## EDITORIAL

### Terry Goodman

In my Spring 1997 editorial I summarized some of the results from the Third International Mathematics and Science Study. The performance of the U.S. students in the study was at or below the international average in all eight mathematics areas (1). Conclusions and implications based on the TIMSS data are at this time, at best, tentative. One concern expressed by many is the lack of interest in mathematics shown by the majority of students.

From 1985 to 1991, in the United States, the percent of undergraduate degrees awarded in all the sciences (including mathematics and computer science) decreased from 21.7% to 15.9%. In mathematics and computer science, the percent decreased from 5.5% to 3.6% (2). If the eighth grade mathematics curriculum is, as suggested by the TIMSS study, unfocused and rather shallow, then it may well be that students began to lose interest in mathematics during these crucial developmental years. By the time these students reach high school, many of them have decided to "take as little math as possible." As a result, their lack of mathematics preparation will "screen" them from virtually all of the sciences, including mathematics.

All colleges and universities invest a great deal of time and resources in recruiting efforts. These efforts are generally aimed at students in general and typically focus on students in the junior and senior years of high school. In the light of studies such as TIMSS and recent mathematics enrollment trends, it would seem that our efforts to encourage students to continue their study of mathematics need to begin before they reach high school. Certainly our professional organizations (MAA, NCTM, etc.) provide us with resources (print materials, contests, etc.) that can be used to encourage students to see the relevance and beauty of mathematics.

Those of us in the mathematics community should seek to build upon these resources and develop other avenues for helping students at an early age to begin to develop an interest in and appreciation for mathematics. With this solid early foundation, more of these students will continue a serious study of mathematics at the undergraduate level.

# References

- 1. U.S. National Research Center, Report No. 7, December 1996.
- 2. The Digest of Education Statistics, 1996.

At this time, we would like to say thank you to those individuals who serve as referees for MJMS. We deeply appreciate their contribution to this journal and recognize that their role is of vital importance.

### List of Referees

Hadi Y. Alkahby, Dillard University Charles J. Allard, Polo R-VII High School Mohammad K. Azarian, University of Evansville Seung-Jin Bang, Seoul, Korea Gerald Bergum, South Dakota State University John E. Bernard, University of Texas-Pan American Jim Bruening, Southeast Missouri State University Joseph Chance, University of Texas-Pan American Hang Chen, Central Missouri State University Eungchun Cho, Kentucky State University Gregory Davis, University of Wisconsin-Green Bay Bryan Dawson, Emporia State University Richard Delaware, University of Missouri-Kansas City Joseph B. Dence, University of Missouri-St. Louis Albert Dixon, College of the Ozarks John J. Edgell, Jr., Southwest Texas State University Vince Edmondson, Central Missouri State University Larry Eifler, University of Missouri-Kansas City Ekemezie J. Emeka, Columbia College Martin Erickson, Truman State University Russell Euler, Northwest Missouri State University Joe Flowers, Truman State University Jayanthi Ganapathy, University of Wisconsin-Oshkosh Ramesh Garimella, Northwest Missouri State University Raymond J. Grinnell, University of the West Indies Victor Gummersheimer, Southeast Missouri State University K.L.D. Gunawardena, University of Wisconsin-Oshkosh Dennis R. Harmon, Missouri Southern State College Stan Hartzler, Virginia Polytech Institute & State University Troy Hicks, University of Missouri-Rolla Yue-Chan Phoebe Ho, Central Missouri State University Larry K. Johnson, Central Missouri State University Timothy P. Keller, George Mason University

## List of Referees (cont.)

N. J. Kuenzi, University of Wisconsin-Oshkosh Charles E. Lamb, University of Texas-Austin Man Chun Leung, National University of Singapore Yi-Hsin Liu, University of Nebraska-Omaha William Livingston, Missouri Southern State College Roger Marty, Cleveland State University Wayne McDaniel, University of Missouri-St. Louis Gary McDonald, Northwest Missouri State University Rhonda L. McKee, Central Missouri State University Peter R. Mercer, St. Mary's College of Maryland Kandasamy Muthvel, University of Wisconsin-Oshkosh Ollie Nanyes, Bradley University Krzysztof Ostaszewski, University of Louisville Miguel Paredes, University of Texas-Pan American Bob Prielipp, University of Wisconsin-Oshkosh Don Redmond, Southern Illinois University Jeffrey A. Rosoff, Gustavus Adolphus College Prasanna Sahoo, University of Louisville Jau-Shyong Shiue, University of Nevada-Las Vegas Donald P. Skow, University of Texas-Pan American Randall J. Swift, Western Kentucky University Jinhua Tao, Central Missouri State University Songlin Tian, Central Missouri State University Mohan Tikoo, Southeast Missouri State University Mathew Timm, Bradley University Alvin Tinsley, Central Missouri State University Peter L. Vachuska, University of Wisconsin-Washington Co. Bobby Neal Winters, Pittsburg State University