

Jerry Becker, recently honored for his contributions as a longtime math educator, is surrounded by 3D models of geometrical solids and figures used to teach mathematical concepts including volume, area and much more. (*Photo by Russell Bailey*)

December 08, 2021

## Longtime SIU mathematics educator honored for his contributions

by Christi Mathis

CARBONDALE, III. – For nearly half a century, there's a name that has been virtually synonymous with math education according to those in the field: Southern Illinois University Carbondale faculty member <u>Jerry Becker</u>.

Now, a trio of formal honors is recognizing Becker's distinguished service and significant contributions in the mathematics education field. Becker, a professor of mathematics education in the <u>School of Education</u>, recently received the Distinguished Life Achievement in Mathematics Award from the Illinois Council of Teachers of Mathematics.

Becker said receiving the award was a "very pleasant surprise and a great honor. Illinois teachers and colleagues are outstanding. They have provided the important impetus for me in my work." Becker is a 2021 Distinguished Alumni Award recipient from the College of Education and Human Development at the University of Minnesota, Twin Cities, and there are new endowed fellowships at Rutgers University and the University of Minnesota in Becker's name.

## **Longtime SIU educator**

Becker has been part of the SIU faculty for more than 40 years, arriving in 1979. "He has been tirelessly working with practitioners to guide them in improving mathematics teaching and learning," wrote Akihiko Takahashi, an associate professor of mathematics education at the College of Education at DePaul University, in nominating Becker for the lifetime achievement award.

At SIU, Becker teaches mathematics and directs doctoral and master's degree students. Lee Ngan Hoe, a former student of Becker's at SIU and now an associate professor of mathematics and mathematics education for the National Institute of Education in Singapore, said Becker has an infectious passion and wealth of knowledge in mathematics education. He also lauded Becker as a caring and nurturing mentor and said Becker goes out of his way to make international students feel welcome. "Jerry Becker has contributed more to spreading quality information about mathematics teaching and learning than anyone else in the mathematics education community," wrote George Reese, director of the office for Mathematics, Science and Technology Education at the University of Illinois at Urbana-Champaign. "Math education in general and my growth in particular are so much richer for all you have done," Reese said. In addition to his teaching and research, Becker is also involved in other math education efforts. For instance, he taught math courses at the University of Chicago for 100 Chicago public school teachers this summer. Becker said he realized while in high school geometry that mathematics and teaching would be an important part of his life.

"It was always challenging, it was always satisfying," Becker said. Throughout his life, Becker said that he has been "extremely fortunate to have excellent teachers and professors who provided a kind of gentle breeze that moved me to the right people and places for my life's work. It could not be better." He in turn, has tried to help others. Becker's study and research interests include: improving teacher preparation and curriculum development in mathematics, international mathematics education, problem-solving (including cross-cultural) and the cognitive development of learners in mathematics.

# Involved in numerous math organizations

Nerida Ellerton, professor emeritus in the Department of Mathematics at Illinois State University, praised Becker's "outstanding achievements in mathematics at the international, national, and local levels." Becker has served on the National Council of Teachers of Mathematics' board of directors and as its representative for International Mathematics Education. He has also served on the Illinois Council of Teachers of Mathematics' board of directors, including a stint as chair and also chairing several committees. In addition, he has been president and board member of the national School Science and Mathematics Association, and served two three-year terms on the U.S. National Commission on Mathematical Instruction of the National Research Council/ National Academy of Sciences.

He has been active as well in organizing the annual conferences on teaching mathematics for the Illinois Council of Teachers of Mathematics/Southern Section and national conferences of the National Council of Teachers of Mathematics. Becker also organized two U.S.-Japan seminars on Mathematical Problem Solving and Computers and one with Japan and China that featured leading math educators from all three countries in the 1980s. The proceedings of the seminars were subsequently published and since have been repeatedly cited by experts. In all, he has organized three bi-or tri-national seminars on mathematics education and problem-solving. Becker is the only math educator worldwide to have participated in all 13 previous Congresses on Mathematics Education. In conjunction with these congresses, he has chaired sessions, organized working groups and presented lectures and papers, including a plenary presentation on the program of the 13th Congress.

## Worldwide influence

Becker's international influence in the world of math education is even more extensive. He has collaborated with other math educators from across the United States and around the world, including Japan, the Netherlands, Germany, Australia England, India and New Zealand. He has been invited to present lectures in Germany, Korea, Singapore, China, Japan and other international locales.

He has authored many articles published in international, refereed journals and spoken at conference around the world. More than a quarter of a century ago, Becker also developed 13 email distribution lists to share postings relevant to math education and still maintains those lists. Literally thousands of math educators have been the beneficiaries of his efforts.

#### Minnesota honors Becker

Becker earned his undergraduate degree in mathematics education from the University of Minnesota in 1959, his master's in mathematics at the University of Notre Dame in 1961 and doctorate in mathematics education at Stanford University in 1967. His research was directed by E.G. Begle, professor and director of the School Mathematics Study Group, a national curriculum development project. Becker also taught at the elementary and secondary levels along with more than 50 years at the collegiate level.

Becker received the University of Minnesota's alumni award on Nov. 18 at the McNamara Alumni Center in Minneapolis, Minnesota. He's one of few honored since the award was initiated in 2010. The university also received a donation to establish and endow the "Jerry P. Becker Ph.D Fellowship for Students in Mathematics Education." In addition, the Graduate School of Education at Rutgers University received a \$100,000 donation to establish the "Jerry P. Becker Annual Fellowship in Mathematics Education," which was awarded for the first time this fall. The doctoral fellowship honoring Becker, a tenured faculty member at Rutgers before coming to SIU, was established by a former Rutgers graduate student and her husband.