



MALGORZATA DUBIEL: Using humour, puzzles and Homer (Simpson) to make advanced mathematical concepts accessible to the rest of us

THE 3M AWARDS: OUR BEST TEACHERS

Part of an elite community of great university educators, these 10 professors lead the way as they challenge and inspire their students

BY KEN MACQUEEN & MARTIN PATRIQUIN

TA Loeffler, a professor of human kinetics at Memorial University of Newfoundland—and a world-class mountaineer—knows every student has her own Everest to conquer. “Go for it! Go big!” she scrawled on one student’s tentative first assignment. “Funny,” the student later reflected, “how such simple words can be so powerful.”

Malgorzata Dubiel, a senior mathematics lecturer at Simon Fraser University, could offer an equation to explain the exponential impact of great teachers, but why not let a student put her gratitude into words: “My attitude toward mathematics has changed from one of loathing to one of fascination.”

Dubiel and Loeffler have reached the summit of their profession. They are two of 10 professors named this year to the 3M National Teaching Fellowship—an elite community of 228 of the country’s best university teachers. The award, now in its 23rd year, was established by 3M Canada in collaboration with the Society of Teaching and Learning in Higher Education. It was the idea of John Myser, then-president of 3M Canada, as a long-over-

due recognition of the inspirational power of great professors. *Maclean’s* became the media partner for the awards in 2006.

The award has contributed to a gradual shift in attitude as university administrators realize what students in overcrowded lecture halls have long known: that fostering and rewarding exceptional teachers contributes as much to an institution’s impact and reputation as the greatest research. This year’s winners—selected for the quality of their teaching, their leadership and contributions to pedagogy—were chosen from 52 carefully vetted nominations. The number and quality of submissions continue to rise, as adjudicators search for the elusive “wow factor” that exceeds even the 3M’s high criteria, says program coordinator Arshad Ahmad, a business professor at Concordia University, and a 3M fellow himself.

While a professor can impact thousands of students, the fellowship sees its task as influencing the very science of teaching. The fellows are about to publish a book on the benefits and perils of silence in teaching and learning. The next major project, likely wel-

comed by students weighed down by ponderous academic writing, is an exploration of narrative storytelling as a teaching tool.

The fellows will gather in Windsor this June for a meeting of the teaching and learning society. They’ll attend a retreat this November at the Fairmont Le Château Montebello in Quebec. “Projects are hatched,” Ahmad says of the meetings. “This award is about people getting together and creating a kind of ethos that is bigger than themselves.” Among the 2008 fellows:

MALGORZATA DUBIEL,
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Midway through a lecture in Math 190, her course in Mathematics for Elementary School Teachers, Dubiel invokes the thoughts of Homer to illustrate the leap between two- and three-dimensional shapes. While math is indeed an odyssey for many phobic students, she isn’t seeking wisdom from the ancient epic poet. Her Homer is Simpson, the cartoon guy from Springfield.

In a brief clip on the lecture hall screen, Homer falls into a 3-D world of spheres, cones and complex shapes. “What’s going on here, I’m so bulgy?” he says, looking at his transformation from flat to fat. The *Simpsons* segment is loaded with advanced concepts and

