## **EDITORIAL**

## Terry Goodman

The Mathematical Association of America has issued a recent report that should be of interest to many in the mathematics community. The report, Mathematics and the Mathematical Sciences in 2010: What Should Students Know?, was prepared by the Committee on the Undergraduate Program in Mathematics (CUPM). One purpose of the report is to invite participation from the mathematics profession. Ultimately the committee intends to use the information gathered to help in "the preparation of a Curriculum Guide to help departments plan the further development and evolution of their undergraduate curriculum."

CUPM has already gathered information through various paper sessions, workshops, and focus groups. This information was used to prepare this initial report. Major issues and tentative recommendations for a *Curriculum Guide* are summarized in the report. CUPM is now inviting interested persons to share their views concerning these issues and recommendations (CUPM-curricula@maa.org).

The report is divided into three sections: The Goal of the Curriculum Initiative, The Information Gathering Process, and Issues and Possible Recommendations Identified at the September 2000 CUPM Workshop. The Issues and Possible Recommendations section focuses on several specific areas:

- 1. Mathematical Knowledge: General Expectations
- 2. Mathematical Knowledge: Specific Expectations
- 3. Specific Needs of Future Teachers
- 4. Extracurricular Learning Environment
- 5. Assessment
- 6. The Role and Responsibility of the Department
- 7. Issues for the Discipline

Recommendations found in sections 1-3 address the question, "What do we want our students to be able to do?" Sections 4-7 focus on the support and resources needed by students and faculty in order for students to meet these expectations.

The full report can be found at <a href="http://www.maa.org/news/cupm.html">http://www.maa.org/news/cupm.html</a>. Along with the report you will also find a set of discussion papers about the report. These discussion papers focus on a number of important issues and questions related to the recommendations found in the report.

I believe that all of the mathematics community should be vitally interested in the undergraduate mathematics curriculum. This curriculum provides the mathematical foundation for future mathematicians, mathematics teachers, and others whose careers will require them to have an appropriate mathematics background. Changes in the expectations of our students as well as employers, the impact of technology on the teaching and learning of mathematics, and the ever increasing range of mathematical applications would suggest that the mathematics curriculum must be viewed as more than a list of courses. We must begin to define the curriculum more specifically in terms of what we want our graduates to know and be able to do.

I would strongly encourage you to read the report, discuss it with your colleagues, and provide feedback to CUPM. MJMS would also welcome your letters to us discussing the report and related issues and recommendations.