Everyday Mathematics and Parental Involvement

Educators work hard to engage parents in their children's education, but does parent involvement really increase student achievement in mathematics?

Studies show that it does (Cotton and Wikelund, 1989; Sheldon and Epstein, 2005). But to maximize the impact of that involvement, the interactions between parents and children should go beyond helping with homework. It should include helping children access resources to find information, encouraging them to engage in math-related activities, and influencing their attitudes and beliefs about mathematics. Educators can play a crucial role in helping parents play an active, meaningful role in their child's mathematical education.

One key way to engage parents 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 new skills and concepts, and connect the mathematics they learn in school to their everyday world.

Parents may need support to help their children successfully complete their homework (Lee and Bowen, 2006). Sometimes the math is not what they learned in school or the approach is not anything they recognize. In these cases, it is important to give parents the information they need to help so that they can avoid teaching misconceptions or introducing inconsistencies. *Everyday Mathematics* (EM) contains a great deal of support for parents to help them assist their children in homework, and, more generally, to help them understand the mathematics their children are learning:

- At the beginning of each unit, Family Letters are provided. Teachers can send these letters home to educate parents about the mathematics their child will be learning. In Grades 1-6, the letters also provide answer keys for many of the Home Link problems for the unit.
- Home Links come with nearly every lesson in Grades 1-6, and with about half of the lessons in Kindergarten. Most 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 on-line, these books contain glossaries, game directions, explanations of mathematical content, worked examples, and data banks. Home Links often contain references to specific *Student Reference Book* pages.
- The EM author group maintains a website at http://everydaymath.uchicago.edu that parents can go to 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, 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 http://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. In addition to Home Links, *Everyday Mathematics* helps connect school with children's lives outside the classroom by offering opportunities for students to engage in math activities with their families.

- Games are an integral part of the EM curriculum. They provide an enjoyable way for students to practice important basic skills without the tedium of worksheets. Games 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 Letters provided in each unit of *Everyday Mathematics*.

Parent attitudes and expectations can influence children's behavior, specifically with respect 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. Teachers can encourage parents to establish routines, specifying the time and place for homework, and a few simple homework 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

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