

GEOFFREY B. SAXE

Professional Preparation

- 1970 B.A., University of California, Berkeley. Psychology.
- 1975 Ph.D., University of California, Berkeley. Psychology.
- 1975-1977 Post-doctoral Trainee, Children's Hospital Medical Center (Harvard University Medical School) and Boston Veteran's Administration Hospital, Boston, Massachusetts. Atypical cognitive development.

Appointments

- 1997-pres Professor, Graduate School of Education. University of California, Berkeley.
- 1982-1997 Associate Professor and Professor, Graduate School of Education & Information Studies. University of California, Los Angeles.
- 1977-1982 Assistant and Associate Professor, Ph.D. Program in Educational Psychology with joint appointment in Ph.D. Program in Developmental Psychology. The Graduate School and University Center of the City University of New York.

Honors, Recognition

- 2005- *Elected Member*. National Academy of Education, USA
- 2013 *Book Award, Cognitive Development Society*. Book: *Cultural Development of Mathematical Ideas: Papua New Guinea Studies* (Cambridge Univ. Press, 2012).
- 2010 *AERA Presidential Citation*. Citation presented for “unique and important contributions to the study of cognition and culture.”
- 2008-2011 *President, Jean Piaget Society*. Society for the Study of Knowledge & Development; (*Past President* (advisory role, 2011-2014))
- 2006 *Fellow in Residence*. Rockefeller Foundation. Bellagio, Italy
- 2002-2006 *Editor-in-Chief*. HUMAN DEVELOPMENT (journal)
- 2003–2004 *Fellow in Residence*. Center for Advanced Study in the Behavioral Sciences.
- 2001 Invited to “open” (ribbon cutting ceremony) the *Glen Lean Ethnomathematics Centre, University of Goroka, Papua New Guinea*:
http://www.uog.ac.pg/glec/about_glec/about.htm/
- June, 1999 *Senior Scholar in Residence*. Max-Planck-Institut für Wissenschaftsgeschichte (Max Planck Institute for the History of Science), Berlin, Germany.
- 1996-1999 Elected Board Member, Jean Piaget Society
- 1995, June *Fellow in Residence*. Center for Interdisciplinary Studies (CIRADE), Université du Québec à Montréal.

- 1992 Finalist in Outstanding Book Award Competition. American Psychological Association, Division 1, 1992. *Culture and Cognitive Development: Studies in Mathematical Understanding*.
- 1990 Recipient of the Hal and Lois Haytin Faculty Award for "outstanding research in children's learning and achievement"
- 1985-1986 *Fulbright Fellowship*. Visiting Professor in the Department of Psychology, Universidade de Pernambuco.

Recent Grants

- 2009-2014 *Principal Investigator and Program Co-Director*. Research in Cognition & Mathematics Education. Pre-doctoral Training Grant from the Institute of Education Sciences.
- 2007-2012 *Principal Investigator*. Teaching Integers and Fractions: The Development of Research-Based Instructional Practice. Grant from the Institute of Education Sciences.
- 2001-2006 *Co-Investigator*. Diversity in Mathematics Education Consortium (2001-2005). Member of UC Berkeley Team (Alan Schoenfeld, PI). NSF Grant to support program titled, "Diversity in Mathematics Education (DiME)." [\$1 M/year across Univ. of Wisconsin, UCLA, and UC Berkeley; pre-doctoral training]
- 2000-2006 *Principal Investigator*. Representational Forms, Classroom Practices, and Children's Understanding of Fractions. Spencer Foundation Major Grants Program (\$436,000)

Current and Memberships in Scholarly Societies

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| <i>Elected Member</i> | National Academy of Education (since 2005) |
| <i>Fellow</i> | American Educational Research Association |
| <i>Executive Board Member</i> | The Jean Piaget Society for the Study of Knowledge and Development |
| <i>President</i> | The Jean Piaget Society for the Study of Knowledge and Development (past: 2008-2011) |
| <i>Member</i> | National Council of Teachers of Mathematics |

Some Notable Recent Professional Activities

- 2012-2013 *Chair, Standing Selection Committee*. The National Academy of Education/Spencer Postdoctoral Fellowships
- 2009-2014 *Standing Selection Committee Member*. The National Academy of Education/Spencer Postdoctoral Fellowships
- 2006-2009 *Standing Review Panel Member*. Panel reviews grants for research in math and science Education. U.S. Dept. of Education, Institute of Education

Sciences.

- 2002- *Advisory Board Member*. Glen Lean Ethnomathematics Centre, University of Goroka, Papua New Guinea
- 1998-1999 *General Program Chair* for the 1999 Meetings of the American Educational Research Association.

Books, Monographs

- Saxe, G.B. (2012). *Cultural development of mathematical ideas: Papua New Guinea studies*. New York, NY: Cambridge University Press. Website for visual/video support: <http://www.culturecognition.com/>
- Saxe, G. B. (1991). *Culture and cognitive development: Studies in mathematical understanding*. Hillsdale, NJ: Erlbaum.
- Saxe, G. B., Guberman, S. R., & Gearhart, M. (1987). *Social processes in early number development*. *Monographs of the Society for Research in Child Development*. 52(2). [With reviews by B. Rogoff and R. Gelman & C. Massey]

Edited Books

- Nucci, L., Saxe, G.B., Turiel, E. (Eds.) (2001). *Culture and Development*. Lawrence Erlbaum & Associates. NJ.
- Saxe, G. B. & Gearhart, M. (Eds.) (1988). *Children's Mathematics. New Directions in Child Development*. SF: Jossey-Bass.

Selected Journal Articles

- Saxe, G.B., Shaughnessy, M., Gearhart, M., & Haldar, L.C. (2013, in press). Coordinating numerical and linear units: Elementary students' strategies for locating whole numbers on the number line. *Mathematical Thinking and Learning*.
- Saxe, G.B., Diakow, R., Gearhart, M. (2013). Towards curricular coherence in integers and fractions: The efficacy of a lesson sequence that uses the number line as the principal representational context. *ZDM*. 45, 343-364. DOI 10.1007/s11858-012-0466-2 Special Issue (Classroom-based interventions in mathematics education).
- Saxe, G.B. (2012). Approaches to reduction in treatments of culture-cognition relations: Affordances and limitations. *Human Development*, 55(4). DOI: 10.1159/000341975.
- Saxe, G.B., Earnest, D., Sitabkhan, Y., Haldar, L., Lewis, K., & Zheng, Y. (2010). Supporting generative thinking on the integer number line. *Cognition & Instruction*, 28(04) 433-474.
- Saxe, G. B. (2008). Reflections of J.V. Wertsch's 'From Social Interaction to Higher Psychological Processes'. *Human Development*. 51. 80-89.
- Greeno, J.G., & Saxe, G.B. (2007). Conceptual growth in children and in the learning sciences: Giyoo Hatano's contributions. *Human Development*, 50(1), 55-64.
- Saxe, G.B., Shaughnessy, M.M., Shannon, A., Langer-Osuna, J., Chinn, R., & Gearhart, M. (2007). Learning about fractions as points on a number line (pp. 221-237). *The Learning of Mathematics: Sixty-ninth Yearbook of the National Council of Teachers of Mathematics*. Reston, VA: NCTM.

- Saxe, G. B., & Esmonde, I. (2005). Studying cognition in flux: A historical treatment of fu in the shifting structure of Oksapmin mathematics. *Mind, Culture, & Activity*, 12(3&4), 171-225.
- Saxe, G.B., Taylor, E.V., McIntosh, C. & Gearhart, M. (2005). Representing Fractions with Standard Notation: A Developmental Analysis. *Journal for Research in Mathematics Education*, 36(2), 137-157.
- Nasir, N. & Saxe, G. B. (2003) Ethnic and academic identities: A cultural practice perspective on emerging tensions and their management in the lives of minority students. *Educational Researcher*, 32(5), 14-18.
- Saxe, G.B. (2002). Children's developing mathematics in collective practices: A framework for analysis. *The Journal of the Learning Sciences*, 11, 2&3, 275-300.
- Saxe, G. B., Gearhart, M., & Nasir, N. (2001). Enhancing Students' Understanding of Mathematics: A Study of Three Contrasting Approaches to Professional Support. *Journal for Research in Teacher Education* 4. 55-79.
- Guberman, S. R., & Saxe, G. B. (2000). Mathematical problems and goals in children's play of an educational game. *Mind, Culture, and Activity*, 7, 201-216
- Saxe, G. B., & Gearhart, M., & Seltzer, M. (1999). Relations between classroom practices and student learning in the domain of fractions. *Cognition and Instruction*, 17, 1-24.
- Gearhart, M., Saxe, G.B., Seltzer, M., Schlackman, J., Fall, R., Ching, C. C., Nasir, N., Bennett, T., Rhine, S., & Sloan, T. (1999). When can educational reforms make a difference? Opportunities to learn fractions in elementary mathematics classrooms. *Journal for Research in Mathematics Education*.
- Saxe, G. B., Gearhart, M., Franke, M.L., Howard, S., Crockett, M. (1999). Teachers' shifting assessment practices in the context of educational reform in mathematics. *Teaching and Teacher Education*, 15, 85-105.
- Saxe, G. B. (1994). Studying cognitive development in sociocultural context: The development of a practice-based approach. *Mind, Culture, and Activity*, 1(3) 135-157.
- Saxe, G. B., & Gearhart, M. (1990). The development of topological concepts in unschooled straw weavers. *British Journal of Developmental Psychology*, 8, 251-258.

Selected Invited Chapters

- Saxe, G.B., de Kirby, K. Le, M., Sitabkhan, Y., and Earnest, D. (in press). Understanding learning across lessons in classroom communities: A multi-leveled analytic approach. To appear in A. Bikner-Ahsbabs, G. Kaiser, N. Presmeg (Eds.) *Doing (qualitative) research: Methodology and methods in mathematics education*. ZDM research handbook series: *Advances in Mathematics Education*. Springer. Anticipated publication date: 2013
- Saxe, G.B., Shaughnessy, M.M., Earnest, D., Cremer, S., Platas, L., Sitabkhan, Y. (2009). Methods and techniques for studying the travel of ideas in classroom communities. In T. Dreyfus & B. Schwartz (Eds.). *The Construction of Knowledge in Classroom Communities*. pp. 203-222. London: Routledge.