Affinity](#)



[Relevance of Math](#)



Improve the Student Experience... and Student Outcomes

The Elevate student survey is part of the Elevate program for teachers to measure and build classroom conditions that catalyze engagement and learning.

[Learn more about Elevate](#) and how the program leverages student feedback from the Elevate survey into actionable recommendations personalized for each educator.

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ABOUT PERTS

The Project for Education Research That Scales (PERTS) is a nonprofit that equips educators to create learning conditions that boost engagement and accelerate learning. To do so, PERTS develops, tests, and scales the impact of evidence-based solutions in collaboration with hundreds of partner organizations. Learn more about our work, our team, and our partners at www.perts.net/about.

Research About Elevate Math Learning Conditions

Numerous studies have shown that the five math learning conditions below affect students' academic engagement and promote more positive social, emotional, and/or academic outcomes for all students. Below is relevant research for each learning condition.



AUTONOMY OVER PROCESS

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RELEVANCE OF MATH

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