A marginal math program is improved by integrating classes, differentiating instruction, developing a common curriculum, and creating teacher teams. Teachers received staff development opportunities, incentives to participate in them, and common planning time during the school day.

BY PATRICK DELMORE

A survey of Georgia O’Keeffe Middle School math classes five years ago would have revealed ability-grouped classes, with lower level classes populated by poor, minority students; an eclectic curriculum based upon teacher-selected content and pedagogy; and a significant percentage of students scoring less than proficient on state standardized tests. Today, a similar survey reveals heterogeneously grouped math classrooms that are demographically representative of our school and the inclusion of special education students in regular education classrooms. All teachers now use a common, standards-based curriculum. Because of students’ improved scores on state standardized tests, O’Keeffe received School of Promise awards from the Wisconsin state education department for the last two school years. These awards have been a great source of staff member, student, and community pride.

Patrick Delmore (pdelmore@madison.k12.wi.us) is the principal of Georgia O’Keeffe Middle School in Madison, WI.
The Goal
Five years ago, disturbed by the presence of racially and socioeconomically identifiable classrooms in our tracked math program, poor standardized test scores, and limited access to high-quality curriculum and instruction, I initiated the process to change the math program by sharing disaggregated test data at staff and team meetings. To give staff members an idea of my expectations, I cited certain “givens”: Tracking would end; special education students would be included in all heterogeneously grouped math classes; instruction would be differentiated to allow all students to access learning; and a common, challenging curriculum would be offered to all students.

I encouraged our math teachers to attend conferences, used staff inservice sessions to examine newly developed state math standards, and facilitated staff member participation in district math committee work. I supported staff members through staff development activities and offered them released time so they could work with colleagues and local school and district curriculum specialists during the school day. I also prompted teacher participation in after-school classes for salary advancement credit and summer curriculum work. Substitute teachers were available to cover classes so teachers could observe one another’s work. Math curriculum specialists held teaching demonstrations in teachers’ classrooms. In addition, our local school curriculum generalist demonstrated her commitment to this change process by teaching a grade 6 math class daily for a year to better understand implementation challenges and to better assist the teachers to whom she provided math curriculum leadership and support.

All of our math teachers—regular education and special education and teachers of English language learners—were expected to take part in the staff development activities and implementation efforts. Although some teachers initially felt uncomfortable with the new curriculum and the related shift in pedagogy to a constructivist, student-centered approach, most of the school’s math teachers supported the change. I met with the few resistant staff members and told them, “This is our program and we need to implement it.” I coupled my message with assurance that my support for staff development would continue.

To further promote change, we reorganized the math classes. A regular education teacher paired with a special education teacher (or a special education assistant) to team teach—effectively creating lower student-teacher ratios in classes. We built common planning time into the school day so grade level teams could meet and plan instruction. Curriculum coordinators from O’Keeffe facilitated twice-monthly after-school math cadre meetings that included representatives from each teaching team. To enhance student learning opportunities and to allow for more instructional differentiation and individual student-teacher interaction, math class periods were expanded from 50 to 65 minutes daily.

The Community Responds
We communicated the changes in our math program to parents in monthly newsletter articles, discussions at monthly parent-teacher group meetings, and fall “Go to School Night” presentations. Parental concern and initial opposition came largely from White middle-class parents who were unhappy that we were dismantling the tracked system that had placed their children in “high track” classes, which were largely devoid of minority group or special education students. Many of these parents also questioned the constructivist, student-centered approach to math instruction that was part of the new math program. They felt that integrating less-able math students into general education classes would force teachers to move through the curriculum at a slower pace and that more-able students would not receive appropriate challenges.

To address these concerns, some staff members and I held a question-and-answer session at a special evening meeting. Monthly parent-teacher group meetings were used as forums to discuss the math curriculum, and students set up learning stations at “math nights” where they could teach math lessons to their parents. Regardless of our efforts, a small group of parents, supported by some community members, continued to oppose the change and wrote letters to the editor and articles in a local weekly newspaper. Their opposition declined as the math program was more fully implemented and standardized test scores improved.
Supporting and Sustaining the Changes

Teachers have pursued ongoing staff development, especially in the area of differentiated instruction, in our team meetings, district-offered classes, and teacher-led daily planning sessions. The teaming teaching arrangements have now existed for several years, which has led the teacher teams to accept all the students in their classes as “our kids” and encouraged them to feel mutually responsible for student learning.

When teaching openings occur at our school, we post a detailed job description that outlines the expectations, skills, and training that candidates need. An interview team that includes me, school math teachers, and local school support staff members conducts interviews for potential teacher transfers from other district schools or hires from outside the district. This process helps us find skilled staff members who buy into our beliefs, curriculum, and pedagogy.

The Wisconsin Department of Public Instruction granted O’Keefe awards for moving many students from the minimal/basic to the proficient/advanced ranking on standardized tests and for narrowing the achievement gap between minority and nonminority students. After our students’ test performance exceeded other schools with similar demographics, a local newspaper cited our school for beating the odds.

Our experience affirms the belief that public schools can successfully educate students from diverse backgrounds in heterogeneous classes that feature a challenging curriculum. We remain committed to meeting the challenges as we strive for equity and excellence in our educational program. PL