URI J. WILENSKY

Northwestern University
Learning Sciences & Computer Science
Center for Connected Learning & Computer-Based Modeling
Evanston, IL 60208

847-467-3818 (tel)
847-491-8999 (fax)
uri@northwestern.edu

ACADEMIC WORK EXPERIENCE / EDUCATION

Northwestern University, Evanston, IL

Professor of Learning Sciences, Computer Science & Complex Systems	*2008 – present*
Faculty member, program in Cognitive Science	*2000 - present*
Faculty member, program in Technology and Social Behavior	*2009 - present*
Faculty member, Segal Design Center Research Council	*2014 – present*
Governing Board, Northwestern Institute on Complex Systems	2004 - present
Associate Professor of Learning Sciences & Computer Science	2000 – 2008
Director of Center for Connected Learning & Computer-Based Modeling	**2000 - present**
Shepard undergraduate residential college fellow	2007 - present

Other University affiliations: University of Haifa

Tufts University, Medford, MA	1994 - 2000
Associate Professor of Computer Science	1999 – 2000
Director of Center for Connected Learning	1994 - 2000
Assistant Professor of Education and Child Development	1994 - 1999
Director of Mathematics and Science Teacher Education Programs	1994 - 1999

Affiliated Faculty in Computer Science, Media and Communications, and Cognitive Science.

Massachusetts Institute of Technology, Cambridge, MA	1998 - 1999
Post-doctoral Fellow	1993 - 1994

Mathematics Education, Learning Technologies

Ph.D. in Media Arts and Sciences, 1993	1988-1993

Thesis: *Connected Mathematics: Building Concrete Relationships with Mathematical Knowledge*
Thesis advisor: Prof. Seymour Papert

International Journal of Computers for Mathematical Learning	1994 – 2013
Editor-in-Chief	2004 – 2011
Executive Editor	1994 – 2013

Technology, Knowledge and Learning	2011 – 2013

Executive Editor

Thinking Machines Corporation, *Cambridge, MA*	1988 - 1993 (part time)

Scientist

Parallel simulation of physical systems
Parallel document retrieval

ComputerVision, Bedford, MA 1980-1987
Senior Technical Staff
Computer Graphics, Computer Aided Design & Expert Systems

Harvard University, Cambridge, MA 1978 - 1980
Mathematics Teaching Fellow

Brandeis University, Waltham, MA 1973 - 1977
M.A. in mathematics, 1977
B.A. in mathematics and philosophy, 1977
Phi Beta Kappa, magna cum laude

HONORS

Lyle-Spencer Awardee	2015
Best paper, IDC 2014	2014
NSF distinguished lecture	2014
McQuown Complex systems gift honoree	2013
NRC Computational Thinking Panel	2009/2010
AAAS Computational Thinking Commission	2009
Texas Instruments Fellowship	2006
Brady Gift Honoree	2005
National Academy of Education/Spencer Fellow	1999
National Science Foundation Career Award	1996
MIT Wiesner Prize	1992
Massachusetts Council of Arts and Humanities Grant	1988
ComputerVision Outstanding Achievement Award	1985
Voted "Best Calculus Teaching Fellow" by Harvard University students	1980
Phi Beta Kappa	1977
Brandeis University Highest Honors in Mathematics	1977
Winner of Hebrew University (of Jerusalem) Mathematics Olympiad	1972

GRANTS

2015-2018. Lyle-Spencer Foundation Award. **Broadening Participation in a Computational Future: Casting a Wide Net.** 996,000**.** Co-PI (with PI, Mike Horn, co-PIs Kai Orton and Kemi Jona, NU).

2014-2017. NSF CISE. Com**putational Thinking in STEM**. $599,849 .Co-PI (with PI, Kai Orton, Mike Horn, Laura Trouille and Kemi Jona, NU).

2014-2017. NSF CyberLearning. **LevelSpace: Modeling in Levels**. **$1,259,805**. Co-PI. (with Corey Brady, NU).

2014-2016. NSF EAGER. **A low-cost integrated agent-based modeling and physical computing platform.** $137,351**.** PI (with Corey Brady, NU).

2013-2014. Homeland Security. **NetLogo 2.5D phase one**. $14,000. Principal Investigator. (with Josh Epstein, Johns Hopkins University, Corey Brady, NU).

2013-2015. National Institute of Health. **NetLogo 2.5D phase two**. $37,500. Principal Investigator. (with Josh Epstein, Johns Hopkins University, Corey Brady, NU).

2013-2015. Mellon Foundation Sawyer Seminar Series. Co-PI. **What do we Know?: Theoretical Issues in Social Epistemology.** $175,000. (with Sanford Goldberg, Fabrizio Carani, Steven Epstein, Jennifer Lackey, Sarah J. Fodor).

2012-2013. Murphy Society. Principal Investigator. **Introduction to Agent-Based Modeling.** $35,000.

2012-2015 NSF CyberLearning. Co-PI. **InquirySpace: Technologies in Support of Student Experimentation. $**1,939,632. (with Bill Finzer, Bob Tinker & Chad Dorsey, PI).

2012-2015. NSF-DRL. PI**. Emerging Research-Empirical--Simulated Evolution: Developing a Framework for Computer-Based Modeling and Simulation Activities in the Classroom**. $995,180. (with Michael Horn, Corey Brady).

2011-2015. NSF CE21. Co-Principal Investigator. **Casting a Wide Net: Computational Thinking.** $ 998,711. (with Kemi Jona, Mike Horn, Laura Trouille, Vicky Kalogera).

2010-2011. NSF Information & Intelligent Systems. Principal Investigator. **Workshop: Transitioning Research-Developed Learning Technologies into Broad Use Phases, Challenges, and Needed Infrastructure.** $41,268.

2010-2011. Murphy Society. Principal Investigator. **Introduction to Agent-Based Modeling.** $36,500.

2010-2014. NSF DRK12. Principal Investigator. **Enabling Modeling and Simulation-based Science in the classroom: Integrating agent-based models, real world sensing and collaborative networks.** $2,095,316. (with Corey Brady, David Figlio, Paulo Blikstein & Pratim Sengupta).

2009-2010. Murphy Society. Principal Investigator. **Introduction to Agent-Based Modeling.** $32, 576.

2008-2009. Motorola Innovations grants program. Co-PI. **Speech and the Cell Phone: an Experiential Learning Project.** (with Janet Pierrehumbert, PI and Berry, Bradlow, Honig, Katsaggelos, Kraus, Pardo, Wong).

2007-2010. NSF Information & Intelligent Systems. Principal Investigator. **Advancing the Science of Agent-based Modeling Through Frameworks, Tools, and Pedagogies**. $447,918.

2007 – 2010. NSF Engineering Education and Centers. Co-PI**. Exploring the Role of Computational Adaptive Expertise in Design and Innovation.** (with Ann McKenna, PI, Robert Linsenmeier, & Matthew Glucksberg). $940,667.

2006 – 2009. NSF Human and Social Dynamics. Principal Investigator. **Exploring Educational Policy and Change from a Complex Systems Perspective.** (with Louis Gomez & Luis Amaral). $750,000.

2005 – 2008. NSF ROLE. Co-PI. **Toward a new conceptualization of what constitutes progress in learning physics, K-16: Resources, frames, and networks**. (with David Hammer, Joe Redish, Rachel Scherr & Andrew Elby, University of Maryland). $1, 265, 230.

2005 – 2008. Dreyfus Foundation. Co-PI. **Simulations and Interactive Models in Science.** (with Mike Stieff, UC Davis)**.** $646,733.

2004 – 2006. Searle Foundation. Principal Investigator. **Understanding School Choice using Agent-Based Simulation.** (with Louis Gomez, Northwestern University), $171,548.

2003 – 2008. NSF ITR**.** Principal Investigator. **Procedural Modeling of Urban Environments**. (with Ben Watson, Northwestern University & Martin Felsen, Illinois Institute of Technology). $1,600,000.

2003-2005. NSF ITR**. Learning-Centered Design Methodology: Meeting the Nation's Need for Computational Tools for K-12 Science Education (Engineering Scaffolded Work Environments***)*. Elliot Soloway, Mark Guzdial, Andrew Johnson, Daniel Edelson, Joseph Krajcik, Uri Wilensky, Principal Investigators. Research, 9/15/00-8/31/04. (My involvement was only with final project year). $2,999,998.

2002-2006. NSF ROLE. Principal Investigator . **Integrated Simulation and Modeling Environment.** (co-PI, Walter Stroup, University of Texas). $2,013,662 ($1,673,662 from NSF and $340,000 from Texas Instruments).

2001- 2006. NSF IERI. Co-Principal Investigator. **Modeling Across the Curriculum**. (with Paul Horwitz, Bob Tinker, Janet Gobert of Concord Consortium & Chris Dede, John Willett, Harvard University). $7,269,182.

2001-2004. NSF ROLE. Co-Principal Investigator**. Facilitating the Understanding of Complex Adaptive Systems Through Computer Simulations**. (with Robert Goldstone, Kelly Mix, Indiana University). $330,910.

1999-2000. National Academy of Education/Spencer Post-Doctoral Fellowship. **Learning through Parallel Modeling**.

1998- 2001. NSF REPP. Principal Investigator**. Participatory Simulations: Network-based Design for Systems Learning in Classrooms**. (co-PI, Walter Stroup, University of Texas at Austin). $2,129,115, ($1,749,115 from NSF and $380,000 from Texas Instruments).

1996 - 2000. NSF REC. Principal Investigator . **Connected Mathematics: Making Sense of Complex Phenomena through Building Object-Based Parallel Models**. $244,362.

1995 - 1996. NSF RED. Principal Investigator . **Making Sense of Complex Phenomena through Building Computational Models**. $50,000.

1991 - 1993. MIT Council for the Arts. **Poetry at the Media Lab**.

1987- 1988. Massachusetts Council for the Arts and Humanities. **Wellfleet Words**.

Grants Pending

1. NSF AISL. **A Computational Approach to Learning Evolution in Museums**. $2,264,453. co-PI. (with Michael Horn, PI and co-PI, Corey Brady and Collaboration with Field Museum and New York Hall of Science)

2. National Institute for Mental Health. **Agent Based Modeling to Implement Suicide Prevention Programs.** $3,732,126. Co-PI. (with Hendricks Brown, PI, and Luis Amaral, co-PI).

3. NSF ITEST. Group-Based Cloud Computing for STEM Education. $1.200,000. Co-PI. (with Walter Stroup, PI, Tony Petrosino, co-PI and Corey Brady, co-PI.

4. NSF Physics. Title. co-PI. Exploring the Origins and Consequences of Modular Hierarchical Structures Observed in Living Systems $586,338. (with Christian Huepe, PI).

PAPERS AND PUBLICATIONS

Refereed Journal Articles

1. Sirer, I., Maroulis, S., Guimera, R, Wilensky, U. & Amaral, L.A.N. (in press). The Currents Beneath the "Rising Tide" of School Choice: An Analysis of Student Enrollment Flows in the Chicago Public Schools. Journal of Policy Analysis and Management.

2. Weintrop, D., & Wilensky, U. (in press). Situating Programming Abstractions in a Constructionist Video Game. *Informatics in Education*.

3. Berland, M. & Wilensky, U. (2015). Comparing Virtual and Physical Robotics Environments for Teaching Complex Systems and Computational Literacies. Journal of Science Education and Technology.

4. Brady, C., Holbert, N., Soylu, F., Novak, M., & Wilensky, U. (2015). Sandboxes for Model-Based Inquiry. *Journal of Science Education and Technology, 24*(2). 265-286.
5. Wilkerson-Jerde, M. H., Wagh, A. & Wilensky, U. (2015). Balancing curricular and pedagogical needs in computational construction kits: Lessons from the DeltaTick project. *Science Education*, *99*(3), 465-499.
6. Wilkerson-Jerde, M. H. & Wilensky, U. (2014). Patterns, probabilities, and people: Making sense of quantitative change in complex systems. Online First in *Journal of the Learning Sciences*. doi:10.1080/10508406.2014.976647
7. Hjorth, A., & Wilensky, U. (2014). Redesigning Your City–A Constructionist Environment for Urban Planning Education. Informatics in Education-An International Journal, (Vol13_2), 197-208. Chicago.
8. Weintrop, D., & Wilensky, U. (2014). Situating Programming Abstractions in a Constructionist Video Game. *Informatics in Education*, 13(2), 307-321.
9. Wilensky, Brady & Horn (2014). Fostering Computational Literacy in Science Classrooms. *Communications of the ACM*.
10. Brady, C., Holbert, N. R., Novak, M., Soylu, F., & Wilensky, U. (2014). Sandboxes for Model-Based Inquiry. Science Teaching and Learning with Models. *Journal of Science Education and Technology* (JOST) [Special Issue].
11. Stroup, W. & Wilensky, U. (2014). On the Embedded Complementarity of Agent-Based and Aggregate Reasoning in Students' Developing Understanding of Dynamic Systems. *Technology, Knowledge and Learning*, 9(1-2).
12. Maroulis, S., Bakshy, E., Gomez, L., & Wilensky, U. (2014). Modeling the transition to public school choice. *Journal of Artificial Societies and Social Stimulation*, 17 (2): 3.
13. Holbert, N., & Wilensky, U. (2014). Constructible Authentic Representations: Designing video games that enable players to use knowledge developed in-game to reason about science. *Technology, Knowledge and Learning,* 1-27.

14. Maroulis, S & Wilensky, U. (2014). Social and task interdependencies in the street-level implementation of innovation. *Journal of Public Administration Research and Theory*.
15. Gobert, J., O'Dwyer, L., Horwitz, P., Buckley, B., Levy, S.T. & Wilensky, U. (2011). Examining the relationship between students' epistemologies of models and conceptual learning in three science domains: Biology, Physics, & Chemistry. *International Journal of Science Education*, 33(5), 653-684.
16. Levy, S. T. & Wilensky, U. (2011). Mining students' inquiry actions for understanding of complex systems. ScienceDirect Alert: *Computers & Education*, Vol. 56, Iss. 3, 2011. pp. 556-573.
17. Stonedahl, F. & Wilensky, U. (2011). Finding Forms of Flocking: Evolutionary Search in ABM Parameter-Spaces. In Multi-Agent-Based Simulation XI, T. Bosse, A. Geller, & C. M. Jonker (Eds). Lecture Notes in Computer Science. Springer Berlin / Heidelberg. Vol. 6532. pp. 61-75.
18. Wilkerson-Jerde, M. & Wilensky, U. (2011). How do mathematicians learn math?: Resources and acts for constructing and understanding mathematics. *Educational Studies in Mathematics, 78*(1), 21-43.
19. Maroulis, S., Guimera, R., Petry, H., Stringer, M., Gomez,L. Amaral, L & Wilensky, U. (2010). A complex systems approach to Educational Policy Research. *Science* 1 October 2010: Vol. 330. no. 6000, pp. 38.
20. Blikstein, P., & Wilensky, U. (2009). An atom is known by the company it keeps: A constructionist learning environment for Materials Science using multi-agent simulation. *International Journal of Computers for Mathematical Learning, 14*(1), 81-119.
21. Kornhauser, D., Rand, W. & Wilensky, U. (2009). Design guidelines for agent-based model visualization. *Journal of Artificial Societies and Social Simulation (JASSS), 12*(2), 1.
22. Levy, S. T., & Wilensky, U. (2009). Crossing levels and representations: The Connected Chemistry (CC1) curriculum. *Journal of Science Education and Technology, 18*(3), 224-242
23. Levy, S. T., & Wilensky, U. (2009). Students' learning with the Connected Chemistry (CC1) curriculum: Navigating the complexities of the particulate world. *Journal of Science Education and Technology, 18*(3), 243-254.
24. Sengupta, P., & Wilensky, U. (2009). Learning electricity with NIELS: Thinking with electrons and thinking in levels. *International Journal of Computers for Mathematical Learning, 14*(1), 21-50.
25. Levy, S.T. & Wilensky, U. (2008). Inventing a "mid-level" to make ends meet: Reasoning through the levels of complexity. *Cognition & Instruction.* 26(1), 1-47.
26. Goldstone, R., & Wilensky, U. (2008). Promoting transfer through grounding complex systems principles. *Journal of the Learning Sciences*, 17(4), 465-516.
27. Wang, J., Dam, G., Yildrim, S., Rand, W., Wilensky, U. & Houk, J.C. (2008). Reciprocity between the Cerebellum and the Cerebral Cortex: Nonlinear dynamics in Microscopic Modules. *Complexity.* 14(2), 29-45.
28. Wilensky, U. & Rand, W. (2007). Making Models Match: Replicating an Agent-Based Model. *Journal of Artificial Societies and Social Simulation (JASSS)*. 10(4).

29. Abrahamson, D. & Wilensky, U. (2007). Learning Axes and Bridging Tools in a Technology-Based Design for Statistics. *International Journal of Computers for Mathematical Learning*. 12(1), 23-55.
30. Abrahamson, D., Berland, M.W., Shapiro, R. B., Unterman, J. W., & Wilensky, U. (2006). Leveraging epistemological diversity through computer-based argumentation in the domain of probability. *For the Learning of Mathematics*, 2*6*(3), 39-55.
31. Jacobson, M. & Wilensky, U. (2006). Complex Systems in Education: Scientific and Educational Importance and Implications for the Learning Sciences. *Journal of Learning Sciences*. 15(1), pp. 11-25.
32. Wilensky, U. & Reisman, K. (2006). Thinking like a Wolf, a sheep or a Firefly: Learning Biology through Constructing and Testing Computational Theories -- an Embodied Modeling Approach**.** *Cognition & Instruction*, 24(2), pp. 171-209.
33. Abrahamson, D. Janusz, R. & Wilensky, U. (2006). There once was a nine block…. – A middle school design for probability and statistics. *Journal of Statistics Education*. 8(1).
34. Stieff, M. & Wilensky, U. (2003). The Connected Chemistry Modeling Environment: Incorporating Interactive Simulations into the Chemistry Classroom. *Journal of Science Education and Technology*.
35. Wilensky, U. (2003). Statistical Mechanics for secondary school: The GasLab Multi-agent Modeling Toolkit. *International Journal of Computers for Mathematical Learning*, 8(1), 1-41 (special issue on agent-based modeling).
36. Wilensky, U. & Resnick, M. (1999). Thinking in Levels: A Dynamic Systems Perspective to Making Sense of the World. *Journal of Science Education and Technology.* Vol. 8 No. 1. pp. 3 – 18.
37. Resnick, M. & Wilensky, U. (1998). Diving into Complexity: Developing Probabilistic Decentralized Thinking through Role-Playing Activities. *Journal of Learning Sciences,* Vol. 7, No. 2. pp.153-172.
38. Wilensky, U. & Reisman, K. (1998). ConnectedScience: Learning Biology through Constructing and Testing Computational Theories -- an Embodied Modeling Approach. *InterJournal of Complex Systems*, #234, 1-12. (reprinted from conference proceedings #8).
39. Wilensky, U. (1997). What is Normal Anyway? Therapy for Epistemological Anxiety. *Educational Studies in Mathematics.* Volume 33, No. 2. pp. 171-202
40. Wilensky, U. (1996). Modeling Rugby: Kick First , Generalize Later? *International Journal of Computers for Mathematical Learning*. Vol. 1, No. 1. pp. 124 - 131.
41. Wilensky, U. (1995). Paradox, Programming and Learning Probability. *Journal of Mathematical Behavior.* Vol. 14, No. 2. pp. 231-280.
42. Masand, B., Wilensky, U., Massar, J.P., and Redner, S. (1992). An Extension of the Two-Dimensional Self-avoiding Walk Series on the Square Lattice. *Journal of Physics A:* Gen 25.

Additionally, I guest edited a special issue of the International Journal of Computers for Mathematical Learning: Wilensky, U. (2004). (Ed.) Special issue on agent-based modeling in Education. *International Journal of Computers for Mathematical Learning*.

Refereed Conference Papers

1. Head, B., Hjorth, A., Brady, C., & Wilensky, U. (in press). Evolving Agent Cognition with NetLogo LevelSpace. Poster in Proceedings of the Winter Simulation Conference. Winter Simulation Conference.

2. Lungeanu, A., Sullivan, S., Wilensky, U., & Contractor, N.S. (2015). A computational model of team assembly in emerging scientific fields. In L. Yilmaz, W.K.V. Chan, I. Moon, T.M.K. Roeder, C. Macal, & M.D. Rossetti (Eds.). *Proceedings of the 2015 Winter Simulation Conference*.

3. Brady, C., Weintrop, D., Gracey, K., Anton, G., & Wilensky, U. (2015). The CCL-Parallax Programmable Badge: Learning with Low-Cost, Communicative Wearable Computers. In *Proceedings of the 16th Annual Conference on Information Technology Education* (pp. 139–144). New York, NY, USA: ACM.

4. Weintrop, D., & Wilensky, U. (2015). Keeping it Old School: Classic Video Games as Inspiration for Modern Student Programs. In *Proceedings of the 11th Games, Learning, & Society Conference*. Madison, WI.

5. Weintrop, D., & Wilensky, U. (2015). To Block or Not to Block, That is the Question: Students' Perceptions of Blocks-based Programming. In *Proceedings of the 14th International Conference on Interaction Design and Children* (pp. 199–208). New York, NY, USA: ACM.

6. Weintrop, D. & Wilensky, U. (2015). Using Commutative Assessments to Compare Conceptual Understanding in Blocks-based and Text-based Programs. In Proceedings of the 11th annual International Computing Education Research (ICER) conference. New York, NY, USA: ACM.

7. Hjorth, A., Wilensky, U., Villamar, J., & Brown, H. (2014) Using agent-Based Modeling to Explore and Visualize the Effects of Prevention Implementation Strategies for Policy. In Computational and Technical Approaches to Improve Implementation of Prevention Programs. Panel chaired by Dr. Hendricks Brown at 7th Annual Conference on the Science of Dissemination and Implementation. Bethesda, MD.

8. Hjorth, A., Brady, C., Head, B. and Wilensky, U. (2015). LevelSpaceGUI – Scaffolding Novice Modelers' Inter-Model Explorations. In proceedings for Interaction Design & Children 2015. Boston, MA.

9. Holbert, N., Brady, C., Soylu, F., Novak, M., & Wilensky, U. (2015). *The Model Gallery: Supporting Idea Diffusion in Computational Modeling Activities.* Poster presented at the AERA Annual Meeting, Chicago, IL: April, 2015.

10. Beheshti, E., Weintrop, D., Orton, K., Horn, M.S. , Jona, K., Trouille, L., & Wilensky, U. (2015). Bringing Expert Computational Practices into High School

Science Classrooms. Poster presented at the annual meeting of the National Association for Research in Science Teaching (NARST). Chicago, IL

11. Hjorth, A., Brady, C., Head, B., & Wilensky, U. (2015). Thinking Within and Between Levels: Exploring Reasoning with Multi-Level Linked Models. In T. Koschmann, P. Häkkinen, & P. Tchounikine (Eds.), "Exploring the material conditions of learning: opportunities and challenges for CSCL," the Proceedings of the Computer Supported Collaborative Learning (CSCL) Conference Gothenburg, Sweden: ISLS.

12. Weintrop, D., Orton, K., Horn, M.S., Beheshti, E., Trouille, L., Jona, K., & Wilensky, U. (2015). Outcomes of Bringing Computational Thinking into STEM Classrooms. Paper to be presented at the Annual Meeting of the American Educational Research Association (AERA 2015), Chicago, USA.
13. Weintrop, D., Wilensky, U., Roscoe, J., & Law, D. (2015). Teaching Text-based Programming in a Blocks-based World. In *Proceedings of the 46th ACM Technical Symposium on Computer Science Education* (pp. 678–678). New York, NY, USA: ACM

14. Weintrop, D., Orton, K., Horn, M.S., Beheshti, E., Trouille, L., Jona, K., & Wilensky, U. (2015).Computational Thinking in the Science Classroom: Preliminary Findings from a Blended Curriculum. Paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST). Chicago, IL

15. Head, B., Liang, C., & Wilensky, U. (2014). Flying like a School of Fish: Discovering Flocking Formations in an Agent-Based Model with Analogical Reasoning. Poster in Proceedings of the Michigan Complexity Mini-Conference. University of Michigan, Ann Arbor, Michigan.

16. Head, B., Orton, K., & Wilensky, U. (2014). An Agent-Based Approach to Modeling Membrane Formation. In Proceedings of the Michigan Complexity Mini-Conference. University of Michigan, Ann Arbor, Michigan.

17. Hjorth, A. & Wilensky, U., Villamar, J. & Brown, H. (2014). Using Agent-Based Modeling to Visualize the Effects of Prevention Implementation Strategies for Policy in symposium on Computational and Technologic Approaches to Improve the Implementation of Prevention Programs. Academy Health 7th Annual Conference on the Science of Dissemination and Implementation.

18. Hjorth, A., & Wilensky, U. (2014). Redesigning Your City – A Constructionist Environment for Urban Planning Education. Proceedings of the Constructionism 2014 Conference. Vienna, Austria. August 2014.

19. Weintrop, D., & Wilensky, U. (2014). Situating Programming Abstractions in a Constructionist Video Game. Proceedings of the Constructionism 2014 Conference. Vienna, Austria. August 2014.

20. Guo, Y., & Wilensky, U. (2014) Beesmart: a microworld for swarming behavior and for learning complex systems concepts. Proceedings of the Constructionism 2014 Conference. Vienna, Austria. August 2014.

21. Brown, CH, Gallo, C., Villamar, J, Hjorth, A & Wilensky, U. (2014). Agent-based Modeling in Prevention Methodology Research. In Brown, CH (Chair) PoVey, C (Discussant), Computational and Technical Approaches to Improve the Implementation of Prevention Programs. Symposium conducted at the 7th Annual Conference on the Science of Dissemination and Implementation: Transforming Health Systems to Optimize Individual and Population Health, Bethesda, MA.

22. Hjorth, A. & Wilensky, U. (2014). Re-grow Your City – a NetLogo curriculum unit on Regional Development. In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee & L. D'Amico (Eds.), Proceedings of "Learning and Becoming in Practice," the 11th International Conference of the Learning Sciences (ICLS) 2014 (Vol. 3, pp. 1553-1555). Boulder, CO: International Society of the Learning Sciences.

23. Wagh, A., & Wilensky, U. (2014) *Seeing patterns of change: Supporting student noticing in building models of natural selection.* Proceedings of the Constructionism 2014 Conference. Vienna, Austria. August 2014.
24. Holbert, N., Weintrop, D. & Wilensky, U. (2014). Constructionist video games: Creating educational video games that empower players to construct new knowledge. In N. Holbert & D. Weintrop (Org), N. Holbert (Chair), and Y. Kafai (Discussant), Combining Video Games and Constructionist Design to Support Deep Learning in Play. In J. Poleman, E. Kyza, I. Tabak & K. O'Neill (Eds.), Proceedings of "*Learning and Becoming in Practice," the 11th International Conference of the Learning Sciences* (ICLS 2014). University of Colorado at Boulder: ISLS.

25. Horn, M.; Brady, C., Hjorth, A., Wagh, A. & Wilensky, U. (2014). Frog Pond: A code first learning environment on natural selection and evolution. Proceedings of IDC 2014 (recipient of best short paper award).

26. Wilensky, U. (2014). Computational Thinking through Modeling and Simulation. Whitepaper presented at the summit on Future Directions in Computer Education. Orlando, FL. Jan 8-9, 2014. http://www.stanford.edu/~coopers/2013Summit/WilenskyUriNorthwesternREV.pdf.

27. Jona, K., Wilensky, U., Trouille, L., Horn, M. S., Orton, K., Weintrop, D., & Beheshti, E. (2014). Embedding Computational Thinking in Science, Technology, Engineering, and Math (CT-STEM). Whitepaper presented at the summit on Future Directions in Computer Education. Orlando, FL. Jan 8-9, 2014.

28. Weintrop, D., Beheshti, E., Horn, M. S., Orton, K., Trouille, L., Jona, K., & Wilensky, U. (2014) Interactive Assessment Tools for Computational Thinking in High School STEM Classrooms. In D. Reidsma, I. Choi, & R, Bargar (Eds.), *Proceedings of Intelligent Technologies for Interactive Entertainment*: *6th International Conference, INTETAIN 2014, Chicago, IL, USA* (pp. 22-25). Springer International Publishing.

29. Weintrop, D. & Wilensky, U. (2014). Program-to-play videogames: Developing computational literacy through gameplay. *Paper presented at Games, Learning, & Society 10*. Madison, WI.

30. Wagh, A. & Wilensky, U. (2014). EvoBuild: Programming models of evolutionary change using blocks. Poster presented at the 2014 Annual Meeting of the AERA, Philadelphia.

31. Yang, C. K., & Wilensky, U. (2014). Easing Epistemological Anxiety with Models: A Case Study in South Korea and the U.S. Proceedings of the 38th Meeting of the International Group for Psychology of Mathematics Education (joint meeting with the North American Chapter),Vancouver, Canada, July 15-21, 2014.

32. Weintrop, D., Beheshti, E., Horn, M. S., Orton, K., Jona, K., Trouille, L., & Wilensky, U. (2014). Defining Computational Thinking for Science, Technology, Engineering, and Math. Paper presented at the annual meeting of the American Educational Research Association (AERA 2014), Philadelphia, USA.

33. Soylu, F., Brady, C., Holbert, N., & Wilensky, U. (2014). The thinking hand: Embodiment of tool use, social cognition and metaphorical thinking and implications for learning design. Paper presented at the AERA Annual Meeting (SIG: Brain, Neurosciences, and Education), Philadelphia, PA: April 2014.

34. Brady, C., Horn, M., Wilensky, U., Wagh, A., Hjorth, A., & Bannerjee, A. (2014). Getting your Drift - Activity designs for grappling with evolution. In Penuel, W., Jurow, S., & O'Connor, K. (Eds.) Learning and Becoming in Practice: Proceedings of the 11th International Conference of the Learning Sciences (ICLS 2014) - Volume 2, Short Papers, Symposia, and Selected Abstracts. International Society of the Learning Sciences: Boulder, CO.

35. Wagh, A. & Wilensky, U. (2014). Seeing patterns of change: Supporting student noticing in building models of natural selection. Proceedings of 2014 Constructionism, Vienna, Aug 19-23.

36. Tisue, S., & Wilensky, U. (2004, updated 2013). NetLogo: Design and implementation of a multi-agent modeling environment. In Proceedings of the Agent 2004 Conference on Social Dynamics: Interaction, Reflexivity and Emergence, Chicago, Illinois, October 2004

37. Wilensky, U. (2001, updated 2013). Modeling nature's emergent patterns with multi-agent languages. Proceedings of EuroLogo 2001. Linz, Austria

38. Weintrop, D., & Wilensky, U. (2013). RoboBuilder: A Computational Thinking Game. In Proceedings of the 44th ACM technical symposium on Computer science education (pp. 736–736). Denver, CO: ACM.

39. Weintrop, D., & Wilensky, U. (2013). Supporting Computational Expression: How Novices Use Programming Primitives in Achieving a Computational Goal. Paper Presented at AERA, San Francisco, CA, USA.

40. Weintrop, D., & Wilensky, U. (2013). Learning by Leveling: An Incremental Introduction to Programming. Proceedings of the 43rd Annual Meeting of the Jean Piaget Society Annual Meeting, Chicago, IL, USA.

41. Weintrop, D, Hjorth, A, & Wilensky, U. (2013). Know Your Network: Learning Social Networks Analysis Through Meaningful Manipulation. Poster presented at InfoSocial 2013. Evanston, IL, USA.

42. Trouille, L., Beheshti, E., Horn, M., Jona, K., Kalogera, V., Weintrop, D., & Wilensky, U. (2013). Bringing Computational Thinking into the High School Science and Math Classroom. In Proceedings of the *American Astronomical Society, AAS Meeting #221, #201.09*.

43. Wagh. A. & Wilensky, U. (2013). *Leveling the playing field: Making multi-level evolutionary processes accessible through participatory simulations.* Proceedings of CSCL, Madison, Wisconsin, June 15-19.

44. Yang, C. K. & Wilensky, U. (2013). Mathematical Epistemologies and Modeling: A Case Study in South Korea. Invited Lecture at the 10th Korean Women in Mathematical Sciences International Conference, Seoul, Korea, June 20-21, 2013.

45. Yang, C. K. & Wilensky, U. (2013). Unpacking Student Mathematical Epistemologies: A Case Study in South Korea. Presentation at the Fulbright Conference, Jeju, Korea, April 6-8, 2013.

46. Hjorth, A. & Wilensky, U. (2012). *Acting like a Turtle: A NetLogo Kinect Extension.* Proceedings of Constructionism 2012 Conference. Athens, Greece, Aug 21-25.

47. Holbert, N. R., Wilensky, U. (2012). Designing video games that encourage players to integrate formal representations with informal play. In van Aalst, J., Thompson, K., Jacobson, M. J., & Reimann, P. (Eds.) *The Future of Learning: Proceedings of the 10th International Conference of the Learning Sciences (ICLS 2012) - Volume 1, Full papers*. International Society of the Learning Sciences: Sydney, NSW, Australia.

48. Holbert, N., Wilensky, U. (2012). Representational congruence: Connecting video game experiences to the design and use of formal representations. *Proceedings of the Constructionism 2012 Conference*. Athens, Greece, Aug 21-25.

49. Wagh, A. & Wilensky, U. (2012). *Evolution in blocks: Building models of evolution using blocks.* Proceedings of Constructionism, Athens, Greece, Aug 21-25.

50. Wagh, A. & Wilensky, U. (2012). *Breeding birds to learn about artificial selection: Two birds with one stone?* Proceedings of ICLS, Sydney, Australia, July 2-6.

51. Wagh, A. & Wilensky, U. (2012). *Mechanistic explanations of evolutionary change facilitated by agent-based models.* Paper presented at AERA, Vancouver, April 13-17.

52. Horn, M.S. & Wilensky, U. (2012). *NetTango: A mash-up of NetLogo and Tern*. In Moher, T. (chair) and Pinkard, N. (discussant), When systems collide: Challenges and opportunities in learning technology mashups. Symposium presented at the annual meeting of the American Education Research Association, Vancouver, British Columbia.

53. Weintrop, D., Holbert, N., Wilensky, U., & Horn, M. S. (2012). Redefining Constructionist Video Games: Marrying Constructionism and Video Game Design. *Proceedings of the Constructionism 2012 Conference*. Athens, Greece, Aug 21-25.

54. Weintrop, D., & Wilensky, U. (2012). RoboBuilder: A Program-to-Play Constructionist Video Game. *Proceedings of the Constructionism 2012 Conference*. Athens, Greece, Aug 21-25.

55. Wagh, A. & Wilensky, U. (2011). *Giraffes don't stretch their necks anymore: Useful pieces of knowledge about natural selection*. Proceedings of epiSTEME 2011, Mumbai, Jan 4- 9.

56. Yang, C. K. & Wilensky, U. (2012). Problem Solving and its Relationship to Students' Epistemology of Mathematics: A Case Study in South Korea. Paper published in the Proceedings of the 12th International Congress on Mathematical Education, Seoul, Korea, July 8-15, 2012.

57. Yang, C. K., & Wilensky, U. (2012). Mathematical Problem Solving and its Relationship to Students' Epistemology of Mathematics in Korean Students . Poster presented at the American Education Research Association, Vancouver, BC, April 13-17, 2012.

58. Yang, C. K. (2012). Understanding Cultural Differences in Mathematical Cognitive Strategies and Learning Cultures in Korea and the United States. Paper presented at the American Education Research Association, Vancouver BC, April 13-17, 2012.

59. Olson, I.C., Leong, Z.A., Wilensky, U., & Horn, M.S. (2011). "It's just a toolbar!" Using tangibles to help children manage conflict around a multi-touch tabletop. In Proceedings of the fifth international conference on Tangible, Embedded and Embodied Interaction (TEI'11), Funchal, Portugal. ACM New York. pp. 29-36.

60. Holbert, N., Penney, L., & Wilensky, U. (2010). *Bringing Constructionism to Action Gameplay*. In J. Clayson & I. Kalas (Eds.), Proceedings of the Constructionism 2010 Conference. Paris, France, Aug 10-14.

61. Lerner, R., Levy, S.T., & Wilensky, U. (2010). *Encouraging Collaborative Constructionism: Principles Behind the Modeling Commons*. In J. Clayson & I. Kalas (Eds.), Proceedings of the Constructionism 2010 Conference. Paris, France, Aug 10-14.

62. Levy, S. T., Wilensky, U. (2010). *Mining students' actions for understanding of complex systems: Students' explorations of gas models in the Connected Chemistry curriculum*. Paper presented at AERA 2010, Denver, CO.
63. Olson, I., Horn, M., & Wilensky, U. (2010). NetLogo Tango: Supporting Student Programming with Tangible Objects and Multi-Touch Displays. In K. Gomez & J. Radinsky (Ed.), *Proceedings of the 9th International Conference of the Learning Sciences*. Chicago, IL.

64. Russell, E., Buzby, C., & Wilensky, U. (2010). *Watershed Modeling For Education*. Paper presented at the First International Conference for Geospatial Research & Application, Washington, DC.

65. Stonedahl, F. & Wilensky, U. (2010). Finding Forms of Flocking: Evolutionary Search in ABM Parameter-Spaces. *Proceedings of the MABS workshop at the Ninth International Conference on Autonomous Agents and Multi-Agent Systems*. Toronto, Canada.

66. Stonedahl, F., Rand, W., & Wilensky, U. (2010). Evolving Viral Marketing Strategies. *Proceedings of the 12th Annual Conference on Genetic and Evolutionary Computation*. Portland, OR.

67. Stonedahl, F. & Wilensky, U. (2010). Evolutionary Robustness Checking in the Artificial Anasazi Model. *Proceedings of the AAAI Fall Symposium on Complex Adaptive Systems: Resilience, Robustness, and Evolvability.* November 11-13, 2010. Arlington, VA.

68. Wagh, A. & Wilensky, U. (2010). *Ideas-to-think-with: Useful pieces of knowledge about natural selection*. In J. Clayson & I. Kalas (Eds.), Proceedings of the Constructionism 2010 Conference. Paris, France, Aug 10-14.

69. Wilensky, U., & Papert, S. (2010). Restructurations: Reformulations of Knowledge Disciplines through new representational forms. In J. Clayson & I. Kallas (Eds.), In J. Clayson & I. Kalas (Eds.), Proceedings of the Constructionism 2010 Conference. Paris, France, Aug 10-14, p. 97.

70. Wilkerson-Jerde, M. & Wilensky, U. (2010). Qualitative Calculus of Systems: Exploring Students' Understanding of Rate of Change and Accumulation in Multiagent Systems. Paper presented at AERA 2010, Denver, CO.

71. Wilkerson-Jerde, M. & Wilensky, U. (2010, July). Seeing Change in the World from Different Levels: Understanding the Mathematics of Complex Systems. In M. Jacobson (Org.), U. Wilensky (Chair), and Peter Reimann (Discussant), *Learning about Complexity and Beyond: Theoretical and Methodological Implications for the Learning Sciences*. Proceedings of ICLS 2010, Chicago, IL.

72. Wilkerson-Jerde, M. & Wilensky, U. (2010, June). *Reflected abstraction and knowledge reconstruction in expertise: Tracking mathematicians' sensemaking around unfamiliar mathematical ideas".* Paper presented at the 40th Annual Meeting of the Jean Piaget Society, St Louis, MO.

73. Wilkerson-Jerde, M. & Wilensky, U. (2010). *"Restructuring Change, Interpreting Changes:The DeltaTick Modeling and Analysis Toolkit"*. Proceedings of Constructionism 2010, Paris.

74. Blikstein, P., Wilensky, U., & Abrahamson, D. (2009, April). Towards a framework for cognitive research using agent-based modeling and complexity sciences. In M. Jacobson (Chair), M. Kapur (Organizer) & N. Sabelli (Discussant), *Complexity, learning, and research: Under the microscope, new kinds of microscopes, and seeing differently*. Symposium conducted at the annual meeting of the American Educational Research Association, San Diego, CA.

75. Lerner, Levy & Wilensky (2009). Design of the Modeling Commons. Chais Conference, Tel Aviv, Israel.

76. Wilkerson-Jerde, M., & Wilensky, U. (2009, April). Complementarity in agent-based and equation-based models. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

77. Wilkerson-Jerde, M., & Wilensky, U. (2009, May). Understanding proof: Tracking experts' developing understanding of an unfamiliar proof. Paper presented at the International Commission on Mathematical Instruction, ICMI Study 19, Proof and Proving in Mathematics Education, Taipei, Taiwan.

78. Stonedahl, F., Wilkerson-Jerde, M., & Wilensky, U. (2009, May). Re-conceiving introductory computer science curricula through agent-based modeling. Paper presented at the Eighth International Conference on Autonomous Agents and Multi-agent Systems (AAMAS) - EduMAS Workshop, Budapest, Hungary.

79. Blikstein, P., & Wilensky, U. (2008). Implementing Multi-Agent Modeling in the Classroom: Lessons from Empirical Studies in Undergraduate Engineering Education. In Jacobson, M. (Organizer), Complex Systems and Learning: Empirical Research, Issues, and 'seeing' Scientific Knowledge with New Eyes. Symposium in G. Kanselaar, J. van Merriënboer, P. Kirschner, & T. de Jong, Proceedings of the International Conference of the Learning Sciences (ICLS2008), vol. 3, pp. 266-273. Utrecht, The Netherlands: ISLS.

80. Blikstein, P., Abrahamson, D., & Wilensky, U. (2008). The classroom as a complex adaptive system: An agent-based framework to investigate students' emergent collective behaviors. In G. Kanselaar, J. van Merriënboer, P. Kirschner, & T. de Jong, Proceedings of the International Conference of the Learning Sciences (ICLS2008), vol. 3, pp. 312-313. Utrecht, The Netherlands: ISLS.

81. Blikstein, P., Abrahamson, D., & Wilensky, U. (2008). Groupwork as a complex adaptive system: A methodology to model, understand, and design classroom strategies for collaborative learning. Paper presented at the annual conference of the American Education Research Association, New York, March 24-28.

82. Rand, W., Blikstein, P., & Wilensky, U. (2008). GoGoBot: Group Collaboration, Multi-Agent Modeling and Robots. In L. Padgham, D. Parkes, J. Müller & S. Parsons (Eds.), *Proceedings of the 7th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*. (Vol. 3, pp. 1717-1722): International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS).

83. Russell, E. & Wilensky, U. (2008). Consuming Spatial Data in NetLogo using the GIS Extension. Paper presented at Swarmfest 2008 Conference, Chicago, IL.

84. Sengupta, P., & Wilensky, U. (2008). Designing Across Ages: On The Low-Threshold-High-Ceiling Nature of NetLogo Based Learning Environments. Paper presented at the 2008 Annual Meeting of the American Educational Research Association, March 24-28.

85. Sengupta, P., & Wilensky, U. (2008). *Learning Activities As Tools For Formative Assessment- Case Study Of A Computational Multi-Agent Based Electricity Curriculum (NIELS: NetLogo Investigations In Electromagnetism)*. In B. Zhang (Chair) and J. Gobert (Discussant), "Designing and Assessing Modeling and Visualization Technologies (MVT) Enhanced Learning". Proceedings of the Eighth International Conference for the Learning Sciences (ICLS 2008), Vol. 3, pp 383 – 391. The Netherlands: ISLS.

86. Sengupta, P., & Wilensky, U. (2008). *On Learning Electricity in 7th Grade with Multi-agent Based Computational Models (NIELS)*. Proceedings of the Eighth International Conference for the Learning Sciences (ICLS 2008), Vol. 3, pp 123 – 125. The Netherlands: ISLS.

87. Sengupta, P., & Wilensky, U. (2008). *On The Learnability of Electricity As A Complex System*. In M. Jacobson (Chair) and R. Noss (Discussant), "Complex Systems & Learning: Empirical Research, Issues & "Seeing" Scientific Knowledge With New Eyes." Proceedings of the Eighth International Conference for the Learning Sciences (ICLS 2008), Vol. 3, pp 258 – 264. The Netherlands: ISLS.

88. Sengupta, P., & Wilensky, U. (2008). On the representational and epistemological affordances of NetLogo-based science curricula. Paper presented at the annual meeting of the American Educational Research Association, April 2008.

89. Stonedahl, F., Kornhauser, D., Russell, E., Brozefsky, C., Verreau, E., Tisue, S. & Wilensky, U. (2008). Tinkering with Turtles: An Overview of NetLogo's Extensions API. Paper presented at Swarmfest 2008 Conference, Chicago, IL.

90. Stonedahl, F., Rand, W. & Wilensky, U. (2008). Multi-Agent Learning with a Distributed Genetic Algorithm: Exploring Innovation Diffusion on Networks. Paper presented at the ALAMAS&ALAG workshop at AAMAS 2008, Estoril, Portugal.
91. Stonedahl, F., Rand, W., & Wilensky, U. (2008). CrossNet: A Framework for Crossover with Network-based Chromosomal Representations. Paper presented at GECCO 2008, Atlanta, Georgia.

92. Wilkerson, M. & Wilensky, U. (2008). Embedding Environments as a Mechanism for Mathematical Reasoning: An Expert Study. Presented at the 2008 Annual Meeting of the American Educational Research Association, March 24-28.

93. Wilkerson, M. & Wilensky, U. (2008). How do mathematicians learn mathematics? In O. Figueras, J. L. Cortina, S. Alatorre, T. Rojano, & A. Sepulveda, Proceedings of the Joint Meeting of PME-32 and PME-NA XXX, vol. 4, pp. 409-416. Morelia, Mexico: PME.

94. Wilkerson, M., Sengupta, S., & Wilensky, U. (2008). Perceptual Supports for Sensemaking: A Case Study Using Multi Agent Based Computational Learning Environments. In G. Kanselaar, J. van Merriënboer, P. Kirschner, & T. de Jong, Proceedings of the International Conference of the Learning Sciences (ICLS2008), vol. 3, pp. 151-152. Utrecht, The Netherlands: ISLS.

95. Bakshy, E., & Wilensky, U. (2007). Turtle Histories and Alternative Universes: Exploratory Modeling with NetLogo and *Mathematica.* Proceedings of Agent2007, Chicago, November 15-1

96. Blikstein, P., Rand, W., & Wilensky, U. (2007). Examining Group Behavior and Collaboration using ABM and Robots. Proceedings of Agent2007, Chicago, November 15-17.

97. Kornhauser, D., Rand, W., & Wilensky, U. (2007). Visualization design and tools for agent-based modeling in NetLogo. Proceedings of Agent2007, Chicago, November 15-17.

98. Levy, S.T., & Wilensky, U. (2007). Actions Across Levels (AAL): A Multiple Levels Perspective On What It Means To Make Sense Of Complex Systems. In M. Jacobson (Org.), M. Chi (discussant), Complex Systems and Education: Conceptual Principles, Methodologies, and Implications for Education. Presented at the 12th Biennial Conference for Research on Learning and Instruction, Budapest, Hungary, August 28 - September 1, 2007.

99. Abrahamson, D., Blikstein, P., & Wilensky, U. (2007). Classroom model, model classroom: Computer-supported methodology for investigating collaborative-learning pedagogy. In C. Chinn, G. Erkens, & S. Puntambekar (Eds.), *Proceedings of the Computer Supported Collaborative Learning (CSCL) Conference* (Vol. 8, Part 1, pp. 46 - 55). NJ: Rutgers University.

100. Ottino-Loffler, J., Rand, W., & Wilensky, U. (2007). Coevolution of Predators and Prey in a Spatial Model. Paper presented at the GECCO 2007 Conference. London, England. July 7-11.

101. Rand, W., & Wilensky, U. (2007). Full-Spectrum Modeling: From Simplicity to Elaboration and Realism in Urban Pattern Formation. Paper presented at the North American Association Computational Social and Organization Sciences conference (NAACSOS), Atlanta, GA.

102. Blikstein, P., Rand, W., & Wilensky, U. (2007). Just a Cog in the Machine: Participatory Robotics as a Powerful Tool for Understanding Collaborative Learning. Proceedings of the Computer Supported Collaborative Learning (CSCL) conference, Rutgers, NJ.

103. Abrahamson, D., Wilensky, U., & Levin, J. (2007). Agent-Based Modeling as a Bridge Between Cognitive and Social Perspectives on Learning. In D. Abrahamson (Org.), *Learning Complexity: Agent-Based Modeling Supporting Education Research on Student Cognition in Social Contexts*. Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

104. Blikstein, P., Abrahamson, D., & Wilensky, U. (2007). Multi-agent simulation as a tool for investigating cognitive-developmental theory. In D. Abrahamson (Org.), Learning Complexity: Agent-Based Modeling Supporting Education Research on Student Cognition in Social Contexts. Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

105. Blikstein, P., & Wilensky, U. (2007). Modeling manifold epistemological stances with agent-based computer simulation. In D. Abrahamson (Org.), *Learning Complexity: Agent-Based Modeling Supporting Education Research on Student Cognition in Social Contexts*. Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

106. Gobert, J., Buckley, B., Levy, S., & Wilensky, U. (2007). Teasing apart domain-specific and domain-general inquiry skills: Co-evolution, bootstrapping, or separate paths? In J. Gobert & C. Schunn (Orgs.), *Supporting Inquiry Learning: A Comparative Look at What Matters.* Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

107. Levy, S., & Wilensky, U. (2007). Consistency and change in high-school students' exploration of Connected Chemistry models. In J. Gobert & J. Slotta (Orgs.), *New learning technologies: affordances for authoring, assessment, and research*. Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

108. Levy, S., & Wilensky, U. (2007). *How do I get there... straight, oscillate or inch? High-school students' exploration patterns of Connected Chemistry.* Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

109. Sengupta, P., Wilkerson, M., & Wilensky, U. (2007). *On the relationship between spatial knowledge and learning electricity: Comparative case studies of students using 2D and 3D emergent, computational learning environments.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, April 9-13.

110. Blikstein, P., & Wilensky, U. (2006). An atom is known by the company it keeps: A constructionist learning environment for Materials Science using multi-agent simulation. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

111. Maroulis, S., & Wilensky, U. (2006). Using agent-based modeling to understand the social dynamics of schools. Paper presented at the Teacher Networks conference, Northwestern University, Evanston, IL, November 8.

112. Lechner, T., Watson, B., Ren, P., Wilensky, U., Tisue, S., & Felsen, M. (2006). Procedural modeling of urban land use. *ACM SIGGRAPH 2006 conference*.

113. Sondahl, F., Tisue, S., & Wilensky, U. (2006). Breeding faster turtles: Progress towards a NetLogo compiler. Proceedings of Agent 2006, Chicago, IL.

114. Wilensky, U. (2006). Promoting ABM literacy: implications for design, scientific content and education. Keynote presentation at Agent 2006, Chicago, IL.

115. Felsen, M., Watson, B., & Wilensky, U. (2006). Urban Complexity + Emergence: Procedural Modeling of City Activity and Form. In Surfacing Urbanisms: Recent Approaches to Metropolitan Design (pp. 261-265). Pasadena, CA: Woodbury University.

116. Wilensky, U., Rand, W., & Blikstein, P. (2006). *Participatory, Embodied, Multi-Agent Simulation*. Paper presented at the AAMAS-06 Conference, 2006.

117. Blikstein, P., & Wilensky, U. (2006). 'Hybrid Modeling': Advanced Scientific Investigation Linking Computer Models and Real-World Sensing. Proceedings of the Seventh International Conference of the Learning Sciences, Bloomington, IN, June 27 – July 1.

118. Blikstein, P., & Wilensky, U. (2006). Learning About Learning: Using Multi-Agent Computer Simulation to Investigate Human Cognition. Proceedings of the International Conference on Complex Systems 2006, Boston, MA, June 25-30.

119. Rand, W., Blikstein, P., & Wilensky, U. (2006). Widgets, Planets, and Demons: The Case for the Integration of Human, Embedded, and Virtual Agents via Mediation. Paper presented at Swarmfest 2006, South Bend, IN, June 23-24.

120. Rand, W., & Wilensky, U. (2006). Verification and Validation through Replication: A Case Study Using Axelrod and Hammond's Ethnocentrism Model. Paper presented at the Annual Conference of the North American Association for Computational Social and Organizational Sciences, South Bend, IN, June 22 – 23.

121. Blikstein, P., Abrahamson, D., Wilensky, U. (2006). Minsky, mind, and models: Juxtaposing agent-based computer simulations and clinical-interview data as a methodology for investigating cognitive-developmental theory. Paper presented at the annual meeting on the Jean Piaget Society, Baltimore, MD, June 1-3.

122. Berland, M. & Wilensky, U. (2006). Constructionist Collaborative Engineering: results from an Implementation of PVBOT. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

123. Levy, S.T, Novak, M., & Wilensky, U. (2006). Students' foraging through the complexities of the particulate world: Scaffolding for independent inquiry in the connected chemistry (MAC) curriculum. In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

124. Levy, S.T. & Wilensky, U. (2006). Emerging knowledge through an emergent perspective: High-school students' inquiry, exploration and learning in the Connected Chemistry curriculum. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

125. Sengupta, P., & Wilensky, U. (2006). NIELS: An Agent Based Modeling Environment for Learning Electromagnetism. In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

126. Unterman, J. W., & Wilensky, U. (2006,) PANDA BEAR: Perimeter and Area by Embodied Agent Reasoning. In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

127. Wilensky, U. (2006). Complex systems and restructuration of scientific disciplines: Implications for Learning, Analysis of Social Systems, and Educational Policy. In J. Kolodner (Chair), C. Bereiter (Discussant), and J.D. Bransford (Discussant), "Complex Systems, Learning, and Education: Conceptual Principles, Methodologies, and Implications for Educational Research." Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 7-11.

128. Blikstein, P., & Wilensky, U. (2006). A case study of multi-agent-based simulation in undergraduate materials science education. Proceedings of the Annual Conference of the American Society for Engineering Education, Archived at http://www.asee.org/acPapers/code/getPaper.cfm?paperID=10906&pdf=2006Full2496.pdf.

129. Wilensky, U., & Abrahamson, D. (2006). Is a disease like a lottery?: Classroom networked technology that enables student reasoning about complexity. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA., April 7-11.

130. Blikstein, P. & Wilensky, U. (2006). From inert to generative modeling: case studies of Multi-Agent-Based Simulation in Undergraduate Engineering education. In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Symposium presented at the annual meeting of the American Educational Research Association, San Francisco, CA., April 7-11

131. Abrahamson, D. & Wilensky, U. (2005). Understanding chance: From student voice to learning supports in a design experiment in the domain of probability. *Proceedings of the Twenty Seventh Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*.

132. Blikstein, P. & Wilensky, U. (2005). Less Is more: Agent-Based Simulation as a Powerful Learning Tool in Materials Science. *Proceedings of the IV International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2005)*. Utrecht, Netherlands. July 23-26, 2005.

133. Sengupta, P. & Wilensky, U. (2005). N.I.E.L.S: An Emergent Multi-Agent Based Modeling Environment for learning Physics. AMAS-05. Utrecht, Netherlands. July 23-26, 2005.

134. Sklar, B., & Wilensky, U. (2005). Agent-based systems for human learning. AMAS-05. Utrecht, Netherlands. July 23-26, 2005.

135. Abrahamson, D., Blikstein, P., Lamberty, K. K., & Wilensky, U. (2005, June). Mixed-media learning environments. *Proceedings of the annual meeting of Interaction Design and Children 2005,* Boulder, Colorado.

136. Abrahamson, D. & Wilensky, U. (2005, June) *Piaget? Vygotsky? I'm Game: Agent-Based Modeling for Psychology Research*. Paper presented at the annual meeting of the Jean Piaget Society. Vancouver, Canada.

137. Maroulis, S. & Wilensky, U. (2005). Modeling school districts as complex adaptive systems: a simulation of market-based reform. Paper presented at the 3rd Lake Arrowhead Conference on Human Complex Systems. Lake Arrowhead, California, May 18 - 22, 2005.

138. Abrahamson, D. & Wilensky, U. (2005). Collaboration and equity in classroom activities using Statistics As Multi-Participant Learning-Environment Resource (S.A.M.P.L.E.R.). Paper presented in W. Stroup and U. Wilensky (Chairs) & C. D. Lee (Discussant), *Patterns in group learning with next-generation network technology.* The annual meeting of the American Educational Research Association, Montreal, Canada, April 11 - 15, 2005.

139. Berland, M. & Wilensky, U. (2005). Complex play systems -- Results from a classroom implementation of VBot. Paper presented in W. Stroup and U. Wilensky (Chairs) & C. D. Lee (Discussant), *Patterns in group learning with next-generation network technology.* The annual meeting of the American Educational Research Association, Montreal, Canada, April 11 - 15, 2005.

140. Hillis, T., Stroup, W., & Wilensky, U. (2005). Patterns of Risk Seeking and Aversion Among Pre-Service Teachers: Mathematical Decisions, Preference, Efficacy, and Participation. Annual Meeting of the American Educational Research Association, Montreal, Canada, April 11-15, 2005.

141. Levy, S.T. & Wilensky, U. (2005). Students' patterns in exploring NetLogo™ models, embedded in the Connected Chemistry Environment. Paper presented in W. Stroup and U. Wilensky (Chairs) & C. D. Lee (Discussant), *Patterns in group learning with next-generation network technology.* The annual meeting of the American Educational Research Association, Montreal, Canada, April 11 - 15, 2005.

142. Maroulis, S. & Wilensky, U. (2005). *Leave no turtle behind: An agent-based simulation of school choice dynamics*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada, April 11 - 15, 2005.

143. Tisue, S., & Wilensky, U. *(2004). NetLogo: Design and Implementation of a Multi-Agent Modeling Environment , Proceedings of Agent 2004, Chicago, October 2004.*

144. Abrahamson, D. & Wilensky, U. (2004). Embodied spatial articulation: A gesture perspective on student negotiation between kinesthetic schemas and epistemic forms in learning mathematics (PDF). In D. E. McDougall and J. A. Ross (Eds.), *Proceedings of the Twenty Sixth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education Vol. 2* (pp. 791 - 797). Windsor, Ontario: Preney.

145. Blikstein, P. & Wilensky, U. (2004) *MaterialSim: an agent-based simulation toolkit for Materials Science learning. Proceedings of the International Conference on Engineering Education*. Gainesville, Florida. Archived at http://www.succeed.ufl.edu/icee/Papers/402_BliksteinICEEFinalPaper_(3).pdf

146. Abrahamson, D. & Wilensky, U. (2004). ProbLab goes to school: Design, teaching, and learning of probability with multi-agent interactive computer models. *Proceedings of the Fourth Conference of the European Society for Research in Mathematics Education*.

147. Tisue, S., & Wilensky, U. (2004). NetLogo: Design and Implementation of a Multi-Agent Modeling Environment. Proceedings of Agent 2004, Chicago, October 2004.

148. Blikstein, P. & Wilensky, U. (2004). MaterialSim: An agent-based simulation toolkit for Materials Science learning. *Proceedings of the International Conference on Engineering Education*, Gainesville, Florida, October 17-21, 2004.

149. Abrahamson, D. & Wilensky, U. (2004). ProbLab: Multi-agent interactive computer models for grounding probability in perceptual judgments of spatial proportions and in accessible mathematization. *Proceedings of the 28th Annual Meeting of the International Group for the Psychology of Mathematics Education,* Bergen, July 11 - 14, 2004.

150. Abrahamson, D. & Wilensky, U. (2004). SAMPLER: Collaborative interactive computer-based statistics learning environment. *Proceedings of the 10th International Congress on Mathematical Education*, Copenhagen, July 4 - 11, 2004.

151. Abrahamson, D., Berland, M.W., Shapiro, R. B., Unterman, J. W., & Wilensky, U. (2004). Leveraging epistemological diversity through computer-based argumentation in the domain of probability. In Y. B. Kafai, W. A. Sandoval, N. Enyedy, A. S. Nixon, F. Herrera (Eds.), *Proceedings of The Sixth International Conference of the Learning Sciences* (pp. 28 – 35). Mahwah NJ: Lawrence Erlbaum Associates.

152. Tisue, S., & Wilensky, U. (2004). NetLogo: Design and Implementation of a Multi-Agent Modeling Language. SwarmFest, Ann Arbor, May 9 - 11, 2004.

153. Tisue, S., & Wilensky, U. (2004). NetLogo: A Simple Environment for Modeling Complexity. International Conference on Complex Systems, Boston, May 16 - 21, 2004.

154. Abrahamson, D. & Wilensky, U. (2004). S.A.M.P.L.E.R.: Statistics As Multi-Participant Learning-Environment Resource. In U. Wilensky (Chair) and S. Papert (Discussant) *Networking and complexifying the science classroom: Students simulating and making sense of complex systems using the HubNet networked architecture*. The annual meeting of the American Educational Research Association, San Diego, CA, April 12 - 16, 2004.

155. Berland, M. & Wilensky, U. (2004). Virtual robotics in a collaborative constructionist learning environment. In U. Wilensky (Chair) and S. Papert (Discussant) *Networking and complexifying the science classroom: Students simulating and making sense of complex systems using the HubNet networked architecture*. The annual meeting of the American Educational Research Association, San Diego, CA, April 12 - 16, 2004.

156. Levy, S. T. & Wilensky, U. (2004). Making sense of complexity: Patterns in forming causal connections between individual agent behaviors and aggregate group behaviors. In U. Wilensky (Chair) and S. Papert (Discussant) *Networking and complexifying the science classroom: Students simulating and making sense of complex systems using the HubNet networked architecture*. The annual meeting of the American Educational Research Association, San Diego, CA, April 12 - 16, 2004.

157. Levy, S. T., Kim, H., & Wilensky, U. (2004). Connected Chemistry - A study of secondary students using agent-based models to learn Chemistry. In U. Wilensky (Chair) and S. Papert (Discussant) *Networking and complexifying the science classroom: Students simulating and making sense of complex systems using the HubNet networked architecture.* The annual meeting of the American Educational Research Association, San Diego, CA, April 12 - 16, 2004.

158. Wilensky, U. (2004). *The uses of complexity perspectives and multi-agent modeling in education.* Plenary talk at the International Conference on Complexity Sciences. Boston, Ma. (May 2004).

159. Tisue, S. & Wilensky, U. (2004). *NetLogo language Development.* International Conference on Complexity Sciences. Boston, Ma. (May 2004)

160. Lechner, T. Watson, B. Wilensky, U. & Felsen, M. (2003). Procedural City Modeling. *Proceedings of Midgraph, 2003*. Washington University: St. Louis, MO.

161. Kim, H., Levy, T. & Wilensky, U. (2003). The use of modeling/simulation software in science education: an experiment with NetLogo Software and the Connected Chemistry curriculum. Paper presented at the twenty first International Conference of the Korean Society for Educational Technology. Seoul, Korea (June 2003).

162. Wilensky, U., Stroup, W. & Shapiro, B. (2003). Networked Participatory Simulations: Technologies for Supporting Classroom Collaboration in Exploring the Dynamics of Complex Systems. *Proceedings of the Conference on Computer-Supported Collaborative Learning*, CSCL ’03.

163. Stroup, W. & Wilensky, U. (2003). Embedded Complementarity of Object-based and Aggregate Reasoning in students developing understanding of dynamic systems. Paper presented at the annual meeting of the *American Educational Research Association*. Chicago, IL.

164. Abrahamson, D. & Wilensky, U. (2003). The quest of the bell curve: A constructionist approach to learning statistics through designing computer-based probability experiments. Proceedings of the Third Conference of the European Society for Research in Mathematics Education, Bellaria, Italy, Feb. 28 - March 3, 2003. [http://ccl.northwestern.edu/cm/papers/bellcurve/].

165. Horwitz, P., Gobert, J., Wilensky, U. & Dede. C. (2003). MAC: A Longitudinal Study of Modeling Technology in Science Classrooms. National Educational Computing Conference (NECC).

166. Wilensky, U. (2002). Complex Systems Concepts and Tools in Education: Developing a Modeling Mindset: The need for a modeling and simulation *strand* in the K-16 Curriculum. Paper presented at the annual meeting of the *American Educational Research Association*. New Orleans, LA..

167. Stieff. M. & Wilensky, U. (2002). ChemLogo: A novel computer-based modeling environment for teaching and learning chemistry. Proceedings of the Fifth Biannual International Conference of the Learning Sciences: Seattle, WA, October, 2002.

168. Stroup, W., Kaput, J, Ares, N. & Wilensky, U. (2002). The Nature and Future of Classroom Connectivity: The Dialectics of Mathematics in the Social Space. *Proceedings of the Psychology of Mathematics Education.*

169. Wilensky, U. (2002). Participatory Simulation: Envisioning the networked classroom as a way to support systems learning for all. Paper presented at the annual meeting of the *American Educational Research Association*. New Orleans, LA.

170. Wilensky, U. (2001) Modeling Nature's Emergent Patterns with Multi-agent Languages. *Proceedings of EuroLogo 2001*. Linz, Austria.

171. Wilensky, U. (2001). Emergent Entities and Emergent Processes: Constructing Emergence through Multi-agent programming. Paper presented at the annual meeting of the *American Educational Research Association*. Seattle, Wa.

172. Wilensky, U. (2001). Embodied Learning: Students Enacting Complex Dynamic Phenomena with the HubNet Architecture. Paper presented at the annual meeting of the *American Educational Research Association*. Seattle, Wa.

173. Centola, D., & Wilensky, U. (2000). Survival of the Groupiest: Facilitating Students' Understanding of the Multiple Levels of Fitness through Multi-Agent Modeling - The EACH Project. *Interjournal of Complex Systems*, 2000.

174. Centola, D., McKenzie, E. & Wilensky, U. (2000). A Hands-On Modeling Approach to Evolution: Learning about the Evolution of Cooperation and Altruism Through Multi-Agent Modeling - The EACH Project. *Proceedings of the Fourth Annual International Conference of the Learning Sciences*: Ann Arbor, MI, June 14-17, 2000.

175. Wilensky, U. & Stroup, W. (2000). Networked Gridlock: Students Enacting Complex Dynamic Phenomena with the HubNet Architecture. *Proceedings of the Fourth Annual International Conference of the Learning Science*s: Ann Arbor, MI, June 14-17, 2000.

176. Wilensky, U. & Stroup, W. (1999). Participatory Simulations: Network-based Design for Systems Learning in Classrooms. *Proceedings of the Conference on Computer-Supported Collaborative Learning*. Article no. 80. International Society of the Learning Sciences. Archived at http://portal.acm.org/citation.cfm?id=1150240.1150320&coll=GUIDE&dl=ACM&type=series&idx=SERIES11363&part=series&WantType=Proceedings&title=CSCL. (This is a condensed version of the paper below).

177. Wilensky, U. & Stroup, W. (1999). Learning through Participatory Simulations: Network-based Design for Systems Learning in Classrooms. *American Educational Research Association*. Montreal, Canada.

178. Wilensky, U., Hazzard, E & Froemke, R. (1999). An Extensible Modeling Toolkit for Exploring Statistical Mechanics *Proceedings of the Seventh European Logo Conference* - EUROLOGO'99, Sofia, Bulgaria.

179. Wilensky, U. & Reisman, K. (1998). Learning Biology through Constructing and Testing Computational Theories -- an Embodied Modeling Approach. In Y. Bar-Yam (Ed.), *Proceedings of the Second International Conference on Complex Systems.* Nashua, NH: New England Complex Systems Institute.

180. Jacobson, M. J., Brecher, K., Clemens, M., Farrell, W., Kaput, J., Reisman, K. & Wilensky, U. (1998). Education in complex systems. In Y. Bar-Yam (Ed.), *Proceedings of the Second International Conference on Complex Systems*. Nashua, NH: New England Complex Systems Institute.

181. Westbury, C. & Wilensky, U. (1998). Knowledge representation in cognitive science: Implications for education. *Proceedings of the First National Conference on the Learning Sciences and the challenges of the Information Era*. Lima: Peru.

182. Wilensky, U. (1995). Learning Probability through Building Computational Models. *Proceedings of the 19th International Conference on the Psychology of Mathematics Education*.

183. Wilensky, U. & Resnick, M. (1995). New Thinking for New Sciences: Constructionist Approaches for Exploring Complexity". *American Educational Research Association*, San Francisco. Ca.

184. Wilensky, U. (1994). What is Normal? *National Educational Computing Conference*, Boston, Ma.

185. Resnick, M. & Wilensky, U. (1993). Beyond the Deterministic, Centralized Mindsets: New Thinking for New Sciences," *American Educational Research Association*, Atlanta, Ga.

186. Wilensky, U. (1993). What is Abstract? What is Concrete*? American Educational Research Association*, Atlanta, Ga.

187. Wilensky, U. (1991). People's Intuitions about Probability and Statistics: Implications for a Learning Environment," *American Educational Research Association*, San Francisco, CA.

188. Wilensky, U. & Brandes. A. (1990). A Computer Environment for the Study of Feedback," *American Educational Research Association*, Cambridge, Ma.

189. Wilensky, U. (1989). Putting the Child in the Feedback Loop. *Fourth International Conference on Logo and Mathematics Education*, Jerusalem, Israel.

SOFTWARE AND CURRICULA

The NetLogo software has tens of thousands of users with over 500,000 downloads to date. Our software packages and curricula are in use in classrooms, research laboratories and informal contexts worldwide.

1. Wilensky, U. (2015). **NetLogo 5.2.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

2. Wilensky, U. (2015). **Computer HubNet 5.2.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

3. Wilensky, U. (2015). **NetLogo3D 5.2.1**. [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

4. Wilensky, U. (2015). **NetLogo 5.2** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

5. Wilensky, U. (2015). **Computer HubNet 5.2** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

6. Wilensky, U. (2015). **NetLogo3D 5.2.** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

7. Hjorth, A. Head, B. & Wilensky, U. (2015). **LevelSpace NetLogo extension.** [computer software]. Evanston, IL: Center for Connected Learning and Computer Based Modeling, Northwestern University. **http://ccl.northwestern.edu/levelspace** .

8. Wilensky, U. (2014). **NetLogo 5.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

9. Wilensky, U. (2014). **Computer HubNet 5.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

10. Wilensky, U. (2014). **NetLogo3D 5.1.** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

11. Wilensky, U. (2013). **NetLogo 5.0.5** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

12. Wilensky, U. (2013). **Computer HubNet 5.0.5** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

13. Horn, M. & Wilensky, U. (2013). **NetTango 2.0.** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://tidal.sesp.northwestern.edu/nettango/ .

14. Wilensky, U. (2012). **NetLogo 5.0.4** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

15. Wilensky, U. (2012). **Computer HubNet 5.0.4** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

16. Wilensky, U. & Payette, N. (2012). NetLogo Networks Extension.

17. Sengupta, P. & Wilensky, U. (2012). MSIM Electricity unit.

18. Sengupta, P. & Wilensky, U. (2012). N.I.E.L.S. curriculum. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/curriculum/niels.

19. Wilensky, U., Brady, C., Holbert, N.R., Soylu, F. (2012). MSIM Particulate nature of matter unit. http://ccl.northwestern.edu/rp/modelsim/index.shtml .

20. Wilensky, U., Novak, M., Wagh, A., Soylu, F. (2012). MSIM Population biology unit. http://ccl.northwestern.edu/rp/modelsim/index.shtml .

21. Wilensky, U., Novak, M. & Wagh, A., (2012). MSIM Evolution unit. http://ccl.northwestern.edu/rp/modelsim/index.shtml .

22. Wilensky, U., Rand, W., & Novak, M. (2012). BEAGLE curriculum. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/curriculum/simevolution/beagle.shtml.

23. Wilensky, U. (2012). **NetLogo 5.0.3** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

24. Wilensky, U. (2012). **Computer HubNet 5.0.3** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet **.**

25. Wilensky, U. (2012). **NetLogo 5.0.2** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

26. Wilensky, U. (2012). **Computer HubNet 5.0.2** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet **.**

27. Wilensky, U., Head, B. & Payette, N. (2012). **NetLogo Networks Extension**. [computer software]. Evanston, IL: Center for Connected Learning and Computer Based Modeling, Northwestern University**. http://ccl.northwestern.edu/netlogo/docs/nw.html.**

28. Horn, M. & Wilensky, U. (2011). **NetTango 1.0.** Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://tidal.sesp.northwestern.edu/nettango/ .

29. Stonedahl, F & Wilensky, U. (2011). **BehaviorSearch** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://behaviorsearch.org .

30. Wilensky, U. (2011). **Computer HubNet 5.0** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

31. Wilensky, U. (2011). **NetLogo 5.0.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

32. Wilensky, U. (2011). **Computer HubNet 5.0.1** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

33. Wilensky, U. (2011). **NetLogo 5.0** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

34. Wilensky, U. (2011). **Computer HubNet 5.0** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet .

35. Wilensky, U. (2011) **NetLogo3D 5.0**. [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

36. Wilensky, U. (2011). **NetLogo 4.1.3** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

37. Wilensky, U. (2011). **Computer HubNet 4.1.3 [Computer software].** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University**.** http://ccl.northwestern.edu/netlogo/docs/#HubNet .

38. Wilensky, U. (2010). **NetLogo 4.1.2** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

39. Wilensky, U. (2010). **NetLogo 4.1.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

40. Wilensky, U. (2009). **Computer HubNet 4.1** [Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/docs/#HubNet ..

41. Wilensky, U. (2009). **NetLogo 4.1** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

42. Wilensky, U. (2009) **NetLogo3D 4.1**. [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

43. Wilensky, U. (2009). **NetLogo 4.0.5** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

44. Wilensky, U. (2009). **Computer HubNet 4.0.5** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. **http://ccl.northwestern.edu/netlogo**.

45. Wilensky, U. (2008). **Computer HubNet 4.0.3** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

46. Wilensky, U. (2008). **NetLogo 4.0.3** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

47. Wilensky, U. (2008). **NetLogo 4.0.4** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

48. Wilensky, U. (2007). **Computer HubNet 4.0** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

49. Wilensky, U. (2007). **Computer HubNet 4.0.2** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

50. Wilensky, U. (2007). **Computer HubNet 4.0.4** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

51. Wilensky, U. (2007). **NetLogo 4.0** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

52. Wilensky, U. (2007). **NetLogo 4.0.2** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

53. Wilensky, U. (2007) **NetLogo3D Preview 4**. [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

54. Wilensky, U. (2007) **NetLogo3D Preview 5**. [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

55. Wilensky, U. (2006). **Computer HubNet 3.1.3** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/hubnet.html.

56. Wilensky, U. (2006). **NetLogo 3.1.3** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

57. Wilensky, U. (2006) **NetLogo3D Preview 3**. [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo.

58. Wilensky, U., & Unterman, J. (2006). **PANDA BEAR curriculum**. Evanston, IL: Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/curriculum/panda/.

59. Abrahamson, D., & Wilensky, U. (2005, 2009). **ProbLab 2.0 model-based curriculum.** Evanston, IL, Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu//ProbLab.

60. Sengupta, P., & Wilensky, U. (2005, 2009). **NIELS Curriculum (electromagnetism).** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/NEILS.

61. Wilensky, U. (2005). **Flowgrammer 1.0 Systems Dynamics package.** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu.

62. Wilensky, U. (2005). **NetLogo Network package 1.0.** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/netlogo/network.

63. Wilensky, U., & Blikstein, P. (2005). **NetGogo 1.0** [Computer software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/netgogo.

64. Wilensky, U., Levy, S., & Novak, M. (2005, 2009). **Connected Chemistry Model-based Curriculum 3.0**. Evanston, IL. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/curriculum/chemistry.

65. Berland, M., & Wilensky, U. (2004). **VBot Curriculum (Robotics).** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/curriculum/vbot.

66. Blikstein, P., & Wilensky, U. (2004). **MaterialSim Curriculum (Materials Science)**. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/curriculum/materialsim.

67. Levy, S., Wilensky, U., Novak, M., & Bruozas, M. (2003). **Connected Chemistry Model-based Curriculum 2.0**. Evanston, IL. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/mac/. (updated 2004; 2005).

68. Wilensky, U. (2003). **NetLogo 2.0.** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/netlogo.

69. Wilensky, U., & Abrahamson, D. (2003). **ProbLab model-based curriculum.** Evanston, IL, Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu//ProbLab. (updated 2004; 2005)

70. Wilensky, U., & Stroup, W. (2003). **Computer-HubNet 1.0.** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/ps. (updated 2004).

71. Wilensky, U., & Stroup, W. (2003). **Participatory Simulations guide for Computer-HubNet.** Center for Connected Learning and Computer Based Modeling, Northwestern University. Evanston, IL. (Updated 2004, 2005).

72. Stroup, W., & Wilensky, U. (2002). **Participatory Simulations guide for Calculator-HubNet**. Center for Connected Learning and Computer Based Modeling, Northwestern University. Evanston, IL. (Updated 2003, 2004, 2005).

73. Wilensky, U., & Shargel, B. (2002). **BehaviorSpace** [computer software]. Evanston, IL: Center for Connected Learning and Computer Based Modeling, Northwestern University. http://ccl.nothwestern.edu/netlogo

74. **Connected Chemistry Model-based Curriculum 1.0**. Evanston, IL. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/mac/. (updated 2002; 2005).

75. Wilensky, U. (2000). **GasLab Curriculum.** Evanston, IL, Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/cm/GasLab/ (updated 2002; 2003; 2004; 2005)

76. Wilensky, U. (2000). **Project EACH Curriculum.** Evanston, IL, Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu//cm/EACH/ (updated 2002)

77. Wilensky, U. (1999). **NetLogo. 1.0** Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/netlogo. (updated 2002; 2003; 2004)

78. Wilensky, U., & Stroup, W. (1999). **Calculator-HubNet 1.0**. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/ps. (updated 2002; 2003; 2005)

79. Wilensky, U. (1998). **Connected Models**. Evanston, IL, Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu//cm/models. (updated 2000; 2001; 2002).

80. Wilensky, U. (1997). **StarLogoT**. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/cm. (updated 1999, 2001, 2002)

81. Wilensky, U., Novak, M.. & Rand, B. (1997; 2005, 2009). **BEAGLE Evolution Lab** [Curriculum and Computer Software]. Evanston, IL. Center for Connected Learning and Computer Based Modeling, Northwestern University. ccl.northwestern.edu/curriculum/evolab.

HARDWARE

Brady, C. Gracey, K & Wilensky, U (2015). CCL-Parallax programmable badge. http://hackaday.com/2015/09/14/the-open-hackable-electronic-conference-badge/ .

Books

1. Wilensky, U. & Rand, W. (2015). An introduction to agent-based modeling: Modeling natural, engineered, and social complex systems with NetLogo. Cambridge, MA: MIT Press.

Book chapters

1. Weintrop, D. & Wilensky, U. (in press). Designing for Computational Expression: Four Principles for the Design of Learning Environments Towards Computational Literacy. In D. J. Loveless, B. Griffith, M. Berci, E. Ortlieb, P. Sullivan (Eds.), Academic Knowledge Construction and Multimodal Curriculum Development. Hershey, PA: IGI Global.

2. Wilensky, U. & Jacobson, M. (2014). Complex Systems in the Learning Sciences. In R. K. Sawyer (Ed.), The Cambridge handbook of the learning sciences (2nd Edition). Cambridge, UK: Cambridge University Press.

3. Sengupta, P., & Wilensky, U. (2012). Lowering the Learning Threshold: Multi-Agent-Based Models and Learning Electricity. In Khine, M.S., & Saleh, I.M (Eds.). Dynamic Modeling: Cognitive Tool for Scientific Inquiry. Springer, New York, NY.

4. Stonedahl, F., Wilkerson-Jerde, M. & Wilensky, U. (2011). MAgICS: Toward a multiagent introduction to computer science. In M.Beer, M.Fasli, and D. Richards (Eds.) Multi-Agent Systems for Education and Interactive Entertainment: Design, Use and Experience. IGI Global. pp.1-25.

5. Blikstein, P., & Wilensky, U. (2010). MaterialSim: A constructionist agent-based modeling approach to engineering education. In M. J. Jacobson & P. Reimann (Eds.), Designs for learning environments of the future: International perspectives from the learning sciences. New York: Springer.

6. An, G. & Wilensky, U. (2009). From artificial life to in silico medicine: NetLogo as a means of translational knowledge representation in biomedical research. In A. Adamatzky & M. Komosinski (Eds.), Artificial Life Models in Software (2nd Edition). Berlin: Springer-Verlag.

7. Felsen, M., Watson, B., & Wilensky, U. (2006). Urban Complexity + Emergence: Procedural Modeling of City Activity and Form. In *Surfacing Urbanisms: Recent Approaches to Metropolitan Design (pp. 261-265). Pasadena*, CA: Woodbury University.

8. Stroup, W. & Wilensky, U. (1999). Assessing Learning as Emergent Phenomena: Moving Constructivist Statistics Beyond the Bell-Curve. In Kelly, A. E., & Lesh, R. (Eds.), *Research Methods in Mathematics and Science Education*. Englewood Cliffs, NJ: Erlbaum.

9. Wilensky, U. (1999). GasLab—an Extensible Modeling Toolkit for Exploring Micro- and Macro- Views of Gases. In Roberts, N. , Feurzeig, W. & Hunter, B. (Eds.) *Computer Modeling and Simulation in Science Education*. Berlin: Springer Verlag.

10. Wilensky, U. (1996). Making Sense of Probability through Paradox and Programming. In Y. Kafai & M. Resnick (Eds.). *Constructionism in Practice: Rethinking the Roles of Technology in Learning* (This is a version of article #5).

11. Wilensky, U. (1991). Abstract Meditations on the Concrete and Concrete Implications for Mathematics Education, in *Constructionism*, I. Harel and S. Papert (eds.), Norwood N.J., Ablex Publishing Corporation. Chapter 10.

12. Brandes, A. & and Wilensky, U. (1991). TreasureWorld: An Environment for the Study and Exploration of Feedback. In *Constructionism*, I. Harel and S. Papert (eds.), Norwood N.J., Ablex Publishing Corporation. Chapter 20.

WORKS IN PROGRESS

1. Abrahamson, D. & Wilensky, U. *Is a disease like a lottery?: Classroom networked technology that enables student reasoning about complexity*.

2. Holbert, N., Weintrop, D., Horn, M., & Wilensky, U. Constructionist video games.

3. Unterman, J., Hazzard, E. & Wilensky, U. *Learning to construct multi-agent models: analysis of a NetLogo workshop*.

4. Weintrop, D. & Wilensky, U. The Program-to-Play Approach: A Design Strategy for Supporting Novices in Computational Expression.

5. Weintrop, D., Bheshti, E., Horn, M., Orton, K., Jona, K., Trouille, L. & Wilensky, U. Defining Computational Thinking for Science, Technology, Engineering, and Math.

6. Wilensky, U., & Abrahamson, D. *Fostering Complexity Reasoning*.

7. Wilensky, U.J., Novak, M., & Horn, M.S. BEAGLE: Understanding evolution as an emergent process through agent-based computer modeling.

8. Sengupta, P. & Wilensky, U. Developing an Understanding of Electric Current with Multi-Agent-Based Models: Lowering the Learning Threshold through connecting the micro-level with flow rate.

9. Sengupta, P., & Wilensky, U. Balancing Electrons & Learning Electricity in 5th Grade: Emergence, Electric Current and Multi-Agent Based Models.

10. Abrahamson, D. & Wilensky, U. *Is a disease like a lottery?: Classroom networked technology that enables student reasoning about complexity*.

11. Ottino, J. Stonedahl, F. Vatel, V. & Wilensky, U. Concerning Stability in Competition: An Agent-Based Exploration of Hotelling's Law (in review).

12. Stroup, W. & Wilensky, U. *On the Dynamic Complementarity of Agent-based and Aggregate Reasoning in Students' Developing Understandings of Dynamic Systems*.

13. Crain, M. & Wilensky, U. Learning Through Computer-Based Modeling: A Guide for Teachers and Parents.

14. Unterman, J. Hazzard, E. & Wilensky, U. *Learning to construct multi-agent models: analysis of a NetLogo workshop*.

15. Wilensky, U. & Papert, S. *Restructurations: Reformulations of Knowledge Disciplines through new representational forms*.

16. Wilensky, U., Hazzard, E. & Longenecker, S. *A Bale of Turtles: A case study of a middle school science class studying complexity using StarLogoT*.

17. Wilensky, U. & Stroup, W. *Embodied Science Learning: Students enacting participatory Simulations with the HubNet architecture*.

18. Holbert, N. & Wilensky, U. Thinking with the Game: Designing educational video games to be objects-to-think-with.

19. Weintrop, D., Hobert, N., Horn, M., & Wilensky, U. *Computational thinking in Constructionist Video Games*.

UNREFEREED PAPERS

1. Wilensky, U. (2000). Modeling Emergent Phenomena with StarLogoT. *@CONCORD*. Winter. Concord Consortium: Concord, Ma.

2. Wilensky, U. & Stroup, W. (1999). Participatory Simulations: Network-based Design for Systems Learning in Classrooms. Paper presented at the PI meeting of the National Science Foundation, EHR division, June 3 –4, 1999.

3. Wilensky, U. (2000). A Bale of Turtles: A case study of a middle school science class studying complexity using StarLogoT. Paper presented at the meeting of the Spencer Foundation. New York, NY. October 12, 2000.

EDITED COLUMNS

Computer-Math Snapshots column (I solicit contributions and write forwards contextualizing these "snapshots")

1. (1997). Modeling Rugby: Kick First, Generalize Later? (Uri Wilensky).
2. (1997). Decimals to Fractals: A Student's Algorithm (Al Cuoco).
3. (1997). Counting Crazy (Brian Silverman).
4. (1998). Reasoning with Computers: Inference vs. Backtracking (Brian Harvey).
5. (1999). An Inefficient Route to the Cosine Law (E. Paul Goldenberg).
6. (1999). Demystifying e^{i_π} (Daniel Scher).
7. (1999). Squirals and Volutes in Logo and J (Howard A. Peelle).
8. (2000). Flying in a Floating (Point) World (Shay Gueron).
9. (2000). Superposed Turtle Walks (Mike Eisenberg).

10. (2000). Two-Parameter Universes. Part 1. Picture a Quadratic Polynomial… (Wallace Feurzeig, Gabriel Katz, Phillip Lewis, and Victor Steinbok).
11. (2001). Two-Parameter Universes. Part 2. Picture a Quadratic Polynomial… (Wallace Feurzeig, Gabriel Katz, Phillip Lewis, and Victor Steinbok).
12. (2001). A Herrick Among Mathematicians or Dynamic Geometry as an Aid to Proof (Maxim Bruckheimer and Abraham Arcavi).
13. (2001). Getting Euler's Line to Relax (E. Paul Goldenberg).
14. (2002). Representing Geometric Constructions as Programs: A Brief Exploration (Bruce Sherin).
15. (2002). A North Pole Adventure (Pavel Boytchev).
16. (2002). Using a Computer to Model the Electoral College (David Ehren and Jeremy Kahan).
17. (2003). (2003). A Web-based Resource for Automatic Discovery in Plane Geometry (Francisco Botana).
18. (2003). Finding Polynomial and Rational Function Turning Points in Precalculus (Barry Cherkas).
19. (2003). Cycloids, Billiards, Lissajou: Using the Computer to Visualize Irrational Numbers, and What Can This Be Good For. (Marita Barabash).
20. (2004). 3-D Dynamic Geometry: Ceva's Theorem in Space (Boris Koichu and Abraham Berman).
21. (2004). Probabilities, The US Electoral College, and Generating Functions Considered Harmful (Erich Neuwirth).
22. (2005). Reflections on Reflections. (Peter Liljedahl).
23. (2005). Archimedes with Cabri: Visualization and Experimental Verification of Mathematical Ideas. (Adnan Baki).
24. (2006). The Shape of Things to Come: The Computational Pictograph as a Bridge From Combinatorial Space to Outcome Distribution. (Dor Abrahamson).
25. (2006). On the Use of Computational Tools to Promote Students' Mathematical Thinking (Manuel Santos-Trigo).
26. (2007). Mathematical String Sculptures: a Case Study in Computationally-Enhanced Crafts. (Michael Eisenberg).
27. (2007). A Program to Interpolate (and Extrapolate) Between Turtle Programs. (Ken Kahn).
28. (2008). Explorations with Sketchpad in Topogeometry. (Amanda Hawkins and Nathalie Sinclair).
29. (2008). Dynamic Triangle Geometry: Families of Lines with Equal Intercepts. (Paul Yiu).

30. (2008). Using Dynamic Geometry Software to gain an insight for Proof. (Bulent Guven).
31. (2009). Agents with Attitude: Exploring Coombs Unfolding Technique with Agent-Based Models. (Michelle Hoda Wilkerson).
32. (2009). Using Geometer's Sketchpad to Explore, Conjecture and Enjoy. (Scott Fallstrom and Marion Walter).
33. (2010). When Two Circles Determine a Triangle, Discovering and Proving a Geometrical Condition in a Computer Environment.(N.Metaxas and A.Karagiannidou)
34. (2010). Symbolic Geometry Software and Proofs. (P.Tod, I.Lyublinskaya. and V.Ryzhik)
35. (2011). A Journey to a Mathematical Frontier with Multiple Computer Tools. (Sergei Abramovich and Gennady A. Leonov).
36. (2011). Mean-Invariant Polynomial Intersections: A Case Study in Generalisation (John Mason)
37. (2012) Exploring the Mathematical Model of the Thumbaround Motion by GeoGebra (Muharrem Aktumen and Tolga Kabaca)
38. (2013) Talking Statistics/Talking Ourselves: Some Constructionist Lessons from the Work of the Psychologist George Kelly (James Clayson)
39. (2014) How to determine the maximum circle that can be enclosed in a convex quadrilateral (Cekmez)
40. (2014) Exploring Archimedes' quadrature of parabola with Geogebra snapshots (Caglayan)
41. (2014) Dynamic geometry software as a tool for doing mathematics (Cekmez)

Published agent-based models

1. Head, B., Rand, W. & Wilensky, U. (2015). Traffic Basic Adaptive Individuals model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TrafficBasicAdaptive .

2. Novak, M. & Wilensky, U. (2015). NetLogo Bacteria Food Hunt model. http://ccl.northwestern.edu/netlogo/models/BacteriaFoodHunt. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

3. Novak, M. & Wilensky, U. (2015). NetLogo Bacteria Hunt Speeds model. http://ccl.northwestern.edu/netlogo/models/BacteriaHuntSpeeds. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

4. Brady, C., & Wilensky, U. (2015). NetLogo Arduino Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ArduinoExample.

5. Wilensky, U. (2015). NetLogo Honeycomb Model. http://ccl.northwestern.edu/netlogo/models/honeycomb. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

6. Grider, R. & Wilensky, U. (2015). NetLogo Paths model. http://ccl.northwestern.edu/netlogo/models/Paths. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

7. Novak, M. & Wilensky, U. (2015). NetLogo Bug Hunt Disruptions model. http://ccl.northwestern.edu/netlogo/models/BugHuntDisruptions. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

8. Novak, M. & Wilensky, U. (2015). NetLogo Bug Hunt Environmental Changes model. http://ccl.northwestern.edu/netlogo/models/BugHuntEnvironmentalChanges. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

9. Novak, M. & Wilensky, U. (2015). NetLogo Bug Hunt Predators and Invasive Species - Two Regions model. http://ccl.northwestern.edu/netlogo/models/BugHuntPredatorsandInvasiveSpecies-TwoRegions. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

10. Kelter, J., Luijten, E. & Wilensky, U. (2015). NetLogo Lennard-Jones model. http://ccl.northwestern.edu/netlogo/models/Lennard-Jones. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

11. Kim, D. & Wilensky, U. (2015). NetLogo Hydrogen Diffusion 3D model. http://ccl.northwestern.edu/netlogo/models/HydrogenDiffusion3D. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

12. Hjorth, A., Head, B. & Wilensky, U. (2014). NetLogo K-Means Clustering model. http://ccl.northwestern.edu/netlogo/models/K-MeansClustering. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

13. Guo, Y. & Wilensky, U. (2014). NetLogo BeeSmart - Hive Finding model. http://ccl.northwestern.edu/netlogo/models/BeeSmart-HiveFinding. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

14. Stonedahl, F., Wilensky, U., & Rand, W. (2014). NetLogo Heroes and Cowards model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HeroesandCowards.

15. Head, B. & Wilensky, U. (2013). NetLogo membrane formation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

16. Head, B. & Wilensky, U. (2013). NetLogo Voronoi Emergent model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

17. Brady, C. & Wilensky, U. (2012). NetLogo Example HubNet model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ExampleHubNet.

18. Novak, M. & Wilensky, U. (2012). BEAGLE Evolution DNA Protein Synthesis model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

19. Novak, M. & Wilensky, U. (2012). NetLogo Connected Chemistry Reversible Reaction model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

20. Novak, M. & Wilensky, U. (2012). NetLogo Fish Spotters HubNet model. http://ccl.northwestern.edu/netlogo/models/FishSpottersHubNet. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

21. Rand, W. & Wilensky, U. (2012). NetLogo Simple Viral Marketing model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimpleViralMarketing.

22. Wilkerson-Jerde, M., Stonedahl, F. , & Wilensky, U. (2012). Flocking Vee Formations model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

23. Rand, W. & Wilensky, U. (2012). Perceptron model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

24. Troutman, C. & Wilensky, U. (2012). Language Change model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

25. Wilensky, U. (2012). GasLab Circular Particles model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

26. Novak, M. & Wilensky, U. (2011). NetLogo Bug Hunters Competition HubNet model. http://ccl.northwestern.edu/netlogo/models/BugHuntersCompetitionHubNet. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

27. Stonedahl, F. & Wilensky, U. (2011). Heroes and Cowards model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

28. Yang, C. & Wilensky, U. (2011). Kermack-McKendrick Travel model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

29. Yang, C. & Wilensky, U. (2011). Kermack McKendrick model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

30. Rand, W & Wilensky, U. (2011). NetLogo Ticket Sales model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TicketSales.

31. Novak, M. & Wilensky, U. (2011). Bug Hunt Consumers. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

32. Stonedahl, F. & Wilensky, U. (2011). Preferential Attachment 3D. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

33. Weintrop, D., Tisue, S., Tinker, T., Head, B. & Wilensky, U. (2011). NetLogo Sandpile Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SandpileSimple.

34. Wilensky, U. (2011). NetLogo Label Position Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/LabelPositionExample

35. Wilensky, U. (2011). NetLogo Matrix Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

36. Wilensky, U. (2011). NetLogo QuickTime Camera Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

37. Wilensky, U. (2011). NetLogo Quicktime Movie Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

38. Wilensky, U. (2011). NetLogo Simple Economy model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/SimpleEconomy.

39. Stonedahl, F. and Wilensky, U. (2011). NetLogo Preferential Attachment 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/PreferentialAttachment3D

40. Wilensky, U. (2011). NetlLogo Table Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

41. Stonedahl, F. & Wilensky, U. (2010). NetLogo Artificial Anasazi model. http://ccl.northwestern.edu/netlogo/models/ArtificialAnasazi. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

42. Wilensky, U. (2010). NetLogo Info Tab Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.

43. Wilkerson-Jerde, M., Stonedahl, F. and Wilensky, U. (2010). NetLogo Flocking Vee Formations Model [Computer Software]. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/FlockingVeeFormations.

44. Abrahamson, D. and Wilensky, U. (2009). NetLogo 4 Block Two Stalagmites Model [Computer Software]. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/4 BlockTwoStalagmites.

45. Abrahamson, D. and Wilensky, U. (2009). NetLogo Histo Blocks Model [Computer Software]. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HistoBlocks.

46. Abrahamson, D. and Wilensky, U. (2009). NetLogo Sampler Solo Model [Computer Software]. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ SamplerSolo.

47. Li, J., & Wilensky, U. (2009). NetLogo Sugarscape 1 Immediate Growback model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Sugarscape1ImmediateGrowback.

48. Li, J., & Wilensky, U. (2009). NetLogo Sugarscape 2 Constant Growback model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Sugarscape2ConstantGrowback.

49. Li, J., & Wilensky, U. (2009). NetLogo Sugarscape 3 Wealth Distribution model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Sugarscape3WealthDistribution.

50. Novak, M., & Wilensky, U. (2009). NetLogo Bug Hunt Drift model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BugHuntDrift.

51. Stonedahl, F., & Wilensky, U. (2009). NetLogo PageRank model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PageRank.

52. Stonedahl, F., & Wilensky, U. (2009). NetLogo Simulated Annealing model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimulatedAnnealing.

53. Wilensky, U. (2009). NetLogo HubNet Memory model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetMemoryHubNet.

54. Wilensky, U. (2009). NetLogo Sunflower Emergent model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, http://ccl.northwestern.edu/netlogo/models/SunflowerEmergent.

55. Novak, M., & Wilensky, U. (2008a). NetLogo Bug Hunt Drift model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BugHuntDrift.

56. Novak, M., & Wilensky, U. (2008b). NetLogo Bug Hunt Camouflage model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BugHuntCamouflage.

57. Novak, M., & Wilensky, U. (2008c). NetLogo Bug Hunt Coevolution model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BugHuntCoevolution.

58. Rand, W. & Wilensky, U. (2008). Agentset Ordering Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTEXTBOOK/AgentsetOrdering.

59. Rand, W. & Wilensky, U. (2008). NetLogo Agentset Efficiency model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/AgentsetEfficiency.

60. Rand, W. & Wilensky, U. (2008). NetLogo Run Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RunExample.

61. Rand, W. & Wilensky, U. (2008). NetLogo Run Result Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RunResultExample.

62. Rand, W. & Wilensky, U. (2008). NetLogo Simple Machine Learning model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimpleMachineLearning.

63. Rand, W. & Wilensky, U. (2008). NetLogo Spread of Disease model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SpreadofDisease.

64. Rand, W. & Wilensky, U. (2008). NetLogo Traffic Grid Goal model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TrafficGridGoal.

65. Rand, W. & Wilensky, U. (2008). NetLogo Voting Sensitivity Analysis model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/VotingSensitivityAnalysis.

66. Rand, W. & Wilensky, U. (2008). Traffic Basic Adapative Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/TrafficBasicAdaptice.

67. Rand, W. & Wilensky, U. (2008). Traffic Basic Utility Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/TrafficBasicUtility.

68. Sengupta, P. & Wilensky U. (2008e). NetLogo Series Circuit model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SeriesCircuit.

69. Sengupta, P. & Wilensky, U. (2008). Current in a Wire model. Evanston IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/CurrentinaWire.

70. Sengupta, P. & Wilensky, U. (2008). NetLogo Electron Sink model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/ElectronSink.

71. Stonedahl, F., & Wilensky, U. (2008). NetLogo Diffusion on a Directed Network model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwester.edu/netlogo/models/DiffusiononaDirectedNetwork.

72. Stonedahl, F., &Wilensky, U. (2008). NetLogo Particle Swarm Optimization model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwester.edu/netlogo/models/ParticleSwarmOptimization.

73. Stonedahl, F., &Wilensky, U. (2008). NetLogo Simple Genetic Algorithm model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwester.edu/netlogo/models/SimpleGeneticAlgorithm.

74. Stonedahl, F., &Wilensky, U. (2008). NetLogo Virus on a Network model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwester.edu/netlogo/models/VirusonaNetwork.

75. Wilensky, U. (2008). NetLogo Life Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/LifeSimple.

76. Wilensky, U. (2008). NetLogo Voting Component Verification model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/VotingComponentVerification.

77. Wilensky, U. Rand, W. (2008). NetLogo Random Network model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomNetwork.

78. Wilensky, U. & Rand, W. (2008). Preferential Attachment Simple Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/PreferentialAttachmentSimple.

79. Bakshy, E., & Wilensky, U. (2007). NetLogo Team Assembly model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TeamAssembly.

80. De Leon, F.D., Felsen, M. and Wilensky, U. (2007). NetLogo Urban Suite - Tijuana Bordertowns model. http://ccl.northwestern.edu/netlogo/models/UrbanSuite-TijuanaBordertowns. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

81. Kornhauser, D. & Wilensky, U. (2007). NetLogo Particle System Basic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ParticleSystemBasic.

82. Kornhauser, D., & Wilensky, U. (2007). NetLogo Particle System Flame model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ParticleSystemFlame.

83. Kornhauser, D., & Wilensky, U. (2007). NetLogo Particle System Waterfall model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ParticleSystemWaterfall.

84. Kornhauser, D., & Wilensky, U. (2007). Particle System Fountain model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ParticleSystemFountain.

85. Novak, M. and Wilensky, U. (2007). NetLogo Connected Chemistry Gas Combustion model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistryGasCombustion.

86. Novak, M. and Wilensky, U. (2007). NetLogo Connected Chemistry Rusting Reaction model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistryRustingReaction.

87. Novak, M. and Wilensky, U. (2007). NetLogo Connected Chemistry Solid Combustion model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistrySolidCombustion.

88. Rand, W., & Wilensky, U. (2007). NetLogo El Farol model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ElFarol.

89. Rand, W., Wilensky, U. (2007). NetLogo El Farol Extension 1 model. http://ccl.northwestern.edu/netlogo/models/ElFarolExtension1. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

90. Rand, W., Wilensky, U. (2007). NetLogo El Farol Extension 2 model. http://ccl.northwestern.edu/netlogo/models/ElFarolExtension2. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

91. Rand, W., Wilensky, U. (2007). NetLogo El Farol Extension 3 model. http://ccl.northwestern.edu/netlogo/models/ElFarolExtension3. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

92. Sengupta, P., & Wilensky, U. (2007). NetLogo Ohm's Law model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Ohm'sLaw.

93. Sengupta, P., & Wilensky, U. (2007). NetLogo Parallel Circuit model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ParallelCircuit.

94. Sengupta, P., & Wilensky, U. (2007). NetLogo Series Circuit model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SeriesCircuit.

95. Stieff, M. & Wilensky, U. (2007). NetLogo Diprotic Acid model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiproticAcid.

96. Tinker, R. & Wilensky, U. (2007). NetLogo Climate Change model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ClimateChange.

97. Troutman, C., & Wilensky, U. (2007). NetLogo Language Change model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/LanguageChange.

98. Unterman, J., & Wilensky, U. (2007). NetLogo PANDA BEAR Solo model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PANDABEARSolo.

99. Wilensky, U. (2007). NetLogo Continental Divide model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ContinentalDivide.

100. Wilensky, U. (2007). NetLogo Hex Cell Aggregation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HexCellAggregation.

101. Wilensky, U. (2007). NetLogo Planarity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Planarity.

102. Wilensky, U. (2007). NetLogo Solid Diffusion model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SolidDiffusion.

103. Wilkerson, M., & Wilensky, U. (2007). NetLogo Surface Walking 2D model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SurfaceWalking2D.

104. Wilensky, U. (2007). NetLogo Surface Walking 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/SurfaceWalking3D.

105. Wilensky, U. (2007). NetLogo Wolf Sheep Simple 1 model. http://ccl.northwestern.edu/netlogo/models/WolfSheepSimple1. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

106. Wilensky, U. (2007). NetLogo Wolf Sheep Simple 2 model. http://ccl.northwestern.edu/netlogo/models/WolfSheepSimple2. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

107. Wilensky, U. (2007). NetLogo Wolf Sheep Simple 3 model. http://ccl.northwestern.edu/netlogo/models/WolfSheepSimple3. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

108. Wilensky, U. (2007). NetLogo Wolf Sheep Simple 4 model. http://ccl.northwestern.edu/netlogo/models/WolfSheepSimple4. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

109. Wilensky, U. (2007). NetLogo Wolf Sheep Simple 5 model. http://ccl.northwestern.edu/netlogo/models/WolfSheepSimple5. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

110. Abrahamson, D. and Wilensky, U. (2006). NetLogo 4 Block Stalagmites model. http://ccl.northwestern.edu/netlogo/models/4BlockStalagmites. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

111. Novak, M and Wilensky, U. (2006). NetLogo Daisyworld model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Daisyworld.

112. Wilensky, U. (2006). NetLogo Fireworks 3D model Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Fireworks3D

113. Novak, M., & Wilensky, U. (2006). NetLogo HubNet Bug Hunters Camouflage model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetBugHuntersCamouflage.

114. Novak, M., & Wilensky, U. (2006). NetLogo HubNet Guppy Spots model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetGuppySpots.

115. Novak, M., & Wilensky, U. (2006). NetLogo Sunflower Biomorphs model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SunflowerBiomorphs.

116. Novak, M., & Wilensky, U. (2006). NetLogo Wolf Sheel Stride Inheritance model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WolfSheepStrideInheritance.

117. Rand, W., & Wilensky, U. (2006). NetLogo Artificial Neural Net model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ArtificialNeuralNet.

118. Rand, W., & Wilensky, U. (2006). NetLogo Perceptron model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Perceptron.

119. Wilensky, U. (2006). NetLogo Connected Chemistry 8 Gas Particle Sandbox model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry8GasParticleSandbox.

120. Wilensky, U. (2006). NetLogo Connected Chemistry Atmosphere model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistryAtmosphere.

121. Wilensky, U. (2006). NetLogo Diffuse Off Edges Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiffuseOffEdgesExample.

122. Wilensky, U. (2006). NetLogo DLA 3D model. Evanston, IL Center for Connected Learning and Computer –Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DLA3D

123. Wilensky, U. (2006). NetLogo DLA Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DLASimple.

124. Wilensky, U., & Rand, W. (2006). NetLogo DLA Simple Extension 1 model. http://ccl.northwestern.edu/netlogo/models/DLASimpleExtension1. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

125. Wilensky, U., & Rand, W. (2006). NetLogo DLA Simple Extension 2 model. http://ccl.northwestern.edu/netlogo/models/DLASimpleExtension2. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

126. Wilensky, U., & Rand, W. (2006). NetLogo DLA Simple Extension 3 model. http://ccl.northwestern.edu/netlogo/models/DLASimpleExtension3. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

127. Wilensky, U. (2006). NetLogo Ethnocentrism model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Ethnocentrism.

128. Wilensky, U. (2006). NetLogo Fire Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/FireSimple.

129. Wilensky, U. (2006). NetLogo Fire Simple Extension 1 model. http://ccl.northwestern.edu/netlogo/models/FireSimpleExtension1. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

130. Wilensky, U. (2006). NetLogo Fire Simple Extension 2 model. http://ccl.northwestern.edu/netlogo/models/FireSimpleExtension2. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

131. Wilensky, U. (2006). NetLogo Fire Simple Extension 3 model. http://ccl.northwestern.edu/netlogo/models/FireSimpleExtension3. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

132. Wilensky, U. (2006). NetLogo Grand Canyon model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GrandCanyon.

133. Wilensky, U. (2006). NetLogo HubNet Disease Doctors model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetDiseaseDoctors.

134. Wilensky, U. (2006). NetLogo HubNet Walking model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetWalking.

135. Wilensky, U. (2006). NetLogo Intersecting Lines Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IntersectingLinesExample.

136. Wilensky, U. (2006). NetLogo Moore & Von Neumann Example. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University.http://ccl.northwestern.edu/netlogo/models/Moore&VonNeumannExample.

137. Wilensky, U. (2006). NetLogo Percolation 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Percolation3D.

138. Wilensky, U. (2006). NetLogo Rope 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Rope3D.

139. Wilensky, U. (2006). NetLogo Sandpile 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Sandpile3D.

140. Wilensky, U. (2006). NetLogo Tabonuco Yagrumo Hybrid model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TabonucoYagrumoHybrid.

141. Wilensky, U. (2006). NetLogo Tabonuco Yagrumo model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TabonucoYagrumo.

142. Wilensky, U. (2006). NetLogo Tie System Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TieSystemExample.

143. Wilensky, U. (2006). NetLogo Voronoi model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Voronoi.

144. Wilensky, U. & Rand, W. (2006). NetLogo Segregation Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/SegregationSimple.

145. Wilensky, U., & Rand, W. (2006). NetLogo Segregation Simple Extension 1 model. http://ccl.northwestern.edu/netlogo/models/SegregationSimpleExtension1. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

146. Wilensky, U., & Rand, W. (2006). NetLogo Segregation Simple Extension 2 model. http://ccl.northwestern.edu/netlogo/models/SegregationSimpleExtension2. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

147. Wilensky, U., & Rand, W. (2006). NetLogo Segregation Simple Extension 3 model. http://ccl.northwestern.edu/netlogo/models/SegregationSimpleExtension3. Center for Connected Learning and Computer-Based Modeling, Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL.

148. Wilensky, U. (2005). NetLogo Algae model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Algae.

149. Abrahamson, D. & Wilensky, U. (2005). NetLogo Central Limit Theorem model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CentralLimitTheorem.

150. Abrahamson, D. & Wilensky, U. (2005). NetLogo Dice Stalagmite model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiceStalagmite.

151. Wilensky, U. (2005). NetLogo Flocking 3D Alternate model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Flocking3DAlternate.

152. Abrahamson, D. & Wilensky, U. (2005). NetLogo HubNet Dice Stalagmite model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetDiceStalagmite.

153. Abrahamson, D. & Wilensky, U. (2005). NetLogo ProbLab Genetics. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ProbLabGenetics.

154. Abrahamson, D. & Wilensky, U. (2005). NetLogo Random Basic Advanced. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomBasicAdvanced.

155. Abrahamson, D., & Wilensky, U. (2005). NetLogo Expected Value Advanced model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ExpectedValueAdvanced.

156. Blikstein, P. & Wilensky, U. (2005). NetLogo MaterialSim Grain Growth model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/MaterialSimGrainGrowth.

157. Novak, M., & Wilensky, U. (2005). NetLogo Bug Hunt Speeds. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BugHuntSpeeds.

158. Sengupta, P. & Wilensky, U. (2005). NetLogo Electrostatics model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Electrostatics.

159. Wilensky, U. (2005). NetLogo Autumn model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Autumn.

160. Wilensky, U. (2005). NetLogo Bug Hunt Camouflage model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BugHuntCamouflage.

161. Wilensky, U. (2005). NetLogo Color Fractions model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ColorFractions.

162. Wilensky, U. (2005). NetLogo Connected Chemistry 3 Circular Particles model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry3CircularParticles.

163. Wilensky, U. (2005). NetLogo Connected Chemistry 5 Temperature and Pressure model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry5TemperatureandPressure.

164. Wilensky, U. (2005). NetLogo Connected Chemistry 6 Volume and Pressure model Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry6VolumeandPressure.

165. Wilensky, U. (2005). NetLogo Connected Chemistry 7 Ideal Gas Law model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry7IdealGasLaw.

166. Wilensky, U. (2005). NetLogo Disease Solo model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiseaseSolo.

167. Wilensky, U. (2005). NetLogo DLA Alternate Linear model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DLAAlternateLinear.

168. Wilensky, U. (2005). NetLogo DLA Alternate model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DLAAlternate.

169. Wilensky, U. (2005). NetLogo Echo model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Echo.

170. Wilensky, U. (2005). NetLogo Exponential Growth model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ExponentialGrowth.

171. Wilensky, U. (2005). NetLogo GasLab Circular Particles model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabCircularParticles.

172. Wilensky, U. (2005). NetLogo Giant Component model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GiantComponent.

173. Wilensky, U. (2005). NetLogo HubNet Public Good model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetPublicGood.

174. Wilensky, U. (2005). NetLogo HubNet Restaurants model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetRestaurants.

175. Wilensky, U. (2005). NetLogo Logistic Growth model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/LogisticGrowth.

176. Wilensky, U. (2005). NetLogo Lunar Lander model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/LunarLander.

177. Wilensky, U. (2005). NetLogo Merge Sort model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/MergeSort.

178. Wilensky, U. (2005). NetLogo Minesweeper model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Minesweeper.

179. Wilensky, U. (2005). NetLogo Moths model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Moths.

180. Wilensky, U. (2005). NetLogo Optical Illusions model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/OpticalIllusions.

181. Wilensky, U. (2005). NetLogo Polymer Dynamics model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PolymerDynamics.

182. Wilensky, U. (2005). NetLogo Preferential Attachment model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PreferentialAttachment.

183. Wilensky, U. (2005). NetLogo Small Worlds model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SmallWorlds.

184. Wilensky, U. (2005). NetLogo Sound Machines model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SoundMachines.

185. Wilensky, U. (2005). NetLogo Vants model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Vants.

186. Wilensky, U. (2005). NetLogo Wolf Sheep Predation (docked) model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WolfSheepPredation(docked).

187. Wilensky, U. (2005). NetLogo Wolf Sheep Predation (System Dynamics) model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WolfSheepPredation(SystemDynamics).

188. Wilensky, U. (2004). NetLogo Birthdays model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Birthdays.

189. Wilensky, U. (2004). NetLogo Communication-T-T Network Example model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern. http://ccl.northwestern.edu/netlogo/models/Communication-T-TNetworkExample.

190. Wilensky, U. (2004). NetLogo Connected Chemistry 1 Bike Tire model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry1BikeTire.

191. Wilensky, U. (2004). NetLogo Connected Chemistry 4 Number and Pressure model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry4NumberandPressure.

192. Wilensky, U. (2004). NetLogo Erosion model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Erosion.

193. Wilensky, U. (2004). NetLogo Expected Value model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ExpectedValue.

194. Wilensky, U. (2004). NetLogo Heatbugs model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Heatbugs.

195. Wilensky, U. (2004). NetLogo HubNet Herbivore Carnivore model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetHerbivoreCarnivore.

196. Wilensky, U. (2004). NetLogo HubNet Investments model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetInvestments.

197. Wilensky, U. (2004). NetLogo HubNet Minority Game model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.ed edu/netlogo/models/HubNetMinorityGame.

198. Wilensky, U. (2004). NetLogo HubNet Oil Cartel Alternative model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CompHubNetOilCartelAlternate.

199. Wilensky, U. (2004). NetLogo HubNet Oil Cartel model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetOilCartel.

200. Wilensky, U. (2004). NetLogo Minority Game model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/MinorityGame.

201. Wilensky, U. (2004). NetLogo Prisoners Dilemma HubNet model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetPrisonersDilemma.

202. Wilensky, U. (2004). NetLogo Rebellion model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Rebellion.

203. Wilensky, U. (2004). NetLogo Scatter model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Scatter.

204. Wilensky, U. (2003). NetLogo Ethnocentrism - Alternative Visualization model. http://ccl.northwestern.edu/netlogo/models/Ethnocentrism-AlternativeVisualization. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

205. Wilensky, U. & Stroup, W. (2003). NetLogo HubNet Beer Game activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetBeerGame.

206. Wilensky, U. & Stroup, W. (2003). NetLogo HubNet Beer Game Alternate 1 activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetBeerGameAlternative1.

207. Wilensky, U. & Stroup, W. (2003). NetLogo HubNet Beer Game Alternate 2 activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetBeerGameAlternative2.

208. Wilensky, U. & Stroup, W. (2003). NetLogo HubNet Gridlock Alternate activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetGridlockAlternate.

209. Wilensky, U. & Stroup, W. (2003). NetLogo HubNet Sampler activitymodel. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetSampler.

210. Wilensky, U. (2003). NetLogo B-Z Reaction model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/B-ZReaction.

211. Wilensky, U. (2003). NetLogo CA Continuous model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CAContinuous.

212. Wilensky, U. (2003). NetLogo CA Stochastic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CAStochastic.

213. Wilensky, U. (2003). NetLogo Dining Philosophers model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiningPhilosophers.

214. Wilensky, U. (2003). NetLogo Equidistant Probability model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/EquidistantProbability.

215. Wilensky, U. (2003). NetLogo Fur model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Fur.

216. Wilensky, U. (2003). NetLogo GasLab Heat Box model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabHeatBox.

217. Wilensky, U. (2003). NetLogo Gridlock model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Gridlock.

218. Wilensky, U. (2003). NetLogo Honeycomb model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/honeycomb.

219. Wilensky, U. (2003). NetLogo Ising model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Ising.

220. Wilensky, U. (2003). NetLogo Pac-Man Level Editor model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Pac-ManLevelEditor.

221. Wilensky, U. (2003). NetLogo Sunflower model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Sunflower.

222. Wilensky, U. (2003). NetLogo Sunflower 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Sunflower3D.

223. Wilensky, U. (2003). NetLogo Turbulence model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Turbulence.

224. Wilensky, U. & Stroup, W. (2002). NetLogo HubNet Gridlock Alternate HubNet model. http://ccl.northwestern.edu/netlogo/models/HubNetGridlockAlternateHubNet. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

225. Wilensky, U. & Stroup, W. (2002). NetLogo HubNet Polling Advanced activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetPollingAdvanced.

226. Wilensky, U. & Stroup, W. (2002). NetLogo HubNet Tragedy of the Commons activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetTragedyoftheCommons.

227. Wilensky, U. (2002). NetLogo 3D Solids model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/3DSolids.

228. Wilensky, U. (2002). NetLogo 9-Block Stalagmite model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/9-BlockStalagmite.

229. Wilensky, U. (2002). NetLogo 9-Blocks model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/9-Blocks.

230. Wilensky, U. (2002). NetLogo Brian's Brain model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BriansBrain.

231. Wilensky, U. (2002). NetLogo CA 1D Rule 110 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DRule110.

232. Wilensky, U. (2002). NetLogo CA 1D Rule 250 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DRule250.

233. Wilensky, U. (2002). NetLogo CA 1D Rule 30 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DRule30.

234. Wilensky, U. (2002). NetLogo CA 1D Rule 30 Turtle model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DRule30Turtle.

235. Wilensky, U. (2002). NetLogo CA 1D Rule 90 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DRule90.

236. Wilensky, U. (2002). NetLogo CA 1D Totalistic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DTotalistic.

237. Wilensky, U. (2002). NetLogo Crystallization Basic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CrystallizationBasic.

238. Wilensky, U. (2002). NetLogo Crystallization Directed model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CrystallizationDirected.

239. Wilensky, U. (2002). NetLogo Crystallization Moving model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CrystallizationMoving.

240. Wilensky, U. (2002). NetLogo Dice model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Dice.

241. Wilensky, U. (2002). NetLogo Division model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Division.

242. Wilensky, U. (2002). NetLogo Frogger model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Frogger.

243. Wilensky, U. (2002). NetLogo Galton Box model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GaltonBox.

244. Wilensky, U. (2002). NetLogo GasLab Gravity Box model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabGravityBox.

245. Wilensky, U. (2002). NetLogo GasLab Moving Piston model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabMovingPiston.

246. Wilensky, U. (2002). NetLogo GasLab Pressure Box model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabPressureBox.

247. Wilensky, U. (2002). NetLogo GasLab Second Law model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabSecondLaw.

248. Wilensky, U. (2002). NetLogo Lattice Gas Automaton model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/LatticeGasAutomaton.

249. Wilensky, U. (2002). NetLogo Mousetraps model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Mousetraps.

250. Wilensky, U. (2002). NetLogo Mousetraps 3D model . Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Mousetraps3D.

251. Wilensky, U. (2002). NetLogo Muscle Development model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/MuscleDevelopment.

252. Wilensky, U. (2002). NetLogo Partition Perms Distrib model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PartitionPermsDistrib.

253. Wilensky, U. (2002). NetLogo PD Basic Evolutionary model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PDBasicEvolutionary.

254. Wilensky, U. (2002). NetLogo PD Basic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PDBasic.

255. Wilensky, U. (2002). NetLogo PD N-Person Iterated model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PDN-PersonIterated.

256. Wilensky, U. (2002). NetLogo PD Two Person Iterated model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PDTwoPersonIterated.

257. Wilensky, U. (2002). NetLogo Prob Graphs Basic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ProbGraphsBasic.

258. Wilensky, U. (2002). NetLogo Random Basic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomBasic.

259. Wilensky, U. (2002). NetLogo Random Combinations and Permutations. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomCombinationsandPermutations.

260. Wilensky, U. (2002). NetLogo Stochastic Cryptology model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/StochasticCryptology.

261. Wilensky, U. (2002). NetLogo Stochastic Patchwork model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/StochasticPatchwork.

262. Wilensky, U. (2002). NetLogo Termites 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Termites3D.

263. Wilensky, U. (2002). NetLogo Traffic Grid model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TrafficGrid.

264. Wilensky, U. (2002). NetLogo Turing Machine 2D model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TuringMachine2D.

265. Stieff, M. & Wilensky, U. (2001). NetLogo Simple Kinetics 2 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimpleKinetics2.

266. Stieff, M. & Wilensky, U. (2001). NetLogo Simple Kinetics 3 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimpleKinetics3.

267. Stieff, M. & Wilensky, U. (2001). NetLogo Strong Acid model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/StrongAcid.

268. Stieff, M. & Wilensky, U. (2001). NetLogo Weak Acid model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WeakAcid.

269. Stieff, M. & Wilensky, U. (2001). NetLogo Buffer model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Buffer.

270. Stieff, M. & Wilensky, U. (2001). NetLogo Enzyme Kinetics model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/EnzymeKinetics.

271. Wilensky, U. (2001). NetLogo 3D Surface model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/3DSurface.

272. Wilensky, U. (2001). NetLogo Life 3D model. http://ccl.northwestern.edu/netlogo/models/Life3D. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

273. Wilensky, U. (2001). NetLogo L-System Fractals. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/L-SystemFractals.

274. Wilensky, U. (2001). NetLogo Pac-Man model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Pac-Man.

275. Wilensky, U. (2001). NetLogo Rabbits Grass Weeds model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RabbitsGrassWeeds.

276. Wilensky, U. (2001). NetLogo Tetris model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Tetris.

277. Wilensky, U. (2001). NetLogo Tree Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TreeSimple.

278. Wilensky, U. (2001). NetLogo Tree Simple 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/TreeSimple3D.

279. Wilensky, U. & Stroup, W. (2000). NetLogo HubNet Polling activity model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetPolling.

280. Wilensky, U. (2004). NetLogo Connected Chemistry 2 Changing Pressure model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConnectedChemistry2ChangingPressure.

281. Wilensky, U. (1999). NetLogo Star Fractal model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/StarFractal.

282. Wilensky, U. & Stroup, W. (1999). NetLogo Disease with Android Avoidance HubNet model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiseaseWithAndroidAvidanceHubNet.

283. Wilensky, U. & Stroup, W. (1999). NetLogo HubNet Disease modelactivity. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetDisease.

284. Wilensky, U. & Stroup, W. (1999). NetLogo HubNet Function modelactivity. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetFunction.

285. Wilensky, U. & Stroup, W. (1999). NetLogo HubNet Gridlock activitymodel. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HubNetGridlock.

286. Wilensky, U. (1998). NetLogo Altruism model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Altruism.

287. Wilensky, U. (1998). NetLogo Bank Reserves model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BankReserves.

288. Wilensky, U. (1998). NetLogo Boiling model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Boiling.

289. Wilensky, U. (1998). NetLogo CA 1D Elementary. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CA1DElementary.

290. Wilensky, U. (1998). NetLogo Cash Flow model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/CashFlow.

291. Wilensky, U. (1998). NetLogo Chemical Equilibrium model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ChemicalEquilibrium.

292. Wilensky, U. (1998). NetLogo Conic Sections 1 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConicSections1.

293. Wilensky, U. (1998). NetLogo Conic Sections 2 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ConicSections2.

294. Wilensky, U. (1998). NetLogo Doppler model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Doppler.

295. Wilensky, U. (1998). NetLogo Fireworks model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Fireworks.

296. Wilensky, U. (1998). NetLogo Flocking model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Flocking.

297. Wilensky, U. (1998). NetLogo Flocking 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Flocking3D.

298. Wilensky, U. (1998). NetLogo Flocking - Alternative Visualizations model. http://ccl.northwestern.edu/netlogo/models/Flocking-AlternativeVisualizations. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

299. Wilensky, U. (1998). NetLogo Follower model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Follower.

300. Wilensky, U. (1998). NetLogo Follower 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Follower3D.

301. Wilensky, U. (1998). NetLogo Gas Chromatography model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasChromatography.

302. Wilensky, U. (1998). NetLogo GasLab Maxwells Demon model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabMaxwellsDemon.

303. Wilensky, U. (1998). NetLogo GasLab Single Collision model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabSingleCollision.

304. Wilensky, U. (1998). NetLogo GasLab Two Gas model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabTwoGas.

305. Wilensky, U. (1998). NetLogo Geometron Top-Down model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GeometronTop-Down.

306. Wilensky, U. (1998). NetLogo Gravitation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Gravitation.

307. Wilensky, U. (1998). NetLogo Heat Diffusion model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/HeatDiffusion.

308. Wilensky, U. (1998). NetLogo Heat Diffusion - Alternative Visualization model. http://ccl.northwestern.edu/netlogo/models/HeatDiffusion-AlternativeVisualization. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

309. Wilensky, U. (1998). NetLogo Kaleidoscope model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Kaleidoscope.

310. Wilensky, U. (1998). NetLogo Koch Curve model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/KochCurve.

311. Wilensky, U. (1998). NetLogo Life model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Life.

312. Wilensky, U. (1998). NetLogo Life Turtle-Based model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/LifeTurtle-Based.

313. Wilensky, U. (1998). NetLogo Mandelbrot model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Mandelbrot.

314. Wilensky, U. (1998). NetLogo N-Bodies model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/N-Bodies.

315. Wilensky, U. (1998). NetLogo Percolation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Percolation.

316. Wilensky, U. (1998). NetLogo Plant Growth model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PlantGrowth.

317. Wilensky, U. (1998). NetLogo Pursuit model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Pursuit.

318. Wilensky, U. (1998). NetLogo Radical Polymerization model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RadicalPoylmerization.

319. Wilensky, U. (1998). NetLogo Raindrops model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Raindrops.

320. Wilensky, U. (1998). NetLogo Raindrops 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL http://ccl.northwestern.edu/netlogo/models/Raindrops3D.

321. Wilensky, U. (1998). NetLogo Random Balls Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomBalls.

322. Wilensky, U. (1998). NetLogo Random Walk 360 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomWalk360.

323. Wilensky, U. (1998). NetLogo Random Walk Left Right model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RandomWalkLeftRight.

324. Wilensky, U. (1998). NetLogo Reactor Top Down model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ReactorTopDown.

325. Wilensky, U. (1998). NetLogo Reactor X-Section model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ReactorX-Section.

326. Wilensky, U. (1998). NetLogo Scattering model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Scattering.

327. Wilensky, U. (1998). NetLogo Shepherds Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Shepherds.

328. Wilensky, U. (1998). NetLogo Sierpinski Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SierpinskiSimple.

329. Wilensky, U. (1998). NetLogo Sierpinski Simple 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/SierpinskiSimple3D.

330. Wilensky, U. (1998). NetLogo Simple Kinetics 1 model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimpleKinetics1.

331. Wilensky, U. (1998). NetLogo Speakers model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Speakers.

332. Wilensky, U. (1998). NetLogo Thermostat model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Thermostat.

333. Wilensky, U. (1998). NetLogo Three Doors model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/ThreeDoors.

334. Wilensky, U. (1998). NetLogo Traffic 2 Lanes model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Traffic2Lanes.

335. Wilensky, U. (1998). NetLogo Traffic Intersection model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TrafficIntersection.

336. Wilensky, U. (1998). NetLogo Tumor model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Tumor.

337. Wilensky, U. (1998). NetLogo Vector Fields model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/VectorFields.

338. Wilensky, U. (1998). NetLogo Virus model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Virus.

339. Wilensky, U. (1998). NetLogo Virus - Alternative Visualization model. http://ccl.northwestern.edu/netlogo/models/Virus-AlternativeVisualization. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

340. Wilensky, U. (1998). NetLogo Virus - Circle Visualization model. http://ccl.northwestern.edu/netlogo/models/Virus-CircleVisualization. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL.

341. Wilensky, U. (1998). NetLogo Voting model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Voting.

342. Wilensky, U. (1998). NetLogo Wealth Distribution model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WealthDistribution.

343. Wilensky, U. (1997). NetLogo AIDS model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/AIDS

344. Wilensky, U. (1997). NetLogo Ant Lines model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/AntLines.

345. Wilensky, U. (1997). NetLogo Ants model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Ants.

346. Wilensky, U. (1997). NetLogo Ants Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/AntsSimple.

347. Wilensky, U. (1997). NetLogo Binomial Rabbits model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/BinomialRabbits.

348. Wilensky, U. (1997). NetLogo Cooperation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Cooperation.

349. Wilensky, U. (1997). NetLogo Decay model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Decay.

350. Wilensky, U. (1997). NetLogo Diffusion Graphics model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DiffusionGraphics.

351. Wilensky, U. (1997). NetLogo Divide the Cake model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DividetheCake.

352. Wilensky, U. (1997). NetLogo DLA model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/DLA.

353. Wilensky, U. (1997). NetLogo DLA Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/DLASimple.

354. Wilensky, U. (1997). NetLogo Fire model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Fire.

355. Wilensky, U. (1997). NetLogo Fireflies model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Fireflies.

356. Wilensky, U. (1997). NetLogo GasLab Adiabatic Piston model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabAdiabaticPiston.

357. Wilensky, U. (1997). NetLogo GasLab Atmosphere model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabAtmosphere.

358. Wilensky, U. (1997). NetLogo GasLab Free Gas model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabFreeGas.

359. Wilensky, U. (1997). NetLogo GasLab Gas in a Box. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabGasinaBox.

360. Wilensky, U. (1997). NetLogo GasLab Isothermal Piston model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabIsothermalPiston.

361. Wilensky, U. (1997). NetLogo GenDrift P global model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GenDriftPglobal.

362. Wilensky, U. (1997). NetLogo GenDrift P local model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GenDriftPlocal.

363. Wilensky, U. (1997). NetLogo GenDrift T interact model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GenDriftTinteract.

364. Wilensky, U. (1997). NetLogo GenDrift T reproduce model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GenDriftTreproduce.

365. Wilensky, U. (1997). NetLogo Maxwells Demon model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/GasLabMaxwellsDemon.

366. Wilensky, U. (1997). NetLogo Mimicry model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Mimicry.

367. Wilensky, U. (1997). NetLogo Painted Desert Challenge model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PaintedDesertChallenge.

368. Wilensky, U. (1997). NetLogo Party model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Party.

369. Wilensky, U. (1997). NetLogo Peppered Moths model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/PepperedMoths.

370. Wilensky, U. (1997). NetLogo Rope model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Rope.

371. Wilensky, U. (1997). NetLogo Rugby model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Rugby.

372. Wilensky, U. (1997). NetLogo Rumor Mill model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/RumorMill.

373. Wilensky, U. (1997). NetLogo Sand model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Sand.

374. Wilensky, U. (1997). NetLogo Segregation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Segregation.

375. Wilensky, U. (1997). NetLogo Simple Birth Rates model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/SimpleBirthRates.

376. Wilensky, U. (1997). NetLogo Slime Model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Slime.

377. Wilensky, U. (1997). NetLogo Termites model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/Termites.

378. Wilensky, U. (1997). NetLogo Traffic Basic model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TrafficBasic.

379. Wilensky, U. (1997). NetLogo Turtles Circling model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/TurtlesCircling.

380. Wilensky, U. (1997). NetLogo Turtles Circling Simple model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/IABMTextbook/TurtlesCirclingSimple .

381. Wilensky, U. (1997). NetLogo Wandering Letters model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WanderingLetters.

382. Wilensky, U. (1997). NetLogo Wave Machine model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WaveMachine.

383. Wilensky, U. (1997). NetLogo Wolf Sheep Predation model. Evanston, IL: Center for Connected Learning and Computer-Based Modeling, Northwestern University. http://ccl.northwestern.edu/netlogo/models/WolfSheepPredation.

384. Wilensky, U. (1996). NetLogo Sand 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/Sand3D

385. Wilensky, U. (1996). NetLogo Wave Machine 3D model. Center for Connected Learning and Computer-Based Modeling, Northwestern University, Evanston, IL. http://ccl.northwestern.edu/netlogo/models/WaveMachine3D.

Patents

Wilensky, U. & Stroup, W. (2002). Distributed Agent Network Using Object Based Parallel Modeling Language to Dynamically Model Agent Activities.

Professional Activities and Membership in Professional Organizations

Panel member: American Academy of Arts and Sciences panel on Computational Thinking.

Editor in Chief: International Journal of Computers for Mathematical Learning (IJCML).

Editor: IJCML "Computer Math Snapshots" column.

Editor, Technology, Knowledge and Learning

Grant Proposal Reviewer, National Science Foundation

Co-founder and Governing Board Member: Northwestern Institute on Complex Systems

Conference Organizer: NSF Planning Conference for a National Initiative on Complex Systems in K-16 Education

Member of Editorial Board, Journal of the Learning Sciences

Member of Editorial Board, Journal of Interactive Learning Research

Journal Reviewer: JLS, MIT Press, AERJ, JILR, C&I, JASSS, PSPR

Member of Program Committee: AAAI '96 and ICLS '96/'97/02

Consultant: Addison-Wesley Publishing, Quest MultiMedia, MIT Media Laboratory

Affiliated Faculty, University of Haifa

Visiting Professor: University of Tel Aviv Education School

Professional Memberships: AERA, NCTM, AMS, MAA, ACM, PME, NECSI, SLS

Teaching

Courses taught at Northwestern

The Design of Technological Tools for Thinking and Learning

Designing and Constructing Models with Multi-Agent Languages

A Constructionist Approach to the Design of Learning Environments

Secondary Mathematics Methods

Introduction to Complexity Sciences

Turtle Geometry

Practicum in the Design of Learning Environments

Constructionist Learning

Courses taught prior to Northwestern

Technological Tools for Thinking and Learning, Tufts, 1994 – 1998

Mathematics Learning Environments, Tufts, 1994 – 1998

Mathematics Practices, Tufts, 1997/98

Learning through Computer-Based Projects, Tufts, 1996-1998

Development of Reasoning in the Science Curriculum, Tufts, 1994, 1998

Intellectual Development, Tufts, 1995

Mathematical Learning in Alternative Voices, MIT, 1992-1993

Graduate Students and Post-Doctoral Fellows Supervised

Doctoral Thesis Supervisor
Dor Abrahamson (associate professor, U.C. Berkeley)
Matthew Berland (assistant professor, University of Wisconsin, Madison)
Paulo Blikstein (assistant professor, Stanford)
Spiro Maroulis (assistant professor, ASU)
Pratim Sengupta (assistant professor, Vanderbilt)
Forrest Stonedahl (assistant professor, Augustana College)
Michelle Wilkerson-Jerde (assistant professor, Tufts)
Nathan Holbert (assistant professor, Columbia)
Bryan Guo (current)
Bryan Head (current)
Arthur Hjorth (current)
Daniel Kornhauser (current, on leave)
Reuven Lerner (Israel)
Josh Unterman (current, on leave)
Aditi Wagh (Tufts University)
David Weintrop (current)
Christine Yang (current)
Gabby Anton (current)
Christina Pei (current)
Umit Aslan (current)

Doctoral Students Co-supervised:
Ben Shapiro (assistant professor, University of Colorado)
Michael Stieff (associate professor, UIC)

Izabel Olson (current)
Sophia Sullivan (Thing Big, Teradata)
Alina Lungeneau (University of Pittsburgh)

Post-Doctoral Fellows Supervised

Dor Abrahamson (associate professor, U.C. Berkeley)
Sharona Levy (associate professor, University of Haifa)
Bill Rand (assistant professor, University of Maryland)
Firat Soylu (assistant professor, University of Alabama)
Kai Orton (current)
Nathan Holbert (assistant professor, Columbia)
Corey Brady (current)

Other graduate students supervised

Fernando Alegre,
Zeina Atrash,
Michael Barber,
Elham Beheshti
Alexei Beltukov,
Barbara Brizuela,
Rodrigo Cadiz,
Dennis Campbel,
Andrew Carter,
Damon Centola,
Ivica Ceraj,
Adam Colestock,
Jaquelyn Crowe,
Elisa D'Amore,
Gregory Dam,
Anita Dewaard,
Jared Dunne,
Megan Gerstenzang,
Heping Hao,
Ed Hazzard,
Lin He
Chris Johnson,
Georgine Kalil,
Hyungsin Kim,
Karen Kinel,
Moshe Krakowski,
Jaime Koh,
Marcia Lazo,
Victor Lee,
Steven Longenecker,
Alina Lungeneau
Jeanne McDermott,
Patrick McNally,
Albert Micozzi,
Deidra Morrisson,
Rachel Nathan,
Nate Nichols,
Marsha Novak,
Julia Richmond,
Eric Russell,
Omer Shezifi,
Ben Shapiro,
Shai Shomroni,
Ian Smolkin,
Karen Spezzaferro,
Claudia Spiro-Silverman,
Mike Stieff,
Sophia Sullivan
Jessica Tredeau,
Kim Rose,
Stacey Vahey,
Joseph Walsh,
Joseph Wanka,
Jim Watt,
Aditi Wagh,
Max Weinstein,
Allison Whitmarsh,
Janet Walkoe,
Jun Wang,
Weiguo Yang

Undergraduate Research Students Supervised

Jason Alt,
Jessica Andrews,
Gordon Bailey,
Ethan Bakshy,
Srinivas Balusu,
Simon Barnicle
Stephanie Bezold,
Marc Blanchette,
Silas Boyd-Wickizer,
Emma Brick
Nicholas Callerame,
Samuel Cedarbaum,
Jonathan Chan,
Alex Chang,
Richard Chang,
Charles Chen,
Steven Chen,
Eric Cheng,
Kai Cheung,
Jarva Chow,
Brent Collins,
Marc Covitz,
Daniel Cozza,
Paul Deeds,

Xiaotian (Tina) Ding,
Rumou Duan,
Jeffrey Farma,
Ann Fefferman,
Rob Froemke,
Ziwerekoru Fumudoh,
Eduardo Gaitan.
Geoff Garen,
Jeremy Glassenberg,
Kate Goodrum,
Stephen Gordon,
Steve Gorodetsky,
Nancy Gu,
Josh Harriman,
Randall Harris,
Carrie Hobbs,
Daniel Hodges,
Geoff Hulette,
Abigail Jacobs,
Kevin Jin,
Wendy Johnson,
Nathan Jones,
Nickolas Kaplan,
Kristen Kawachi,
Jayun Kim,
Samuel Kim,
Sergey Krilov,
Max Kupschik,
Alok Lal,
Inhye Lee,
Shin Lee,
Justin Li,
Jason Liu,
Claire Maby,
Greg McGlynn,
Eamon McKenzie,
Dhrumil Mehta,
Sarah Miller,
Zack Moy,
Ben Neidhart,
James Newell,
Jules Ottino-Loffler,
Daniel Padron,
Cristina Polenica,
Ben Rafshoon,
Kevin Qui,
Jennifer Rawicz,
Ken Reisman,
Sebastian Rodriguez,
Andrew Russell,
Austin Ryder,
Maitreyi Sistla,
Taiyo Sogawa,
Kendall Speer,
Elisa Sutherland,
Jordan Timmerman,
Nate Wong,
Philip Woods,
Zifan Xiang,
Tom Zhao

High School Research Students Supervised

Eytan Bakshy
Jules Ottino-Loffler
Bertrand Ottino-Loffler
Daniel Glick-Unterman

ACADEMIC CONFERENCES: TALKS and PRESENTATIONS

"A history of Computational Thinking". Northwestern University. (December 2014)

"Computational Thinking and Modeling", Northwestern University (December 2014).

"NetLogo workshop". GK12. Northwestern University. (December, 2014).

"Agent-based modeling literacy." Oxford University. (November 2014)

"Integrating modeling into STEM classrooms." University College, London (November 2014)

"A history of NetLogo." Oxford University (November 2014).

"InquirySpace: Fusing Modeling, simulation, sensors and data exploration to foster seamless inquiry learning. ". NSF distinguished lecture. Arlington, Va. June 16, 2014.

"Modeling and Simulation as a path to Computational Thinking." Keynote presentation at the Summit on the Future of Computer Science education. Orlando, FL. January 9, 2014.

"The future of Agent-based modeling in Science education." University of Haifa, December 26, 2013 .

"The development of Tortoise, combining agent-based modeling with data analysis. Concord Consortium. December 2, 2013.

"Agent-based Modeling in Policy." Chicago Metropolitan Agency for Planning. July 18, 2013.

"Agent-Based Modeling and Networks workshop". Science of Team Science Conference. Northwestern University. June 27, 2013.

"Know your enemy: Learning from in-game opponents." Interaction Design and Children. New York, June 26.

"The Legacy of Seymour Papert." Interaction Design and Children. New York, June 26, 2013.

"Social and Task Interdependencies in the Street-Level Implementation of Innovation." Presented at the Public Management Association research Association Conference, Madison, WI. June 22, 2013.

"Leveling the playing field: Making multi-level evolutionary processes accessible through participatory simulations." Computer-Supported Collaborative Learning. CSCL, Madison, Wisconsin, June 16, 2013.

"Supporting Computational: How Novices Use Programming Primitives in Achieving a Computational Goal." AERA, San Francisco. April 28, 2013.

"Agent-based literacy." Plenary presentation at Agent-Based Modeling in Education, Phoenix, AZ. March 1, 2013.

"Using NetLogo with networks workshop". NetSci and WebSci conference. Northwestern University. June 17, 2012.

"NetTango: A mash-up of NetLogo and Tern." (with M.. Horn). In Moher, T. (chair) and Pinkard, N. (discussant), When systems collide: Challenges and opportunities in learning technology mashups. Symposium presented at the annual meeting of the American Education Research Association,Vancouver, British Columbia. April 2012.

"Social and Task Interdependencies in the Frontline Implementation of Innovation." Presentati on at the annual meeting of the Association for Public Policy and Management Baltimore, MD. November 8 - 10, 2012.

"Computational Thinking and Modeling", Northwestern University (October 2012).

""NetLogo workshop". NSF GK12 Program. Northwestern University. (October 15, 2012).

"NetLogo workshop". Office of STEM Education Partnerships. Northwestern University. (August 7, 2012).

"NetLogo Networks workshop". Network Science conference. (June 17, 2012).

"Using Simulation to Understand Consistency in Treatment Effects: An Application to School Choice." Presentation at the annual meeting of the Society for Research on Educational Effectiveness, Washington D.C. (March 8 - 11, 2012)

"Transforming knowledge and learning through Agent-Based Modeling: A case for universal ABM literacy". University of Sydney. (December 7, 2011).

"Transforming knowledge and learning through Agent-Based Modeling". Keynote presentation at Business in Complexity Conference, Washington, DC. (October 14, 2011).

"A case for universal literacy in Agent-Based Modeling." Keynote presentation at CSSSA, Santa Fe, New Mexico (October 9-12, 2011).

"Seeing Emergence: Transforming Learning with Agent-Based Modeling". Adler Planetarium. (October 3, 2011).

"*Context counts: Role of the context in triggering productive and unproductive pieces of knowledge about natural selection."* (with Wagh, A.). Paper presented at Jean Piaget Society Conference, Berkeley (June 2-4, 2011).

"The Power of Agent-Based Modeling." Santa Fe Institute. (May 24, 2011*).*

"Racing games for exploring kinematics: A computational thinking approach." (with Holbert, N.R.) Paper presented at AERA 2011, New Orleans, LA. (April 8 – 12, 2011)

"Putting the turtle on the racetrack: Investigating a constructionist racing game for exploring kinematics." (with Holbert, N.R.) Paper presented at NARST 2011, Orlando, FL. (April 3 – 6, 2011)

"*Lowering the Learning Threshold: Multi-Agent-Based Models and Learning Electricity*."(with Sengupta, P.)

"Giraffes don't stretch their necks anymore: Useful pieces of knowledge about natural

selection." (with Wagh, A.) Presentation at epiSTEME 2011, Mumbai. (Jan 4- 9, 2011).

"It's just a toolbar!" Using tangibles to help children manage conflict around a multi-touch tabletop. (with Olson, I.C., Leong, Z.A., & Horn, M.S.) Paper presented at the Fifth International Conference on Tangible, Embedded and Embodied Interaction (TEI'11), Funchal, Portugal. (2011).

"NetLogo HotLink Replay: A Tool for Exploring, Analyzing and Interpreting Mathematical Change in Complex Systems". (with Wilkerson-Jerde, M.). Poster presented at ICLS 2010, Chicago, IL. (Jun 29 - Jul 2 2010).

"Mining students' actions for understanding of complex systems: Students' explorations of gas models in the Connected Chemistry curriculum." (with Levy, S. T). Paper presented at AERA 2010, Denver, CO. (2010)

"Watershed Modeling For Education". (with Russell, E. & Buzby, C.). Paper presented at the First International Conference for Geospatial Research & Application, Washington, DC. (2010)

"Agent-based and aggregate level reasoning elicited by problem scenarios and an agent-based model."(with Wagh, A.) Poster presented at the annual meeting of the American Education Research Association, Denver, CO. (April 30-May 4, 2010).

"Qualitative Calculus of Systems: Exploring Students' Understanding of Rate of Change and Accumulation in Multiagent Systems."(with Wilkerson-Jerde, M.) Paper presented at AERA 2010, Denver, CO. (2010)

"Reflected abstraction and knowledge reconstruction in expertise: Tracking mathematicians' sensemaking around unfamiliar mathematical ideas." (with Wilkerson-Jerde, M.) Paper presented at the 40th Annual Meeting of the Jean Piaget Society, St Louis, MO. (June 3-5 2010)

"Reinterpreting school effects from the bottom up: Merging statistical analysis and a complex systems perspective". (with Yang, C. K.). Poster presented at the Constructionism conference, Paris, France. (August 16-20, 2010).

"Evolutionary Robustness Checking in the Artificial Anasazi Model." (with Stonedahl, F.) Paper presented at the AAAI Fall Symposium on Complex Adaptive Systems: Resilience, Robustness, and Evolvability. Arlington, VA. (November 11-13, 2010).

"The Conspiracy of Organizational Inertia: A Complex Systems Perspective on School Reform." Paper presented at the Academy of Management Annual Meeting, Chicago, IL, (August 7-11, 2009.)

"Towards a framework for cognitive research using agent-based modeling and complexity sciences". (with P. Blikstein & B. Rand). In M. Jacobson (Chair), M. Kapur (Organizer) & N. Sabelli (Discussant), *Complexity, learning, and research: Under the microscope, new kinds of microscopes, and seeing differently.* Symposium conducted at the annual meeting of the

American Educational Research Association, San Diego, CA (April 2009).

"*Understanding proof: Tracking experts' developing understanding of an unfamiliar proof"*. (with M. Wilkerson-Jerde). Paper presented at the International Commission on Mathematical Instruction, ICMI Study 19, Proof and Proving in Mathematics Education, Taipei, Taiwan (May 2009).

"*Complementarity in agent-based and equation-based models".* (with M. Wilkerson-Jerde). Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA (April 2009).

"*Re-conceiving introductory computer science curricula through agent-based modeling*". (with F. Stonedahl & M. Wilkerson-Jerde). Paper presented at the Eighth International Conference on Autonomous Agents and Multi-agent Systems (AAMAS) - EduMAS Workshop, Budapest, Hungary (May 2009).

"Consuming Spatial Data in NetLogo using the GIS Extension". (with E. Russell). Paper presented at the Swarmfest 2008 Conference, Chicago, IL (May 2008).

"CrossNet: A Framework for Crossover with Network-based Chromosomal Representations". (with F. Stonedahl and B. Rand). Paper presented at the 2008 Genetic and Evolutionary Computation Conference (GECCO), Atlanta, GA (July 2008).

"Designing Across Ages: On The Low-Threshold-High-Ceiling Nature of NetLogo Based Learning Environments". (with P. Sengupta). Paper presented at the 2008 Annual Meeting of the American Educational Research Association, New York (March 2008).

"Embedding Environments as a Mechanism for Mathematical Reasoning: An Expert Study". (with M. Wilkerson-Jerde). Paper presented at the 2008 Annual Meeting of the American Educational Research Association, New York (March 2008).

"Groupwork as a complex adaptive system: A methodology to model, understand, and design classroom strategies for collaborative learning". (with P. Blikstein & D. Abrahamson). Paper presented at the annual conference of the American Education Research Association, New York (March 2008).

"How Do Mathematicians Learn Mathematics?" (with M. Wilkerson-Jerde). Paper presented at the Joint Meeting of the International Group for the Psychology of Mathematics Education (PME-32 and PME-NA XXX), Morelia, Mexico (July 2008).

"Implementing Multi-Agent Modeling in the Classroom: Lessons from Empirical Studies in Undergraduate Engineering Education". (with P. Blikstein). Paper presented at the 2008 International Conference of the Learning Sciences, Utrecht, The Netherlands (June 2008).

"Learning Activities As Tools For Formative Assessment - Case Study Of A Computational Multi-Agent Based Electricity Curriculum (NIELS: NetLogo Investigations In Electromagnetism)". (with P. Sengupta). Paper presented at the 2008 International Conference of the Learning Sciences, Utrecht, The Netherlands (June 2008).

"Multi-Agent Learning with a Distributed Genetic Algorithm: Exploring Innovation Diffusion on Networks". (with F. Stonedahl & B. Rand Paper presented at the 7th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), Estoril, Portugal (May 2008).

"On Learning Electricity in 7th Grade with Multi-agent Based Computational Models (NIELS)". (with P. Sengupta). Paper presented at the 2008 International Conference of the Learning Sciences, Utrecht, The Netherlands (June 2008).

"On The Learnability of Electricity As A Complex System". (with P. Sengupta). Paper presented at the 2008 International Conference of the Learning Sciences, Utrecht, The Netherlands (June 2008).

"On the representational and epistemological affordances of NetLogo-based science curricula". (with P. Sengupta). Paper presented at the annual meeting of the American Educational Research Association, New York (March 2008).

"Perceptual Supports for Sensemaking: A Case Study Using Multi Agent Based Computational Learning Environments". (with P. Sengupta & M. Wilkerson-Jerde). Paper presented at the 2008 International Conference of the Learning Sciences, Utrecht, The Netherlands (June 2008).

"The classroom as a complex adaptive system: An agent-based framework to investigate students' emergent collective behaviors". (with P. Blikstein & D. Abrahamson). Paper presented at the 2008 International Conference of the Learning Sciences, Utrecht, The Netherlands (June 2008).

"Tinkering with Turtles: An Overview of NetLogo's Extensions API". (with F. Stonedahl, D. Kornhauser, E. Russell, C. Brozefsky, E. Verreau, & S. Tisue). Paper presented at the Swarmfest 2008 Conference, Chicago, IL (May 2008).

Rand, W., Blikstein, P., & Wilensky, U. (2008). "GoGoBot: Group Collaboration, Multi-Agent Modeling and Robots". (with B. Rand & P. Blikstein). Paper presented at the 7th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), Estoril, Portugal (May 2008).

"Learning Complexity: Agent-Based Modeling Supporting Education Research on Student Cognition in Social Contexts." (with P. Blikstein, M. Cole, D. Hammer). Symposium chaired at the 2007 annual meeting of the American Educational Research Association, Chicago, IL (April 2007).

"Agent-Based Modeling as a Bridge Between Cognitive and Social Perspectives on Learning." (with D. Abrahamson & J. Levin). Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL (April 2007).

"Multi-agent simulation as a tool for investigating cognitive-developmental theory." (with P. Blikstein & D. Abrahamson). Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL (April 2007).

"Modeling manifold epistemological stances with agent-based computer simulation." (with P. Blikstein & D. Hammer). Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL (April 2007).

"Teasing apart domain-specific and domain-general inquiry skills: Co-evolution, bootstrapping, or separate paths?" (with J. Gobert, B. Buckley, & S. Levy). Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL (April 2007).

"Consistency and change in high-school students' exploration of Connected Chemistry models." (with S. Levy). Paper presented at the 2007 annual meeting of the American Educational Research Association, Chicago, IL, April 9-13, 2007.

"Modeling and Participatory simulation in mathematics and science education". Plenary talk at the annual conference of the International Commission on Mathematics Instruction. Hanoi, Vietnam. (December 2006).

"Using agent-based modeling to understand the social dynamics of schools." (with S. Maroulis) Presented at the Teacher Networks conference, Northwestern University, Evanston, IL, (November 2006).

"Promoting ABM literacy: implications for design, scientific content and education." Keynote Paper presented at Agent 2006, Chicago, IL. (October 2006).

"Breeding faster turtles: Progress towards a NetLogo compiler" (with F. Sondahl & S. Tisue) Paper presented at Agent 2006, Chicago, IL. (October 2006).

"Widgets, Planets, and Demons: the Case for the Integration of Human, Embedded, and Virtual Agents via Mediation" (with W. Rand & P. Blikstein). Paper presented at Swarmfest 2006, South Bend, IN, June 2006.

"NetLogo 3.1: Low Threshold, No Ceiling" (with W. Rand). Paper presented at NAACSOS 2006, South Bend, IN, June 2006.

"Minsky, mind, and models: Juxtaposing agent-based computer simulations and clinical-interview data as a methodology for investigating cognitive-developmental theory." (with D. Abrahamson and P. Blikstein) Paper presented at the annual meeting on the Jean Piaget Society, Baltimore, MD (June 2006)

"Emergent Modeling." Plenary talk at the International Conference on Complexity Sciences. Boston, Ma. (June 2006).

"Learning About Learning: Using Multi-Agent Computer Simulation to Investigate Human Cognition." (with P. Blikstein) Paper presented at the International Conference on Complex Systems 2006, Boston, MA. (June 2006).

"Verification and Validation through Replication: A Case Study Using Axelrod and Hammond's Ethnocentrism Model." (with W. Rand) Paper presented at the Annual Conference of the North American Association for Computational Social and Organizational Sciences, South Bend, IN, (June 2006)

"'Hybrid Modeling': Advanced Scientific Investigation Linking Computer Models and Real-World Sensing."(with P. Blikstein). *Paper presented at the Seventh International Conference of the Learning Sciences*, Bloomington, IN. (June 2006).

"Participatory, embodied, multi-agent simulation." (with W. Rand). AAMAS-2006. Hakodate, Japan. (May 2006).

"Constructionist Collaborative Engineering: results from an Implementation of PVBOT." (with M. Berland). *Annual meeting of the American Educational Research Association*, San Francisco, CA. (April 2006).

"Students' foraging through the complexities of the particulate world: Scaffolding for independent inquiry in the connected chemistry (MAC) curriculum." (with S. Levy & M. Novak). In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Annual meeting of the American Educational Research Association, San Francisco, CA. (April 2006).

"Emerging knowledge through an emergent perspective: High-school students' inquiry, exploration and learning in the Connected Chemistry curriculum." (with S. Levy). *Annual meeting of the American Educational Research Association*, San Francisco, CA. (April 2006).

"NIELS: An Agent Based Modeling Environment for Learning Electromagnetism." (with P. Sengupta). In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Annual meeting of the American Educational Research Association, San Francisco, CA. (April 2006).

"PANDA BEAR: Perimeter and Area by Embodied Agent Reasoning." (with J. Unterman). In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Annual meeting of the American Educational Research Association, San Francisco, CA. (April 2006).

"Is a disease like a lottery?: Classroom networked technology that enables student reasoning about complexity." (with D. Abrahamson). *Annual meeting of the American Educational Research Association*, San Francisco, CA. (April 2006).

"From inert to generative modeling: case studies of Multi-Agent-Based Simulation in Undergraduate Engineering education." (with P. Blikstein). In D. Abrahamson (Org.), U. Wilensky (Chair), and M. Eisenberg (Discussant), *Small steps for agents… giant steps for students?: Learning with agent-based models*. Annual meeting of the American Educational Research Association, San Francisco, CA. (April 2006).

"On-screen and off-screen: do they make a marriage? A case study of the implementation of computer simulation in hands-on materials science laboratory experiments." (with P. Blikstein & K. Stair). *Annual Conference of the American Society for Engineering Education* (2006).

"A Case Study Of Multi-Agent-Based Simulation In Undergraduate Materials Science Education." Annual Conference of the American Society for Engineering Education. (February 2006).

"Understanding chance: From student voice to learning supports in a design experiment in the domain of probability." (with D. Abrahamson). *Paper presented at the Twenty Seventh Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Roanoke, VA. (June 2005)

"Less Is more: Agent-Based Simulation as a Powerful Learning Tool in Materials Science." (with P. Blikstein). *Paper presented at the Fourth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2005)*. Utrecht, Netherlands. (July 2005).

"N.I.E.L.S: An Emergent Multi-Agent Based Modeling Environment for learning Physics." (with P. Sengupta). *Paper presented at the Fourth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2005)*. Utrecht, Netherlands. (July 2005).

"Agent-based systems for human learning." (with E. Sklar). *Paper presented at the Fourth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2005)*. Utrecht, Netherlands. (July 2005).

"Mixed-media learning environments." (with D. Abrahamson, P. Blikstein, & K. Lamberty). *Proceedings of the annual meeting of Interaction Design and Children 2005*, Boulder, Colorado. (June 2005).

"Piaget? Vygotsky? I'm Game: Agent-Based Modeling for Psychology Research." (with D. Abrahamson). Paper presented at the annual meeting of the Jean Piaget Society. Vancouver, Canada. (June 2005).

"Modeling school districts as complex adaptive systems: a simulation of market-based reform." (with S. Maroulis). *Paper presented at the 3rd Lake Arrowhead Conference on Human Complex Systems*. Lake Arrowhead, California. (May 2005).

"Collaboration and equity in classroom activities using Statistics As Multi-Participant Learning-Environment Resource (S.A.M.P.L.E.R.)." (with D. Abrahamson). Paper accepted for presentation in W. Stroup and U. Wilensky (Chairs) & C. D. Lee (Discussant), *Patterns in group learning with next-generation network technology*. The annual meeting of the American Educational Research Association, Montreal, Canada. (April 2005).

"Complex play systems -- Results from a classroom implementation of VBot." (with M. Berland). Paper presented in W. Stroup and U. Wilensky (Chairs) & C. D. Lee (Discussant), *Patterns in group learning with next-generation network technology*. The annual meeting of the American Educational Research Association, Montreal, Canada. (April 2005)

"Students' patterns in exploring NetLogo™ models, embedded in the Connected Chemistry Environment." (with S. Levy). Paper presented in W. Stroup and U. Wilensky (Chairs) & C. D. Lee (Discussant), *Patterns in group learning with next-generation network technology*. The annual meeting of the American Educational Research Association, Montreal, Canada (April 2005).

"Leave no turtle behind: An agent-based simulation of school choice dynamics." (with S. Maroulis). *Paper presented at the annual meeting of the American Educational Research Association*, Montreal, Canada. (April 2005).

"NetLogo: Design and Implementation of a Multi-Agent Modeling Environment." (with S. Tisue). *Paper presented at Agent 2004,* Chicago. (October 2004).

"SAMPLER: Collaborative interactive computer-based statistics learning environment." (with D. Abrahamson). *Paper presented at The 10th International Congress on Mathematical Education*, Copenhagen. (July 2004).

"MaterialSim: an agent-based simulation toolkit for Materials Science learning." (with P. Blikstein). *Paper presented at the International Conference on Engineering Education*, Gainesville, Florida. (June 2004)

"Leveraging epistemological diversity through computer-based argumentation in the domain of probability." *(with* Abrahamson, D., Berland, M., Shapiro, R., & Unterman, J.) *Proceedings of The Sixth International Conference of the Learning Sciences*, Santa Monica, (June 2004).

"*Complexity Perspectives and Multi-agent Modeling in Education."* Plenary talk at the International Conference on Complexity Sciences. Boston, MA. (May 2004).

"*NetLogo Language Development."* (with S. Tisue). International Conference on Complexity Sciences. Boston, Ma. (May 2004).

" *Networking and Complexifying the Science Classroom: Students simulating and making sense of complex systems using the HubNet networked architecture"* (with S. Papert). The annual meeting of the American Educational Research Association, San Diego, CA, (April 2004).

"S.A.M.P.L.E.R.: Statistics As Multi-Participant Learning-Environment Resource". (with D. Abrahamson). The annual meeting of the American Educational Research Association, San Diego, CA. (April 2004).

"Virtual Robotics in a Collaborative Constructionist Learning Environment." (with M. Berland). The annual meeting of the American Educational Research Association, San Diego, CA, (April 2004).

"Making Sense of Complexity: Patterns in forming causal connections between individual agent behaviors and aggregate group behaviors." (with S. Levy). The annual meeting of the American Educational Research Association, San Diego, CA, (April 2004).

"*Connected Chemistry - A study of secondary students using agent-based models to learn Chemistry*." (with S. Levy). Paper presented at the annual meeting of the *American Educational Research Association. (*April 2004).

"Multi-agent Modeling in School and Research" HICSS. (January, 2004).

"The quest of the bell curve: A constructionist approach to learning statistics through designing computer-based probability experiments." (with D. Abrahamson). *Paper presented at the Third Conference of the European Society for Research in Mathematics Education*. Feb. 28 - March 3, 2003.

"Networked Participatory Simulations: Technologies for Supporting Classroom Collaboration in Exploring the Dynamics of Complex Systems" Paper presented at the *biannual Conference on Computer-Supported Collaborative Learning*, CSCL '03 (June 2003).

"Embedded Complementarity of Object-based and Aggregate Reasoning in students developing understanding of dynamic systems". Paper presented at the annual meeting of the *American Educational Research Association*. Chicago, IL. (April 2003).

"Learning to see the world through an emergent lens: A report on secondary students' construction and exploration of models using NetLogo and HubNet**".** Paper presented at the annual meeting of the *American Educational Research Association*. Chicago, IL. (April 2003).

"Social Science Research through agent-based Modeling. " Agent2002: Social Agents, Ecology and Evolution. University of Chicago. (October 2002).

"ChemLogo: A novel computer-based modeling environment for teaching and learning chemistry." (with M. Stieff). The Fifth Biannual International Conference of the Learning Sciences: Seattle, WA, (October, 2002)

"Learning undergraduate Chemistry with the ChemLogo modeling system " (with M, Steiff) International Conference on the Learning Sciences (October, 2002).

"The Nature and Future of Classroom Connectivity: The Dialectics of Mathematics in the Social Space." *Psychology of Mathematics Education*. (October 2002).

" Exploring, Constructing and Participating in Simulations". Learners, Laptops and Powerful Ideas. University of Maine (August 2002).

"Participatory Simulation: Envisioning the networked classroom as a way to support systems learning for all. " Paper presented at the annual meeting of the *American Educational Research Association*. New Orleans, LA. (April 2002).

"Complex Systems Concepts and Tools in Education: Developing a Modeling Mindset: The need for a modeling and simulation *strand* in the K-16 Curriculum. " *American Educational Research Association*. New Orleans, LA. (April 2002)

"Modeling Emergent Phenomena with Multi-agent Modeling Languages." EuroLogo 2001. Linz, Austria. (August, 2001) .

"Integrated Multi-agent Modeling". EuroLogo 2001. Linz, Austria. (August, 2001) .

"Participatory Simulations and Embodied Learning: Students Enacting Complex Dynamic Phenomena with the HubNet Architecture". European Spring Days Conference . Porto, Portugal. (April, 2001)

"Thinking in Levels: Seeing the World through an Emergent Lens". European Spring Days Conference . Porto, Portugal. (April, 2001).

"New Programming Paradigms ", (with A. diSessa, C. Hancock, C. Hoyles, R. Noss, B. Sherin) American Educational Research Association, Seattle, WA (April, 2001).

"Turning Points", (with A. diSessa, C. Hoyles, J. Kaput, R. Noss) American Educational Research Association, Seattle, WA (April, 2001)

"Levels", (with M. Chi, J. Frederiksen, D. Perkins, M. Resnick, B. White) American Educational Research Association, Seattle, WA (April, 2001)

"HubNet", (with W. Stroup) American Educational Research Association, Seattle, WA (April, 2001)

"Networked Gridlock: Students Enacting Complex Dynamic Phenomena with the HubNet Architecture." The Fourth Annual International Conference of the Learning Sciences: Ann Arbor, MI, (June 2000)

"A Hands-On Modeling Approach to Evolution: Learning about the Evolution of Cooperation and Altruism Through Multi-Agent Modeling - The EACH Project." (with D. Centola & E. Mckenzie) The Fourth Annual International Conference of the Learning Sciences: Ann Arbor, MI, (June 2000)

"HubNet: a networked architecture to enable classroom participatory simulations", Third International Conference on Complex Systems, Nashua, NH, (May 2000)

"Survival of the Groupiest: Facilitating Students' Understanding of the Multiple Levels of

Fitness through Multi-Agent Modeling - The EACH Project", (with D. Centola & E. Mckenzie) Third International Conference on Complex Systems, Nashua, NH, (May 2000)

"HubNet: a networked architecture to enable classroom participatory simulations", (with V. Colella, R. Borovoy, L. Roberts & W. Stroup) American Educational Research Association, New Orleans, LA (April, 2000)

"Participatory Simulations in the Mathematics Classroom" (with W. Stroup) Annual Meeting of the National Council of Teachers of Mathematics, Chicago, IL, (April, 2000)

"The affordances of a network of graphing calculators for learning mathematics and science." (with W. Stroup) Teachers, teaching with Technology (March, 2000)

"Participatory Simulations Project" (with W. Stroup) CSCL conference (December, 1999)

"Developing a Modeling Mindset – The case for a modeling and simulation strand in the K-16 curriculum," NSF Meeting on Complex Systems and Education, June 18 – 20, 1999

"Participatory Simulations: Network-based design for systems learning in classrooms", (with W. Stroup) CILT conference on ubiquitous computing (May, 1999)

"Learning Biology through Embodied Modeling", (with K. Reisman) American Educational Research Association, Montreal (April, 1999)

"Participatory Simulations: Network-based design for systems learning in classrooms", (with W. Stroup) American Educational Research Association, Montreal (April, 1999)

"Classnet: An Architecture for Enabling Classroom Participatory Simulations", Second International Conference on Complex Systems (October 1998)

"Individual-Based Computer Modeling in Biology", Second International Conference on Complex Systems (October 1998)

"Connected Learning: A New Paradigm for Education", Plenary address at the First National Conference on the Learning Sciences and the Challenges of the Information Era. Peruvian Ministry of Education. Lima: Peru (June 1998)

"Dynamic Systems and Education ", Invited symposium for SIG-ATL, American Educational Research Association, San Diego (April 1998)

"The Sciences of Complexity, Learning and the Educational Process: Emerging Perspectives on Ways of Thinking and Doing" (symposium), American Educational Research Association, San Diego (April 1998)

"Object-Based Parallel Computation in Education", First International Conference on Complex Systems (September 1997)

“Expressive Mathematics: Perspectives on Making Math Meaningful” (symposium) National Council of Teachers of Mathematics Annual Meeting Research Pre-session, Minneapolis (April 1997).

“Making Sense of Complexity through Building Object-Based Parallel Models”, Annual Meeting of the National Science Foundation, Division of Applications of Advanced Technologies (July 1996).

"Logo in the Schools - a Retrospective " (panel presentation). Annual Meeting of the American Educational Research Association. New York City, (April 1996)

“What is an Intellectual Technology? Second International Conference on Technology Education for a Changing Future under the auspices of UNESCO. (January 1996).

"Mathematics as a way of Connecting", Boston Forum for the Future of Science Education under the auspices of the American Academy of Arts and Sciences, Cambridge, Ma., (September 1995)

"Computer Programming and Learner-Centered Design", National Science Foundation Educational Technology Workshop, Washington DC, (September 1995).

"Learning Probability Through Parallel Modeling", American Mathematical Society Annual Meeting, Jerusalem, Israel, (May 1995).

"A Retrospect of the Logo Culture: Reflections and Promising Prospects", (with M. Linn, A. Brandes, R. Goldman-Segall, Y. Kafai & M. Resnick). American Educational Research Association, San Francisco. (April 1995)

"New Thinking for New Sciences: Constructionist Approaches for Exploring Complexity". (with M. Resnick).American Educational Research Association, San Francisco. (April, 1995).

“Integrated Curriculum through Computational Modeling”. Supercomputing Conference, Washington, DC. (September 1994).

"When is Programming Mathematics?,” Eighteenth International Conference on Psychology of Mathematics Education, Lisbon, Portugal, (August 1994)

“Micro- and Macro- Views of Probability”. Invited Presentation at the National Educational Computing Conference, Boston, MA, (June 1994).

“What is Normal?”Invited Presentation at the National Educational Computing Conference, Boston (June 1994)

“Parallel Modeling in Mathematics and Science Education”, Invited presentation at the symposium on modeling and simulation in science and mathematics education. American Educational Research Association, New Orleans (April 1994)

"Parallel Modeling in Mathematics and Physics" Second Annual Conference on Modeling and Simulation, Sponsored by National Science Foundation. Endicott House, Dedham, MA (February 1994)

"Beyond the Deterministic, Centralized Mindsets: New Thinking for New Sciences," (with S. Papert and M. Resnick) Presentation at the American Educational Research Association, Atlanta (April 1993)

"What is Abstract? What is Concrete?," Presentation at the American Educational Research Association, Atlanta (April 1993)

"Concrete Learning: Mathematical Experiences and Building Relationships through Software Design in Logo," (with I. Harel, Y. Kafai and S. Papert) Presentation at the International Conference on Technology and Education, MIT (March 1993)

"People's Intuitions about Probability and Statistics: Implications for a Learning Environment," Presentation at the American Educational Research Association, San Francisco (April 1991)

"Abstract and Concrete Mathematics," Presentation at the American Educational Research Association, San Francisco (April 1991)

"A Computer Environment for the Study of Feedback," (with A. Brandes) Presentation at the American Educational Research Association, Cambridge (April 1990)

"Putting the Child in the Feedback Loop," Presentation at the Fourth International Conference on Logo and Mathematics Education, Jerusalem, Israel (June 1989)

I have also taught numerous Logo, Computational Science and Mathematics workshops to varied audiences in varied settings -- children, elementary school educators, secondary educators, university and industry researchers in the U.S. and abroad.

WORKSHOPS OFFERED

"NetLogo workshop". GK12. Northwestern University. (December, 2014).

"Using NetLogo to model scientific phenomena as complex systems", Madero, Tamaulipas, Mexico (November 12-13, 2014).

"Know Your Network: Learning Social Networks Analysis Through Meaningful Manipulation with NetLogo". Workshop at *Constructionism 2014*. Vienna, Austria.(August 2014).

"ModelSim teacher workshop", Northwestern University (July, 2014)

"ModelSim teacher workshop", Maine South High school (July, 2014)

"ModelSim teacher workshop", Niles North High School (July, 2014)

“NetLogo workshop”. Mae-Song Middle School and Seo-Hyun high school, Seoul, South Korea. (June 2014).

“ModelSim teacher workshop”, Wilmette Junior High School (October, 2013)

"Understanding Complexity II: A Simple Guide to Using and Developing Agent-Based Models for Research”. American Political Science Association Annual Meeting (August 2013).

“NetLogo workshop”. OSEP. Northwestern University. (August 2013).

“ModelSim teacher workshop”, Northwestern University (July, 2013)

“NetLogo workshop”. SIGCSE, Computer Science Education. Denver, Colorado. (March 2013).

“NetLogo and Networks workshop.” SciTS 2013, Science of Team Science. (June 27 2013)

“NetLogo workshop”. GK12. Northwestern University. (October 15, 2012).

“NetLogo workshop”. OSEP. Northwestern University. (August 7, 2012).

“NetLogo Networks workshop”. Network Science conference. (June 17, 2012)

“NetLogo workshop”. Global Sustainability Summer School, Potstam, Germany. (July 20, 2012)

“NetLogo workshop”. University of Sydney. (December 6, 2011).

“NetLogo workshop”. GK12. Northwestern University. (December 2, 2011).

“NetLogo workshop”. GK12. Northwestern University. (November 14, 2011).

“NetLogo workshop”. OSEP. Northwestern University. (November 8, 2011).

“NetLogo workshop”. OSEP. Northwestern University. (November 3, 2011).

“NetLogo workshop.” CSSSA Conference, Santa Fe, New Mexico (October 9-12, 2011).

“NetLogo workshop”. GK12. Northwestern University. (October 3, 2011).

“NetLogo workshop”. OSEP. Northwestern University. (August, 2011).

“NetLogo workshop.” Santa Fe Institute Short Course on Complex Systems (May 23-25, 2011).

"EECS 372/472 Multi-Agent Modeling Prospective TA Training Workshop." Northwestern University, Evanston, IL. (March 18, 2011).

"Introduction to Computer Modeling" Short interactive workshops/demos at Northwestern's "Career Day for Girls". Northwestern University, Evanston, IL. (February 26, 2011).

“Agent-Based Modeling with NetLogo: Exploring, Designing, and Building.” Constructionism 2010. Paris, France.(August 20, 2010).

“Constructing, Analyzing and Critiquing Agent-Based Models.” Northwestern Institute on Complex Systems (NICO) Complexity Conference, Evanston, IL.(September 1-3, 2009).

“NetLogo workshop.” Agent Conference, Chicago, IL (November 2007).

“NetLogo Modeling Workshop.” *Agent 2006*, Chicago, IL (September 18-20, 2006).

“Advanced Applications of Agent-Based Modeling for Business.” *CANet Virtual Network*. Evanston, IL (October 17, 2006).

“ Introduction to Agent-Based Modeling Using NetLogo,” *North American Association for Computational Social and Organizational Science (NAACSOS) 2007*, Emory University, Atlanta, GA, USA. (June 6, 2007).

“ NetLogo Modeling Workshop.” *Swarmfest 2007*. (July 12, 2007).

“ NetLogo Modeling Workshop.” *Maine Department of Education*. Bar Harbor, ME. (July 18, 2007).

“NetLogo and Urban Modeling workshop.” IIT Urban Studies Class, Evanston and Chicago, IL. (October 2006).

“Advanced Applications of Agent-Based Modeling for Business.” CANet Virtual Network. Evanston, IL. (October 2006).

“NetLogo workshop.” Agent Conference, Chicago, IL (September 2006).

“NetLogo & HubNet teacher workshop.” Northwestern University (July 2006).

“NetLogo workshop.”NICO CaNet conference, Northwestern University (June 2006).

“An Introduction to Using NetLogo for Social Scientists.” NAACSOS 2006, South Bend, IN (June 2006)

“An Introduction to Using NetLogo for Computer Scientists.” Swarmfest 2006, South Bend, IN (June 2006).

“An Introduction to Using NetLogo for Models of Language Change.” Northwestern Linguistics Class, Evanston, IL. May 19, 2006.

"NetLogo and Urban Modeling workshop." IIT Urban Studies Class, Evanston and Chicago, IL (February 2006).

"NetLogo workshop." Agent Conference, Chicago, IL. (September 2005).

"NetLogo workshop," NATO…., Porto, Portugal, (xx 200x)

"NetLogo workshop." Northwestern University. (July 2004).

"NetLogo workshop." ICCS. (June 2004).

"HubNet teacher workshop," Salt Lake City, Utah (June 2003).

"HubNet teacher workshop," Austin, Texas (June 2001)

"NetLogo workshop," EuroLogo, Linz, Austria (July 2001)

"NetLogo workshop," Tufts University (December 1999)

"StarLogoT teacher workshop" Rochester, NY (July 1998)

"StarLogoT workshop" Tufts University (July 1997)

"StarLogoT workshop," Tufts University (June 1996)

"Rescuing the Powerful Ideas." National Science Foundation sponsored workshop, Washington, DC (November, 1996).

"Participatory Simulations workshop" AERA, New Orleans, LA (April 1995).

"Participatory Simulations workshop" AERA, Atlanta, GA (April 1993).

"StarLogo Workshop", Artificial Life III, Santa Fe, NM (June 1992).

DEPARTMENTAL & INDUSTRY TALKS

"A history of Computational Thinking". Northwestern University. (December 2014)

"Computational Thinking and Modeling", Northwestern University (December 2014).

"Agent-Based Restructurations". Oxford University. (November 17, 2014).

"Integrating modeling into STEM classrooms." University College, London (November 2014)

"A history of NetLogo." Oxford University (November 2014).

" Computational Thinking and Modeling", Northwestern University (October 29, 2014).

"Computational Thinking in K-8", NSF CE21 PI meeting, Portland, OR (January 14, 2013).

" Computational Thinking and Modeling", Northwestern University (October 2012).

Agent-Based Modeling in Science, Santa Fe Institute (July 2012)

Agent-Based Modeling in Science, Portland State University (May, 2012)

"Technology-supported STEM learning", Northwestern University (2011).

"Restructurations of Knowledge", Northwestern University, (2010).

"The Deterministic Centralized Mindset", Northwestern University (2010).

"A review of agent-based modeling in education", Northwestern University (2010).

"Restructuring evolution education through the use of agent-based simulations." Evolution Challenges Meeting at Arizona State University. (November 2007).

"Complex Systems and Education". Brain and Education Workshop. Illinois Math and Science Academy (October 2007).

"Exploring Educational Policy and Change From a Complex Systems Perspective." NSF HSD PI Meeting. (October 2007).

"Learning with Agent-based Modeling". Maine Department of Education. (July 2007).

"Restructurating Education through agent-based modeling: implications for knowledge domains, student learning and educational research." University of Haifa. (June 2007).

"Agent-based models of evolution." University of Michigan. (June 2007).

"Agent-based Modeling with NetLogo". Argonne Labs. (January 2007).

"Using agent-based models to understand business challenges." NICO CaNet conference (June 2006).

"Agent-based models, distributed computing, and science education." Texas Instruments (May 2006).

"NetLogo and Complex Systems Modeling." (with W. Rand, M. Berland, P. Blikstein, D. Kornhauser, R. Lerner, P. Sengupta, F. Sondahl, & M. Wilkerson). NICO Conference. Evanston, IL. (April 2006).

“Complex Systems, computer-based modeling and education: implications for student learning and educational research” Vanderbilt (February 2006).

“Seeing and making sense of Complexity through Agent-based Modeling” NICO CaNet conference (February 2006).

“Harnessing Emergence through Multi-agent modeling” NICO CaNet conference (September 2005).

“Complexity, Emergence and Multi-agent modeling” IIT (February 2005).

“Agent-based Modeling of Urban environments” Illinois Institute of Technology (IIT) (September 2004).

“Modeling Complex Systems with Multi-Agent Languages.” Northwestern NetLogo workshop (July 2004).

“Multi-agent Modeling” NU Complexity group (November, 2003).

"Connected Chemistry: Model-based inquiry curricular units in Chemistry" Concord Consortium (March, 2003).

“Unlocking the secret codes of nature’s patterns”, Northwestern University Alumni Lecture (February 2003).

“Agent-based Modeling in Science Research” Northwestern University Complexity Group. (February, 2003).

“Introduction to Agent-based Modeling” Northwestern University Complexity Group. (February, 2003).

“Learning with agents” University of Washington (February, 2003).

“NetLogo modeling in schools” University of Utah (November, 2002).

“Modeling Across the Curriculum: Modeling chemistry with ChemLogo” NSF IERI PI Meeting.

“Learning Chemistry through Agent-based Modeling”. Concord Consortium. (August 2002).

"Learning through Exploring and Constructing Multi-Agent Models." University of Wisconsin, Madison (December, 2001).

“Complex Systems, Glass Box Modeling and Simulation” Maxis Corporation (November, 2001).

“An Embodied Modeling approach to Learning Science and Mathematics “ Indiana University Cognitive Science Colloquium (November, 2001).

"An Complex Systems Perspective on Learning Science and Mathematics " Purdue University (November, 2001).

"Creating a Technology supported Learning Institute" University of London (September, 2001).

"A networked architecture for Learning with Participatory Simulations" University of Utah (July, 2001).

"Modeling and Simulations in Science Education". Concord Consortium. (July, 2001).

"Introducing Parallel Modeling into Science and Mathematics Education". Northwestern University. (May, 2001).

"Learning with Participatory Simulations" University of Texas (July, 2000).

"The Design of Multi-agent Modeling Languages:" Tufts University. (April, 2000).

"The Case for Glass-Box Exchangeable Simulations in Science Research" University of Kyoto, (December, 1999).

"Multi-Agent Modeling of Complex Systems" National Institute of Radiological Sciences, Tokyo, Japan (December, 1999).

"Embodied Modeling of Emergent Phenomena (with StarLogoT) -- A Complex Dynamic Systems Perspective on Thinking and Learning" Annual Meeting of Andersen Consulting (November, 1999).

"Modeling Emergent Phenomena with StarLogoT -- A Complex Systems Perspective on Curriculum." Ryan Seminar, Northwestern University Consulting (November, 1999).

"Complex Systems as a Framework for Integrated Science and Mathematics Education", TERC (June, 1999).

"Complex Systems as a Framework for Science and Mathematics Education", Northwestern University (March, 1999).

"Complex Systems as a Framework for Science and Mathematics Education", Education Development Center (March, 1999).

"Complex Systems as a Framework for Science and Mathematics Education", University of Massachusetts at Lowell (March, 1999).

"A Complex Systems Perspective on Science and Mathematics Curriculum", University of Texas at Austin (February, 1999).

"A Complex Systems Perspective on Learning Science and Mathematics – Implications for Curriculum", Northwestern University (February, 1999).

"A Complex Systems Perspective on Learning Science and Mathematics -- an Embodied Modeling approach", Education Development Center (February, 1999).

"Complex Systems as a Framework for Science and Mathematics Education", University of Texas at Austin (January, 1999).

"Computational Toolkits for Modeling Complex Systems: An Embodied Modeling Approach", Tufts University Medical School Neuroscience Colloquium (January, 1999).

"Learning Science and Mathematics through Embodied Modeling", Brandeis University Computer Science Colloquium, Center for Complex Systems (January, 1999).

"Learning Through Individualist Modeling", University of Colorado at Boulder (November 1998).

"An Individualist Modeling Approach to Mathematics & Science Education", University of Texas at Austin (November 1998).

"Object-Based Parallel Modeling", Tufts University, Department of Electrical Engineering and Computer Science. (September 1998).

"Teacher Education in a Connected Learning Framework", Massachusetts Institute of Technology (June 1998).

"Assessment of Learning Technologies", University of Colorado at Boulder (May 1998).

"Participatory Simulations: Network-Based Design for Systems Learning in Classrooms", Texas Instruments (May 1998).

"Designing Educational Technology", MIT Education Program (November 1997).

"Multi-Media Pre-Calculus". University of Texas at Austin (February 1997).

"Educational Knowledge Engineering". Invited Presentation at the University of Tel Aviv, Israel (Jan 1997).

"Designing a Center for Systemic Reform in Science, Mathematics, Technology Education" Invited Presentation at the University of Texas at Austin (November 1996).

"Modeling Complexity". Invited Presentation at the University of Tel Aviv, Israel (June, 1996).

"What is Normal? A Connected Mathematics Prescription". Tufts University Education Department Doctoral Colloquium. (March 1996).

"Digital Books -- Are bits replacing atoms?". Technology and the Publishing Industry. Addison Wesley, Danvers, Ma (November 1995).

“The Deterministic Mindset”. Invited Presentation at the University of Tel Aviv, Israel, (May 1995).

“Mathematical Intuition and Learning Technologies,” Invited Presentation at the Georgia Institute of Technology (May 1994).

“Beyond the NCTM Standards: Visions of Mathematics Reform” Invited Presentation at the Eastern Connecticut State University (April 1994).

"Ubiquitous Computing: more, smaller, faster computers." Symposium on the Digital Future. Media Laboratory, Massachusetts Institute of Technology (March 1994).

“Learning Technologies in a Connected Mathematics Framework,” Invited Presentation at the Institute for Learning Sciences, Northwestern University (April 1994).

“Probabilistic and Systems Thinking,” Invited Presentation at the Technion, Israel (January 1994).

“New Models of Math/Science Education - Tools for Deeper Understanding,” Invited Presentation at the Louisiana State University (September, 1993).

"Mathematical Intuition and the Development of Probabilistic Concepts," - Invited Presentation at Tufts University (September 1992).

"Thinking about Mathematics Concretely," Invited Presentation at the University of British Columbia (July 1992).