Profile of

John Koker

Professor of Mathematics and Interim Dean, University of Wisconsin-Oshkosh
2006 Regents Teaching Excellence Award Recipient

Background and Experience (Selected)

- Joined the UW-Oshkosh faculty in 1991.
- B.A. in Math from Saint Norbert College, M.S. in Math from Purdue University, Ph.D. in Math from the University of WI-Milwaukee.
- Department Chair from 2000 to present.
- Recipient of the 2004 UW-Oshkosh John McNaughton Rosebush Professorship for excellence in Teaching, Research and Service, and the 2002 UW-Oshkosh Distinguished Teaching Award, two of the highest awards bestowed upon faculty at the UW-Oshkosh.
- Recipient of an ESEA Title II – Part B – Mathematics and Science Partnership grant for $154,000 titled "Creating Middle School Classrooms Containing an Atmosphere of Mathematical Reasoning and Problem Solving" with the Menominee Indian School District.
- Co-authored and received Eisenhower Professional Development grants ($88,500) in 1995-97 for two-week workshops for middle grades mathematics teachers. Received additional Eisenhower Professional Development grants ($66,000) in 2001-02 for "Implementing a Problem Solving Atmosphere in Upper Elementary and Middle School Classrooms."
- Selected as a Wisconsin Teaching Fellow, June 1999 to May 2000.
- Authored several articles and numerous conference papers on teaching and mathematics.
- Leader in implementing "Problem Based Inquiry Seminars" as an integral part of the general education curriculum and that offer a strong intellectual experience and form a solid base for life-long learning.
- Devotes time unselfishly to directing the University's Math Tutor Lab and to improving math programs for Native American students and teachers in the Midwest.
- Recently appointed Interim Dean of the College of Letters and Science at UW-Oshkosh.

In Professor Koker's own words:

- "When I first started teaching someone said to me, 'The best thing about teaching math is that it doesn't change.' While I suppose one can argue that aspects of mathematics and teaching haven't changed, it didn't take me very long to discover that I didn't want to be a teacher who doesn't change. I now treat teaching as one big problem. I realize that it may be a problem I never fully solve."

- "I want my students to have the opportunity to be "stuck", understand that the state of being "stuck" is a natural and honorable place to spend time during the problem solving process, and examine and apply methods to become "unstuck". Much of my courses are spent on processes rather than skills or answers. I attempt to allow students to grow as mathematical thinkers. I expect that they will gain confidence as they realize they can improve with practice and reflection. They see that problem solving is provoked by contradiction, tension and surprise and is supported by an atmosphere of questioning, encouraging and challenging. Students experience this while working on interesting, appropriate and relevant mathematical topics."

In the words of his students:

- "Dr. Koker is an inspiration and a mentor to me. When I leave his classroom I cannot wait to share what I have learned with my students and my peers. I also look forward to each new lecture. If his presentation has not been a demonstration of the problem-solving process, it has been an application of integers or prime numbers from real life that hooks me into wanting to learn more. He breaks down the learning process into simple manageable steps that allow me to experience an aha! for myself.
    - Teri Jaeger, UW-Oshkosh graduate student.

- "John Koker has taught me more about how to learn, think, problem solve and teach than any other person I've encountered through all my years of education. His impact on me has actually made an impact on over a thousand students that I have had as a teacher. I credit much of my success to his original instructional strategies that created a high level of interest and motivation within me as a learner. John has led me through three different courses of learning and recently has come to share his expertise with the math teachers of the district I currently teach in. (…) (John) has modeled well and I aspire to get my students to think, express and appreciate mathematics to the level I was taken by him."
    - Camée Compton, math teacher in Oregon, WI.

In the words of his colleagues:

- "Dr. Koker is deeply committed to fostering student learning and to cultivating the minds of students. This dedication begins in his classroom; Dr. Koker is an extraordinarily talented teacher. Though he has a natural affinity for expressing difficult mathematics clearly, his teaching success is as much due to the classroom culture he generates in his courses as to his skill. (…) Rather than focusing on what he plans to tell students in class, he contemplates what he wants students to learn, then he designs activities and problems that generate relevant mathematical conversations. (…) His students work collaboratively to examine problems from multiple perspectives, to apply mathematical techniques in a diverse range of applications and to communicate real mathematics."
    - Stephen Szydlik, Associate Professor of Mathematics, UW-Oshkosh

- "For the past fifteen years, I have provided elementary level mathematics workshops for schools serving Native American children. These schools often asked me to recommend math educators to work with the middle and high school teachers. Over the years, I recommended several; however, they were not able to work effectively for various reasons (…). Fortunately, the summer of 2003, John agreed to travel to Rosebud Reservation, Mission, South Dakota and work with the high school teachers. (…) John managed not only to help them begin to rethink how to work with their underachieving students, he ingratiated himself with the Native administration and has been invited to return each summer since (will again return summer 2006). I include this information because it reveals something very special about John, not only is he an exceptional math educator, he has the ability to put people at ease. Teachers, students, parents, administrators like him."
    - Judith Hankes, Ph.D., Mathematics Education, Department of Curriculum & Instruction, UW-Oshkosh