

WRITING PROFILE

Creator of books that invite all children to see their stories in nonfiction. Avid researcher, usability tester, networking guru, closet journal writer, and creator of educational experiences.

- Published author of books, peer-reviewed research journals, and magazine articles
- Curriculum writer and technology designer
- Editor of books, magazines, & Web-based education products
- Grant Writer

PUBLICATIONS

Books & Chapters

Koch, M. (2017). *3D Printing: The Revolution in Personalized Manufacturing*. Minneapolis, MN: Lerner Publishing.

Koch, M. & Fusco, J. (2008). Designing for growth: Enabling communities of practice to develop and extend their work online. In C. Kimble & P. Hildreth (Eds.) *Communities of Practice: Creating Learning Environments for Educators*, Volume 2 (pp. 1-23). North Carolina: Information Age Publishing.

Serim, F. & Koch, M. (1996). *NetLearning: Why Teachers Use the Internet*. Sebastopol, CA: O'Reilly & Associates and Songline Studios

Koch, M (1994). *Educators Online: Three Case Studies*. San Francisco, CA: CompuMentor.

Koch, M (1994). *The Care and Feeding of Online Networks for Nonprofits*. San Francisco, CA: CompuMentor.

Curriculum

Koch, M. (2016). *ABI Curriculum Series*. Palo Alto, CA: Anita Borg Institute. Available at <https://anitaborg.org/insights-tools/abi-curriculum-series/>

Koch, M., Lockwood, J., Lara-Meloy, T., Harris, C., Schulz, C., & Johnson, K. (2012). *InnovaTE³: Girls innovating with technology as entrepreneurial environmental engineers*. Menlo Park, CA: SRI International.

Koch, M., Lara-Meloy, T., Gorges, T., Bryan, M., Nemes, O., & Donis, M. (2008). *Build IT: Girls building information technology fluency through design*. Curriculum. Menlo Park, CA: SRI International

Koch, M. (1998). *Curriculum Integration Guide for Compton's Encyclopedia Online: Information Literacy*. Fremont, CA: The Learning Company, Inc.

Articles

Koch, M. & Gorges, T. (2016). Curricular influences on female afterschool facilitators' computer science interests and career choices. *Journal of Science Education and Technology* 25: 782–794.

Koch, M., Lundh, P., & Harris, C. (2015). Investigating STEM support and persistence among urban teenage African American and Latina girls across settings. *Urban Education*. 1-31

Koch, M. & Gorges, T. (2012). Inspiring girls and their female afterschool educators to pursue computer science careers. *International Journal of Gender, Science and Technology* (4),3.

Koch, M., Gorges, T., & Penuel, W. (Fall 2012). Build IT: Scaling and sustaining an afterschool computer science program for girls. *Afterschool Matters*. Available online at <http://www.niost.org/Afterschool-Matters/afterschool-matters-fall-2012>

Koch, M., Georges, A., Gorges, T., & Fujii, R. (2010). Engaging youth with STEM professionals in afterschool programs. *Meridian: A Middle School Computer Technologies Journal* (13), 1. Available online at <http://www.ncsu.edu/meridian/winter2010/koch/index.htm>

Koch, M., & Penuel, W. (2010). *Planning for scaling and sustaining afterschool STEM programs*. Invited paper presented at the NSF ITEST Convening, St. Paul, MN.

Koch, M. & Penuel, W.R. (2007 April). Designing for design learning. In *CHI 2007 Conference Proceedings. Workshop on Converging on a Science of Design through the Synthesis of Design Methodologies*. Reading, MA: ACM Press.

Koch, M., & Sackman, M. (2004, September). Assessment in the palm of your hand: Handheld computers transform the assessment process. *Science and Children*, 33-37. Available online at http://www.nsta.org/main/news/pdf/sc0409_33.pdf

Koch, M. (Spring 2001). Information literacy: Where do we go from here? *Technos* (10), 1.

Koch, M. (Winter 2000). Learning from Civilization. *LiNE Zine*

Koch, M. (Fall 1994). No girls allowed. *Technos* (3), 3.

Koch, M. (Spring 1993). Beyond the light bulb: The promise of technology in The Edison Project. *Technos* (2), 1.

EXPERIENCE

Anita Borg Institute (ABI). Palo Alto, California (2015–2016)

Director of Content & Curriculum ABI connects, inspires, and guides women in computing and organizations that view technology innovation as a strategic imperative. At ABI, I led the strategy and development of the ABI Curriculum series. The ABI Curriculum provides career guidance to women technologists by connecting them with each other and the materials they need, when and where they need them.

SRI International's Center for Technology in Learning (SRI). Menlo Park, California. (2001–2015)

Senior Educational Developer / Program Director SRI is a research and development organization well known for its innovations in a variety of fields including energy, technology, health, and education. At SRI, I wrote grants to the National Science Foundation and other foundation then led the projects. I developed collaborative technologies and science, technology, engineering, and mathematics (STEM) curricula that teach educators and youth. I created professional development programs that support educators in the use of technologies and curricula. I led diverse teams of science and mathematics educators, computer scientists, researchers, and K-12 educators. Example NSF projects include:

- **Director of Afterschool Computer Science Educators (ACSEs)**, a mixed-methods study to investigate under what conditions teaching an afterschool computer science curriculum encourages African American and Latina female educators to pursue computer science learning and careers.
- **Director of Gender Equity in Afterschool Computer Science (GEACS)**, a randomized trial to investigate the impact of using a technology curriculum in single-sex and coeducational settings.
- **Director of InnovaTE³**, an after school program that challenges high school girls to develop ecologically sustainable innovations. Developing these innovations and participating in internships motivates girls to explore the STEM fields and careers needed to address environmental challenges.
- **Director of Build IT**, an information and communication technology fluency after school program for middle school girls that fosters the development of computer science and mathematics understanding and skills through design-based problems and interactions with role models. Started in SF Bay Area, now scaled throughout U.S. and Canada in Girls Inc. network.

RealCommunities, Inc. Cupertino, California. (1999–2001)

Director of Applications / Senior Product Marketing Manager Member of management team for Internet start-up that developed online community tools for Web-based businesses such as eBay and ThirdAge. Provided vision and led implementation of online applications, including a mentoring application and a reputation manager. Co-authored whitepaper, *Using the 12 Principles of Civilization to Build Web Communities*.

Pearson Education's Computer Curriculum Corporation. Sunnyvale, California. (1998–1999)

Director of CCCnet Collaborated with marketing and executive staff to define company's Internet strategy for CCCnet, an award-winning online environment that reached more than 275,000 educators. Provided vision and content direction for all online community projects.

Internet Community Producer Created and managed CCCnet's Community Program. Supervised Webmentors, message board providers, and content experts. Wrote design documents and curricular materials.

The Learning Company, Inc. Fremont, California. (1997–1998)

Internet Learning Specialist Wrote content for all Internet products and curriculum materials reaching more than two million customers. Researched and developed online features and products for the *Compton's Home Library* series. Consulted with educators, conducted user testing, and led field studies to inform design decisions.

O'Reilly & Associates, Inc. Sebastopol, California. (1994–1997)

Songline Studios Producer Managed, edited, and helped market the book series, Songline Guides. Co-authored the first book in the series, *NetLearning: Why Teachers Use the Internet*. Directed the development of several Web publications: *The New Seven Wonders* and the *Education Workbook*.

GNN Editor and Founding Team Member Designed, edited, and managed the *Education Center*, one of the Global Network Navigator's (GNN) Web publications. Managed GNN's relationship with Houghton Mifflin.

EXPERIENCE

Koch Enterprises. San Francisco, California. (1993–1994)

Consultant on Educational Technologies Developed, wrote, edited, and implemented online curriculum materials. Researched and presented market strategies for educational technologies. Evaluated the implementation of new technologies in K-12 education. Clients included: GTE, PBS, Rockman *et al*, CompuMentor, and the National Foundation for the Improvement of Education.

The Edison Project. Knoxville, Tennessee. (1992–1993)

Research Associate Researched and advised on many aspects of technology for the Edison Project, an organization rethinking K-12 education's pedagogy, technology, and business structures and designing schools. Investigated technology solutions and represented the company at conferences and meetings.

Stewart Public Library. Grinnell, Iowa. (1987-1989)

Children's Library Page Shelved and processed children's books. Assisted children and their parents in finding books. Read books to children during story time. Position held while attending Grinnell College.

EDUCATION

Northwestern University, Evanston, Illinois.

M.A. in Mass Communications. 1992. Telecommunication Science, Management, & Policy Certificate

Received Annenberg/Washington postgraduate policy fellowship, Office of Plans and Policy at the FCC.

Grinnell College, Grinnell, Iowa

B.A. in English. 1990. Interdisciplinary Concentration in Gender & Women's Studies

Chair of Student Radio & Publications Committee

PROFESSIONAL & COMMUNITY AFFILIATIONS

Society of Children's Book Writers & Illustrators (SCBWI), Member

American Educational Research Association (AERA)

Computer Science Teachers Association (CSTA), Member

International Society for the Learning Sciences (ISLS)

International Society for Technology in Education (ISTE)

National Center for Women & Information Technology (NCWIT), K-12 Alliance Member

National Science Teachers Association (NSTA), Member

Techbridge, Advisory Board Member