

Multiple Missions

Research, service, teaching: some permutation of these three words is a familiar mantra at most American universities. Presidents and provosts use the words to define the mission of the institution; deans and department heads base raises and promotions on the perceived contributions of faculty members to each category; professors strive to fulfill a tripartite role.

Yet research, service, and teaching are not wholly separate activities. Supervising a Ph.D. dissertation is both teaching and research; refereeing for a journal is both research and service; developing a new course on financial mathematics is both service and teaching. Publishing an expository article about recent developments in contemporary mathematics falls in the intersection of all three activities.

The separateness of research, service, and teaching is such a widespread myth that some departments even tell faculty members to spend, say, 35 percent of their time on research, 15 percent on service, and 50 percent on teaching. The specificity of such an assignment is an absurdity based on an illusory view of a professor's job. The job is to be a scholar; learning, teaching, and advancing the profession are inseparable components of the job. A professor indeed has multiple missions, but these can no more be understood as individual pieces than can the faces of a diamond. Research, service, and teaching are all facets of the jewel of scholarship.

The *Notices* too has multiple missions. As the new editor, I have learned that over the years the Council has augmented the mandate of this journal. Originally an ephemeral newsletter, the *Notices* subsequently became also the journal of record for the Society. In 1995 the visionary leadership of editor Hugo Rossi added a third dimension to the *Notices*, that of an exciting scientific magazine, and outstanding efforts over the past three years by retiring editor Anthony W. Knap made expository excellence the hallmark of the new *Notices*. Newsletter, journal of record, magazine: these are the missions of the *Notices* today.

As newsletter, the *Notices* reports notable events in mathematicians' lives: awards of Ph.D. degrees in American mathematics departments; professional honors, such as major prizes and fellowships; deaths of members of the Society. It also carries announcements of such items as upcoming conferences, professional opportunities, new books, and backlogs of mathematics research journals.

As official chronicle for the Society, the *Notices* publishes such items as reports from the treasurer, registration information for the annual meeting, and materials concerning the election of officers of the Society. It also prints lists of financial contributors, of reciprocity agreements with other mathematical organizations around the world, and of members of committees of the Society. The secretary of

the Society, who serves ex officio on the editorial board of the *Notices*, has a dedicated part of the *Notices* in which to report Society business.

As magazine, the *Notices* prints a lively variety of items that include high-level exposition of contemporary mathematical research, obituaries of especially prominent mathematicians, communications about issues of concern to the profession, and opinion pieces ranging from editorials to letters to book reviews. A necessary condition for publishing a contribution in the magazine part of the *Notices* is that the editorial board finds it interesting and well written.

The three dimensions of the *Notices* overlap, just as the research, service, and teaching functions of a professor overlap. A report on the award of the Steele Prizes is both official Society business and news; an obituary is both news and a magazine article; a retiring presidential address is both a magazine article and Society business. There is one case, however, in which the different aspects of the *Notices* are manifestly disjoint: statements of opinion in the magazine are, by definition, never official pronouncements of the Society.

Some mathematicians excel at research, others at teaching, while others have a special dedication to service. Many mathematicians find that different facets of their scholarship shine most brightly at different periods of their careers. Analogously, readers find that different parts of the *Notices* are most valuable to them at different times. The employment advertisements are interesting to recent Ph.D. recipients but useless to retirees; a letter to the editor leaves some readers cold but inflames others; an article on applications of partial differential equations intrigues some readers, while others turn to an article on number theory.

We mathematicians choose a career of scholarship because we find the endeavor stimulating and rewarding. I am similarly excited about editing the *Notices*. Communicating effectively with an inhomogeneous audience is a challenge and an opportunity. The *Notices* aims to inform, to interest, and to enlighten. I hope that in pursuing its multiple missions, this journal will help to illuminate the gem of mathematical scholarship.

—Harold P. Boas
Editor

Letters to the Editor

Post-Tenure Review

A description and panel discussion of post-tenure review at four universities was held at the Joint Mathematics Meetings on January 19, 2000. (For a report, see the MAA newsletter *Focus* for August/September 2000.) As a former chair of the AMS Committee on Academic Freedom, Tenure, and Employment Security (CAFTES), I would like to add some comments.

Nasty tenure cases generally end in court, where the heavy fees always put the individual teacher at a severe disadvantage to the institution. Sometimes the teacher wins only because the court is persuaded that the institution has breached some possibly unwritten canon of the teaching profession: in courts' words, the "common law of the profession".

Tenure may seem like a property right, but it is still a contract. It gives the teacher the right to continued employment subject to satisfactory performance of certain duties. However, unlike contracts in most ordinary businesses, the terms of tenure contracts have never been completely clear. To resolve ambiguities the court may turn to this "common law". Teachers' rights can be enlarged by legislation (as in the uncapping of retirement age), but generally neither the employer nor the legislature can withdraw rights already granted, even when they are only an unwritten part of the common law. The problem with "post-tenure review" is that despite any original good intentions it could be used to do just that.

The common law of the teaching profession should not be underestimated. Judges have looked to it for guidance. Consider, for example, a professor contesting dismissal after a post-tenure review in the following words:

"When I was granted tenure, there was no such thing as post-tenure review, to which I have now fallen victim. It just wasn't part of my contract with the university. I'm not arguing against dismissal 'for cause'—we all know that is part of the bargain and always has been. But tenure,

when I was appointed, protected me from reprisals for expressing my views, which lately have become very unpopular with some of my colleagues, including ones sitting on the panel now accusing me.

"And what are the views that have brought me here? When I was granted tenure, the university prided itself on the strength of its research in mathematics, and my department was in the forefront. It was willing to accept my performance as a teacher because grant money flowed freely and I captured my share. Now that stream has all but dried up. The university is trying to raise money from industry with its biotechnology licenses and is sacrificing mathematics research, but it is advertising how great its math teaching is in preparing students for the dotcom world. My very vocal point of view, which rattles some of my colleagues, is that research must still come first. Although I try, I'm not a good teacher, but that wasn't the main consideration when I was tenured. Now it is, and the 'great teachers' of my department are trying to oust me. The university offered me a 'second chance' with its program for 'professional development', but I missed some sessions because of manuscript deadline pressures. Besides, the whole thing resembles a penal 'reeducation' program. This wasn't the contract that the university tacitly made with me. In fact, the whole process of 'post-tenure review' of which I am a victim wasn't part of my contract. The university is now trying unilaterally to change it."

The professor has a winning argument if the judge agrees that the common law of the profession protects his or her tenure when there is a change in university policy. There are cases that suggest that it does. It would be the same if a school rising in research ranks tried to oust someone whose strength was in teaching. While on CAFTES I testified in some difficult cases where although the university had a good argument, I thought that the common law favored the teacher.

One can't decide the form in which post-tenure review should exist for mathematicians, if at all, unless we accept some basic common rules. The common law of the teaching profession

has been evolving since academies were first organized, but little beyond the AAUP's principles has been written down. In mathematics the only part in print is the AMS's formal Ethical Guidelines, for which I was in effect the scribe. They should help to prevent repetition of the abuses that led to their formulation. It will be harder but more important to write guidelines preventing abuse of post-tenure review. January's panel was a start, but if the matter rests, a real case like the hypothetical one above will quickly make it urgent.

—Murray Gerstenhaber
University of Pennsylvania

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Another View of PSSM

Joan Ferrini-Mundy offered a description in the September 2000 issue of the *Principles and Standards for School Mathematics* (PSSM), the year 2000 rewrite of the 1989 *Curriculum and Evaluation Standards* of the NCTM [National Council of Teachers of Mathematics]. Her article concluded with "the carefully crafted ideas and responses of the ARG [Association Review Group] members enriched our effort immeasurably." As one of the AMS ARG members, I feel, to the contrary, that our responses did not significantly affect the document.

A pretty good summary is given by Ferrini-Mundy herself after a discussion about circles to which one ARG member (not me) had responded with the criticism, "A definition is not something that can be discovered in a bull session." The PSSM authors revised the discussion to read:

At the beginning of a tenth-grade unit on circles, for example, a teacher might ask students to tell her everything they know about circles....In this way, the students' knowledge becomes a starting point for instruction, and the teacher can establish the idea that the students are expected to have reasons for their mathematical opinions.

Ferrini-Mundy comments, “No doubt this revision will not completely satisfy the reviewer, because the definition is not stated.” In other words, the PSSM authors ignored the reviewer’s point that mathematics teachers must provide precise definitions. This is just one example of how the PSSM is an inappropriate guide for designing and evaluating mathematics education programs.

Fortunately there is an excellent alternative for concerned mathematicians to use and to recommend to others nationally and even internationally. It is the California Mathematics Framework of 1999. The original drafting committee was chaired by Deborah Tepper Haimo of UC San Diego, and the final draft was overseen by Hung-Hsi Wu of UC Berkeley and R. James Milgram of Stanford. The document is entirely built around the California Mathematics Content Standards (Chapter 2), in which the involvement of the Stanford mathematics department was instrumental—most especially, Carlsson, Cohen, Kerckhoff, and Milgram, but others as well. Chapter 10 (“Criteria for Evaluating Instructional Resources”) is especially helpful guidance to ground-level decision makers. Contrast PSSM with the third bullet in the checklist for evaluators, which states, “Mathematical terms are defined and used appropriately, precisely, and accurately.”

Although a great deal of hand-wringing, procrastination, and even stonewalling remain, the decades-long bull session in California is over, and we invite the country to follow our lead. Copies of the California Mathematics Framework are available for \$17.50, plus shipping and handling. Call the Sales Office, 800-995-4099, or see detailed ordering information at <http://www.cde.ca.gov/cdepress/download.html>.

—Wayne Bishop
California State University,
Los Angeles

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The Wen Ho Lee Case and Chinese-American Mathematicians

During the past decade the U.S. mathematical community has offered significant opportunities to Chinese students and scholars in mathematics. After the Tiananmen Square massacre, Congress enacted the Chinese Student Protection Act of 1992 (CSPA). An estimated 2,000 Chinese students received Ph.D. degrees in mathematics from U.S. institutions. Many of them settled here, landing academic or industrial positions. Quite a few other Chinese graduate students in mathematics switched their major to computer science and found jobs in that area. They all believe the American dream of liberty and justice for all.

The Wen Ho Lee case smashed that dream for many of them. They look at Lee as someone who devoted nearly all his life to this country, yet was singled out for prosecution due to a combination of American politics, his ethnic background, and his own error. They saw that the U.S. mainstream media, led by the *New York Times* and the *Washington Post*, essentially convicted Lee with those sensational “Chinese Spy” headlines. With the threat from the Soviet Union dissipating, China has become the next enemy. A lot of Chinese-Americans were dismayed to see the Cox Report, which did not contain much evidence yet announced that there were quite a few spies for Beijing who might be Chinese-Americans. The unjust treatment of Lee at the hands of the U.S. media and some agents of the U.S. government is a troubling indication of current prejudice against Chinese-American scientists.

I was heartened by the comments from U.S. District Judge James Parker. But it would take more than a courageous judge to allay those grave concerns of Chinese-Americans. Recently in an open letter to U.S. Attorney General Janet Reno, presidents of the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine complained that Lee appears to be a victim of unjust treatment. The AMS should take a strong stand on the Wen Ho

Lee case in particular and on the fair treatment of Chinese-American mathematicians in general.

—Charles Bu
Wellesley College

(Received September 20, 2000)

On the Disappearance of Boris Weisfeiler in Chile

It is well known that on January 5, 1985, Boris Weisfeiler disappeared while hiking in Chile. A Russian-born U.S. citizen and a prominent mathematics professor at Pennsylvania State University, Weisfeiler had arrived in Chile on December 25, 1984, to spend a couple of weeks on a solitary backpacking trip. On January 15 Weisfeiler’s backpack was recovered near the Nuble River. Some items, such as his American passport, his return ticket, and some money, were missing. Several searches were made by Chilean officials, including ground searches, helicopter searches, and a search in the Nuble River by navy frogmen. Although no body was ever recovered, Boris Weisfeiler was declared dead on March 6, 1985, and the inquest was closed. The conclusion of the Chilean courts was “probable death by [accidental] drowning.” Friends of Weisfeiler, with the help of the Chilean Math Society, hired a Chilean private detective. His report, dated March 4, 1985, arrived at the same conclusion. Moreover, the report ruled out “the possibility that Dr. Weisfeiler entered Dignidad Colony...since it is more than 100 km from the place where he was last seen.”

More than 250 documents, declassified by the United States State Department on June 30, 2000, tell a far different story about the facts surrounding Weisfeiler’s case. A memorandum dated April 10, 1985, states that “at the time of his disappearance Weisfeiler was either on or very near to the Colonia [Dignidad] property.” Colonia Dignidad was described in a February 1991 article in the *New York Times* as “a secretive settlement of German immigrants that has been linked to human rights abuses and accused of being a detention and torture center under the former

government of General Augusto Pinochet.” Recently declassified records include indications that Boris was detained by Chilean soldiers and may have been held in Colonia Dignidad. The documents show conclusively that his death was not accidental, but rather that he was one of the 1,100 “desaparecidos”, persons disappeared at the time of General Pinochet’s military rule and still unaccounted for in Chile. There remains a slim possibility that Weisfeiler may still be alive after fifteen long years of captivity. The declassified documents include various testimonies and eyewitness accounts during the first six years following Boris Weisfeiler’s disappearance in Chile. The truth these documents reveal is painful and stunning: within days of his disappearance, a Chilean source told one embassy official that he was still alive. Over the next several years U.S. government officials received “persistent reports that Boris Weisfeiler was or is detained in Colonia Dignidad.” According to some eyewitness accounts, Weisfeiler was kept in Colonia Dignidad in “animal-like conditions” and was “treated like a Jewish dog.” Several documents contain accounts that he was still alive some years after his disappearance. On the other hand, a CIA [Central Intelligence Agency] memorandum suggests that a Chilean army patrol had mistaken him for a “subversive”, killed him, thrown his body in the river, and then covered up this crime.

A State Department memorandum dated February 1990 indicates that the U.S. embassy could not get approval from the State Department to officially pursue an investigation through the Chilean courts. “At the present time there are no funds available for this project,” was the explanation. As early as May 1986, according to one cable, the American Mathematical Society offered “to pay the cost of whatever help they can get.” But that offer appears to have been forgotten.

The case has now been reopened in Chile by a lawyer working on behalf of Weisfeiler’s sister, Olga. This letter is based on a detailed memorandum written by Olga Weisfeiler. This memorandum and

other documents can be found on the Web site <http://www.weisfeiler.com/boris/>.

—Victor Kac
MIT
—Olga Weisfeiler

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Opportunities for Women: A Different View

A letter in the October issue of the *Notices* comments on the low percentage (6%) that women accounted for among the speakers of the meeting “Mathematical Challenges of the 21st Century”. This low percentage is contrasted with the 25% that women represented among domestic recipients of Ph.D.’s in the period 1989–98, and the organizers of the meeting (plus others) are faulted for the discrepancy. One conclusion that the letter writer draws is that women have bleak opportunities in mathematics.

I would like to offer a different perspective. Firstly, the speakers invited to the “Challenges” were, understandably, all very senior in the sense of accomplishments, and such seniority is typically achieved at a later point in one’s career, if ever. Given this, no recent graduate could possibly be a presenter. Indeed, the Ph.D.’s of the speakers date more from the 1970s or earlier than the 1990s or even 1980s. The breakdown of Ph.D.’s awarded in the years 1989–1998 is not really relevant here.

Secondly and more importantly, life—professional or otherwise—would be scary if every step we take were policed and publicly decried should it fail the test of some piece of statistics. We have to make complex decisions all the time—for example, when organizing a meeting—and these complex decisions should not be judged by a sole and exclusive criterion.

There are many signs that right now prospects in mathematics in general and the prospects of women in mathematics in particular are not bleak at all. The numbers of women in graduate schools are up, many academic institutions are strongly

committed to hiring women, special opportunities are created on all levels for women to develop, and there is a growing number of women in decision-making positions. This is not to say that the path to a successful career in mathematics contains no hurdles. In all, we still should encourage young people, male or female, with talent and interest to go into mathematics rather than scare them away.

—László Lempert
Purdue University

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The *Notices* invites letters from readers about mathematics and mathematics-related topics. Electronic submissions are best. Acceptable letters are usually limited to something under one printed page, and shorter letters are preferred. Accepted letters undergo light copyediting before publication. See the masthead for electronic and postal addresses for submissions.