

## **TEACHERS NEED TO KNOW WHAT STUDENT CURRICULUM THEY ARE EXPECTED TO TEACH**

### **A COHERENT CURRICULUM: THE CASE OF MATHEMATICS**

William Schmidt, Richard Houang, & Leland Cogan, *American Educator*, Summer 2002

This analysis shows that the mathematics curricula used in the highest achieving countries are very similar—and very coherent. Through a stunning visual comparison, we can see where the U.S. comes up short. We've all heard that curricula in the U.S. are a "mile wide and an inch deep." here's the research behind the rhetoric.

### **THE PREPARATION GAP: TEACHER EDUCATION FOR MIDDLE SCHOOL MATHEMATICS IN SIX COUNTRIES (MT21 REPORT)**

William H. Schmidt, et al., MSU Center for Research in Mathematics and Science Education, December 2007

Excerpts from a new study which uses national and international data to conclude that U.S. middle school mathematics teachers are not as well prepared to teach this challenging subject as are many of their counterparts in five other countries. One area of mathematics education found in some high-performing nations, but mostly lacking in the U.S. is “advanced treatment of elementary topics”—that is, coverage of advanced mathematics that provides background for teaching topics found in the middle grades student curriculum.