Massachusetts Institute of Technology
School of Architecture and Planning
Faculty Personnel Record

Date: Spring 2015
Name: Eric Klopfer
Department: Urban Studies and Planning / Teacher Education Program
Affiliations: Comparative Media Studies, Media Arts and Sciences, Engineering Systems Division

3. Education:

School	*Degree*	*Date*
Cornell University	B.S. (Biology)	May 1992
University of Wisconsin, Madison	Ph.D. (Zoology)	May 1997

4. Title of Ph.D. Dissertation:
"Ecological and Evolutionary Consequences of Explicit Spatial Structure in Exploiter-Victim Systems"

5. Principal Fields of Interest:
Complex Systems, Computation and Modeling in K-12 Education – Understanding Science through Using and Creating Computer Simulations
The Education Arcade – Computer Games in the Classroom
Mobile Learning Technology – Creating and Studying Location-based and Location-free Games
Online Learning - Applying Principles of Learning Sciences to Learning Online
Teacher Preparation – Alternative Pathways to Teacher Preparation

8. Non-MIT Experience:

Employer	*Position*	*Beginning*	*Ending*
Learning Games Network	Board Member	Sept 2008	Present
Learning Games Network	President/Co-Founder	Sept 2008	March 2014
UMass Amherst	Postdoc/Lecturer	June 1998	June 1999
Amherst Schools	Technology Coordinator	Sept. 1997	June 1998

9. History of MIT Appointments:

Professor	July 2012	Present
Associate Professor with Tenure	July 2006	June 2012
Associate Professor without Tenure	July 2004	June 2006
Assistant Professor	July 1999	June 2004

10. Consulting Record:

Vtech Toys	2010	Present
NAEP	2010	2014
Radford College	2009	2012
Penn GSE	2009	2011
TERC	2008	2012
Ontar Corporation	2008	2010
Learning Box	2008	2009
WGBH Interactive	2008	2009
Minnesota Public Libraries – Games for Learning	2007	2010
NAEP	2007	2008
SimBiotic Software	2006	Present
Harvard-Smithsonian Institute – Environmental Science Simulations	2006	2007
Harvard School of Public Health – Games for Learning Epidemiology	2005	2008
New England Complex Systems Institute – Global Modeling	2005	2006

11. Department and Institute Committees:

Online Summit Planning Committee	2014	Present
MITx Global Impact	2013	Present
MITx Coordinating Committee	2013	Present
MITx Games Task Force	2013	2013
MITx Ad Hoc Committee	2012	2012
Masters in Technology Enabled Education (Chair)	2011	Present
DUSP PhD Committee	2011	2012
MIT Subject Evaluation Committee	2010	Present
eMIT – MIT Online Committee	2010	2012
Committee on Student Information Policy (CSIP)	2009	Present
Online Subject Evaluation Committee	2009	2011
HASS Requirement Subcommittee	2009	2010
DUSP Research Committee (Chair)	2009	2010
Learning Management System (Chair)	2009	2010
OCW Revenue Enhancement	2008	2010
DOS Faculty Advisory Committee	2008	2010
MIT Subject Evaluation	2008	2010
Open Research and Publication	2008	2009
OCW Executive Director Search	2008	2008
DUSP UROP Coordinator	2007	Present
MIT Classroom Committee	2007	2010
Next Generation Student Systems	2007	2010
OCW SE Committee	2007	2009
MIT Council on Educational Technology	2004	2009
MIT K-12 Outreach (co-Founder/co-Chair)	2004	2012
Open Courseware Faculty Advisory Committee	2002	Present
Network of Educators in Science & Technology (co-Chair)	2002	Present
Subcommittee on Mentoring	2002	2003
MIT Committee on the Undergraduate Program	2001	2004
DUSP Undergraduate Committee	2000	Present

12. Government and Other Outside Committees, Service, etc.:

IEEE Transactions on Learning Technologies Editorial Board	2013	Present
ACM Computers in Entertainment Editorial Board	2010	Present
International Conference Learning Sciences, Program Committee	2014	2014
Constructionism, Program Committee	2010	Present
National Assessment of Educational Progress Committee	2009	Present
National Academies – Games, Sims, Education	2009	2010
International J. on Computer Games Technology, Editor	2007	Present
Journal of Science Education and technology, Editorial Board	2007	Present
Games Learning and Society, Reviewer	2007	Present
Games Learning and Society, Organizing Committee	2007	2010
ACM ACE 2008, Review Committee	2007	2008
National Academy of Engineering Education Affiliate	2007	2007
Santa Fe Institute Board	2006	2012
NECSI External Faculty	2005	Present
International Journal of Science Education Reviewer	2005	Present
Alliance for Complexity Education @ SFI (co-Founder)	2005	2008
Technology & Learning Games Education Committee	2005	2007
Australia Conference Review Committee	2005	2006
Journal of Computer Assisted Learning Reviewer	2004	2007
International Power Users Planning & Research Committee	2004	2006
MITES SEED Program - Advisory Committee	2001	2009
Tech Boston – Advisory Committee	2001	2006
FLAIRS – Florida Artificial Intelligence Research Society	2001	2001
Dean's Committee – Boston Higher Education Partnership	2000	2006

13. Awards Received:

Winner, EdTech Digest Best New Product/Service – Radix	2015
Finalist, NTSA Serious Game Showcase & Challenge – Radix	2014
Finalist, Indie Game Challenge – Woosh/Waker, puzzle-platform	2010
Finalist, Independent Games Festival – Backflow, mobile multiplayer puzzle	2008
American Institute of Biological Sciences Education Award	2008
Top 10 Innovative Projects – The Education Arcade was selected as one of the top 10 innovations in education technology by Technology and Learning Magazine	2003
Scheller Career Development Chair	2001-2007
NSF Postdoctoral Fellowship in SMTE (Science, Math, Engineering and Technology Education)	1998-2000

14. Current Organization Memberships:
American Education Research Association (AERA)
American Institute for Biological Sciences (AIBS) Lifetime member
International Society for the Learning Sciences (ISLS)
International Society for Technology in Education (ISTE)
National Association of Research in Science Teaching (NARST)
National Association of Biology Teachers (NABT)
National Council for Teachers of Mathematics (NCTM)
American Association for the Advancement of Science (AAAS)

17a. Projects:

Teacher Education Program – The mission of the MIT Teacher Education Program (TEP) is to develop a cadre of MIT undergraduates that will become the science and math teachers of tomorrow. Current responsibilities include teaching the core courses for the TEP, supervising the practicum work for student teachers, and developing partnerships with K-12 and informal education institutions.

The Radix Endeavor – Developing a massively multiplayer online game for STEM (science, technology, engineering, and math) learning. The game provides students with a collaborative, social experience in a systems-based game world where they can explore how the world works and discover important scientific concepts. This inquiry-based game includes back-end data collection and interpretation of the data for a variety of purposes including player feedback, analysis by researchers, and assessment.

StarLogo, WebLogo and Adventures in Modeling – Developing StarLogo software and curriculum for use in K-12 and undergraduate education to teaching modeling and simulation of complex systems. Supervise the development of software, develop curriculum and research the effectiveness of modeling and simulation in the classroom. StarLogo TNG provides a graphical programming language with 3D world to introduce students and teachers to programming through simulations and games in the classroom. Working to integrate games, simulations, programming and complex systems into science curriculum. WebLogo is being developed to provide StarLogo via the cloud.

Augmented Reality and Ubiquitous Games – Designing simulations using connected and context aware smartphones and tablets. Developing software that engages students in games via mobile devices outside of the normal classroom context, connecting students to their communities and enabling game play as a part of class without using class time. Games explore the use of location aware simulations to engage learners in large scale investigations. Recent work focuses on student and teacher creation of location-based Augmented Reality Games and a new Ubiquitous Game platform that allows for mobile game play that fits the constraints of formal learning environments.

The Education Arcade- Co-founded The Education Arcade, a group at MIT that overlaps STEP and Comparative Media Studies focused on the design and research of educational games. Games that we have developed range from physics-based platformers (in conjunction with Gambit) to "curated" games played by thousands of students nationwide (funded by NSF). Ongoing work in this space includes creating new games, working with external partners and devising methods for sustaining and scaling efforts.

EdTechx – A series of online courses through edX about games, educational technology and the intersection of these two fields. The courses are designed around a series of interviews and documentary-style video to situate practices in the field and within a community. Each of the courses is designed around a project that serves as a marker of completion, and draw upon principles from CSCL to promote collaboration.

EducationxPress – Founding Editor. EducationXPress originates from the growing need to connect diverse communities engaged in the pursuit of advancing teaching and learning through online and hybrid experiences. Our mission is to build a community of content developers, engineers, educators, researchers, and practitioners

focused on the continued improvement of digital learning technologies and instructional practices. Through publication, curation, dissemination, and facilitation of community engagement, EducationXPress seeks to bring together this community in an accessible, high-quality platform.

Clix – A partnership with the Tata Institute for Social Sciences in India to address the learning divide in India with the help of educational technology. We are building lightweight web-delivered educational technologies in science, math and English language learning for secondary schools. We are also working to build domestic capacity for the development of educational technology in India.

TILT – TILT is a new initiative at MIT that focuses on hands and minds on STEM learning in K-12 schools. The first part of this initiative is a collaboration with the Woodrow Wilson National Fellowship Foundation to create a new competency-based hybrid model for pre-service teacher training. The work at MIT focused on research and development around teacher competencies, teaching and learning technologies, community, and supporting research on teaching and learning.

17b. Software Developed:

Gameblox **–** An online graphical language for building games in the browser

The Radix Endeavor – A Massively Multiplayer Online Roleplaying game about math and science.

StarLogo Nova – Web-based version of a new StarLogo software to be integrated with the Biograph project.

TaleBlazer – Provides a web-based programming environment for novices to create highly interactive location-based games. Being deployed as part of the CZA collaboration and with CSI.

Physics Games – As part of a project studying the role of narrative in learning games we helped in the development (along with Gambit) of the games Woosh/Waker and Poikiliea.

Ubiquitous Games – A mobile web-based platform for creating and deploying games in formal learning environments. First game, called Weatherlings, is a battle game that combines Pokemon style game play with real weather data. Second set of games focuses on high school biology learning.

Vanished – Infrastructure and games surrounding an alternate reality "curated" game played over six weeks.

Palmagotchi – Mobile game to teach evolution that built on the theme of virtual pets.

Augmented Reality Game Editor – Provides students and teachers with a drag and drop method of creating their own handheld based augmented reality games. Editors available for both designers and students.

POSIT – Public Opinions on Science Using Information Technology – Location based games engaging learners in controversial issues in science and technology.

StarLogo TNG – An entirely new version of StarLogo aimed at lowering the bar of simulation development in the classroom. Employs a new graphical user interface for designing simulations as well as 3D representations of phenomena to broaden the range of applications.

Participatory Simulations – Wearable computer based simulations on the evolution of cooperation, genetics, market formation, and predator-prey relationships. Palm based simulations on genetics, cooperation, predatory prey relationships and epidemics.

Mystery at the Museum – Indoor location aware simulation game platform launched at the Museum of Science.

Augmented Reality Simulation Platform – Platform in development to allow the creation of location aware computer simulations for handheld computers.

Outbreak at MIT – Indoor location based simulation designed to train epidemiologists.

Charles River City – Outdoor location based simulations for middle school students.

Environmental Detectives – Handheld based computer simulations (in collaboration with the Kurt Squire and Games to Teach Project)

StarLogo DDA – Online discussion area to support StarLogo users

StarLogo 2.0 – Released a new version of StarLogo software (in collaboration with Mitchel Resnick, MIT Media Lab)

18. Symposia Organized:

Learning Sciences and Online Learning	2015	
Sandbox Summit	2010	2012
MIT Science and Engineering Program for Teachers	2005	Present
Learning Technologies	2000	

19. Teaching Experience:

Term	*Course*	*Enrollment (Approx)*
SP 15	11.127 - Computer Games and Simulations for Education and Exploration	20
FA 15	11.124 – Introduction to Education	25

SP 14	11.127 – Computer Games and Simulations for Education and Exploration	20
FA 14	11.124 – Introduction to Education	25
SP 13	11.127 – Computer Games and Simulations for Education and Exploration	21
FA 12	11.124 – Introduction to Education	25
SP 12	11.127 – Computer Games and Simulations for Education and Exploration	21
FA 11	11.124 – Introduction to Education	25
SP 11	11.125	25
SP 11	11.127/CMS 590	21
AY10-11	Freshman Advisor	8
FA 10	11.124	25
SP 10	11.125	26
SP 10	11.127/CMS 590	18
FA 09	11.124	22
FA 09	Freshman Seminar	8
FA 09	11.129/11.131	13
SP 09	11.125	18
SP 09	11.127/CMS.590	16
FA 08	11.124	13
FA 08	11.129	5
FA 08	6.087 – Mobile Application Development	60
SP 08	11.125	20
SP 08	11.27	15
FA 07	11.124 – Intro to Teaching and Learning	15
FA 07-SP 08	11.129 – K-12 Classroom Teaching	10
FA 06-SP 07	Sabbatical	
FA 05	11.124 – Intro to Teaching and Learning	21
SP 06	11.125 – K-12 Teaching	14
SP 06	11.127 – Games and Simulations for Education	12
SP 06	7.014 – Introductory Biology (Lecturer)	
IAP 06	11.178 – Wireless Media	6
FA05-SP 06	11.129/130/131 – K-12 Classroom Teaching	10
FA04-SP 05	11.129/130/131 – K-12 Classroom Teaching	13
SP 05	11.125 – K-12 Teaching	23
SP 05	11.127 – Games and Simulations for Education	16
FA 04	11.124 – Intro to Teaching and Learning	27
FA03-SP 04	11.129/130/131 – K-12 Classroom Teaching	9
FA 03	11.124 – Intro to Teaching and Learning	29
FA 03	FAS – Challenges of the 21st Century School	6
SP 04	11.125 – K-12 Teaching	27
SP 04	11.127 – Games and Simulations for Education	16
FA02-SP 03	11.942/194/195 – K-12 Classroom Teaching	8
FA 02	11.124 – Obsv and Analysis in Classroom Settings	25
FA 02	FAS – Challenges of the 21st Century School	6
SP 03	11.127/252 Computer Modeling for Education	12
SP 03	11.125 – K-12 Teaching	30
FA 01	11.124 – Intro to Teaching and Learning	35
SP 02	11.125 – Obsv and Analysis in Classroom Settings	20
SP 02	11.127/252 – Computer Modeling for Education	15
SP 02	1.991 – Service Learning in Environmental Education	10
FA 00	11.124 – Intro to Teaching and Learning	18
SP 01	11.125 – Obsv and Analysis in Classroom Settings	12
SP 01	11.127/252 – Computer Modeling for Education	8
SP 00	11.125 – Obsv and Analysis in Classroom Settings	10
FA 99	11.124 – Intro to Teaching and Learning	20
SP 99	UMass Amherst – Instructional Design for the Web	
FA 98	UMass Amherst – Interactive Internet- From the Web to the Classroom	

Online Courses
Fall 2014 – Design and Development of Educational Technology (edX) – 15,000 students
Fall 2014 – Design of Games (edX) – 20,000 students
Spring 2015 – Design of Educational Games (edX)
Summer 2015 – Implementation and Evaluation of Educational Technology (edX)

20a. Publications:

Books:
1. Klopfer, E., J. Haas, L. Rosenheck, and S. Osterweil. Embedded Games (In Prep)
2. Klopfer, E., J. Haas with H. Jenkins (2012). The More We Know: NBC News, Educational Innovation, and Learning from Failure. MIT Press, Cambridge, MA.
3. Klopfer, E. (2008). *Augmented Learning* – Research and Design of Mobile Educational Games. MIT Press, Cambridge, MA.
4. Colella, V., E. Klopfer, and M. Resnick. (2001). *Adventures in Modeling: Exploring Complex*, *Dynamic Systems with StarLogo*. Teachers College Press.

Book Chapters:
1. Rosenheck, L., Klopfer, E., Gordon-Messer, S., Clark-Midura, J. (2015) *Design and Implementation of an MMO: Approaches to Support Inquiry Learning with Games*. In Handbook of Research on Gaming Trends in P-12 Education (in review).
2. Klopfer, E. (2012). Forward/Preface. S. Dikkers, J. Martin and B. Coulter et al. *Mobile Media Learning*. Pittsburgh, PA: ETC Press.
3. Coulter, B., E. Klopfer, J. Sheldon and J. Perry. (2012). Discovering Familiar Places: Learning through Mobile Place-Based Games. C. Steinkuehhler, K. Squire and S. Barab (Eds.), *Games, Learning, and Society: Learning and Meaning in the Diginal Age* (pp 327-354). New York, NY: Cambridge University Press.
4. Klopfer, E., Osterweil, S. (2011). Are Games All Childs Play? P. Maharg and S. De Freitas. (Eds.), *Learning Through Play* (pp. 153-171). New York, NY: Continuum.
5. Klopfer, E., T. Marsh, Z. Nickole, C. Xuejin, S. Osterweil, J. Haas. (2011). Fun Learning: Balancing Design and Development Dimensions in Serious Games. *Serious Games and Edutainment Applications.* New York, NY: Springer.
6. Klopfer, E., Coulter, R., Perry, J. and Sheldon, J. (2011). Discovering Familiar Places: Learning through Mobile Place-Based Games. S. Barab, K. Squire and C. Steinkuehler (Eds.). *Games, Learning, and Society: Learning and Leading in the Digital Age*. New York, NY: Cambridge University Press.
7. Klopfer, E. and Purushotma, R. (2011). Using Simulations as a Starting Point for Constructing Meaningful Learning Games. In Press for J. Fromme and A. Unger. (Eds.), *Computer Games/Players/Game Cultures: A Handbook on the State and Perspectives of Digital Game Studies*. New York, NY: Springer.
8. Klopfer, E. and Squire, K. (2011). Mobile Games and Learning: Looking Back and Looking Forward. In Press for M. Barnet and J. Vanides. (Eds.), *Re-imagining the Classroom: Mobile Technology and the Vanishing Classroom Walls*. Eugene, OR.
9. Klopfer, E., Jenkins, H., Perry, J., et al (2010). From Serious Games to Serious Gaming. M. Cody, U. Ritterfeld and P. Vorderer (Eds.), *Serious Games: Mechanisms and Effects.* New York, NY: Routledge.
10. Klopfer, E., H. Scheintaub, and M. Scheintaub. (2009). Complexity and Biology – Bringing Quantitative Science to the Life Sciences Classroom. F. Roberts (Eds.), *BioMath in Schools (pp 157-167).* Providence, RI: Springer.
11. Klopfer, E., Scheintaub, H., Huang, W, Wendel, D. (2009). StarLogo TNG: Making Agent Based Modeling Accessible and Appealing to Novices In Artificial Life Models in Software. A. Adamatzky and M. Komosinski (Eds.). *Artificial Life Models in Software.* (pp 151-182). New York, NY: Springer.
12. Klopfer, E. (2007). Lightly Augmenting Reality. F. Von Borries, Bottger, M. and Walz S. (Eds.), *Space, Time, Play (pp 380-383)*. Berlin, Germany: Birkhauser Verlag AG.
13. Klopfer, E. and A. Begel. (2005). Starlogo: A Programmable Complex Systems Modeling Environment for Students and Teachers. A. Adamatzky and Komosinski, M. (Eds.), *Artificial Life Models in Software.* New York, NY: Springer.
14. Klopfer, E., K. Squire and H. Jenkins (2004). Environmental Detectives: PDAs as a Window into a Virtual Simulated World. Kerres, Michael/ Kalz, Marco/ Stratmann, Jörg/ de Witt, Claudia (Eds.), *Didaktik der Notebook-Universität*. Münster: Waxmann Verlag.

Papers in Refereed Journals:

1. *Yoon, S., Anderson, E., Wang, J. & Klopfer, E. (2015)* Using an Adaptive Expertise Lens to Understand the Quality of Teachers' Classroom Implementation of Computer-Supported Complex Systems Curricula in High School Science. *Research in Science and Technology Education (accepted)*
2. *Yoon, S., Anderson, E., Wang, J. & Klopfer, E. (2015)* Designing Computer-Supported Complex Systems Curricula for the Next Generation Science Standards in High School Science Classrooms. *International Journal of Science Education (in review)*
3. Yoon, S., Anderson, A., Koehler-Yom, J., Evans, C., Park, M. Sheldon, J., Schoenfeld, I., Wendel, D. Scheintaub, H. & Klopfer, E. (2015) Teaching About Complex Systems Is No Simple Matter: Building Effective Professional Development for Computer-Supported Complex Systems Instruction. *Instructional Science (in review)*
4. *Full author list: Guest Editors of S.I. : Models and Tools for Systems; Emma Anderson; Jessica Koehler-Yom; Chad Evans; Miyoung Park; Josh Sheldon; Ilana Schoenfeld; Daniel Wendel; Hal Scheintaub; Eric Klopfer*
5. Conrad, S., Clark-Midure, J. and E. Klopfer (2014). A Framework for Structuring Learning Assessment in a Massively Multiplayer Online Educational Game: Experiment Centered Design. *International Journal of Game Based Learning.*
6. Klopfer, E and J. Perry. (2014). UbiqBio: Adoptions and Outcomes of Mobile Biology Games in the Ecology of School. *Computers in Schools*.
7. Klopfer, E. and S. Osterweil. (2013). The Boom and Bust and Boom of Educational Games. *Transactions in Edutainment.*
8. Klopfer, E., J. Sheldon, J. Perry and V. Chen. (2012). Ubiquitous Games for Learning (UbiqGames): Weatherlings, A Worked Example. *Journal of Computer Assisted Learning*.
9. Klopfer, E. and R. Purushotma. (2012). Using Simulations as a Starting Point for Constructing Meaningful Learning Games. *Computer Games and New Media Cultures,* 603-617.
10. Haas, J., J. Hammerman, E. Klopfer and Miller, C. (2011). User Behavior in NBC News' Multimedia Educational Site, iCue. In Press for *International Journal of Learning and Media*.
11. Marsh, T., LZ Nickole, E. Klopfer, C. Xuejin, S. Osterweil and J. Haas. (2011). Fun and learning: blending design and development dimensions in serious games through narrative and characters. *Serious Games and Edutainment Applications,* 273-288.
12. Haas, J., JKL Hammerman, E. Klopfer and C. Miller. (2011). User Behavior in NBC News' Multimedia Educational Site, iCue. *International Journal of Learning and Media.*
13. Klopfer, E., H. Scheintaub, W. Huang and D. Wendel. (2010). LEARNING CONNECTIONS-Science-Constructing Learning. *Learning and Leading with Technology*, 37(5), 26.
14. Klopfer, E. and J. Sheldon. (2010). Augmenting Your Own Reality: Student Authoring of Science-Based Augmented Reality Games. *New Directions In Youth Development,* 128, 85-94.
15. Klopfer, E. and D. McFarland. (2010). Network Search: A New Way of Seeing the Education Knowledge Domain. *Teachers College Record.*
16. Klopfer, E., H. Scheintaub, W. Huang, D. Wendel and R. Roque. (2009). The Simulation Cycle - Combining Games, Simulations, Engineering and Science Using StarLogo TNG. *Journal of E-Learning and Digital Media*, 6(1) 71-96.
17. Guryan, J., B. Jacobs, E. Klopfer and J. Groff. (2008) Using Technology to Explore Social Networks and Mechanisms Underlying Peer Effects in Classrooms. *Developmental Psychology*, 44 (2), 355-364.
18. Klopfer, E. and K. Squire. (2008). Environmental Detectives – The Development of an Augmented Reality Platform for Environmental Simulations. *Education Technology Research Development,* 56, 203-228.
19. Rosenbaum, E., E. Klopfer and J. Perry. (2007). On Location Learning: Authentic Applied Science with Networked Augmented Realities. *Journal of Science Education and Technology*, 16 (1), 31-43.
20. Klopfer, E. (2007). Blurring Lines with Mobile Learning Games. *Educational Technology Magazine, 47 (3), 43-46.*
21. Klopfer, E. and K. Squire. (2006). Case Study Analysis of Augmented Reality Simulations on Handheld Computers. *Journal of the Learning Sciences*, 16 (3), 371-413.
22. McFarland, D. and E. Klopfer. (2006). Scholar Practitioner Information Networks for Education (SPINE*). Teacher's College Record*.
23. Yoon, S. & Klopfer, E. (2006). Feedback (F) Fueling Adaptation (A) Network Growth (N) and Self-Organization (S): A Complex Systems Design and Evaluation Approach to Professional Development. *Journal of Science Education and Technology*, 15(5-6), 353-366
24. Klopfer, E., S. Yoon and T. Um. (2005). Young Adventurers- Modeling of Complex Dynamic Systems with Elementary & Middle School Students. *Journal of Computers in Math and Science Teaching*, 24(2), 157-178.

25. Klopfer, E. and S. Yoon. (2005). Using Palm Technology in Participatory Simulations of Complex Systems: A New Take on Ubiquitous and Accessible Mobile Computing. *Journal of Science Education and Technology,* 14(3), 287-295.
26. Meir, E., J. Perry, D. Stal, S. Maruca and E. Klopfer. (2005). How effective are simulated molecular-level experiments for teaching diffusion and osmosis? *Cell Biology Education*, 4, 235-248.
27. Klopfer, E. and S. Yoon. (2005). Developing Games and Simulations for Today and Tomorrow's Tech Savvy Youth. *Tech Trends*, 49(3) 33-41.
28. Klopfer, E. and K. Squire. (2005). Environmental Detectives – The Development of an Augmented Reality Platform for Environmental Simulations. *Educational Technology Research and Development.*
29. Klopfer, E. S. Yoon, and L. Rivas. (2004). Comparative Analysis of Palm and Wearable Computers for Participatory Simulations. *Journal of Computer Assisted Learning,* 20, 347-359.
30. Klopfer, E. and A. Begel. (2003). StarLogo in the Classroom and Under the Hood. *Kybernetes*, 32, 15 -37.
31. Klopfer, E. (2003). Technologies to Support the Creation of Complex Systems Models – Using StarLogo Software with Students. *Biosystems*, 71, 11-123.
32. Jenkins, H., E. Klopfer, K. Squire and P. Tan. (2003). Entering the Education Arcade. *ACM: Computers in Entertainment*, 1, 17-17.
33. Klopfer, E., V. Colella, and M. Resnick. (2002). New Paths on a StarLogo Adventure. *Computers and Graphics,* 26, 615-622.
34. Caton, E., J. Cherrier, E. Farnsworth, S. Franklin, B. Hufnagel, E. Klopfer, J. Russell, and B. Sayler. (1998). New Niches for Life Scientists. *Science*, 282,1266-1267.
35. Ives, A. and E. Klopfer. (1997). Spatial variation in abundance created by stochastic temporal environmental variation. *Ecology*, 78, 1907-1913.
36. Klopfer, E. and A. Ives. (1997) Aggregation and the coexistence of competing parasitoid species. *Theoretical Population Biology*, 52, 167-178.

Papers in Refereed Conference Proceedings:

1. Yoon, S., Oztoc, M. Anderson, A., Klopfer, E., Schoenfeld, I., Scheintaub, H., Wendel, D., Sheldon, J. (2015) Impacts on Student Understanding of Scientific Practices and Crosscutting Themes Through an NGSS–Designed Computer-Supported Curriculum and Instruction Project. Conference on Computer Supported Collaborative Learning (June 2015)
2. Yoon, S., Oztoc, M. Anderson, A., Klopfer, E., Schoenfeld, I., Scheintaub, H., Wendel, D., Sheldon, J. (2015) Design Features for Computer-Supported Complex Systems Learning and Teaching in High School Science Classrooms. Conference on Computer Supported Collaborative Learning (June 2015)
3. Yoon, S., Koehler, J., Wang, J., Anderson, E. and E. Klopfer (2014). Using an Adaptive Lens to Understand the Quality of Teachers' Classroom Implementation of Computer-Supported Reform Curricula in High School Science. *International Conference on the Learning Sciences*. Boulder, CO
4. Holbert, N., Weintrop, D., Wilensky, U., Sengupta, P., Killingsworth, S., Krinks, K., Brady, C., Klopfer, E., Shaprio, B., and R. Russ (2014). Combining Video Games and Constructionist Design to Support Deep Learning in Play. *International Conference on the Learning Sciences*. Boulder, CO
5. Norton, D., Osterweil, S., Levin, J., and E. Klopfer (2014). Massiveness in Educational Games. *Games Learning and Society*. Madison, WI.
6. Yoon, S., Klopfer, E. Sheldon, J., Schoenfeld, I., Wendel, D., Wang, J. Scheintaub, H., and D. Reider (2013) Designing to Improve Understanding Through Complex Systems in High School Classrooms: No Simple Matter. *Computer Supportive Collaborative Learning*. Madison, WI
7. Klopfer, E. (2013) Towards a Unified Agenda for the Next Generation of Engagement in Educational Technology. *Ecological Society of America*, Minneapolis, MN.
8. Klopfer, E. (2013). Ubiquitous Biology Games. *American Educational Research Association.* San Francisco.
9. Klopfer, E. (2013). What Students Learn by Constructing Augmented Reality Games. *American Educational Research Association.* San Francisco.
10. Marsh, T., L. Nickole, I. Zhiqiang, E. Klopfer and J. Hass. (2012). Blended In-Game and Off-Game Learning: Assimilating Serious Games in the Classroom and Curriculum. *Serious Games Development and Applications.*
11. Sao-Ee Goh, Susan A. Yoon, Joyce Wang, Zhitong Yang, Eric. (2012). Klopfer Investigating the Relative Difficulty of Complex Systems Ideas in Biology. International Conference of the Learning Sciences.
12. Sheldon, J., E. Klopfer, J. Perry, L. Stump and P. Medlock-Walton. (2012). TaleBlazer: Next Generation Location-based Augmented Reality Game Authoring. *Games, Learning and Society Conference*.
13. Marsh, T., C. Xuejin, LZ Nickole, S. Osterweil, E. Klopfer and J. Haas. (2011). Fun and learning: the power of narrative. *Proceedings of the 6th International Conference on Foundations of Digital Games*, 23-29.

14. Klopfer, E., J. Perry and L. Rosenheck. (2011). An Interactive Research Experience with Mobile Biology. *International Conference on Computer-Supported Collaborative Learning.* Hong Kong, China.
15. Klopfer, E., L. Rosenheck and J. Perry. (2011). Beetles, Beasties, and Bunnies: Ubiquitous Games for Biology. *Games, Learning and Society Conference.* Madison, WI.
16. Klopfer, E., J. Haas, T. Marsh, S. Osterweil and J. Ramos. (2011). The Role of Narrative in Reflection and Metacognition in Learning Games. *Games, Learning and Society Conference.* Madison, WI.
17. Klopfer, E. (2011). An Ecologist's Perspective on the Ecology of Learning Games. *Games, Learning and Society Conference.* Madison, WI.
18. Klopfer, E. and J. Haas. (2011). The More We Know: Inside NBC News' iCue and Why It Didn't Work. *Games, Learning and Society.* Madison, WI.
19. Dede, C., P. O'Shea, M. Dunleavy and E. Klopfer. (2010). Augmenting Reality for Learning with Wireless Mobile Devices, Part 2. *Society for Information Technology & Teacher Education International Conference.*
20. Klopfer, E., C. Zhang, J. Perry and J. Sheldon. (2010). GameBuilder: does reduced software complexity allow more time on task? *9th International Conference of the Learning Sciences*.
21. Lomas, D., E. Klopfer, C. Scullin, C. Lamenzo and C. Macklin. (2010) Diversifying Mobiles: Participatory Learnings. *Macarthur Digital Media and Learning*. San Diego, CA.
22. Klopfer, E., V. Chen, J. Ong, J. Perry, L. Rosenheck, J. Sheldon and P. Tzuo. (2010). Weatherlings: A New Approach to Student Learning Using Web-Based Mobile Games. *Foundations of Digital Games Conference.* Monterey, CA.
23. Klopfer, E., T. Caswell, V. Lee, M. Jensen, J. Mathews, J. Sheldon, B. Shelton, J. Perry, K. Squire and M. Wagler. (2010). Mobile Games and Education: Extending the Boundaries. *Games, Learning and Society Conference.* Madison, WI.
24. Klopfer, E., J. Haas, S. Osterweil and H. Scheintaub. (2010) Wake Up!: The Use of a Custom Game as Challenging Action in an Action Reflection Cycle. *Games, Learning and Society Conference.* Madison, WI.
25. Klopfer, E., J. Perry, L. Rosenheck and J. Sheldon. (2010). UbiqGames – Ubiquitous Games for Promoting Science Learning and Understanding. *Games, Learning and Society Conference.* Madison, WI.
26. Klopfer, E., B. Coulter, D. Lawlor, J. Perry, L. Rosenheck and J. Sheldon. (2010). MIT Augmented Reality (MITAR): Multiplayer Game Worlds, User-Generated Content and Flow Visualization. *Games, Learning and Society Conference*. Madison, WI.
27. Klopfer, E. and D. Clark. (2010). Computer Games, Simulations and Education – What Do We Know? What Do We Want to Know. *Games, Learning and Society Conference.* Madison, WI.
28. Klopfer, E., B. Coulter, D. Lawlor, J. Perry, L. Rosenheck and J. Sheldon. (2010). Community Science Investigators: Using Augmented Reality to Build Community Connections. *Games, Learning and Society Conference.* Madison, WI.
29. Klopfer, E. (2010). Mobile Gaming. *Advancing Science. Serving Society*. San Diego, CA.
30. Klopfer, E. (2009). Augmented Reality: Using a Simplified Game Editor to Spark Imaginations. *Games Learning and Society.* Madison, WI.
31. Klopfer, E. (2009). Mobile Games and Education: Current Projects and State of the Practice. *Games Learning and Society*. Madison, WI.
32. Klopfer, E. (2009). Gaming the Future of Science Learning. *Games Learning and Society*. Madison, WI.
33. Klopfer, E. E. Hayes, E. Hayes, Y. Kafai, I. Games, K. Peppler, N. Pinkard and H. Scheintaub. (2008). New Perspectives on Learning Through (Game) Design. *American Educational Research Association.* New York, NY.
34. Klopfer, E., H. Scheintaub. (2008). StarLogo TNG – Making content-centered game and simulation development accessible to students and teachers. *American Educational Research Association*. Chicago, IL.
35. Yoon, S. and E. Klopfer. (2008) Measuring In-Service Middle and High School Teachers Understanding of Complex Systems Through an Analysis of Computational Model Construction. *National Association for Research in Science Teaching*. Baltimore, MD.
36. Klopfer, E. and J. Perry. (2008). AR Gone Wild: Two Approaches to Using Augmented Reality Learning Games in Zoos. *International Conference on the Learning Sciences*. Utrecht, Netherlands.
37. Klopfer, E., H. Scheintaub. (2008). StarLogo TNG – Science in Student-Programmed Simulations. *International Conference on the Learning Sciences*. Utrecht, Netherlands.
38. Klopfer, E., H. Scheintaub. (2008). StarLogo TNG – Making content-centered game and simulation development accessible to students and teachers. *International Conference on the Learning Sciences.* Utrecht, Netherlands.
39. Klopfer, E., Boughner, E. Rosebaum, and L. Rosenheck. (2007). Engaging Students in Science Controversy Through an Augmented Reality Role-Playing Game. *Computer Supported Collaborative Learning.* New Brunswick, NJ.

40. Klopfer, E., A. Begel, C. McCaffrey, and D. Wendel. (2006). 3D Game Design with Programming Blocks in StarLogo TNG. *International Conference for the Learning Science.* Bloomington, IN.
41. Klopfer, E., E. Rosenbaum, and J. Groff. (2006). Assessing Success in Networked Augmented Realities. *Games, Learning and Society.* Madison, WI
42. Yoon, S. & E. Klopfer. (2005). Social network influences in a complex systems design for professional development in educational technology use: Results of a first phase implementation. *Hawaii International Conference on Education*. Honolulu, HI.
43. Yoon, S. & E. Klopfer. (2005). Using palm technology in participatory simulations: A new take on ubiquitous and accessible mobile computing. *American Educational Research Association*. Montreal, PQ.
44. Klopfer, E., J. Perry and K. Squire. (2005) Collaborative Learning through Augmented Reality Role Playing. *Computer Supported Collaborative Learning*. Taipei, Taiwan.
45. Klopfer, E., J. Perry and K. Squire. (2005) Mystery at the Museum – A Collaborative Game for Museum Education. *Computer Supported Collaborative Learning Conference*. Taipei, Taiwan.
46. Yoon, S. and E. Klopfer. (2005) Feedback, Adaptation, Network Capital and Self-Organization (FANS): The Application and Evaluation of a Complex Systems Framework for Professional Development. *American Educational Research Association.* San Francisco, CA.
47. Yoon, S. E. Klopfer, G. Richardson, and J. Taylor. (2004). Insights Into the Complexity of Designing for Professional Development Networks in Educational Technologies: Tensions Between Structure and Agency. *International Conference on the Learning Science).* Santa Monica, CA.
48. Squire, K., E. Klopfer, S. Barab, and C. Dede. (2004). Virtual and Augmented Reality Simulations in Education. *American Education Research Association.* San Diego, CA.
49. Scheintaub, H., E. Klopfer and S. Yoon (2004). Complex Systems Modeling Supports and Extends Secondary School Science Learning. *National Association of Research in Science Teaching.*
50. Klopfer, E. and K. Squire. (2004). Getting Your Socks Wet: Augmented Reality Environmental Science. *International Conference on the Learning Sciences.*
51. Klopfer, E., K. Squire, and H. Jenkins. (2003). Augmented Reality Simulations on PDAs. *American Education Research Association.* Chicago, IL.
52. Klopfer, E., and E. Woodruff. (2003). Platforms for Participatory Simulations - Exploring Systems and Generating Discourse with Wearable and Handheld Computers. *Conference on Computer Supported Collaborative Learning*. Oslo, Norway.
53. Yoon, S., E. Klopfer, E. Woodruff, H. Scheintaub. (2003). Investigating How a Wearable Computer Technology Influences Opinion Dynamics. \ *Society for Chaos Theory*. Boston, MA..
54. Klopfer, E., and E. Woodruff. (2002). The Impact of Distributed and Ubiquitous Computational Devices on the Collaborative Learning Environment. *Computer Supported Collaborative Learning*. Boulder, CO.
55. Woodruff, E., E. Klopfer, G. Andrews, K. Mackinnon, S. Yoon, N. Chandra. (2002). Distributed computational devices for collaborative learning. *Canadian Society for the Study of Education*. Toronto, Canada.
56. Klopfer, E. (2002). Adventures in Modeling: Teaching and Learning about Complex Systems in Ecology. *Biomathematics and Related Computational Problems.*
57. Klopfer, E., K. Squire and H. Jenkins. (2002) Environmental Detectives PDAs as a Window into a Virtual Simulated World. *International Workshop on Wireless and Mobile Technologies in Education*. Vaxjo, Sweden.
58. Klopfer, E., T. Um. (2002). Young Adventurers- Modeling of Complex Dynamic Systems with Elementary & Middle School Students. *International Conference on the Learning Sciences.* Seattle, Washington.
59. Taylor, J., R. Noll, V. Colella, and E. Klopfer. (2001). Creating and Analyzing Models in StarLogo: A Secondary Science Approach. *National Association of Research in Science Teaching*. St. Louis, MO.
60. Klopfer, E. and V. Colella. (1999). Structuring Collaboration in Workshops and Classrooms: The StarLogo Community of Learners. *Computer Supported Collaborative Learning*. Palo Alto, CA.

Other Major Publications:

1. Klopfer, E. (2012). The Ecology of Learning Games Research. *Center for Games and Impact.*
2. Klopfer, E. (2012). Games as Precursors to Formal Learning. *Center for Games and Impact*.
3. Davidson, D. et al. (2012). Games for Impact Best Practices. *Academic Consortium on Impact Games*. http://gamesforimpact.files.wordpress.com/2012/09/gamesforimpact-bestpractices.pdf
4. Klopfer, E. (2012). A Better Model Field – Ecology as a model for games and learning. *Teacher's College Record.*
5. Klopfer, E., W. Huang, D. Wendel and H. Scheintaub. (2010). Constructing Learning. *Learning and Leading with Technology.* February 2010, 26-28.

6. Klopfer, E., S. Osterweil and K. Salen. (2009). Moving Learning Games Forward. *The Education Arcade*, Massachusetts Institute of Technology. http://education.mit.edu/papers/MovingLearningGamesForward_EdArcade.pdf
7. Klopfer, E., S. Osterweil, J. Groff and J. Haas. (2009). Using the Technology of Today in the Classroom Today. *The Education Arcade*, Massachusetts Institute of Technology.
8. Klopfer, E. (2007). Mixing Programming with Science. *Educational Technology Magazine*.
9. Klopfer, E. (2005). Playing to Learn. State of the Art Computer Games go to School. *Access Learnin*g. July/August.
10. Klopfer, E., K. Squire and P. Tan. (2003). Top 10 Innovations. *Technology and Learning.* 24.
11. Colella, V. and E. Klopfer. (2001). Changing the Nature of Science Teaching and Learning through Modeling. *The Logo Exchange.* 20.
12. Colella, V. and E. Klopfer. (2000). Seeding Change: Bringing Modeling to Science Teachers and their Students. *The Bulletin of The Santa Fe Institute*. 15 (2).
13. Colella, V, E. Klopfer and M. Resnick. (1998). StarLogo Community of Learners. *The Logo Exchange.* 17 (2) 20-22.

Papers Presented at Academic and Professional Conferences:

1. Dede. C., Dunleavy, M., Squire, K. Kamarainen, A.. (2015) Research on Students' Motivation and Learning in Augmented Realities. AERA (April 2015)
2. Yoon, S., Oztoc, M. Anderson, A., Klopfer, E., Schoenfeld, I., Scheintaub, H., Wendel, D., Sheldon, J. (2015). Building Curriculum and Instruction for Next Generation Science Standards: Articulating Design Features for a Computer-Supported Complex Systems Learning in Science Classrooms. AERA (April 2015)
3. Klopfer, E. and O. Klopfer. (2014) Parenting Through Gaming. *PAX East*. Boston, MA.
4. Roberts, A., Yowell, C., Traylor, S., Klopfer, E., M. Ming (2014). Connecting Practices – The Building Blocks for Connection. *Digital Media and Learning.* Boston, MA.
5. Haas, J. Klopfer, E. Osterweil, S. Rosenheck L. (2012). Worked Example: Cosmos. *Games Learning and Society.*
6. Klopfer. E. (2011). Augmented Reality Games: Place-based Digital Learning. *International Conference on Computer –Supported Collborative Learning.* Hong Kong.
7. Fefferman, N, Horwitz, P., Ketelhut, D., Klopfer, E. Stegman, M., Clark, D. (2010) Worlds of Wonder: Can Video Games Teach Science? *American Association for the Advancement of Science Annual Meeting*, San Diego, CA.
8. Klopfer, E. H. Scheintaub and D. Wendel. (2010). The Imagination Toolbox: Designing and Using Science Simulations and Games with StarLogo TNG. *Eurologo/Constructionism.* Paris, France.
9. Klopfer, E. (2010). Game Changers: Games on the Go: Accessing Play and Learning 24/7. *Sandbox Summit.* Cambridge, MA.
10. J. Perry, E. Klopfer, B. Coulter, J. Sheldon. (2008). LIONS: Augmented Reality Game Design by Middle School Students in an After-School Science Club. *Games Learning and Society*. Madison, WI.
11. J. Perry, E. Klopfer, L. Stump. (2008). Zoo Scene Investigators: An Augmented Reality Mystery Game at the Columbus Zoo & Aquarium. *Games Learning and Society*. Madison, WI.
12. E. Klopfer, S. Osterweil, A. Chisholm, D. Roy. (2008). Two Approaches to Language-Learning Games. *Games Learning and Society*. Madison, WI.
13. Steinkeuler, C. Squire, K. Barab, S. Thomas, D. Peppler, K., & Klopfer, E. (2008). Games and Participation: Why Games Matter to Educators. *American Educational Research Association*. New York, NY.
14. Scheintaub, H.& Klopfer, E. (2008). StarLogo TNG – Making Content-Centered Game And Simulation Development Accessible To Students And Teachers. *American Educational Research Association*. New York, NY.
15. Klopfer E. and J. Perry. (2007). Augmenting Learning with Handheld Gaming Technologies. *Games Learning and Society*. Madison, WI.
16. Klopfer, E. (2007). StarLogo TNG: Graphical Programming for 3D Simulation and Game Design. *Games Learning and Society.* Madison, WI.
17. Lee, I., G. Malone and E. Klopfer. (2006). Adventures in Gaming. *National Educational Computing Conference.* San Diego, CA.
18. Klopfer, E., and J. Perry. (2005). Authoring Toolkits for Augmented Reality Simulations. *International Conference on Interaction, Design and Children*. Boulder, CO.
19. Yoon, S. and E. Klopfer. (2004). Using Palm Technology in Participatory Simulations of Complex Systems. *National Association of Research in Science Teaching*. Vancover, BC.

20. Silverman, B., B. Mikhak, E. Klopfer and S. Scheintaub. (2004). A New Kind of Science Education - Lessons Learned from StarLogo and Perspectives on NK*S*. *New Kind of Science*. Boston, MA.
21. Klopfer, E. and S. Yoon. (2004). New Technologies to Enhance Learning. *Power Users Summit, United Nations*. New York, NY.
22. Yoon, S., E. Klopfer, E. Woodruff, H. Scheintaub. (2003). Investigating How a Wearable Computer Technology Influences Opinion Dynamics. *Society for Chaos Theory*. Boston, MA.
23. Klopfer, E., and V. Colella. (2001). Adventures in Modeling. *Special Interest Group in Graphics (SIGGRAPH)*. Los Angeles, CA.
24. Klopfer, E. (1999). Constructing Computer Models in the Classroom using StarLogo. *Technology and Education*, Amherst, MA.

Invited Lectures and Seminars:

1. Harvard University, Dean's Distinguished Lecture - 2015
2. Waseda University/University of Tokyo - 2015
3. Suburban Superintendents Conference (Keynote) – 2014
4. WGBH STEM Forum - 2014
5. University of Pennsylvania - 2014
6. Network of Academic Programs in the Learning Sciences (online) - 2013
7. MIT Club of Hartford – 2013
8. MIT Alumni Club of Southern California– Teaching STEM Subjects Through the Power of Games – 2012
9. World Conference on Mobile and Contextual Learning – Helsinki, 2012
10. Engineers4KidsUSA Santa Fe Institute – Complexity and the Future of Learning and Education – Santa Fe, August 7, 2012
11. Learnovation Day of the Centro Superior Para la Ensenanza Virtual (CSEV) – Keynote Presentation – Madrid 2012
12. Games + Learning + Society Conference – Madison, WI, June 2012
13. Mobiles for Learning – Keynote – Windsor, CT, April 23, 2012
14. Politecnico Di Milano – Learning through the design and creation of location-based games – March 27, 2012
15. CoSN International Symposium – Washington, March 5, 2012
16. Cyberlearning Research Summit – Mobile as a Creative Medium – Washington, January 18, 2012
17. Ecole Polytechnique Federale de Lausanne – Playing and Making Location Based Learning Games – January 2012
18. UNESCO Mobile Learning Week – Keynote Presentation: Using and Creating Mobile Games and Media for Learning – Paris, December 16, 2011
19. Games for Learning Science – Keynote Speaker – Madison, WI, June 2011
20. Drexel University – Philadelphia, PA, May 2011
21. Technical Education Research Centers – Learning games = Edutainment: R and D of Games for Learning Math and Science in the Education Arcade – May 2011
22. Think Tank on Educational Innovation and Technology – Gaming and Edutainment Panel – Harvard University, Cambridge, MA, April 2011
23. National Institute of Education, Mobile Learning Games, Singapore, March 2011
24. Dé Onderwijsdagen (The Education Days) Conference, Augmenting Learning – Learning through playing and creating location based games – Amsterdam, Netherlands, November 2010
25. Wireless Ed Tech Conference – Panelist – San Diego, CA, October 2010
26. Adobe Max Conference, Learning Games and Simulations – October 2010
27. Ed Week – October 2010
28. American Educational Research Association Convention – Keynote – Denver, CO, April 2010
29. AAAS Panel – Worlds of Wonder" Can Video Games Teach Science? – February 2010
30. Institut für Erziehungswissenschaft, Otto von Guericke Universität (OvGU) – Magdeburg, Germany (remote), 2009
31. IT World Summit, Learning Games and Simulations – Barcelona, Spain, October 2009
32. National Union of Teachers, Ubiquitous Games and Augmented Reality, Research and Design of Mobile Games for Learning – Singapore, September 2009
33. National Institute of Education, Ubiquitous Games and Augmented Reality, Research and Design of Mobile Games for Learning – Singapore, September 2009
34. Malmö University – Augmented Learning – Learning Lessons in Mobile Educational Games – Malmö, Sweden, April 2009
35. Haifa University – Haifa, Israel, Spring 2009

36. Learning and the Brain – Massachusetts Institute of Technology, Cambridge, MA, February 2009
37. Association of Mathematics Teachers in New England Conference – November 2008
38. PICNIC Young in Amsterdam – Augmented Learning – September 2008
39. Malmo University – Augmented Learning – September 2008
40. Opportunistic RF Localization for Next Generation Wireless Devices – June 2008
41. MIT Alumni Association of Cape Cod – 2008
42. MIT Alumni Association of Rhode Island – 2008
43. Grey Thumb Artificial Life – 2008
44. Maine Initiative on Science Technology Engineering and Mathematics – January 2008
45. Minneapolis Public Library – November 2007
46. Fifth Technology and Education Congress, The Inter American University of Puerto Rico - Augmenting Reality and Learning with Mobile Games - September 2007
47. EuroLogo - StarLogo TNG - Making game and simulation development accessible to students and teachers - August 2007
48. E Learning Symposium, George Mason University - Mobile Games for Learning - June 2007
49. Santa Fe Institute – International Learning and Complex Systems – September 2006
50. Smithsonian Institute – Handheld Games for Informal Learning – September 2006
51. Columbia University – Scholar Practitioner Information Networks – August 2006
52. New England Complex Systems Institute – Learning Complex Systems – June 2006
53. Beyond Technology – The Next Generation of Games and Simulations for Learning – May 2006
54. Learning Lab Denmark – Augmented Reality Games for Learning – January 2006
55. Korea Education and Research Information Service – Handheld Games for Learning – November 2005
56. Technology and Learning's Tech Forum – Research in Games Education – October 2005
57. Rebuilding Louisiana through Education – Governor's Conference – October 2005
58. Florida Community College – New Technologies in Science and Math Learning – April 2005
59. Technology and Learning's Tech Forum – MIT Games and Education – October 2004
60. Serious Games Summit – Augmented Reality Simulations for Learning – October 2004
61. MIT Alumni Association of New Mexico – Adventures in Modeling May 2004
62. American Association of Colleges of Teacher Education – Video Games and Learning- February 2004
63. University of Alaska, Anchorage – Complex Systems Colloquium – March 2003
64. Massachusetts Association of Science Teachers – StarLogo in Science Education – Worcester, November 2002
65. Computer Supported Collaborative Learning – Computer Games and Simulations in Education – Seattle, October 2002
66. Boston Museum of Science – Participatory Simulations – Boston, Spring 2002
67. ITESO – Workshop on Complex Systems – Guadalajara, Mexico Spring 2002
68. Museum Institute of Teaching Science – Modeling for Museums – Boston, January 2002
69. American Association of Universities – Teacher Preparation, Fall 2001

20b. Press:

Chronicle of Higher Education – June 2015 - Universities Ban Smart Watches During Finals
MTV News – June 2015 - Your Phone Is Banned During Exams — Is Your Apple Watch Next?
Hechinger Report/Slate – April 2015 – Is 'making a game out of learning' Bad for Learning?
Christian Science Monitor – March 2015 – Why is Turkey weighing a ban on Minecraft?
Harvard Magazine – February 2015 – Computing in the Classroom
Edudemic – December 2014 - 23 Best Game Based Education Resources for 2014
Bostinno – October 9, 2014 - Now You Can Learn About Ed-Tech for Free from the School That's Revolutionized It
USA Today – October 9, 2014 - MIT to offer free online courses in game design
Huffington Post – October 7, 2014 - *Minecraft*: The Game That Captured a Generation Through the Eyes of Serial Entrepreneur Jay Adelson
Aljazeera America – September 16, 2014 - Microsoft bought 'Minecraft' in a bid for the mobile market, analysts say
Edutopia – Feb 19, 2014 – Why Serious Games Are Not Chocolate Covered Broccoli
NYTimes.com – September 15, 2013 – Disruptions: Minecraft, an Obsession and an Educational Tool
KQED Mind Shift – August 28, 2013 - MIT Unleashes New Game for Math and Science
Education Week – May 15, 2013 – Mobile Apps Make Field Trips More Interactive

Education Week – April 17, 2013 – Bringing Digital Games to Market, K-12 Schools
Boston.com – February 8, 2013 – Educational Games and the Creation of Work Teams That Work
WBUR Series: Digital Lives – January 24, 2013 – My Son, The Dragon Slayer: The Risks and Rewards of Growing Up Gaming
The Scientist – January 1, 2013 – Games for Science
American Society of Mechanical Engineers – September 2012 – Can Video Games Reshape STEM Education?
Boston Globe – September 2012 MIT Uses Reality TV, Online Games to Show Science's Appeal
PR Newswire – March 2012 – 2012 Sandbox Summit@MIT Explores the Mobile Revolution and Its Role in Children's Play
The Guardian – February 29, 2012 – The pull of online gaming
BostInno – January 24, 2012 – MIT's Education Arcade, Using Online Gaming To Teach Math & Science
Mass High Tech – August 16, 2011 – MIT gets Google gift for new Center for Mobile Learning
Vadvert.co.uk – August 8, 2011 – The Next STEP in Science Education
MIT News Online – August 3, 2011 – The Science of Teacher Education
Boston Globe – July 3, 2011 – I Played the News Today, Oh Boy
NSTA WebNews Digest – January 25, 2011 – Engaging Students with Augmented Reality
The Voice – November 11, 2010 – Network Search: A New Way of Seeing the Education Knowledge Domain
Mass High Tech – September 20, 2010 – NSF grant aids Boston-area high schools in biology curriculum
CNN Online – July 12, 2010 – *Google aims to make app creation easy*
Google Labs Online – July 12, 2010 – *App Inventor for Android: On The Shoulders of Giants*
Design Mind – May 20, 2010 – Sandbox Summit
National Public Radio's All Things Considered – March 29, 2010 – *From Chalk to Bytes*
Christian Science Monitor – 2009
Boston Globe – 2009 – *Augmented Reality*
Boston Globe – October 2009 – How Video Games are Good for the Brain
PC World – 2009 – Play Games with Your Resume
Wired News – 2007 – Wii + Second Life = New Training Simulator
Wired News – 2007 – Mind Reading Games
CNN Online – 2007 – Second Life's 2nd Value: Testing Ideas
The Escapist – 2006 – *Playing to the Test*
National Geographic – 2006 – Mobile Games Superimpose Virtual Fun on the Real World
MIT Spectrum – Spring 2005 – *Playing Games*
Sydney Morning Herald 2005 – *Play and Learn*
Business Week – 2005 – Education Games Crank Up the Fun
US News – 2005 – Teaching With Tech
CBS 4 News – April 2005 – Participatory Simulations in the Classroom
Wilmington Advocate – 2005 – Piloting New Ways of Learning
The Village Voice – 2005 – *Game On!*
AP – 2004 – Video Games Teach More than Hand-Eye Coordination
Technology Review – 2004 – *The Education Arcade*
Technology Review – 2004 – *Look Listen Walk*
NY Times – 2004 – To Study History Students Can Rewrite It
MIT Tech Talk – November 2003 – Education Arcade zooms in on games in the classroom
Boston Globe – July 2003 – Interactive Game Teaches Students Genetics
Worcester Telegram and Telegraph – February 23, 2003 – *Students Play Genetics Mating Game*
Santa Fe New Mexican – April 15, 2002 – *The New Scientific Method*
Tech Talk – April 10, 2002 – School kids get excited by science
CCTV – April 1, 2002 – StarLogo at the Agassiz School
Tech Talk – July 18, 2001 – Klopfer sparks interest in teaching, learning science and math
Boston Globe – July 8, 2001 – Director at MIT Talks About Science
Boston Globe – February 18, 2001 – Program Puts Fourth Graders to Test – Class Tries Learning Tool Developed at MIT Lab
MIT IS Newsletter

21. Record of Research Funding:

Woodrow Wilson National Fellowships Foundation (2015-2020) – ***$10M*** *TILT (The Initiative for Learning and Teaching)*

Google Collaboration (Diversity in CS Eduation) - ***$1.2M***
Institute of Museum and Library Services (2015-2016 through Missouri Botanical Gardens) ***- $30K*** *- IMAGINE: Innovative Modeling Across the Garden to Investigate Neighborhood Ecology*
Tata Trusts - (2015-2018) ***$4M –*** *CliX – Connected Learning Initiative X*
National Science Foundation (2014-2015) ***$300K –*** *Learning Science and Online Learning*
Arthur Vining Davis Foundtion (2014-2016) ***$180K -*** *Using Popular Games for Serious Learning*
Bill and Melinda Gates Foundation (2013-2015) ***$305K****– Radix Extension*
NSF AISL (2012-2015) **$800K –** information Community Science Investigators
NSF Cyberlearning (2012-2015) **$450K**– DIP: Using dynamic formative assessment models to aid learning the experimental process in biology
Linde Foundation (2012-2014) **$150K –** Simulations Systems and Computational Literacy Community
Center for Mobile Learning **$2.8M** – Google, Telefonica, Motorola Foundation, Verizon Foundation
Bill and Melinda Gates Foundation (2012-2014) **$3M –** STEMMO (Radix)
Department of Homeland Security (2011-2013) $**169.5K** – Computer Programming Tools in Schools
Columbus Zoo and Aquarium – PI (2007-2013) **$453** – Augmented Reality in Informal Education
NSF DRK12 (2010-2014) **$2.1M** – Biograph
Linde Foundation (2009-2012) $**65K + $75K** + **$75K** – Simulations Systems and Computational Literacy
NSF (2009-2011) $**247K** – Transactive Narrative: An Inclusive Game-Based Programming Context
Gambit (2009-2011) **$150K** – The Role of Narrative in Learning Games
NIH (2009-2011) $**853K** – Ubiquitous Games for Biology
NSF ITEST (2009-2011) $**518K –** Community Science Investigators
NSF ISE (2009-2011) **$1.4M** – Mass Extinction: A Curated Game
Department of Homeland Security – STEM Learning (2008) **$163K** – Games and Simulations for STEM Education
NSF ISE (2008-2010) **$194K –** Kids Survey Network
NSF AYS – (2008-2009) **$125K** – LIONS with Missouri Botanical Gardens
NSF – Co-PI (2008-2009) **$400K (MIT $50K)** – EvoBeaker II
NSF AYS – Co-PI (2007-2009) – Project GUTS @ SFI
Hewlett Foundation – PI (2007-2008) **$200K** – Games for Learning
Microsoft iCampus – PI (2006) **$230K** – Public Opinions of Science and Technology
StarSchools – Department of Education – Co-PI (2006-2009) **$1.5M (MIT $450K)** – Improving Mathematics and Literacy Learning Through Augmented Reality Simulation Games With Emerging Mobile Technologies
StarSchools – Department of Education (2006-2008) **$15M** (**MIT $500K** through Comparative Media Studies with Maryland Public Television) – Learning Games to Go
NBC News – Co-PI (2006-2008) **$450K + $400K** + **$400K** – iCue Assessment
Intel Foundation – PI (2005) **$27.5K –** Augmented Reality Simulations for Learning
NSF ITEST (2005-2008) **$1.4M (MIT $90K)** – EcoScienceWorks: Exploring and Modeling Ecosystems Using Information Technology
NSF ITEST – Advisor *(2005-2008)* – Community for Rural Education, Stewardship and Technology
Young Faculty Leaders Forum – PI (2004-2006) **$50K** – Enhancing and Assessing Student Understanding of Biological Concepts with Participatory Simulations
NSF ITEST – PI (2003-2006) **$1M** – New Mexico Adventures in Modeling
NSF – Co-PI (2003-2004) **$35K** – Osmobeaker
Leapster – PI (2003-2004) **$35K** – Leapster Assessment
NSF Postdoctoral Fellowship – PI (1998-1999) **$50K** – Professional Development of Teachers Using Computer Simulations

22. Theses Supervised:

Stacey Allen (MSc 2015)
Jacqueline Hung (MEng 2015)
Erica Du (MEng 2015)
Ellen Finch (MEng 2015)
Timothy Yang (UAP 2015)
Divya Bajekal (MEng 2015)
Kevin Mustelier (UAP 2015)
Shilpa Agrawal (UAP 2015)
Jordan Haines (UAP 2015)

Harry Sanabria (UAP 2015)
Kevin Chen (UAP 2015)

Fidel Sosa (MEng 2014)
Cristina Lozano (MEng 2014)
Ellen Finch (MEng 2014)
Tanya Liu (MEng 2014)
Stephanie Change (MEng 2014)
Shawn Conrad (MEng 2013)
Brad Gaffney (Meng 2013)
Jacob Katz Phd Doctoral Thesis in Aero Astro (Proposal Committee)
Yuzhi Zheng (UAP 2012)
Calvin Lewis (UAP 2012)
Emily Seitz (UAP 2012)
Seth Booth (UAP 2012)
Chris Cheng (MEng 2011) – StarLogo camera controls and enhancements
Vijay Umapathy (MEng 2011) – An adaptive user interface for open educational content
David Lam (MEng 2011) – Intuitive fully integrated platform for designing interactive objects in Quest Atlantis
Joe Laurendi (MEng 2011) – Augmented reality games: improved data layers
Owen Lin (MEng 2010) – The Development of Network Enabled Augmented Reality Mobile Applications
Yunus Sasmaz (MEng 2010) – Extending the Limits of Weatherlings: A Ubiquitous, Educational, Multiplayer, Web-Based Game for Mobile and desktop platforms
Vijay Umapathy (SB 2010)
Nicole Bieber (SB 2010)
Curtis Liu (SB 2010)
Joe Laurendi (SB 2010)
Chris Cheng (SB 2010)
Angel Irizarry (MEng 2010)
Robert Falconi (MEng 2010) – Usability and Game Design: Improving the MITAR Game Editor
Aidan Ho (SB 2009)
John Zhang (MEng 2009) – GameBuilder, An Outdoor AR Creation Software
Chris Wong (MEng 2009) – Kid's Survey Network: Teaching Date Literacy with Multiplayer Online Games
Matt Ng (MEng 2009) – UbiqGames: Casual, Educational, Multiplayer Games for Mobile and Desktop Platforms
Yaa-Lirng Tu (MEng 2009) – A Framework for Teaching Biology using StarLogo TNG : From DNA to Evolution
Mike DAmbrosio (MEng 2008) – Three Dimensional Terrain Editing in StarLogo TNG
Linda Ye (SB 2008)
Eitan Gilnet (MEng 2008) – Audio Games
Tiffany Wang (MEng 2008) – Intuitive Game Design
Dan Roy (MS 2007) – Mobile Massive Multiplayer Games
Ricarose Roque (MEng 2007) – CodeBlocks – Generic Graphical Programming Languages
John Jackman (MEng 2007) – Peer to Peer Networking in StarLogo TNG
Ben Schmeckpeper (MEng 2007) – Editing Augmented Realities
Victor Costan (SB 2007) – Simple Networking Systems for Mobile Games
Melinda Tang (SB 2007) – Improving User Interface in Handheld Games
Thomas Robinson (SB 2007) – Undoing in StarLogo TNG
Mark Burroughs (SB 2007) – Terrain Editing in SpaceLand
Kirupa Chinnathambi (SB 2007) – Creating a Fun, Feature Filled Game Editor
Xia Lu (MEng 2007) – Location Aware Performance Support Systems
Hector Beltran (SB 2006) – Location Aware Wireless Games
Robert Kwok (SB 2006) – Server Based Wireless Games
Katherine Klesch (SB 2006) – Redesigning an Interface for Palmagotchi
Ed Dieterle PhD (Harvard)
Ben Povlich (SB 2006) – Augmented Reality Simulations for Handhelds
Daniel Wendell (MEng 2006) – 3D Terrain in StarLogo TNG
Corey McCaffrey (MEng 2006) – Textual Interfaces to Graphical Programming
Spencer Cross (SB 2005) – Data Integration in Augmented Realities

Mark Boudreau (SB 2005) – Combining Indoor/Outdoor Augmented Realities
Bruce Dibelo (SB 2005) – NPCs in Indoor Augmented Realities
Nicholas Behrens (SB 2005) – Network Protocols for Augmented Realities
Lauren Clement (SB 2005) – User Interface Design in StarLogo
Chester Tse (SB 2005) – 3D Collisions in StarLogo
Jon Hyler (SB 2004) – Indoor Location Based Augmented Realities
Tricia Um (SB 2004) – Simulation Development for Middle Schools Children
Robert Lillianfeld (SB 2003) – Analyzing the TEAL Project as a Tool for Teaching University-Level Electricity and Magnetism
Priscilla Cheung (MEng 2003) – Augmented Reality Simulations
Nick Bozard (SB 2003) – Networks: A Participatory Simulation
Jon Wolfe (SB 2003) – Augmented Reality User Interfaces
Kodjo Hesse (SB 2003) – Tracking Users in Augmented Realities
Douglas Ricket (MEng 2002) – Women's Technology Program
Monique Lo (MCP 2001) – Modeling and Study of Infectious Diseases