

---

# Math Education Practices for Students with Disabilities and Other Struggling Learners: Case Studies of Six Schools in Two Northeast and Islands Region States

---

This report offers in-depth case studies of six schools in New York and Massachusetts that have made targeted efforts to improve math teaching and learning for students with disabilities and struggling learners. It identifies common strategies and challenges at the schools to strengthen math education for students with diverse needs.

— JESSICA BRETT, AMY BRODESKY, JOSEPHINE LOUIE, YVETTE TAN, LI-MING YANG, EDC, PROJECT TEAM

---

## PROJECT OBJECTIVES

- Describe math education practices at six elementary schools (three in Massachusetts and three in New York) that have been making targeted efforts to improve the math teaching and learning of students with disabilities and other struggling learners.

## AUDIENCE & APPLICATION

- Elementary school principals, district administrators, and state policymakers.
- Math coordinators and special education directors.

## METHODOLOGY

- Nomination and screening to select schools for study.
- Data collection through primary documents, interviews, and on-site observations.
- Analysis of information in select practice areas.
- Cross-case analysis by coding interview transcript data, review of classroom observation data and primary documents, development of written profiles and detailed data tables for each school, and systematic comparison of individual school practices.

## FINAL PRODUCTS

- Issues & Answers Report published by the Institute of Education Sciences, which may be found at: [http://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL\\_2008053a.pdf](http://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL_2008053a.pdf)
- Educator journal and news articles summarizing findings.
- National and regional conference presentations.
- Webinar describing and discussing findings.

## What Are Fast-Response Projects?

Fast-Response Projects are short-term projects that respond to regional and national needs and priorities and provide research-based knowledge to inform policy and practice. They use methods such as research syntheses, mining of existing data sets, and descriptive studies.



---

# Math Education Practices for Students with Disabilities and Other Struggling Learners: Case Studies of Six Schools in Two Northeast and Islands Region States

---

The six schools examined in this project displayed a variety of practices in their efforts to improve math instruction for students with disabilities and other struggling learners. Some practices that teachers and administrators across the six sites consistently noted as helpful were:

**In-House Math Leaders:** Each case-study school has at least one highly experienced in-house math leader who provides curriculum and/or instructional guidance to general and special education teachers.

- None of the math leaders evaluate teachers; this situation helps staff members feel more comfortable turning to the leaders for math instructional support.
- At two schools, math leaders provide direct support to students with disabilities and/or struggling learners. Students with the greatest difficulties in math, therefore, receive instruction from the schools' strongest math teachers.

**Collaborative Cultures:** Educators at each of the six schools describe having strong collaborative staff cultures with common planning time, regular grade-level meetings, formal co-teaching arrangements, and/or professional learning communities.

- At each school, collaboration provides staff members with ongoing, in-house professional development through their teacher peers.
- General educators, special educators, and math leaders at the six schools collaborate both formally and informally to provide students with disabilities and struggling learners with more individualized and expert instruction.
- Teachers at all six schools describe collegial and supportive staff cultures that may promote shared ownership and high expectations for all students, as well as higher levels of risk-taking and job satisfaction among staff.

**Strong Leadership:** Staff members at each school commonly describe their administrators as empowering, respectful, and extremely supportive of the staff as well as students with disabilities.

- Based on teacher accounts, strong leadership at the six schools has helped to create safe, stable, and inclusive environments that are conducive to learning and where all learners feel accepted by their peers.
- Strong leadership attracts, builds, and can help to retain strong teachers. Staff members at every school identified their high-quality teaching corps as a major contributor to strong math teaching and learning at their school.

### Contact Information

For more information about this project, e-mail Rebecca Carey ([rcarey@edc.org](mailto:rcarey@edc.org)) or visit REL-NEI online ([www.relnei.org](http://www.relnei.org)).

