

DANIEL STEINBOCK

Stanford University
P.O. BOX 17096
Stanford, CA 94309-7096

+1 650 530 0703
steinbock@stanford.edu

RESEARCH INTERESTS

Realtime Embodied Social Practice, Horizontal Power in Cooperative Social Movements, Epistemology, Group Agency, Design Education, Mystical Experience, Communicative Silence

TEACHING COMPETENCIES

Ethnographic Methodology, Cultural Ecology, Science & Technology Studies, Design Research, Learning Theory, Complex Systems Science, Philosophy of Science, Marx, Wittgenstein, Goffman

EDUCATION

- EXPECTED 06/2012 **Stanford University, Stanford, CA**
Ph.D. in Anthropology of Education (focus in Learning Sciences & Technology Design)
Dissertation: *Creative Process and Collaboration in the Silent Gatherings of Quakers*
Advisors: *Roy Pea & Ray McDermott*
- 2008 **Stanford University, Stanford, CA**
M.S. in Engineering (focus in Human-Centered Design Methodology)
Advisors: *David Kelley & Bernard Roth*
- 2003 **Santa Fe Institute for Complex Systems Studies, Santa Fe, NM**
Certificate of Study in the Science of Complexity
- 2002 **University of California, Santa Cruz, CA**
B.S. in Computer Science, Highest Honors

TEACHING

- WINTER 2012 **Understanding Learning Environments, Education, Stanford University**
Graduate course on major theories of learning, including Dewey, Marx, Freire, Vygotsky, Skinner, Montessori, and others. Lectured on embodied epistemology, dialectical materialism, social justice. Produced supplementary online video lectures and moderated online student discussions.
Lecturer and Teaching Assistant, with Ray McDermott & Roy Pea
- SPRING 2011 **Cognition & Learning in Activity, Psychology & Education, Stanford University**
Grad and undergrad course on ethnographic studies of cognition in diverse cultural contexts. Lectured on embodied reasoning, non-verbal communication.
Lecturer and Teaching Assistant, with Roy Pea
- WINTER 2011 **Needfinding (Design Research Methods), Program in Design, Stanford University**
Taught required seminar section on Design Research to Product Design undergraduates and Design Master's students. Lectured on ethnographic observation and analysis, social science theory. Led collective analysis of students' ethnographic projects. Facilitated discussion of course readings.
Lecturer, with Michael Barry & Anne Fletcher
- Understanding Learning Environments, Education, Stanford University**
Lecturer and Teaching Assistant, with Ray McDermott & Roy Pea
- WINTER 2010 **Needfinding (Design Research Methods), Program in Design, Stanford University**
Lecturer, with Michael Barry & Dev Patnaik
- Understanding Learning Environments, Education, Stanford University**
Lecturer and Teaching Assistant, with Ray McDermott & Roy Pea

- FALL 2009 **Design Thinking Bootcamp**, Hasso Plattner Institute of Design (d.school), Stanford University
Coached two design teams through ethnographic investigation and corporate-sponsored design projects in an introductory design class. Facilitated group ethnographic analysis and team dynamics.
Design Team Coach, Extended Teaching Team
- WINTER 2008 **Designing to Learn**, Hasso Plattner Institute of Design, Stanford University
Co-designed and taught course to undergrad and grad students. Lectured on design process, learning theory in preparation for teaching design-thinking to middle school students (see below).
Instructor, with Rich Crandall, Ugochi Acholanu
- Design Thinking Studio**, East Palo Alto Academy, East Palo Alto, CA
Instructor and Curriculum Designer for 7th grade class
- JAN-SEP 2007 **K12 Innovation Lab**, Hasso Plattner Institute of Design, Stanford University
Taught design process and design-thinking to primary and middle school students. Co-designed curricula and did ethnographic observation to assess and improve pedagogy (see below).
Instructor, Curriculum Designer, Ethnographer for 1st, 4th and 7th graders, with David Kelley
- Design Thinking Studio**, Nueva School, Hillsborough, CA
Instructor, Curriculum Designer, Ethnographer for 1st, 4th and 7th graders, with David Kelley
- SPRING 2007 **Social Machines**, Computer Science & Education, Stanford University
Grad/undergrad seminar on social impact of digital media on learning, cognition and citizenship.
Teaching Assistant, with Roy Pea

EMPLOYMENT

- 09/2005 - PRESENT **Stanford University**, Stanford, CA
Graduate Student Instructor and Researcher (Stanford Design Program & School of Education)
- 06/2010 - PRESENT **Fletcher Research**, Palo Alto, CA
Design Research Consultant
- 04/2007 - 03/2008 **Hasso Plattner Institute of Design (d.school)**, Stanford, CA
Instructor, Curriculum Designer, Founding Member of K12 Design Education lab
- 09/2005 - 06/2006 **Stanford Institute for Economic Policy Research**, Stanford, CA
Social Networks Analyst, Quantitative Researcher
- 09/2004 - 08/2005 **Lunar Logic**, Eugene, OR
Educational Software Developer
- 09/2001 - 06/2004 **University of California, Computer Science Department**, Santa Cruz, CA
Undergraduate and Post-baccalaureate Researcher

AWARDS, HONORS & DISTINCTIONS

- 2005 **Quillen Graduate Fellowship**, Stanford University
- 2002 **Valedictorian**, UC Santa Cruz, Porter College
- 2002 **Highest Honors in Computer Science**, and highest scoring exit exam, UC Santa Cruz
- 2002 **Dean's Award for Outstanding Undergraduate Research**, UC Santa Cruz
- 2002 **Benjamin F. Porter College Honors**, UC Santa Cruz
- 1997 **Regents Scholar**, University of California 4-year full-ride merit scholarship

PUBLICATIONS

- Playful Family Mathematics Learning Design**, Jimenez, O., Goldman, S., Hedrick, B., Pea, R., Blair, K. P., Steinbock, D.. DML 2012: *Proceedings of the Digital Media and Learning Conference 2012*, San Francisco, CA.
- Repertoires of Collaborative Practice**, Barron, B., Martin, C. K., Mercier, E., Pea, R. D., Steinbock, D., Walter, S., Mertl, V.. *Proceedings of the NSF Science of Learning Centers Annual Meeting 2009*, Washington, DC.

Repertoires of Collaborative Practice: Theoretical introduction and background, Barron, B., Martin, C. K., Mercier, E., Pea, R. D., Steinbock, D., Walter, S., Mertl, V.. CSDL 2009: *Proceedings of the Conference on Computer Supported Collaborative Learning*, Rhodes, Greece.

Mindful of Process: Scaffolds for Collaboration Discourse in Design Education, Daniel Steinbock. ICES 2008: *Proceedings of the International Conference for the Learning Sciences*, Utrecht, Netherlands.

Visualizing Identity to Facilitate Learning in Collaboration, Daniel Steinbock, Joey J. Lee, Roy Pea. ISLC 2008: *Proceedings of the Conference for NSF Science of Learning Centers*, Pittsburgh, PA.

Wearable Tag Clouds: Visualizations to Support New Collaborations, Daniel Steinbock, Roy Pea, Byron Reeves. CSDL 2007: *Proceedings of the Conference on Computer Supported Collaborative Learning*, New Brunswick, NJ.

Smartocracy: Social Networks for Collective Decision Making, Marko Rodriguez, Daniel Steinbock, Jennifer Watkins, Carlos Gershenson, Johan Bollen, Victor Grey, Brad deGraf. HICSS 2007: *IEEE Hawaii International Conference on Systems Science*, Waikoloa, Big Island, HI.

Snurf: Social Networks for News Media Distribution, Marko Rodriguez, Jennifer Watkins, Daniel Steinbock, Carlos Gershenson. Los Alamos Nat'l Lab Tech. Report LA-UR-06-2244, March 2006.

The Anatomy of a Large Scale Collective Decision Making System, Marko Rodriguez, Daniel Steinbock. Los Alamos National Lab Technical Report LA-UR-06-2139, March 2006.

Societal-Scale Decision Making Using Social Networks, Marko Rodriguez, Daniel Steinbock. NAACSOS 2004: *North American Association for Computational Social and Organizational Science Conference Proceedings*. Pittsburgh, PA. [featured in *Complexity Digest* 2004.51, *World Changing* June 26, 2005, *Nanotechnology Now* July 1, 2005]

Group Holographic Modeling for Societal-Scale Decision-Making Systems, Marko Rodriguez, Daniel Steinbock. NAACSOS 2004: *North American Association for Computational Social and Organizational Science Conference Proceedings*, Pittsburgh, PA.

When Dissent Is Good: The Interplay Between Reputation and Social Networks in an Artificial Society, Daniel Steinbock, Elena Zinchenko, Joshua Miller, R. Jack Thomas. CSSS 2003: *Santa Fe Institute Complex Systems Summer School Proceedings*, Santa Fe, NM.

Collective Intelligence Quantified for Computer-Mediated Group Problem Solving, Daniel Steinbock, Craig Kaplan, Marko Rodriguez, Juana Diaz, Newton Der, Suzanne Garcia. University of California, Santa Cruz Technical Report UCSC-CRL-02-28, July 2002.

PRESENTATIONS

Ethnography of collaboration, Quakers and human-centered design practice

- 17 OCT 2011 Seminar on the Learning Sciences, Stanford University School of Education, Stanford, CA
- 17 MAY 2010 HSTAR Institute, Stanford University, Stanford, CA
- 26 JAN 2010 Seminar on the Learning Sciences, Stanford University School of Education, Stanford, CA
- 18 MAR 2008 Qualifier Review, Stanford University School of Education, Stanford, CA
- 13 MAR 2008 Seminar on Qualitative Methods, Stanford University School of Education, Stanford, CA

The Dirty Dish Dilemma: altruism and distributed agency in cooperative social systems

- 19 OCT 2011 Synergy Cooperative, Stanford University, Stanford, CA
- 16 JAN 2011 Greenwave Cooperative, East Palo Alto, CA
- 27 SEP 2010 Seminar on the Learning Sciences, Stanford University School of Education, Stanford, CA
- 27 SEP 2010 Synergy Cooperative, Stanford University, Stanford, CA
- 17 OCT 2010 Ithaca Cooperative, Palo Alto, CA
- 23 MAY 2010 Inter-Science of Learning Center Conference, Boston, MA
- 10 MAY 2010 LIFE Leadership Group, NSF Science of Learning Center, Seattle, WA and Stanford, CA
- 22 APR 2009 LIFE Center Collaboration Group, Stanford University School of Education, Stanford, CA
- 6 MAR 2009 Foothill College, Los Altos Hills, CA
- 24 FEB 2009 Stanford University School of Education, Stanford, CA

Word cloud visualization for identity and collaboration

6 MAY 2008 LIFE Media Group, NSF Science of Learning Center, Seattle, WA & Stanford, CA

7 AUG 2006 Stanford University Center for Teaching and Learning, Stanford, CA

Complex social systems, Social network analysis for societal-scale decision-making

22 APR 2005 Free University Center for Evolution, Complexity and Cognition, Brussels, Belgium

6 JUN 2004 PlaNetwork Conference, San Francisco, CA

17 MAY 2004 International Conference on Complex Systems, Boston, MA

3 JUL 2003 Santa Fe Institute, Santa Fe, NM

*Other topics*29 MAY 2008 **Two ways artifacts are used to describe autobiographical experiences**

Seminar on Qualitative Research Methods, Stanford University School of Education, Stanford, CA

12 MAR 2008 **Coworking ecologies in future workplaces**

Program in Design, Stanford School of Engineering, Stanford, CA

19 JUL 2007 **Geotagging and participatory media inside and outside the classroom**

Stanford Center for Innovations in Learning, Stanford, CA

7 JUN 2007 **An artificial sense of direction for personal navigation**

EXPE 2007 Design Fair, Stanford School of Engineering, Stanford, CA

13 MAR 2007 **Three-tiered participatory journalism**

w/ Howard Rheingold, Stanford Dept. of Communication, Stanford, CA

17 JAN 2007 **Overcoming distraction and cognitive-dependence in designing for personal navigation**

Panasonic Advanced Research Lab, Kyoto, Japan; University of Tokyo, Tokyo, Japan.

8 JUN 2006 **The audience effect in online communities**

Topics in Technology & Learning, Stanford University School of Education, Stanford, CA

18 MAY 2002 **Software designs for human collective intelligence**

UC Santa Cruz School of Engineering Research Colloquium, Santa Cruz, CA

SERVICE AND PROFESSIONAL ACTIVITIES

2010-PRESENT Graduate Student Leadership Group, NSF-funded LIFE Science of Learning Center

MAY 2010 Graduate student rep at NSF-iSLC Conference, Boston University, Boston, MA

FEB 2010 Graduate student rep at NSF-LIFE Center site visit, University of Washington, Seattle, WA

NOV 2009 Graduate student rep at NSF-SLC PI Meeting, Washington, DC

JUN 2008 Graduate student rep at NSF-LIFE Center site visit, University of Washington, Seattle, WA

2006-2009 Referee for International Society of the Learning Sciences

ADVISING

GRADS Jamie O’Keeffe, Amanda Cravens, Katherine McFeely, Kacie Kinzer

UNDERGRADS Sasha Novis, Ana Deaconu, William Rogers, Philip Narodick, Zuzanna Drozd, Nadia Mufti

PATENTS & DISCLOSURES**Artificial Sense of Direction for Personal Navigation**, Daniel Steinbock, Benjamin Jackson, Jon Berkowitz. Stanford University and Panasonic Inc. and Stanford University Office of Technology Licensing. Disclosure, June 2007.**Social Semantic Networks for Distributing Contextualized Information**, Marko Rodriguez, Daniel Steinbock, Jennifer Watkins. Stanford University and Los Alamos National Lab, Patent Pending: LAD2006-1115, December 2006.**REFERENCES**

Available on request.