

# WILLIAM A. SANDOVAL

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University of California, Los Angeles  
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## EDUCATION

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1998	Ph.D. Learning Sciences Northwestern University	Evanston, IL
1986	B.S., Computer Science University of New Mexico	Albuquerque, NM

## PROFESSIONAL EXPERIENCE

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2007- 2009 2011- 2012	<i>Division Head, Psychological Studies in Education</i> Graduate School of Education & Information Studies, University of California, Los Angeles
2005 - present	<i>Associate Professor</i> Graduate School of Education & Information Studies, University of California, Los Angeles
1998 - 2005	<i>Assistant Professor, Psychological Studies in Education</i> Graduate School of Education & Information Studies, University of California, Los Angeles

## PUBLICATIONS

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### REFEREED PUBLICATIONS

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Sandoval, W. A. (in press). Conjecture mapping: An approach to systematic educational design research. Journal of the Learning Sciences.

Sandoval, W. A. (2012). Situating epistemological development. In J. van Aalst, K. Thompson, M. J. Jacobson & P. Reimann (Eds.), The future of learning: Proceedings of the 10th international conference of the learning sciences (Vol. 1, pp. 347-354). Sydney: International Society of the Learning Sciences.

Mika, K., Lin, T. Y., Ferreira, M., Lacson, J., Lee, C. M., Lin, C., et al. (2012). Incorporating service-learning in traditionally lecture-based environmental engineering courses through researching bacterial contamination at a local beach. Global Journal of Engineering Education, 14(2), 155-162.

Ryu, S., & Sandoval, W. A. (2012). Improvements to elementary children's epistemic understanding from sustained argumentation. Science Education, 96(3), 488-526.

- Sandoval, W. A., & Çam, A. (2011). Elementary children's judgments of the epistemic status of sources of justification. Science Education, *95*(3), 383-408.
- Sandoval, W. A., & Harven, A. (2011). Urban middle school students' perceptions of the value of inquiry. Journal of Science Education and Technology, *20*(1), 95-109.
- Ryu, S., & Sandoval, W. A. (2010). Listen to each other: How the building of norms in an elementary science classrooms fosters participation and argumentation. In K. Gomez, L. Lyons & J. Radinsky (Eds.), Proceedings of the 2010 Intl. Conference of the Learning Sciences (pp. 1103-1110). Chicago, IL.
- Sandoval, W. A. (2009). In defense of clarity in the study of personal epistemology. Journal of the Learning Sciences, *18*(1), 150-161.
- Wallis, J. C., Milojevic, S., Borgman, C. L., & Sandoval, W. A. (2006). The special case of scientific data sharing with education. Proceedings of the American Society for Information Science and Technology, *43*, 1-13.
- Sandoval, W. A. (2005). Understanding students' practical epistemologies and their influence on learning through inquiry. Science Education, *89*, 634-656.
- Sandoval, W. A., & Millwood, K. (2005). The quality of students' use of evidence in written scientific explanations. Cognition & Instruction, *23*(1), 23-55.
- Sandoval, W. A., & Bell, P. (Eds.). (2004). Design-based research methods for studying learning in context [Special issue]. Educational Psychologist, *39*(4).
- Sandoval, W. A. (2004). Developing learning theory by refining conjectures embodied in educational designs. Educational Psychologist, *39*(4), 213-223.
- Sandoval, W. A., & Daniszewski, K. (2004). Mapping trade-offs in teachers' integration of technology-supported inquiry in high school science classes. Journal of Science Education and Technology, *13*(2), 161-178.
- Sandoval, W. A., & Reiser, B. J. (2004). Explanation-driven inquiry: integrating conceptual and epistemic supports for science inquiry. Science Education, *88*, 345-372.
- Sandoval, W. A. (2003). Conceptual and epistemic aspects of students' scientific explanations. Journal of the Learning Sciences, *12*(1), 5-51.
- Sandoval, W. A., & Morrison, K. (2003). High school students' ideas about theories and theory change after a biological inquiry unit. Journal of Research in Science Teaching, *40*(4), 369-392.
- Design-Based Research Collective (2003). Design-based Research: an emerging paradigm for educational inquiry. Educational Researcher, *32*(1), 5-8.
- Tabak, I., Smith, B. K., Sandoval, W. A., & Reiser, B. J. (1996). Combining general and domain-specific support for biological inquiry. In C. Frasson & G. Gauthier & A. Lesgold (Eds.), Proceedings of Intelligent Tutoring Systems: Third Intl. Conference, ITS'96 (pp. 288-296). Montreal: Springer-Verlag.

Sandoval, W. A., Trafton, J. G., & Reiser, B. J. (1995). The effects of self-explanation on studying examples and solving problems. In J. D. Moore & J. F. Lehman (Eds.), Proceedings of 17th Annual Conference of the Cognitive Science Society (pp. 253-258). Pittsburgh, PA: Erlbaum.

Tabak, I., Sandoval, W. A., Smith, B. K., Agganis, A., Baumgartner, E., & Reiser, B. J. (1995). Supporting collaborative guided inquiry in a learning environment for biology. In J. L. Schnase & E. L. Cunnius (Eds.), Proceedings of 1st Conference on Computer Support for Collaborative Learning, CSCL'95 (pp. 362-366). Bloomington, IN: Erlbaum.

## **BOOKS & BOOK CHAPTERS**

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Sandoval, W. A. (forthcoming). Epistemologies, teacher and student. In D. C. Phillips (Ed.), Encyclopedia of Educational Theory and Philosophy: SAGE.

Sandoval, W. A. (forthcoming). Epistemic goals. In R. Gunstone (Ed.), Encyclopedia of Science Education: Springer.

Sandoval, W. A. (2013). Educational design research in the 21st century. In R. Luckin, J. Underwood, N. Winters, P. Goodyear, B. Grabowski & S. Puntambekar (Eds.), Handbook of design in educational technology. London: Taylor & Francis.

Sandoval, W. A. (2008). Design principles for effective laboratory instruction. In D. W. Sunal, E. L. Wright & C. Sundberg (Eds.), The impact of the laboratory and technology on learning and teaching science K-16 (pp. 35-56). Charlotte, NC: Information Age.

Sandoval, W. A. (2008). Exploring children's understanding of the purpose and value of inquiry. In R. A. Duschl & R. E. Grandy (Eds.), Teaching scientific inquiry: Recommendations for research and application (pp. 157-163). Rotterdam, Netherlands: Sense.

Sandoval, W. A., & Millwood, K. A. (2008). What can argumentation tell us about epistemology? In S. Erduran & M. P. Jiménez-Aleixandre (Eds.), Argumentation in science education: perspectives from classroom-based research (pp. 68-85): Springer.

National Research Council (2005). America's Lab Report: Investigations in High School Science. S. R. Singer, M. L. Hilton, & H. A. Schweingruber (Eds.). Washington, DC: Natl. Academies Press.

Kafai, Y. B., Sandoval, W. A., Enyedy, N., Nixon, A. S., & Herrera, F. (Eds.). (2004). Proceedings of the 6th International Conference of the Learning Sciences, ICLS2004. Mahwah, NJ: Lawrence Erlbaum Assoc.

Sandoval, W. A. (2003). The inquiry paradox: why doing science doesn't necessarily change ideas about science. In C. P. Constantinou & Z. C. Zacharia (Eds.), Proceedings of the Sixth Intl. Computer-Based Learning in Science Conference 2003 (pp. 825-834). Nicosia, Cyprus.

Reiser, B. J., Tabak, I., Sandoval, W. A., Smith, B. K., Steinmuller, F., & Leone, A. J. (2001). BGuILE: Strategic and conceptual scaffolds for scientific inquiry in biology classrooms. In S. M. Carver & D. Klahr (Eds.), Cognition and instruction: Twenty-five years of progress (pp. 263-305). Mahwah, NJ: Lawrence Erlbaum.

#### **OTHER PUBLICATIONS**

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Puntambekar, S., & Sandoval, W. (2009). Editors' Note: Design research moving forward. Journal of the Learning Sciences, 18(3), 323-326.

Spencer RTG Task Force (2009). The preparation of aspiring educational researchers in the empirical qualitative and quantitative traditions: methodological rigor, social and theoretical relevance, and more. Chicago: Spencer Foundation.

Sandoval, W. A. (2007). Review of the book Education for Thinking. Science Education, 91(3), 515-518.

Sandoval, W. A. (2001). Designing new literacies, designing new learners: are they the same? [Review of the book Changing Minds]. Journal of Educational Computing Research, 25(2), 196-203.

#### **INVITED PRESENTATIONS**

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Sandoval, W. A. (2013). Promoting a culture of argumentation in elementary science. University of California, Irvine, Irvine, CA, February 25.

Sandoval, W. A. (2012). How, and why, to develop children's understanding of scientific argumentation. University of North Carolina, Chapel Hill, NC, March 19.

Sandoval, W. A. (2011). The practical turn in science education and what it means for learning environment design. Invited presentation, Board on Science Education, National Academies of Science, Irvine, CA, December 13.

Sandoval, W. A. (2011). Invited workshop, Design-Based Research Methods in Science Education. University of Helsinki, Helsinki, Finland, October 26-28.

Sandoval, W. A. (2011). Designing a culture of argumentation in elementary science. Invited keynote, Helsinki Math & Science Education Research Symposium, October 27.

Sandoval, W. A. (2011). Promoting norms for arguing with data in elementary science. Presidential Session, Natl. Association for Research in Science Teaching Annual Meeting. Orlando, FL.

Sandoval, W. A., D'Arcy, G., Redman, E., (2011). Making science: data modeling and argumentation in elementary science. CONNECT Research Presentation Series, UCLA Lab School, January 19.

Sandoval, W. A. (2010). Situating epistemological development within cultural practices. University of Colorado, Boulder, CO, June 14.

Phillips, D. C., Sandoval, W. A., Floden, R. E., & Moje, E. B. (2010). Preparing researchers to face the complex educational settings of the 21st century: Insights from the Spencer RTG task force, Invited Presidential Session, Annual Meeting of the American Educational Research Assn. Denver, CO.

Sandoval, W. A. (2010). Situating epistemological development within disciplinary practices. Science education research symposium, Stanford University, Palo Alto, CA, May 14.

Sandoval, W. A. (2010). Designing environments to promote and study learning. iSchool/Education Colloquium. University of Maryland, College Park, MD. March 2.

Sandoval, W. A. (2009). Situating epistemic cognition: A view from science education. Invited keynote. European Network of Research on Epistemological Beliefs. Münster, Germany, December 9-11.

Sandoval, W. A. (2009). Studying children's ideas about knowledge in science classrooms. Inaugural speaker, Voices of Innovation Series, North Carolina State University, Raleigh, NC, August 24.

Sandoval, W. A. (2009). Argumentation studies in science education. Invited talk: CMNA09 Workshop on Computational Models of Natural Argument. Pasadena, CA, July 13.

Sandoval, W. A. (2008). How people learn and how we teach. Invited seminar: Huntington Park High School, Huntington Park, CA. September 16.

Sandoval, W. A. (2008). Scientific literacy as epistemic practice. Vanderbilt University, Nashville, TN, April 14.

Sandoval, W. A. (2007). Design-based research for cognitive technologies. Invited Workshop, Ecole Polytechnique Federale Lausanne, Lausanne, Switzerland, June 20-22.

Sandoval, W. A. (2007). Development, learning, and instruction: the case of epistemological beliefs. Invited presentation, Division C Graduate Student Council, Annual Meeting of the American Educational Research Assn., Chicago, IL, April 9-13.

Sandoval, W. A. (2006). Crafting a scholarly voice in science education across the career trajectory. Invited presentation, annual meeting of the National Association of Research in Science Teaching, San Francisco, CA, April 3-6.

Sandoval, W. A., Millwood, K. A., & Cook, M. (2006). How can school inquiry become "authentic" science? Invited presentation at To think and act like a scientist, Texas Tech University, Lubbock, TX, February 10-11.

Sandoval, W. A. (2005). Ability, ontology, and method: A commentary on Hammer, Russ, Mikeska, and Scherr. Invited paper presented at the Rutgers Conference on Inquiry, February 16-19, 2005. Rutgers, NJ.

Sandoval, W. A. (2004). Design-based research methods for studying learning in context. Invited seminar. Harvard Graduate School of Education. Cambridge, MA. December 7, 2004.

Sandoval, W. A. (2004). Practical epistemologies and their influence on learning science through inquiry. Invited seminar, Physics Education Research Group, University of Maryland, July 14, 2004.

Sandoval, W. A. (2003). The inquiry paradox: why doing inquiry doesn't necessarily mean doing science. Invited keynote address, 6<sup>th</sup> International Conference on Computer-Based Learning in Science. July 5-10, Nicosia, Cyprus.

## PRESENTATIONS

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Ryu, S., & Sandoval, W. A. (2012). Coordination of discursive practice and material resources: Leveraging students to engage in epistemic discussions. Paper presented at the NARST Annual Meeting. Indianapolis, IN.

Xiao, S., & Sandoval, W. A. (2012). Influences on teachers' capacities to use educative curriculum materials as intended. Paper presented at the NARST Annual Meeting. Indianapolis, IN.

Enyedy, N., Redman, E. H., & Sandoval, W. A. (2011). Building a culture of argument in elementary school science. Paper presented at the 41st Annual Meeting of Jean Piaget Society. Berkeley, CA.

Redman, E. H., Sandoval, W. A., & Enyedy, N. (2011). A comparison of teaching strategies for promoting argumentation in elementary science, Annual Meeting of the Natl. Assn. for Research in Science Teaching. Orlando, FL.

Çam, A., & Sandoval, W. A. (2010). Elementary children's preferences for causal justification, Paper presented at the Annual Meeting of the Natl. Assn. for Research in Science Teaching. Philadelphia, PA.

Redman, E. H., & Sandoval, W. A. (2010). Examining professional scientists' epistemological views of science, Poster presented at the Annual Meeting of the Natl. Assn. for Research in Science Teaching. Philadelphia, PA.

Ryu, S., & Sandoval, W. A. (2010). The appropriation of argumentation norms in an elementary science classroom, Paper presented at the Annual Meeting of the American Educational Research Assn.. Denver, CO.

Wong, J., Cook, M., & Sandoval, W. A. (2010). Exploring college students' everyday experiences with science, Paper presented at the Annual Meeting of the American Educational Research Assn. Denver, CO.

- Redman, E. H., Enyedy, N., & Sandoval, W. A. (2009). Promoting argumentation within elementary science inquiry, Poster presented at the Annual Meeting of the Natl. Assn. for Research in Science Teaching. Garden Grove, CA.
- Redman, E. H., Sandoval, W. A., & Enyedy, N. (2009). Spontaneous student science arguments in an elementary classroom. Paper presented at the Annual Meeting of the American Educational Research Assn., San Diego, CA
- Wong, J., & Sandoval, W. A. (2009). College students' perspectives of science in their everyday lives. Paper presented at the Annual meeting of the Natl. Assn. for Research in Science Teaching. Garden Grove, CA.
- Cook, M., Wong, J., & Sandoval, W. A. (2008). "We're going to be doing actual science": teachers' and students' positioning moves in inquiry-oriented science classrooms. In Proceedings of the International Conference of the Learning Sciences. Utrecht, Netherlands: Erlbaum.
- Ryu, S., & Sandoval, W. A. (2008). Interpersonal influences on collaborative argumentation during scientific inquiry, Paper presented at the Annual Meeting of the American Educational Research Assn. New York, NY, March 24-28.
- Sandoval, W. A. (2007). Discussant: What progresses in a learning progression?, Annual Meeting of the American Educational Research Assn., Chicago, IL, April 9-13.
- Thadani, V., Cook, M., Millwood, K. A., Harven, A., Fields, D., Griffis, K., et al. (2006). Eyes on the prize: Considering how design research can lead to sustainable innovation. Paper presented at the Annual Meeting of the American Educational Research Assn., San Francisco, April 7-12.
- Sandoval, W. A., & Millwood, K. A. (2006). What can argumentation tell us about epistemology? Paper presented at the annual meeting of the American Educational Research Assn., San Francisco, CA, April 7-12.
- Harven, A., & Sandoval, W. A. (2006). Student interest in inquiry tasks in a novel learning environment, Paper presented at the Annual Meeting of the American Educational Research Assn. San Francisco, April 7-10.
- Cook, M., Sandoval, W. A., & Bockert, J. (2006). Effects of content knowledge on students' socioscientific reasoning, Paper presented at the Annual Meeting of the Natl. Assn. for Research in Science Teaching. San Francisco, April 3-6.
- Cook, M., Fields, D., & Sandoval, W. A. (2006). Understanding local teacher adaptations of a complex learning environment, Paper presented at the Annual Meeting of the American Educational Research Assn. San Francisco, April 7-10.
- Sandoval, W. A., & Millwood, K. A. (2005). Practical epistemologies: how students perceive and pursue scientific argumentation in the classroom. Presented at the 1<sup>st</sup> Conference of the Intl. Society of Cultural Activity Research, Seville, Spain, September 20-24.

Deneroff, V., & Sandoval, W. A. (2005). Urban science teachers' learning in discourse-based professional development, Paper presented at the Annual Meeting of the American Educational Research Assn. Montreal, Canada, April 11-15.

Deneroff, V., & Sandoval, W. A. (2005). Urban science teachers talking about California state content standards: implications for discourse-based professional development about curriculum, Paper presented at the 2005 NARST Annual Meeting. Dallas, TX, April 4-7.

Tabak, I., & Sandoval, W. A. (2005). The extent to which different configurations of students, teachers, and materials foster a sense of agency, Paper presented at the Annual Meeting of the American Educational Research Assn. Montreal, Canada, April 11-15.

Millwood, K. A. & Sandoval, W. A. (2004). A comparison of students' beliefs about school science and professional science. Paper presented at the Annual Meeting of AERA 2004. April 12-16, San Diego.

Deneroff, V., Sandoval, W. A., & Franke, M. L. (2003). From activity-centered to inquiry-centered discourse through professional development. Paper presented at the Annual Meeting of NARST 2003, March 23-26, Philadelphia.

Sandoval, W. A., Crawford, V. M., Bienkowski, M., Hurst, K., & Millwood, K. (2003). Effects of explanation support on learning genetics. Paper presented at the Annual Meeting of NARST 2003, March 23-26, Philadelphia, PA.

Sandoval, W. A. (2002). Tracing effects to causes in design experimentation: What's design got to do with it? Paper presented at the 6th Conference of the International Society for Cultural Research and Activity Theory. ISCRAT02. Amsterdam.

Sandoval, W. A. (2002). Learning from designs: learning environments as embodied hypotheses., Paper presented at the Annual Meeting of the American Educational Research Assn. New Orleans, LA. April 1-5.

Sandoval, W. A. (2002). Tracing effects to causes in design experimentation: What's design got to do with it?, Presented at ISCRAT2002: Conference of the Intl. Society for Cultural Research and Activity Theory. Amsterdam.

Sandoval, W. A. (2002). Technical and social supports for epistemic practices of scientific argumentation. Invited Symposium. 24<sup>th</sup> Annual Conference of the Cognitive Science Society. August 8-10, Fairfax, VA.

Sandoval, W. A., Deneroff, V., & Franke, M. L. (2002). Teaching, as learning, as inquiry: moving beyond activity in the analysis of teaching practice., Paper presented at the Annual Meeting of the American Educational Research Assn. New Orleans, LA. April 1-5.

Crawford, V. M., Sandoval, W. A., Bienkowski, M., & Hurst, K. (2002). Mediation of genetics learning by phenomenological and discursive representations, Paper presented at the Annual Meeting of the American Educational Research Assn. New Orleans, LA. April 1-5.



Deneroff, V., & Sandoval, W. A. (2002). Pedagogical awakenings: how four high school biology teachers came to problematize photosynthesis. Paper presented at the 2002 NARST Annual Meeting, April 7-10, 2002, New Orleans.

Deneroff, V., Sandoval, W. A., & Franke, M. L. (2002). Learning the discourse of inquiry: how in-service high school science teachers come to understand themselves as listeners. Lessons from Samantha., Paper presented at the Annual Meeting of the American Educational Research Assn. New Orleans, LA. April 1-5.

Sandoval, W. A., Millwood, K. A., Bienkowski, M., & Crawford, V. M. (2002). Technical and social supports for epistemic practices of scientific argumentation, *Panel Symposium on "Inquiry, Technology, and Cognition: Theory and Practice"*. 24th Annual Conference of the Cognitive Science Society, Fairfax, VA, August 8-11.

Sandoval, W. A. (2001). Students' uses of data as evidence in scientific explanations., Paper presented at the Annual Meeting of the American Educational Research Assn. Seattle, WA, April 10-14.

Sandoval, W. A., & Morrison, K. (2000). Effects of an inquiry curriculum on high school students' beliefs about the nature of science., Paper presented at the Annual Meeting of the American Educational Research Assn. . New Orleans, April 24-28.

Sandoval, W. A., Bell, P., Coleman, E., Enyedy, N., & Suthers, D. (2000). Designing knowledge representations for epistemic practices in science learning, Paper presented at the Annual Meeting of the American Educational Research Assn. . New Orleans, April 24-28.

Sandoval, W. A. (1999). Epistemic supports for collaborative science inquiry, Poster presentation at CSCL'99, Computer Supported Collaborative Learning Conference. Palo Alto, CA, Dec. 12-15.

Sandoval, W. A., Daniszewski, K., Spillane, J., & Reiser, B. J. (1999). Teachers' discourse strategies for supporting learning through inquiry, Paper presented at the Annual Meeting of the American Educational Research Assn. . Montreal, April 19-23.

Sandoval, W. A., & Reiser, B. J. (1998). Iterative design of a technology-supported biological inquiry curriculum, Paper presented at the Annual Meeting of the American Educational Research Assn. San Diego, CA, April 13-17.

Tabak, I., Sandoval, W. A., Smith, B. K., Steinmuller, F., & Reiser, B. J. (1998). Reflection as a vehicle toward local and global understanding, Paper presented at the Annual Meeting of the American Educational Research Association . San Diego, CA, April 13-17.

Sandoval, W. A., & Reiser, B. J. (1997). Evolving explanations in high school biology, Paper presented at the Annual Meeting of the American Educational Research Assn. Chicago, IL, March 24-28.

Tabak, I., Smith, B. K., Sandoval, W. A., Agganis, A., & Reiser, B. J. (1996). BGuILE: Supporting inquiry in a learning environment for biology. Paper presented at the Annual Meeting of the AERA, New York, April 8-12.

**PROFESSIONAL SERVICE**

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2011-2017	Member (elected), Board of Directors, International Society of the Learning Sciences
2011-present	Associate Editor, <u>Journal of the Learning Sciences</u> .
2010	Mentor, Doctoral Consortium, 9 <sup>th</sup> International Conference of the Learning Sciences, Chicago, IL, June 29-30.
2009 - present	Chair, Conference Committee, International Society of the Learning Sciences
2009 -10	Co-Editor, Design Research Strand, <u>Journal of the Learning Sciences</u> .
2011 - present	Editorial Board, <u>Educational Psychologist</u>
2008 - present	Editorial Board, <u>Cognition &amp; Instruction</u>
2005 - present	Editorial Board, <u>Science Education</u>
2004 – 9	Editorial Board, <u>Journal of the Learning Sciences</u>
2007 – 9	Executive Review Panel Member, AERA, Division C, Section 4 (Science)
2008	Editorial Board, <u>Review of Research in Education</u> , 32.
2008-9	Member, Task Force of the Spencer Foundation Research Training Grant Institutions on Graduate Research Training in Education
2006	Coordinator, Early Career Workshop, 7 <sup>th</sup> Intl. Conference of the Learning Sciences (ICLS 2006), Bloomington, IN
2005 - present	Member, Education & Community Outreach Advisory Board, LIFE Center, Stanford University
2004	Co-Chair, 6 <sup>th</sup> Intl. Conference of the Learning Sciences (ICLS 2004), June 22-26, 2004, Santa Monica, CA.
2002	Program Committee, Intl. Conference of the Learning Sciences (ICLS)
2000-1	Program Chair, AERA Special Interest Group – Education in Science & Technology
1999	Program Committee, M/SET 99, Intl. Conference on Mathematics/Science Education & Technology
	Reviewer, <u>American Educational Research Journal</u> .
	Reviewer, <u>Review of Educational Research</u> .
	Reviewer, <u>Asia Pacific Education Review</u>
	Reviewer, <u>International Journal of Science Education</u>

Reviewer, Journal of Research in Science Teaching

Reviewer, Instructional Science

Reviewer, Learning & Instruction

Reviewer, National Science Foundation

Reviewer, Institute of Education Sciences, U.S. Dept. of Education

Reviewer, Israeli National Science Foundation

Reviewer, Canadian Social Sciences & Humanities Research Council

**UNIVERSITY & COMMUNITY SERVICE**

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2012-13	Team Lead (w/ P. DeLeon) UCLA Community School Dreamfund Science Team
2012-	UCLA Lab School CONNECT Research Review Committee
2011-12	Chair, Faculty Executive Committee, Graduate School of Education & Information Studies, UCLA
2010-11	Chair-elect, Faculty Executive Committee, Graduate School of Education & Information Studies, UCLA
2010-11	Ad-hoc Faculty Search Committee, Macarthur Chair in Digital Media & Learning
2011-12, 2007-9	Education Executive Committee, Dept. of Education, GSE&IS, UCLA
2010-2012	Academic Personnel Committee, Dept. of Education, GSE&IS, UCLA
2003-7	
2010	Search Committee, Lead Secondary Science Teacher, UCLA Community School
2004-7	Education Department Representative, UCLA Legislative Assembly
2004-5	Ad-hoc Faculty Search Committee, Urban Reading & Literacy, Dept. of Education, GSE&IS, UCLA
2004-5	Blended-Instruction Course Study, Assessment Steering Committee, UCLA
2004-5	Science Chair, Curriculum Committee, Ocean Charter School
2001-2	Ad-hoc Space Allocation Committee, Dept. of Education, GSE&IS, UCLA
2000-1	Ad-hoc Faculty Search Committee, Cognitive Development, Dept. of Education, GSE&IS, UCLA
2007–2009, 1999-2001	Committee on Degrees, Admissions, and Standards, Dept. of Education, GSE&IS, UCLA
1999-2000	Ad-hoc Faculty Search Committee, Cognitive Development, Dept. of Education, GSE&IS, UCLA

1998-99 Corinne Seeds University Elementary School Research Committee

**HONORS & AWARDS**

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2011 Elected to Board of Directors, International Society of the Learning Sciences

2010 Greenfield Faculty Award for Applied Research in Learning and Achievement, UCLA

2008 Haytin Award for Outstanding Research on Teaching and Learning, UCLA

2008 Appointed Member, National Academy of Sciences Steering Committee for the Workshop on Exploring the Intersection of Science Education and the Development of 21<sup>st</sup> Century Skills.

2004 Appointed Member, National Academy of Sciences Study Committee on High School Science Laboratories: Role & Vision.

2000 Elected Program Chair, Special Interest Group – Education in Science & Technology, American Educational Research Assn.

1994 Northwestern University Cognitive Science Fellowship

**GRANTS - CURRENT & PRIOR**

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2012-13 Leveraging argumentation for elementary science learning. Spencer Foundation, PI, \$39,650.

2011 Conference Proposal to NSF: Public Understanding and Public Engagement with Science. National Science Foundation, co-PI (PI: Susan Goldman, w/ Anne Britt), \$82,146.

2007 – 10 Making science: Data modeling and argumentation in elementary science. National Science Foundation, PI (w/ N. Enyedy), \$299,853.

2004 – 8 CENSNet: An architecture for authentic web-based science inquiry in middle and high school. National Science Foundation, PI (w/ C. Borgman), \$1,673,189.

2003 - 4 Developing teacher-leaders and school capacity for science education reform. Arthur Vining Davis Foundations, PI, \$136,637.

2001 - 2 Beyond final form science: teaching and learning scientific inquiry, Arthur Vining Davis Foundations, PI (w/ M. Franke), \$167,000

2001 - 2 Beyond final form science: teaching and learning scientific inquiry, UCLA Faculty Career Development Grant, PI, \$3,000.

2000 - 2 Talking about genetics: using representations and language to understand complex science, Contract #51-000211 from SRI, International, \$52,000

1999 - Designing knowledge representations to support epistemic practices in science  
 2000 learning, Center for Innovative Learning Technologies Seed Grant, PI (w/ P. Bell, E. Coleman, N. Enyedy, & D. Suthers), \$8,896.

- 1999 - Developing a curricular framework to support enactment of technology-supported  
2000 inquiry, UCLA Academic Senate, Council on Research, PI, \$3,500
- 1999 - Developing a curricular framework to support enactment of technology-supported  
2000 inquiry, Urban Education Studies Center Seed Grant, PI, \$5,081

**PROFESSIONAL MEMBERSHIPS**

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American Educational Research Association

American Psychological Association, Division 15

Association for the Advancement of Computing in Education

National Association for Research in Science Teaching

International Society of the Learning Sciences

California Science Teachers Association