James H. Gray
San Francisco Bay Area
jim@jimgray.net

Expertise   Play and learning, learning science, educational digital media, learning technology design, curriculum design, toy design, early childhood education, research design and methodology.

Skills   **Management and Strategic Development** - oversee staff, budget, research, & production, guide strategic development of educational products.

Curriculum design - *Examples*: LeapFrog curriculum scope and sequence. Preschool learning design. YogiPlay curriculum combining principles of child development and school readiness.

Learning Technologies - research, design, and evaluation. *Examples*: interactive toys, games, and books (LeapFrog), advising app developers (YogiPlay).

Innovation – creative synthesis of child development, learning, and interactive media design principles applied to product development and testing processes.

Teaching - preschool, young adolescents, teens, graduate students; culturally & ethnically diverse groups; classroom, informal, & online settings.

Research Methods - design and analysis using multiple and mixed methods, including user experience lab studies.

Education

Harvard University, Graduate School of Education Ed.D. / Ed.M. Human Development and Psychology.	1999
Rochester Institute of Technology / American Video Institute Advanced Graduate Certificate in Interactive Media Design.	1987
Michigan State University B.S. Early Childhood Education.	1982

Learning Design and Assessment

Learning Consultant & Entrepreneur
Provide curriculum design, learning technology design, strategic planning, innovation facilitation, advising, and other services to educational start-ups and organizations. Founder-developer of a product to guide parents' facilitation of their children's learning.

3/2011 – Present

Clients include:
- DreamBox.com
- YogiPlay.com
- Kindertown.com
- ImagineK12.com
- Finterprintplay.com
- StoryBots.com

Chief Learning Officer
YogiPlay.com
Design and implement educational app quality assessment, manage app reviewers, coach app developers on learning design, and advise on related topics for a startup focused on parents of young children.

11/2011 – 3/2013

Director of Learning	8/2007 –
LeapFrog Enterprises, Inc.	3/2011

Lead the Learning Team responsible for educational quality of all interactive toys, games, and books.

Key Responsibilities

- Develop educational content and learning designs for all products.
- Manage implementation of educational content and learning designs.
- Manage and grow the curriculum scope and sequence
- Advise product and brand marketing teams on learning claims
- External communications on educational topics
- Liase with academic research partners in learning sciences and digital media.
- Advise executive team on educational strategy

Senior Research Manager	2/2004 –
LeapFrog Enterprises, Inc.	8/2007

Lead the LeapFrog Lab team in its mission to understand how best to provide fun, engagement and learning through interactive products. Plan Lab expansion and strategic directions. Design and implement high-impact user research through Lab studies, in-home research, online surveys, and external vendors. Oversee research of website and digital download use. Work closely with Design, Production, and Marketing staff to coordinate research priorities for maximum impact. Generate and share knowledge of child development, learning, innovation, and media design across departments and in public venues.

Key Initiatives

- Expanded capacity, quality, and scope of Lab research
- LabTalk and LeapTalk lecture and workshop series
- Internship and Research Partner Programs
- Knowledge Base of learning design research and exemplars
- Cross-product curriculum design strategy

Other roles

- Founding member of the LeapFrog Learning Institute
- PR interviews (WIRED Magazine, Washington Post Online) and presentations (KidPower 2005 keynote address; Dust or Magic 2006)
- Facilitate group brainstorming process for applied innovation

Consultant	2002-2003
Youth Engaged in Leadership and Learning Project	
Gardner Center for Youth and Their Communities, Stanford University	

Design and conduct technology-based activities to enhance community research process among urban youth in West Oakland, using handheld computers for survey data collection, and Tinkerplots educationally-oriented statistical software.

Post-doctoral Scholar for Community Tools	1999 – 2002
Center for Innovative Learning Technologies (CILT)	
SRI International, and University of California, Berkeley.	

- Principal Investigator, *Researching Online Communities Project*. Conducted sociocultural analyses of online community and learning in *Tapped In*, a teacher professional development environment.
- Researched teacher perspectives of *Synergy*, a collaborative educational software design project involving the WISE science learning system with sixth-graders, teachers, and researchers.

Online Community Specialist (Consultant)	2001 – 2003
Learning Friends	
Woodside, CA	

Consult on research, design, & development of online learning environments for young children and their families.

Doctoral Dissertation Research   1996 – 1999
Harvard Graduate School of Education
How young adolescent students construct understandings of online peers.
Designed and conducted ethnographic study using observational and interview data,
as well as students' online products, to investigate how sixth-grade students from
two communities in the U.S. constructed understandings of each other during an
online, collaborative social studies project that included cross-site communications
through various Internet media.

Research Methods Consultant   1998 – 1999
Workable Peace Project
Consensus Building Institute, Cambridge MA
Advised on research design and evaluation instruments for a curriculum on inter-
group conflict management for teens.

Video Coordinator   1992 – 1995
ATLAS Communities, Project Zero
Harvard Graduate School of Education
Managed production and budget for video documentation of nationally-recognized
school reform project. Coordinated production activities in three school districts;
conducted interviews with students, faculty, and administrators at all levels;
performed various technical duties during production and post-production phases
(video recording, editing, etc.). Supervised production staff.

Video Producer, Writer, and Editor   1992
Project Zero
Harvard Graduate School of Education
Co-produced *The Arts PROPEL Video Handbook*, illustrating an alternative approach
to instruction and assessment.

Research Assistant   1989 – 1991
Project Zero
Harvard Graduate School of Education
Collected and analyzed data for projects:
- *Catalyst* -- project-based computer assisted learning in three domains: music,
  computer programming, history of immigration;
- *Spectrum* -- alternative assessment, curriculum, and intervention for young
  children based on Gardner's theory of Multiple Intelligences.

Media Designer   1990
Center for Applied Special Technology (CAST)
Peabody, MA
Designed and tested prototypes of instructional software.

Research and Development Team Member   1987 - 1989
American Video Institute
Rochester Institute of Technology, Rochester, NY
Research and development for educational interactive videodisc projects.

Research Team Member   1985
Center for Research on the Influence of Television on Children (CRITC)
University of Kansas, Lawrence, KS
Worked with Dr. Aletha Huston and Dr. John Wright to devise methodology for
analyzing the effects on children of television characters' facial expressions.

Curriculum Design and Teaching

Curriculum Scope and Sequence design — 2007-
LeapFrog Enterprises — 2011
Guided development of company-wide curriculum

Online Course Designer & Instructor — 2001
Center for Innovative Learning Technologies
Course: *Culture, Cognition, and Technology*

Graduate Seminar Designer & Instructor — 1999
Harvard Graduate School of Education
Seminar: *Culture, Cognition, and Technology*

Teaching Fellow
Harvard Graduate School of Education
• Cognitive & Symbolic Development, Dr. Howard Gardner — 1992 – 1993
• Learning as an Interactive Process, Dr. Colette Daiute — 1990

Instructor — 1987 – 1989
Rochester Institute of Technology / American Video Institute, Rochester, NY
Interactive Media Design (principles of learning, design, & programming)

Instructor — 1988 – 1989
"Science, Communication, and Technology" Summer Program
Rochester Institute of Technology, Rochester, NY
Four 2-week courses in Interactive Media Design using HyperCard. Young
adolescent students created "HyperStories" for class projects.

Teacher — 1984 – 1986
Special Education Early Intervention Program
University of Kansas
Initiated and coordinated a curriculum of computer-based instruction and
pedagogical use of classroom video.

Preschool Teacher — 1980 – 1983
Lansing General Hospital Day Care Center;
All Kids Day Care Center
Provided care and learning experiences for infants, toddlers, and pre-schoolers.
Lansing and East Lansing, MI

Publications (Selected)

Gray, J. H., Bulat, J., Jaynes, C., & Cunningham, A. (2009). LeapFrog Learning
Design: Playful Approaches to Literacy, from LeapPad to the Tag Reading System.
In A. Druin (Ed). *Mobile Technology for Children: Designing for Interaction and
Learning.* Elsevier. New York, NY.

Gray, J. H., & Tatar, D. (2004). "Sociocultural analysis of online professional
development: A case study of personal, interpersonal, community, and technical
aspects". In S. Barab, R. Kling, & J.H. Gray (Eds.) *Designing Virtual Communities in
the Service of Learning.* Cambridge University Press.

Gray, J. H. (1999). *How young adolescent students construct understandings of online
peers: individual, social, cultural, and media factors.* Dissertation submitted to the
Department of Human Development and Psychology, Harvard University
Graduate School of Education. Cambridge, MA.

Gray, J. H. (1994). *The effects of television and interactive media on children's cultural stereotyping: Developing complex understandings of cultural, racial, and ethnic groups.* Qualifying Paper, Harvard University Graduate School of Education. Cambridge, MA.

Gray, J. H., & Viens, J. T. (1994). The theory of multiple intelligences: Understanding cognitive diversity in school. In National Forum*: The Phi Kappa Phi Journal*, Vol. LXXIV, 1, pp. 22 - 25.

Presentations (Selected)

Gray, J. H. (2013). *Learning Technology Innovation.* Invited presentation, National Research Council, Planning Meeting on Learning Technology Research Reviews. Washington, DC.

Gray, J. H. (2012). *Assessing Educational App Quality.* Invited presentation, Dust or Magic: Children's New Media Design Institute. Lambertville, NJ.

Gray, J. H. (2011).   *Interaction Design and Children* conference Keynote Speaker. Ann Arbor, MI. June 19-23 (www.idc2011.net).

Gray, J. H. (2010). *Creative Play and Children's Media.* Panel discussion, Fred Forward Conference on Creative Curiosity, New Media, and Learning. Fred Rogers Center for Early Leaning and Children's Media at St Vincent's College. Latrobe, PA.

Gray, J. H. (2010). *Interfaces: New and Eternal.* Kids @ Play Summit. CES 2010. Las Vagas, NV.

Gray, J. H. (2009). *Playful Learning.* Invited presentation, Dust or Magic: Ninth Annual Children's New Media Design Institute. Lambertville, NJ.

Gray, J. H. (2009). *Designing for the Learning Ecosystem.* Computer Human Interaction conference, CHI09. Boston, MA.

Gray, J. H. (2008). *Designing for the Learning Ecosystem.* Invited presentation, Dust or Magic: Eighth Annual Children's New Media Design Institute. Lambertville, NJ.

Gray, J. H. (2008). Sandbox Summit, *The New Playing Fields: Building a 21st Century Sandbox*, panel discussion. New York, NY.

Gray, J. H. (2006). *Tools for Enhancing Social Intelligence: New Media for Children.* Invited presentation, Dust or Magic: Sixth Annual Children's New Media Design Institute. Lambertville, NJ.

Gray, J. H. (2006). *Usability Research with Children: Understanding Consumer Behavior.* Invited presentation, HAAS School of Business, UC Berkeley. Berkeley, CA.

Gray, J. H. (2005). *LeapFrog Lab.* Invited presentation, Stanford University School of Education. Palo Alto, CA.

Gray, J. H. (2005). *Usability Research with Children: Developing Age-Appropriate Products that Maximize Learning.* Opening Keynote Address, Kid Power Conference. Disney Yacht & Beach Club, Lake Buena Vista, FL.

Gray, J. H. (2005). *Screen-based Learning: Lessons from Cognitive Science, Educational Television, & Learning Technology.* LabTalk presentation. LeapFrog Enterprises. Emeryville, CA

Gray, J. H. and Koch, M. (2003). *Community Tools.* Poster presented at CILT's Reflections on "Uniting People, Technology and Powerful Ideas for Learning": Five Years of Knowledge Networking in Learning Sciences and Technologies. Annual Meeting of the American Educational Research Association. Chicago, IL. April, 2003.

Gray, J. H. (2001). *Understanding Online Peers: Learning and Development in a Technologically Mediated World.* Presentation at Northwestern University School of Education and Social Policy. Evanston, IL. May 2001. [Invited]

Gray, J. H. (2001). *Online collaborative learning environments: contexts for developing academic and interpersonal understandings across cultures*. Paper presented at the Annual Meeting of the Comparative and International Education Society. Washington, DC. March 2001.

Gray, J. H. (2000). *The cultural contexts of internet communication and collaboration: How young adolescent students construct understandings of online peers.* Paper presented at the Annual Meeting of the American Anthropological Association. San Francisco, CA. November 2000.

Gray, J. H. (1999). *"Maybe she was a down-low girl": How young adolescent students construct understandings of online peers.* Paper presented at the Annual Meeting of the American Educational Research Association. Montreal, Canada. April 1999.

Gray, J. H. (1997). *How young adolescent students construct understandings of online peers.* Paper presented at The Second International Conference on Computer Support for Collaborative Learning, Doctoral Consortium. University of Toronto, Toronto, Ontario, Canada. December 1997.

Professional Service

Product Development Team Coach Learning & Industry Expert Startl, San Francisco Design Boost.	2010
Advisory Board Member Learning Design and Technology program Stanford University School of Education	2006- 2011
PBS Kids Next Generation Media	2009- 2011
Reviewer Provide feedback on Masters' Projects. Learning Design and Technology program Stanford University School of Education	2003-2006

Memberships

National Association for the Education of Young Children.
Society for Research in Child Development
American Educational Research Association
ACM CHI – Computer Human Interaction SIG
BayCHI – Bay Area Special Interest Group on Computer-Human Interaction

References

Available upon request.