College and University Responsibilities for Mathematics Teacher Education

College faculty must become actively involved in the education of teachers if the teaching of mathematics in the schools is to improve significantly. Active leadership and support of college and university mathematicians, mathematics educators, and administrators is essential if our nation is to increase the number of qualified teachers and strengthen their education. For this reason, the Mathematical Association of America and the National Council of Teachers of Mathematics have adopted the following recommendations for all individuals, in whatever department, who are engaged in teaching mathematics or mathematics education for current or prospective teachers:

1. Colleges and universities should assign significantly higher priority to mathematics teacher education.
2. All individuals who teach preservice or inservice courses for mathematics teachers should have substantial backgrounds in mathematics and mathematics education appropriate to their assignments.
3. Mathematics methods courses should be taught by individuals with interest and expertise in teaching and continuing contacts with school classrooms.
4. All individuals who teach current or prospective mathematics teachers should have regular and lively contact with faculty in both mathematics and education departments; for example, by regular meetings, seminars, joint faculty appointments, and other cooperative ventures.
5. All college and university faculty members who teach mathematics or mathematics education should maintain a vigorous dialogue with their colleagues in schools, seeking ways to collaborate in improving school mathematics programs and supporting the professional development of mathematics teachers.
6. Faculty advisors should encourage their mathematically talented students to consider teaching careers.
7. Colleges and universities should vigorously publicize the need for qualified mathematics teachers and strive to interest and recruit capable students into the profession; for example, by organizing highly visible campus-wide meetings for students to inform them of the opportunities, advantages, disadvantages, and requirements of a career in teaching mathematics.
8. Tenure, promotion, and salary decisions for faculty members who teach current or prospective mathematics teachers should be based on teaching, service, and scholarly activity that includes research in mathematics or mathematics education.
9. Faculty members in mathematics and in mathematics education who are effective in working with activities in the schools and in the mathematical education of teachers should be rewarded appropriately for this work.
10. All institutions involved in educating mathematics teachers should provide specialized classroom and laboratory facilities equipped with state-of-the-art demonstration materials, calculators, and computers at least comparable to those used in the best elementary and secondary schools so that prospective teachers, like graduates from other professional programs, can be properly prepared for their careers.