

## DEBORAH HUGHES HALLETT

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### Education

MA 1976 Harvard University, Cambridge, USA, Whitmore Scholar, Henry Fellow, Fulbright Scholar  
MA 1970 New Hall College, University of Cambridge, England  
BA 1966 Wrangler (first class honours) in Mathematics, New Hall Scholar, State Scholar

### Employment

2001 Adjunct Professor, Kennedy School of Government, Harvard  
1998 Professor of Mathematics, University of Arizona  
1991-1998 Professor of the Practice in the Teaching of Mathematics, Harvard University  
1986-1998 Honorary member, Faculty of Education, Harvard University  
1981-82, 84 Instructor, Middle East Technical University, Ankara, Turkey  
1978-1991 Senior Preceptor in Mathematics, Harvard University  
1975-1978 Preceptor in Mathematics, Harvard University

### Honors

- Distinguished Career Teaching Award, University of Arizona (2011)
- Manuel Carballo Award for Excellence in Teaching, Harvard Kennedy School (2009)
- Chair, International Conference on the Teaching of Mathematics, Istanbul, Turkey (2006)
- Innovation in Teaching Award, University of Arizona (2005)
- MAA Haimo Award for Distinguished Teaching, national winner (2005)
- MAA Distinguished Teaching Award, Southwestern Section (2004)
- Fellow of the American Association of the Advancement of Science (1998)
- ICTCM Award for Excellence and Innovation Using Technology in Collegiate Mathematics (1998)
- Louise Hay Award for Contributions to Mathematics Education (AWM: Joint Math Meetings, January 1998)
- Harvard: Phi Beta Kappa, Levenson and Shattuck Teaching Awards (1981, 1988, and 1993).

### Grants Received

2006 Funding for 3<sup>rd</sup> International Conference on Teaching of Mathematics, Istanbul, Turkey.  
2001-2004 Liaison to NSF evaluation grant at Duke/Clemson for calculus (PIs: Jack Bookman, Susan Ganter)  
1999-2002 Co-PI for NSF grant for Mathematics for Decision-Makers (PI: William G. McCallum)  
1993-1998 PI for NSF grant to Bridge Calculus Consortium (with A. M. Gleason, D. Mumford)  
1992-1995 Co-PI for FIPSE grant for developing materials for training graduate student TAs in mathematics  
1988-1994 PI for NSF grant to Core Calculus Consortium (with A. M. Gleason)

### Service (Current)

MAA Committees: WebWork Advisory Board, Mutual Concerns (with College Board)  
College Board SAT, Chair of Math Review Committee  
IM&E Planning Board Chair  
Shiksha Sankalp Founding member for NGO supporting education in India  
POGIL project Advisory board for design of innovative teaching materials  
CCSS Professional Development for K-12 teachers for the Common Core

## New Courses

2012	Statistics course for high school teachers
2010	Excel Labs for Statistics
2009	Information, Data, and Decisions with Cases
2007	Politics and Policies: What Can Statistics Tell Us?
2006	Quantitative Methods for Management using Case Studies
2000	Math for MPA students in International Development
1998	Information, Data, and Decisions: Data analysis using the Internet and spreadsheets
1995	Calculus over the Internet: for students at a distance
1987	Multivariable Calculus and Linear Algebra: for social scientists
1985	Second Semester Calculus: syllabus redesigned to meet needs of client departments
1983	Linear Algebra: Theory and Applications
1981	Math review for APPAM at Kennedy School/minority students entering MPP program
1980	Quantitative Reasoning Requirement
1977	Mathematics for MARC (Minority Access to Research Careers)
1976	Math review for midcareer MPA students at Kennedy School of Government
1974	Algebra and precalculus for adult students
1970	Precalculus

## Publications

### Books

*Algebra, Form and Function*, with W. G. McCallum (Wiley, 2006, 2010)  
*ConceptTests for Applied Calculus*, with P. Lock, D. Flath (Wiley, 2006, 2010), 2014)  
*ConceptTests*, with M. Robinson, D. Lomen (Wiley, 2004, 2013)  
*Learning And Understanding: Improving Advanced Study Of Mathematics And Science In U.S. High Schools* contributor. Editor: Jerry Gollub et al (National Academy Press 2002).  
*Multivariable Calculus*, with William McCallum, et. al., Wiley, 1995, 1997, 2002. 2005, 2009, 2013)  
*Calculus* with Andrew M. Gleason, et. al., Wiley, 1994, 1998, 2002. 2005, 2009, 2013  
*Applied Calculus*, with Patti Fraser Lock et. al., Wiley, 1996, 1999, 2003, 2006, 2010, 2014  
*Precalculus*, with Eric Connally et. al., 1997, 2000, 2004, 2011.  
*Teaching Mathematics in Colleges and Universities: Case Studies for Today's Classroom*, Solomon Friedberg et al. (American Mathematical Society, 2001)  
*The Math Workshop: Algebra*, W. W. Norton, 1980.  
*The Math Workshop: Elementary Functions*, W. W. Norton, 1980.

### Articles:

"Andy Gleason: Influence on Education", with T.C. Stevens, J. Tecosky-Feldman, T. Tucker, *AMS Notices*, November 2009.  
"Harnessing the Enthusiasm of our Best and Brightest Students for Mathematics" *CBMS Issues in Mathematics Education*, 2007  
"What We Have Learned from Calculus Reform: The Road to Conceptual Understanding", commissioned paper for *Rethinking the Courses Below Calculus*, Nancy Hastings et al (editors) MAA Notes (2006)  
"The Importance of a Story Line: Functions as Models of Change", commissioned paper for *Rethinking the Courses Below Calculus*, Nancy Hastings et al (editors) MAA Notes (2006)  
"ConceptTests: Active Learning in Calculus" in *Proceedings of the Delta'03 Conference*, New Zealand (2003); reprinted in *Proceedings of the Conference on Reform, Revolution, and Paradigm Change* (Malaysia 2005)  
The Role of Mathematics Courses in the Development of Quantitative Literacy" Commissioned paper in *Quantitative Literacy: Why Numeracy Matters for Schools and Colleges*, Bernard Madison, Lynn Steen, editors, NCED (2003).  
"Achieving Quantitative Literacy" Commissioned paper in *Mathematics and Democracy: The Case for Quantitative Literacy*, Lynn Steen (editor), funded by Woodrow Wilson Foundation (2001).  
"Changing Perspectives on Teaching Mathematics" in *Proceedings of 3<sup>rd</sup> European Congress of Mathematicians* (Barcelona, 2000)  
"Calculus at the Start of the New Millennium" in the *Proceedings of ICME* (Beirut, 2000)  
"Teaching Quantitative Methods to Students of Public Affairs", in *Journal of Policy Analysis and Management* (Volume 19, Number 2, Spring 2000)  
"Decision-Makers at the Crossroads: Changing Quantitative and Technological Tools", in *Proceedings of Conference on Technology, Education and Development*, Abu Dhabi, UAE, 2000

"Information, Data, and Decisions", with Eric Connally, in *The Proceedings of the Eleventh Annual Conference on Technology in Collegiate Mathematics* (Addison-Wesley Longman, 2000)  
"Are We Encouraging Our Students to Think Mathematically?" in *How to Teach Mathematics*, by Steven G. Kranz (AMS 1999)  
"Interdisciplinary Activities in Mathematics and Science in the United States" in *Zentralblatt fur Didaktik der Mathematik*, Vol 4 (Karlsruhe, Germany, 1998)  
"Effect of Technology on the Teaching of Mathematics" *Proceedings of Dagstuhl conference*, 1998  
"Constructing a New Calculus Course," *Calculus: The Dynamics of Change* MAA Notes, #39, 1996.  
"Changes in the Teaching of Undergraduate Mathematics" *Proceedings of the International Congress of Mathematicians*, Zurich, 1994. (Birkhäuser Verlag: Basel, 1995)  
"Visualization and Calculus Reform," in *Visualization in Mathematics*, MAA Notes, #19, 1991.  
"Calculus Reform and its Implications for Two Year Colleges," *AMATYC Review*, March, 1991.  
"Where is the Mathematics? Another Look at Calculus Reform," *Proceedings of the Second Annual Conference on Technology in Collegiate Mathematics* (Addison-Wesley, 1990).  
"The Student's-Eye View of Mathematics," in *Mathematics in College*, C.U.N.Y. 1988.  
"The Teleteaching Experiment," with D. Ellen, in *Collegiate Microcomputer*, Rose-Hulman Institute of Technology, 1987.  
"Understanding Students Who Don't Understand Math," in *Improving Mathematics Skills*, Geoffrey Akst (ed.), *New Directions for College Learning Assistance*, Jossey-Bass, 1981.

NAS Reports: "Enhancing Undergraduate Learning with Information Technology" (2002).  
"Report Of The Mathematics Panel To The Committee On The Advanced Study Of Mathematics And Science In American (U.S.) High Schools," National Academy of Science (2002).

Editorial Board: *International Journal of Mathematics and Computer Science* (2005-present)

**Invited Talks:** Speaker at numerous conferences and departments, including Oberwolfach, Dagstuhl, BIRS, MSRI, International Congress of Mathematicians (1994), AMS-Joint Meetings. Workshops in US, Canada, Mexico, South Africa, India, P.R. China, Korea, Lebanon, United Arab Emirates, Malaysia, Australia, New Zealand, Europe.

**Conferences Organized:** Nine US conferences, Chair for three international conferences