Parental Involvement in Math Lessons

Summary: Parental involvement in their student's learning is often limited to the home. In an article for *Teaching Children Mathematics*, educators and instructors from the University of Georgia's Griffin campus discuss a new method for engaging the "untapped potential" of parental involvement by offering mini-courses in math for parents and students together.

Practical Applications

The authors focus on the Math and Parents Partners (MAPPS) program, developed with funding from the National Science Foundation. The MAPPS program is currently active in six states and has shown great promise; these methods can be modified and adapted to your school context. The particular program highlighted in this article served parents and students from a diverse, low-income elementary school.

The core features of the MAPPS program is the minicourse, an eight-week course that happens in two-hour chunks in the evenings. These minicourses "engage parents in doing mathematics using hands-on materials, working in small groups to solve problems, and presenting their solutions to the whole group." Minicourses were on topics ranging from "thinking in patterns" to "geometry for parents."

For instance, one week's session involved fractions, decimals and percentages. Parents, teachers and students gathered in a school auditorium at 5:30pm. The lesson involved all the features of a lesson as if given just to the students: drawing real-life connections, using aides like tiles, baseten blocks, and grids, practice problems, etc. In this case, the lesson was targeted for students grades 4 and up, so games and other activities were provided for younger children. Food and drinks were provided to everyone, and take-home materials, games, etc. were also provided.

Benefits of the minicourse were found to be:

- Increased content knowledge for parents (and teachers; teaching to adults also served as professional development for them)
- A bridge to continuing education, and an improved attitude towards math for parents
- Behavioral models for parents in terms of how to best work with their students at home
- Increased use of manipulatives, and ability to utilize them in helping students
- Strengthened relationships, both parent-student and parent-teacher
- Significantly improved student achievement, and student motivation/confidence in math

Note: You can learn more about the MAPPS program at http://mapps.math.arizona.edu/

Conclusion and Citation

Even without adopting a full MAPPS curriculum, this article presents a model of engaging parents deeply in their students' math learning through conducting joint lessons, helping all parties involved – students, parents, and teachers.

Jefferson, V., Knapp, A. & Lander, R. "Learning Together" *Teaching Children Mathematics*, 19.7 (March 2013) pp. 433-439. http://bit.ly/YJaCAb (subscription only).