Brian Cohen '03, Go4 shares his enthusiasm for mathematics with students at Syracuse's Webster Elementary School.
If School of Education professor Patricia Price Tinto G'90 takes it personally when someone says, "I hate math," it's only because she knows it doesn't have to be that way. She has dedicated her career to teaching math and educating teachers, and is passionate about exploring student learning through funded research projects—many of which are in conjunction with the Syracuse City School District (SCSD). Tinto recently shared her enthusiasm with a group of parents and teachers at Syracuse's Salem Hyde Elementary School, where she explained and endorsed the district's new math program. "Research shows that kids don't learn in a building-block manner, but by making bridges and leaps," says Tinto, associate chair of Teaching and Leadership Programs. Following her presentation, parents stood three-deep in a circle around her, eager to learn more. Meanwhile, Tinto's graduate assistant, Brian Cohen '03, G'04, guided a group of students as they played math games on laptop computers supplied by the University. "Kids practice many skills when they play games using numbers," Tinto says. "When they learn this way, they are able to make connections and apply concepts to new situations. That kind of learning stays with them."

Mathematics education is also the focus of another partnership between the School of Education and the SCSD. Together with the district's middle school and high school mathematics teachers, mathematics education professors Helen Doerr and Joanna Masingila and literacy professors Kelly Chandler-Olcott and Kathleen Hinchman '76, G'80,
G'85 designed a research project to address issues regarding math and literacy. Titled “Investigating the Interrelated Development of Mathematics and Literacy in Urban Schools,” the three-year initiative received a $1 million grant from the National Science Foundation. The project involves teachers and students at Fowler High School and three middle schools that feed into Fowler, and places one faculty member and one graduate student at each school to assist teachers through observation, discussion, and exploration. “We told teachers from the beginning that exploring connections between math and literacy is new stuff that we don’t have all the answers to,” says Masingila, a Laura J. and Douglas Meredith Professor appointed jointly in the School of Education and the Department of Mathematics in the College of Arts and Sciences. “Nobody does. The beauty of the collaboration is that we’re supporting each other in discovering something that’s important to all educators.”

These projects represent countless partnerships that bring together the School of Education and the SCSD to improve student achievement and teacher development in the district, while enhancing teacher preparation programs for Syracuse University students. “The School of Education maintains strong collaborations with elementary, middle, and high schools in the Syracuse City School District,” says Dean Louise C. Wilkinson. “The purpose of our work is to prepare our students to teach and to improve student learning in the Syracuse district. Our projects focus on teacher development and enhanced curriculum, including the integration of newly available technologies to support student learning.”

Benefits to the district take many forms. Teacher preparation programs supply host teachers with student teachers and tutors trained in the most current research-based methods. Funded research projects provide schools with instructional materials, technology upgrades, and other equipment. Faculty experts consult with teachers and administrators to improve student achievement, helping the schools address general trends and specific challenges. In addition, host teachers receive remitted tuition to SU courses created specifically for teacher development. “Our relationship with the School of Education has blossomed, providing continuous opportunities to enhance learning and adding value to both institutions,” says Donna DeSiato G’04, who recently earned an Ed.D. degree from the School of Education and is assistant superintendent of schools in the SCSD. “It’s a terrific partnership that could serve as a model for other colleges and universities.”

**Mutual Support and Enrichment**

As is true of any strong partnership, the school’s relationship with city schools is a reciprocal one. The collaboration provides many benefits to School of Education students and faculty, advancing the school’s goals of enriching the field and addressing the evolving educational needs of a diverse society. Chief among these benefits is an improved student-teaching experience. “For a professional school, active commitment and engagement with the world is essential,” says Professor Joseph Shedd, chair of Teaching and Leadership Programs. “You can’t study education and prepare to be teachers at a distance. We want to break down the distinctions between theory and practice.” Shedd points out that School of Education students are required to fulfill as many as 11 field placements, at least half of which must be in high-needs school systems like SCSD. With more than 550 field placements a semester, the School of Education is heavily dependent on the goodwill of area schools. “We’re not entitled to expect a lot of cooperation from area schools unless we are committed to supporting their efforts,” Shedd says.

According to reading and language arts professor Columbus “Ted” Grace G’02, the challenge of any collaboration between a university and a school district is that, although the two institutions may share goals regarding improved learning, they often use different approaches. “For example, we do research and teach from a research base,” Grace says. “So when I teach my SU students how to teach language arts, I draw from the latest research about how kids learn best. But in real life, there are many contexts—the teachers’ level of experience, available resources, children’s cultural and language differences—that can make those practices difficult to execute.”

Establishing a reciprocal relationship with the Syracuse schools helps address this issue by working to mesh the goals and needs of both institutions. Tinto oversees the School of Education’s connections with area schools, building alliances with those that host student teachers. “Research indicates that one of the biggest influences on the lives of new teachers is the classroom they student-teach in,” Tinto says. “Whenever there is a good match between what we’re doing on campus and what the schools are doing, our students grow more.” One
focus of the partnership has been on consolidating placements in fewer schools. "This allows us to work with more teachers within a school," Tinto says. "We collaborate with administrators within the schools to identify ways we can provide the most support. We're beginning to have a much richer impact on schools beyond the support we've always given to the host teachers."

As part of a New York State Teacher/Leader Quality Partnership grant, Tinto runs sessions for city elementary teachers to support the district's new math program. "She puts extraordinary energy into that," Shedd says. "She made the commitment that if the district adopted a new research-based curriculum, the School of Education would ensure that each student teacher we provide would be grounded in the curriculum and prepared to help implement it in the classroom." Feedback from teachers indicates that SU students have played a major role in helping adopt the new curriculum. "It's an exciting experience for student teachers to have such a big impact," Shedd says. "They have the sense they are playing an important role."

Brian Cohen observed, tutored, and taught in several SCSD classrooms as an undergraduate student in the SYRACUSE CHALLENGE.

Each spring, eighth-graders in the Syracuse City School District have the opportunity to sign a contract with Syracuse University. If the students meet the contract requirements, which include enrolling in the district's college preparatory program, maintaining an 85 grade average, and scoring 1,100 on the SAT or 23 on the ACT, they are guaranteed admission to the College of Arts and Sciences and a financial aid package that meets their needs. This year, 835 eighth-graders accepted the Syracuse Challenge. "We celebrated our 10th anniversary of the Syracuse Challenge with the class that entered in fall 2003," says Susan E. Donovan, dean of admissions. "This year served as a reminder of our long-standing commitment to students in the Syracuse district."

David Viggiano '99, who participated in the second class of the Syracuse Challenge, now works at the Office of Admissions. "Without the encouragement and financial support provided by the Syracuse Challenge, it wouldn't have been possible for me to attend SU, my dream school," he says. Joseph Personte, SU's assistant director of admissions, works with numerous opportunity programs, including the Syracuse Challenge. "Students who follow the challenge guidelines have a clear path toward achieving their academic goals," he says. "Along the way, we work closely with the school district and communicate with students and their parents to provide guidance and encouragement." The University received 92 applications for the 2004-05 academic year from current seniors in the program. "The goal of the program is to provide opportunities," he says. "Whether students choose SU or decide to attend other colleges or universities, the end result is the same: We are making a difference."

—Tanya Fletcher
Inclusive Elementary and Special Education Program. As a graduate student, he assisted Tinto in her research efforts in SCSD classrooms by presenting lessons on laptop computers that were purchased through funding from the Lucent Foundation. “I had some outstanding experiences that I hated to see come to an end,” says Cohen, who earned a master’s degree in elementary education in May. “It was important to me to feel useful in the classroom. I learned a lot, and I gave a lot, too. I developed wonderful relationships and still remain in touch with some of the teachers I worked with.”

Through the city schools partnership, School of Education faculty members develop strong relationships with teachers and administrators that enrich their research efforts. “You have to build trust with school administrators, who, after all, are allowing you to come into their buildings,” Grace says. He does research in the schools on literacy—ways to keep kids excited about learning—and believes a good teacher must entertain and engage students.

One way he both engages students and builds relationships with schools is through storytelling performances for student audiences. “My performances are a mixture of storytelling, music, and poetry—all coming from the African and African American experience,” Grace says. “That’s my way of giving back to the schools. It’s a part of the research partnership that I really take a lot of pride in because it establishes a sense of rapport that allows me to collect better data. And that helps us all know more about how kids learn best.”

Everybody Wins

The effectiveness of the partnership programs reveals itself in many ways. Some results are immediate—and even measurable. For example, achievement scores on state exams for fourth-grade math students show a marked increase at schools where School of Education faculty consistently collab-

The consortium sponsors activities designed for professional development, improvement of individual organizations, and enhancement of Central New York educational institutions. The consortium offers an orientation workshop each fall for teachers new to the area. In addition, it tackles problems in the educational systems, recently working to eliminate a shortage of substitute teachers. Ronald Cavanagh, vice president of undergraduate studies at SU and the University’s representative to the consortium, says the group effectively addresses Central New York’s education agenda. “It is a great way for area institutions to stay abreast of each other,” he says.

Martin sees the consortium as a much-needed opportunity to promote synergy among local schools. “The ultimate testament to the consortium’s meaningfulness is its 18-year longevity,” he says. “As a group of willing volunteers committed to the consortium’s purpose, we believe we’ve made a significant contribution to education in the region.”

—Tanya Fletcher
orate with teachers. "We kept track of every hour we spent interacting with every teacher," Tinto says. "And in the schools where we spent the most time, test scores went up. It makes sense, because there was a real focus on mathematics in those buildings." Positive results like these, Tinto says, encourage funding sources to continue investing in SU research projects.

Another significant benefit of the collaboration is that it pairs the School of Education and SCSD in incorporating technology into schools. A project titled "Using Technology to Transform Teaching (UT3)," which was awarded a $1.56 million grant from the U.S. Department of Education over three years, ensures that future teachers know how to use technology. "The point isn't to dazzle people with lots of digital wizardry," Shedd says. "It's to show that our students can use technology in thoughtful, well-planned ways to promote more effective learning." UT3 is one of numerous technology initiatives supported by the Living SchoolBook (LSB). As the School of Education's technology research and development unit, LSB plays a key role in the SCSD partnership.

Fowler High School teacher Julia Hallquist G'02 affirms that the collaboration has enhanced her teaching. She participated in a math and literacy workshop in 2003 and attends biweekly math department meetings led by Masingila as part of the math and literacy research project. "SU faculty bring valuable information to the table and focus on our needs," Hallquist says. "It's been helpful to connect with teachers across grade levels and school levels to discuss our methods." She also values the availability of equipment supplied through SU collaborations, including graphing calculators. "Our partnership with SU helps me continue to grow as a teacher, learn about the latest philosophies and trends in mathematics education, and try new ideas in my classroom," she says.

Barbara Schrom '04, who majored in secondary English education, tutored at Grant Middle School in Syracuse while taking the required course Literacy Across the Curriculum. The course was developed as part of a University Vision Fund project led by Chandler-Olcott in response to new state regulations requiring all students in teacher preparation programs to take six credits in literacy education, regardless of their concentration. "I tutored two bright, energetic Bosnian students in English," Schrom says. "Our experiences together opened up for me the difficult challenges faced by students who speak English as a second language." Schrom gained a deeper appreciation for the importance of understanding the needs of a diverse population in her role as an educator. "This experience took what we were learning in classes at SU and brought it into context, highlighting the complexity and importance of making education inclusive to students of all backgrounds," she says.

As an administrator, DeSiato sees the relationship between the School of Education and the district come full circle. "Research influences our practice, and our practice influences research," she says. "Working with SU, where they are passionate about improving urban education, helps us remain current by looking at ourselves through the lens of higher education." She believes the presence of SU students and faculty in Syracuse schools also benefits SCSD children in ways that go beyond improved achievement. "Seeing a diverse population at SU gives them hope," she says. "They can envision themselves as part of that community."

Cohen agrees that there is a mutually beneficial nature to the collaboration. "The relationship is sort of a learning triangle that includes the School of Education, the SCSD, and SU students like me," he says. "There's not a single thing I've done in the schools—as a tutor, student teacher, or graduate assistant—that didn't benefit all three. Whatever you do as part of this partnership, you are both the teacher and the learner. Everybody wins."

Inclusive elementary and special education major Shonté Carter '05 works with a Meachem Elementary School student.

Shortly before this issue went to press, Professor Columbus "Ted" Grace passed away. The article appears here as it was written prior to his death, as a tribute to his memory and in honor of his contributions to the School of Education.