AMS Support for Case Studies on Teaching

The AMS and the Calculus Consortium for Higher Education (CCHE) are inviting doctoral and master’s degree-granting mathematics departments to send a faculty representative to one of a series of TA Development Using Case Studies workshops. Two workshops were held this spring at AMS sectional meetings. One was led by Diane Herrmann (University of Chicago) at Ohio University and the other by Solomon Friedberg (Boston College) at the University of Southern California, Los Angeles. The goal of the workshops is to enhance TA training programs so that they adequately prepare graduate students to be effective teaching assistants and, ultimately, faculty members with strong communication and teaching skills.

We found the process very enlightening and believe that adding some of the case studies to our program will enhance TA/ITA training. Graduate students, and new faculty as well, often have limited experiences with students who are not highly motivated to learn mathematics, have weak prerequisite skills, and do not learn mathematics quickly. Dr. Friedberg’s materials address this experience gap by providing real situations and multiple resolution possibilities for consideration. Friedberg notes that just as learning mathematics requires exercises, learning to teach requires exercises and the case studies are exercises for teaching.

— Workshop participants Cathy Jacobson and Rena Brakebill, Mathematics Department, Georgia Tech

I found the workshop very interesting. The case studies brought up a range of teaching issues and the method of presenting them given in the workshop was particularly effective.

— John Eggers, University of California at San Diego

CCHE funds travel for the first 10 departments that sign up for each workshop, and the AMS provides to workshop participants at no charge Teaching Mathematics in Colleges and Universities: Case Studies for Today’s Classroom: Faculty Edition, by Solomon Friedberg (American Mathematical Society, 2003).

Read more. Workshops will be held at the following AMS sectional meetings in fall 2004: October 23–24, Evanston, IL and November 6–7, Pittsburgh, PA. Details will be available at www.ams.org/amsmtgs/sectional.html.
AMS Project NExT Fellows

Project NExT (New Experiences in Teaching) is a professional development program that helps new and recent Ph.D.’s in the mathematical sciences make the transition from graduate student to full-time faculty member. The AMS sponsorship of six fellows per year encourages Project NExT to include young mathematicians with strong research interests.

Participation in Project NExT has provided a great complement to my first half year as a postdoc at Courant. I am delighted to be supported by the AMS (and also Courant) as a Project NExT Fellow. By supporting my participation in this professional development program, I feel that both institutions are making the statement that while conducting research is a vital and exciting aspect of a career as a mathematician, such a career means more than just cranking out papers. Instead, a more holistic view is taken, a view that (I believe) recognizes the importance of each of the areas of research, teaching, and service, as well as the many intersections among these areas.

— Jean Steiner

As an AMS NExT Fellow, I had the opportunity to attend a meeting of departmental chairs. This experience made me feel more comfortable talking to my own chair, which is invaluable. Meeting some of the people who are making the decisions that affect my career has made me more conscientious about voting and reading about the issues in our field and made me more interested in assisting an organization like the AMS.

— Amelia Taylor, Assistant Professor, Mathematics Department, St. Olaf College (AMS Project NExT Fellow, 2001–2002)

Project NExT had a large impact on my professional development. It gave me the opportunity to meet many new Ph.D.’s in the mathematical sciences, as well as the chance to hear from experienced mathematicians on such topics as teaching, engaging in research and scholarship, and participating in service activities. In this way Project NExT has provided me with a network of both peers and mentors.

— Mark Tomforde

Excellence in Undergraduate Mathematics: Confronting Diverse Student Interests

Sam Rankin, Director of the AMS’s Washington, DC office, is co-principal investigator on an NSF grant that supports a collaborative project between the AMS and the Mathematicians and Education Reform Forum (MER)—Excellence in Undergraduate Mathematics: Confronting Diverse Student Interests. Naomi Fisher of the University of Illinois, Chicago is the director of the project, which has supported six national workshops since 2001. The last workshop, “Mainstreaming in-depth mathematical experiences for students”, was held in March at Loras College, Dubuque, IA.

The main goals of the workshops were to stimulate mathematics and mathematical sciences departments to look carefully at the diverse undergraduate student populations in their classes; assess how well current courses meet the students’ mathematical needs; facilitate departmental efforts to revise existing courses; and develop or adapt new courses to afford all students a meaningful mathematical experience. Faculty had the opportunity to interact with others who are striving to excel in undergraduate instruction, to learn from one another, and to showcase their progress.

Over 100 departments participated, representing the spectrum of institutions teaching undergraduate programs—comprehensive universities, research universities, four-year and two-year colleges.

See the list of workshops and photographs on the MER website at www.math.uic.edu/MER/pages/workshops.html.
The AMS and SACNAS

Since 1997 the AMS has supported mathematics programs at the annual meetings of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). This fall the AMS will again be among the colleges and universities, societies and associations, research centers and government agencies to host an information booth at the meetings.

There are few opportunities for undergraduate students to attend mathematics conferences where they are exposed to current research in mathematics and can develop and maintain a network of students and professionals. The SACNAS Annual Conference is the most important scientific meeting for Chicanos, Latinos and Native Americans. The most recent SACNAS meeting in October 2003 was the most successful conference both in the number of mathematics participants and in the number and variety of mathematics activities. The consistent sponsorship, presence and encouragement of the AMS at the SACNAS conferences over the last several years have been indispensable in developing the mathematics community that we have these days at SACNAS.

—Ivelisse Rubio, University of Puerto Rico, Humacao

As a longtime member of both the AMS and SACNAS, I have been delighted to see the fruit that the AMS-SACNAS collaboration has borne. With AMS support, mathematics at the annual SACNAS conference has grown from a relatively small portion of the meeting to a major strand, with a full slate of presentations to rooms that are often packed. In addition, the friendly, personalized career information that AMS personnel provide is greatly appreciated by the Chicano, Latino, and Native American students attending the conference who may not be sure about pursuing an advanced degree in mathematics. I look forward to seeing these students come to future SACNAS and AMS meetings as professional mathematicians and leaders in both organizations. The AMS support for SACNAS is one of the factors that will make this possible.

—Robert Megginson, Deputy Director, MSRI

MathJobs.org

In support of those seeking employment in mathematics, the AMS sponsors MathJobs.org, an automated job application system. Mathjobs primarily serves the Ph.D. job market and is free for applicants. Applicant data is confidential, unless the applicant chooses to make it public to enrolled employers. After registration and document gathering, applicants can apply for jobs, keep track of applications, print out paper coversheets, and invite their reference writers to submit letters into the system. Employers can conduct their recruiting entirely online, without having to set up and maintain separate files. Faculty can read and comment on applications electronically. Data exporting allows easy transfer of information to other software. There are currently about 30 employers, primarily academic, registered on the system.

Our department has been using MathJobs for the last three or four years. This year we decided to make it our preferred way to receive applications: for the first time, we did not produce hard copy of the files and we conducted our searches using Mathjobs as the primary source of information. Most of our faculty have found the system useful and easy to use. We think the system is efficient and reasonably robust, and it will help us in our future searches. We hope that other departments will choose to use MathJobs. The more departments use it the more efficient it will be.

—Laurent Saloff-Coste, chair of the Search Committee, Cornell University

Read more: Read about MathJobs at www.mathjobs.org/jobs. Learn more about AMS employment and career services, careers, early preparation resources, and issues in mathematics education at www.ams.org/employment.
More Members Eligible for Life Membership

Life membership in professional societies is rarely solely about charging up front for the future dues payments. For the Society, it is about allowing members the option of making a declaration about their long-term commitment to membership in the AMS.

—Jim Maxwell, Associate Executive Director

The AMS has instituted new guidelines, effective for the 2005 membership year, for individuals wishing to become life members. A person may become a life member by making a single payment of dues determined by age at the start of the membership (calendar) year according to the following:

• Age 60 or above: five times the “ordinary high” dues rate
• Age 50 or above: ten times the “ordinary high” dues rate
• Age 40 or above: fifteen times the “ordinary high” dues rate

A life member is subsequently relieved of the obligation of paying dues and retains the status and privileges of an “ordinary” member.

You will be notified of the 2005 dues rates in early July, and the rates will also be posted on the AMS website at www.ams.org/membership. If you have questions about the guidelines and eligibility, please contact amsmem@ams.org.