

# research snapshot



## Not Just Numbers: Creating a Partnership Climate to Improve Math Proficiency in Schools

**Source of Research:** Sheldon, S. B. et. al. (2010). *Not just numbers: Creating a partnership climate to improve math proficiency in schools*. *Leadership and Policy in Schools*, 9, 27-48.

### What is this research about?

Family involvement with schools is associated with higher math performance, but little is known about what educators are doing to effectively involve families and communities, and whether this measurably improves math achievement at their schools. This study examines how six types of family involvement (Epstein, 2001) affect partnership climates and how partnership climate affects students' proficiency on math achievement tests.

Which math-focused partnership activities are most commonly implemented in schools as they develop their programs of family and community involvement? What is the relationship between the school's implementation of partnership activities and climate of partnership to school levels of student performance on math proficiency tests? How do math-related partnership activities connect to school partnership climates?

### What did the researchers do?

Baseline and follow-up surveys were obtained from 38 schools who are members of National Network of Partnership Schools (NNPS). As members of NNPS, these schools were interested in developing stronger partnerships with their students' family and community. The baseline survey asked schools which of the 15 math-focused family and community involvement practices they planned to implement. The follow-up survey asked schools to report on the implementation of the practices they listed. In addition, schools reported their overall perceptions of the quality of the schools' partnership programs and parents' support of the programs. Schools also reported the percentage of students who scored at passing or proficient levels on the state's standardized math tests during the 2000-2001 and 2001-2002 school years. Regression analysis examined which variables predicted higher levels of school achievement in 2002.

### What you need to know...

**Better implementation of math-related practices of family and community involvement predicts stronger support from parents and improves students' math achievement. High-yield partnership activities include: connecting business and community leaders with students as math mentors; conducting conferences with parents to discuss how to help their children improve in math; conducting workshops to help parents understand how to work at home with their children to prepare for achievement tests; and hosting math nights to have family members and children work together on math problems and concepts.**

### What did the researchers find?

- 1 Many schools may be focusing their partnership activities on communicating with families, although these were not perceived to be the most effective form of involvement activity for mathematics.
- 2 The perceived quality of a school's partnership climate is based on the degree to which the partnership activities were implemented well, rather than on how many practices were implemented.
- 3 School-level math achievement from one year to the next is related to the partnership climate at the school.

### Question

**How can you go beyond communicating with parents towards partnering with parents in supporting math learning?**