

Catherine Carol Lewis, Ph.D.

PROFESSIONAL PREPARATION

Harvard University	Social Psychology	B.A., 1972
Stanford University	Developmental Psychology, Minor: Japanese	Ph.D., 1979
Harvard University	Postdoctoral: Educational Field Study Methods	1978-79
Duke University	Postdoctoral: Policy Studies	1979-1980

APPOINTMENTS

1999 - 2014	Distinguished Research Scientist, Mills College School of Education, Oakland, CA
2003	Visiting Professor, Tokyo University School of Education. Japan
1988 - 1999	Director of Formative Research, Developmental Studies Center, Oakland, CA
1981 - 1996	Adjunct Assistant to Associate Professor and Research Psychologist, Pediatrics and Psychiatry, University of California, San Francisco
1980 - 1981	Congressional Science Fellow, Legislative Staff to the Senate Subcommittee on Child and Human Development
1972 - 1974	Researcher and Translator, Japan Research Institute, Tokyo, Japan

SELECTED PEER-REVIEWED PUBLICATIONS

2017	Lewis, C. & Perry, R. Lesson study to improve fractions learning: A randomized, controlled trial. <i>Journal for Research in Mathematics Education</i> , 48:2.
2016	Lewis, C. How does lesson study improve mathematics instruction? <i>ZDM</i> 48:4, 571-580. DOI: 10.1007/s11858-016-0792-x
2015	Lewis, C. What is improvement science? Do we need it in education? <i>Educational Researcher</i> , 44:1, 54-61.
2015	Lewis, C., & Perry, R. (2015). A Randomized Trial of Lesson Study with Mathematical Resource Kits: Analysis of Impact on Teachers' Beliefs and Learning Community. In E. J. Cai & Middleton (Ed.), <i>Design, Results, and Implications of Large-Scale Studies in Mathematics Education</i> . New York: Springer, 133-155.
2014	Lewis, C., & Perry, R. Lesson study with mathematical resources: A sustainable model for locally-led teacher professional learning. <i>Mathematics Teacher Education and Development</i> , 16(1), 22-42.

- 2013 Lewis, C., & Takahashi, A. (2013). Facilitating curriculum reforms through lesson study. *International Journal for Lesson and Learning Studies*, 2(3), 207-217.
- 2013 Takahashi, A., Lewis, C., & Perry, R. (2013). A U.S. Lesson Study Network to Spread Teaching Through Problem-Solving. *International Journal for Lesson and Learning Studies*, 2(3), 237-255.
- 2013 Goldsmith, L. T., Doerr, H. M., & Lewis, C. C. (2013). Mathematics teachers' learning: A conceptual framework and synthesis of research. *Journal of Mathematics Teacher Education*, 16(4). doi: 10.1007/s10857-013-9245-4
- 2012 Lewis, C., Perry, R., Friedkin, S., Fisher, L., Disston, J., & Foster, D. (2012). Building knowledge and professional community through lesson study. In J.M. Bay-Williams (Ed.) *2012 NCTM*. 245-258. Reston, VA: National Council of Teachers of Mathematics.
- 2012 Lewis, C., Perry, R., Friedkin, S., Roth, J. (2012) Improving Teaching Does Improve Teachers: Evidence from Lesson Study. *Journal of Teacher Education*. 63: 5. 368-375. DOI: 10.1177/0022487112446633
- 2011 Lewis, C., Perry, R., & Friedkin, S. (2011). Using Japanese Curriculum Materials to Support Lesson Study Outside Japan: Toward Coherent Curriculum. . *Educational Studies in Japan: International Yearbook*, 6, 5-19.
- 2009 Lewis, C., Perry, R., & Hurd, J. Improving mathematics instruction through lesson study: A theoretical model and North American case. *Journal of Mathematics Teacher Education*, 12:4, 285-304. DOI 10.1007/s10857-009-9102-7
- 2008 Perry, R. & Lewis, C. What is successful adaptation of lesson study? *Journal of Educational Change*, 10: 4, 365-391. DOI 10.1007/s10833-008-9069-7
- 2006 Lewis, C., Perry, R. & Murata, A. How Should Research Contribute to Instructional Improvement? The Case of Lesson Study. *Educational Researcher*, 35:3, 3-14.
- 2000 Linn, M., Lewis, C., Tsuchida, I., & Songer, N.B., Beyond fourth grade science: Why do US and Japanese students diverge? *Educational Researcher*, 29:3, 4-14.

- 2004 Murata, A., Lewis, C., and Perry, R. Teacher learning and lesson study: Developing efficacy through experiencing student learning. In D. McDougall. (Ed.). *Proceedings of the twenty-sixth annual meeting of North American chapter of the international group of the Psychology of Mathematics Education*. Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education. pp. 985 – 992.
- 2000 Daniel Solomon, Victor Battistich, Marilyn Watson, Eric Schaps, & Catherine Lewis. A Six-District Study of Educational Change: Direct and Mediated Effects of the Child Development Project. *Social Psychology of Education*, 4:1, 3-51.
- 2000 Battistich, V., Schaps, E., Watson, M., Solomon, D. & Lewis, C. Effects of the child development project on students' drug use and other problem behaviors. *Journal of Primary Prevention*, April 2000, 1-11.
- 1997 Lewis, C. & Tsuchida, I. Planned educational change in Japan: The shift to student-centered elementary science. *Journal of Education Policy*, 12:5, 313-331.
- 1991 Lewis, C., Pantell, R., Sharp, L. Increasing patient knowledge, satisfaction, and involvement: Randomized trial of a communication intervention. *Pediatrics*, 88: 2, 351-358.

SELECTED BOOKS AND CHAPTERS

- 2015 Lewis, C. What have we learned about lesson study outside Japan? In I. Maitree & P. Wang-Iverson (Eds.), *Lesson study: Challenges in Mathematics Education*, World Scientific Publishing, 141-152.
- 2013 Lewis, C. How do Japanese teachers improve their instruction? Synergies of lesson study at the school, district, and national levels. Commissioned Paper: National Academy of Sciences, National Research Council Board on Science Education. Washington DC: National Academy Press, http://sites.nationalacademies.org/DBASSE/BOSE/DBASSE_084388
- 2011 Lewis, C. & Hurd, J. *Lesson Study Step by Step: How Teacher Learning Communities Improve Instruction*. Portsmouth, NH: Heinemann. (In 4th printing)
- 2010 Perry, R. & Lewis, C. (2010). Building demand for research through lesson study. In M. K. Stein & C. Coburn (Eds.) *Research and practice in*

education: Building alliances, bridging the divide. Lanham, MD: Rowman & Littlefield Publishing Group.

- 2010 Lewis, C., Akita, K., & Sato, M. Lesson study as a human science. In W. Penuel & K. O'Connor (Eds.). Learning research as a human science. *National Society for the Study of Education Yearbook*. Volume 109 Issue 1, 222-237.
- 2002 Lewis, C. & Tsuchida, I. How Do Japanese and U.S. Elementary Science Textbooks Differ? Depth, Breadth, and Organization of Selected Physical Science Units. In *National Standards and School Reform in Japan and the United States*, Teachers College, Columbia University. (Chapter 3,p.35-45)
- 2002 Lewis, C., Tsuchida, I., & Coleman S., The Creation of Japanese and U.S. Elementary Science Textbooks: Different Processes, Different Outcomes. In *National Standards and School Reform in Japan and the United States*, Teachers College, Columbia University. (Chapter 4,p.46 -66)
- 1998 Lewis, C., & Tsuchida, I. A lesson is like a swiftly flowing river: Research lessons and the improvement of Japanese education. *American Educator*, Winter, 14-17 & 50-52.
- 1995 Lewis, C. *Educating Hearts and Minds: Reflections on Preschool and Early Elementary Education in Japan*. New York: Cambridge University Press.

SYNERGISTIC ACTIVITIES

- 1999-present Advisor to lesson study activities in U.S. and abroad, including invited presentations: NSF, NAS, US Math Science Partnerships, NCTM, U.S. Regional Labs, France Institute of Education, Singapore NIE
- 2006-present Research-based mathematical toolkits for lesson study: fractions, area of polygons, proportional reasoning; information at www.lessonresearch.net
- 2001-present Website: www.lessonresearch.net published in 'Essential Websites for 21st Century Educational Leaders'; average 2300 new visitors per month.
- 2001-present Development and dissemination of 6 videos on elementary mathematics and science lesson study <http://www.lessonresearch.net/videos1.html>
- 2010-present Vice-president, World Association of Lesson Study; Editorial Board, *Journal of Lesson and Learning Studies*; *Journal of Teacher Education*, *Review of Educational Research*