

EXETER MATHEMATICS INSTITUTE SPREADS THE GOOD NEWS ABOUT NUMBERS

“What this program is really about is promoting good mathematics.”

That’s how mathematics instructor Eric Bergofsky describes the goals of the Exeter Mathematics Institute (EMI). Every summer since 1997, EMI has been on the road promoting good mathematics and innovative instruction to high school educators across the country, visiting more than 25 cities and helping over 2,000 teachers learn how to make mathematics more applicable to their students’ everyday lives.

EMI was founded in 1991 as an on-campus program, explains Bergofsky, the institute’s founder and director, but evolved into a traveling program to reach more teachers. The weeklong workshops offer an intensive exploration of the kind of hands-on, student-centered techniques and applications that define Exeter’s mathematics curriculum, which challenges participants to work through problems instead of simply memorizing answers.

Teaching new techniques often means changing the way teachers approach mathematics, but Bergofsky says the PEA mathematics instructors who make up the EMI teaching team—including Dave Arnold, Bill Campbell, Gwyn Coogan, Tony Greene, Rick Parris and Joe Wolfson—have faith in their methodology. “It’s a philosophy of how you can motivate 35 challenged students or 12 highly motivated ones. It’s the same system applied, no matter the student.”

Bergofsky considers EMI unique for several reasons: program



The goal of the Exeter Mathematics Institute, says founder Eric Bergofsky, is to offer high-school teachers around the country a weeklong immersion in the student-centered techniques that define Exeter’s mathematics curriculum.



Since 1997, EMI instructors like Rick Parris have visited more than 25 cities and held workshops for more than 2,000 teachers.

expenses have been covered entirely by foundation grants since 1991; each workshop is tailored by Bergofsky and school administrators to fit the district’s training needs and desires; and EMI does not promote products, computer software or learning materials.

EMI workshops focus on algebra I and II, geometry, trigonometry, and using the Geometer’s Sketchpad to integrate algebra and geometry. Bergofsky and his EMI instructors usually visit five cities per summer, but this past summer increased that number to six: Hamden, CT; Fort Worth/ Dallas, TX; Las Vegas, NV; Fort Lauderdale, FL; Katy, TX and San Diego, CA.

EMI is not, Bergofsky adds, right for every school district. “Selection is based on system size—not too big, not too small, with a sufficient level of teacher participation and interest, as well as school administration coordination. We want a successful workshop in every city we visit.”

Another plus, says Dave Arnold, is the fresh perspective EMI can offer. “A lot of teachers become locked into doing things one way,” he says, “and we offer them alternatives. Hopefully, we teach them that there isn’t just one way to teach.”

With EMI funding set through 2008, Bergofsky expects to be busy for several summers to come. “We can’t meet the demand because so many teachers today come into the classroom needing this kind of training,” he says.



Our Back Pages: **He Wrote the Book on Math**

The September 1906 *Bulletin* carried an eight-page tribute to a legendary Exeter professor who, like the EMI instructors, also sought to promote good mathematics well beyond his own classroom. George Albert Wentworth (1835–1906) attended Exeter in the 1850s and, after completing his studies at Harvard, returned to the Academy in 1858 to begin a remarkable 47-year career as a professor of mathematics, administrator, trustee and author of a “series of nearly fifty text-books in mathematics [through which] he has reached almost a world-class.” Wentworth gave generously of his fortune as well as his intellect and time, using proceeds from sales of his text-books to endow a permanent mathematics fund and the Wentworth Professorship of Mathematics, a title now held by EMI instructor Rick Parris.



George Wentworth authored close to 50 math textbooks.