

The Felix Klein Medal for 2015 goes to Alan J. BISHOP, Emeritus Professor of Education, Monash University, Australia

It is with great pleasure that the ICMI Awards Committee hereby announces that the Felix Klein Medal for 2015 is given to Alan J. Bishop, Emeritus Professor of Education, Monash University, Australia, in recognition of his more than forty-five years of sustained, consistent, and outstanding lifetime achievements in mathematics education research and scholarly development. Alan's early research on spatial abilities and visualization became transformed during a sabbatical leave in 1977 to Papua New Guinea where he began to think about the process of mathematical enculturation and how it is carried out in different countries. His subsequent book, Mathematical Enculturation: A Cultural Perspective on Mathematics Education, published in 1988, was ground-breaking in that it developed a new conception of mathematics – the notion of mathematics as a cultural product and the cultural values that mathematics embodies. Further evolution of this notion occurred as a result of his co-organizing a special day-long event during the 1988 Sixth International Congress on Mathematical Education devoted to "Mathematics, Education, and Society", and which eventually led to successive conferences on the political and social dimensions of mathematics education. Alan Bishop has been instrumental in bringing the political, social, and cultural dimensions of mathematics education to the attention of the field.

Alan Bishop has also contributed substantially to the field by means of the extensive editorial work he has done. In the late 1970s, Hans Freudenthal, who had been the founding editor of Educational Studies in Mathematics, tapped Alan to be the second editor. Alan began his editorship of the journal with Volume 10 in 1979, ending it with Volume 20 in 1989. In 1980, he founded and became the series editor of Kluwer's (now Springer's) Mathematics Education Library, which currently contains 63 volumes. He was the chief editor of the International Handbook of Mathematics Education (1996) and the Second International Handbook of Mathematics Education (2003), and he continued as an editor for the Third International Handbook (2013). Through his tireless and scholarly work in the area of publication, Alan Bishop has enabled research in mathematics education to become an established field.

Alan Bishop graduated with a B.Sc. in mathematics and science from the University of Southampton in 1961, followed by a Dip. Ed. in mathematics from Loughborough College in 1962. After obtaining an M.A. in Teaching from Harvard University in 1964, he returned to the UK and earned a Ph.D. degree at the University of Hull in 1969. That same year he took a position at the Department of Education of the University of Cambridge, UK, where he remained for 23 years. In 1992 Alan moved to Monash University, Australia, where as Professor of Education he headed the Math, Science, and Technology Education group for 10 years, while also serving as Associate Dean during various periods. In 2002, Alan Bishop was named Emeritus Professor of Education at Monash and in 2006 was also named Visiting Fellow at Wolfson College at Cambridge.

Alan Bishop has a long history of advising prospective and practicing teachers of mathematics, encouraging them to conduct and use research in their practice. Through the Association of Teachers of Mathematics (ATM), he began in the early 1970s to work as a mentor to individual teachers and groups of teachers. He developed full-time M.Ed. and Ph.D. programs in mathematics education at Cambridge and supervised large numbers of doctoral students, many from outside the UK, and several of whom have become distinguished internationally. He always

made sure that the graduate students and visiting scholars from different parts of the world would have occasions to meet together socially and discuss ideas, even on Sunday afternoons in his own home. Alan has long been a leader in helping mathematics educators in countries around the world establish communities of inquiry by teaching courses; speaking at conferences and workshops; directing research and development projects; and serving as consultant, project evaluator, and external examiner. Few researchers can match the way in which his research has improved mathematics education through the connections he has forged between research and practice.

During his years in Cambridge, Alan Bishop was active in the ATM and the British Society for Research into Learning Mathematics. He was President and Council Chair of the Mathematical Association, a founding member of the British Educational Research Association, a member of the Royal Society's Mathematics Education Committee, and the UK National Representative on the International Commission for Mathematics Instruction, advising Government agencies on policies regarding mathematics education. He was a founding member and co-director for 5 years of BACOMET (Basic Components of Mathematics Education for Teachers), an invitational international research group, and was active in the International Group for the Psychology of Mathematics Education including being a member of the International Committee. During his years in Australia, he also served on a large number of commissions, committees, boards, and panels: the Mozambique aid project, the Swedish Development Agency, Commonwealth Universities Appointments Committees, the Australian Council for Educational Research, to mention just a few.

Alan Bishop's lists of publications and presentations at national and international meetings are equally impressive. Both have to be counted in the hundreds. He has also been the recipient of dozens of research grants. Alan has established a truly impressive record of lifetime achievement in mathematics education research. That record is documented and detailed in the 2008 Springer book that was written by colleagues and ex-students in honor of his career-long contributions to the field, *Critical Issues in Mathematics Education: Major Contributions of Alan Bishop*. As noted by one of the persons who nominated Alan Bishop for the Felix Klein award: "Alan is an excellent scholar and researcher who has shaped our field not only over *his* lifetime but also over *its* lifetime, not only in England and Australia (the countries he has called 'home'), but also internationally."

In summary, Alan J. Bishop is an eminently worthy recipient of the Felix Klein Medal for 2015.