Everyday Mathematics and Parental Involvement

Educators across the country work hard trying to engage parents in their children’s education, but does parent involvement really increase student achievement in mathematics?

Studies show that parent involvement does indeed have a positive impact on student achievement in math (Cotton and Wikelund, 1989; Sheldon and Epstein, 2005). But to maximize the impact of that involvement, the parent-student interaction should go beyond helping the child with her or his homework. It might mean helping them access support resources to gain information, encouraging them to engage in math-related activities, and generally influencing children’s attitudes and beliefs. To improve student outcomes, it is crucial for educators to encourage parents to play an active role, and Everyday Mathematics provides resources to support their involvement.

One key factor for engaging parent involvement is well-constructed homework (Walker et al., 2004). Homework that is clear to students and illustrates what they are learning in class supports parents’ understanding and provides a bridge between school and home. Everyday Mathematics homework, called Home Links, serves these two main purposes: (1) It guides students through a follow-up to classroom activities and (2) it involves parents or guardians in their children’s mathematics education. Home Links encourage students to take initiative and responsibility, reinforce newly learned skills and concepts, and relate what is learned in school to students’ lives outside of school, helping tie mathematics to their everyday world.

In addition, parents may need support to help their children successfully complete their homework (Lee and Bowen, 2006). Sometimes the math is not what parents learned in school or the approach is not something they recognize. In these cases it is important to give parents the information they need to help with the homework, and avoid inadvertently teaching misconceptions or introducing inconsistencies. Everyday Mathematics contains ample support for parents, designed to educate and inform:

• At the beginning of each unit Family Letters are sent home to inform parents of the mathematics their child will be learning next. The letters also provide answer keys for all of the Home Link problems for the unit.
• Home Links come with every lesson, encouraging regular practice at home of the concepts covered in school. Many Home Links include a Family Note written specifically to assist parents helping their children complete assignments.
• My Reference Book (Grades 1–2) and the Student Reference Book (Grades 3–6) are resources for students and parents. Available both in print and digital form, these books contain mathematical glossaries, game directions, short explanations of mathematical content, worked examples, and data tents. Both Home Links and Student Math Journal pages contain specific references to the Student Reference Book.
• The Everyday Mathematics author group maintains a website at http://everydaymath.uchicago.edu, which parents can access for support in helping their children with math. Resources on this site include video demonstrations of algorithms used in the curriculum, Home Link support, PDF files of each Home Link, as well as answers and additional help.
• The Student Learning Center, maintained by the publisher, is another digital platform that gives students and parents access, in both English and Spanish, to Home Links and to pages from the Student Math Journals and the reference books. Visit connected.mcgraw-hill.com for more information.

Studies show a direct correlation between improved student outcomes and participation in at-home math activities in which students and parents converse and interact (Sheldon and Epstein, 2005). When parents and their children make a practice of sharing interactive mathematics activities, outside of traditional pencil and paper homework, student achievement increases. Everyday Mathematics helps connect school with children’s lives outside the classroom by offering many opportunities for students to engage in math activities with their families, in addition to Home Links.

• Games are an integral part of the Everyday Mathematics curriculum. They provide an enjoyable way for students to practice important basic skills without the tedium of drill worksheets. But they also help students develop their critical thinking skills and learn to successfully solve problems.

• “Do-Anytime” activities offer opportunities for children to think mathematically about real-life situations with their family, outside of homework. These activities informally reinforce skills and concepts the child is learning in school. They can be found in the Family Letter provided in each unit of Everyday Mathematics.

Parent attitudes and expectations can influence children’s behavior, specifically in regard to homework (Hoover-Dempsey, Bassler, and Burow, 1995; Sheldon and Epstein, 2005). Parents who are well informed about their children’s activities in school are more likely to have positive feelings and be able to share them with their children, which correlates directly with homework assignments being completed and turned in on time, leading to greater achievement.

Familiar homework routines have also proven beneficial to children. Parents need to be encouraged to establish set routines, specifying the time and place for homework along with a few rules. Many ideas for encouraging positive attitudes and behaviors can be found in the Everyday Mathematics Home Connection Handbook.

By providing resources for teachers to enlist parents in their children’s education, Everyday Mathematics takes instruction beyond the classroom, resulting in higher student achievement in mathematics.

References


