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Career Goals:

- Lead world-class academic institutions into becoming renowned centers of 21st century research and learning
- Bring interdisciplinary STEM and humanities research together with education practice and policy in new and compelling ways
- Connect diverse communities of creative learners and thinkers with emerging fields in science and the arts in ways that make them forward-thinking, successful and entrepreneurial lifelong learners and decisionmakers.

My career has been focused on strategic planning and management for the long horizon, positioning organizations at the center of innovation, seeking and eradicating pinch-points in organizational structures and helping organizations get "unstuck" in their ability to participate in global communities, effectively communicate their work to potential funders and build supportive networks of like-minded institutions and collaboratives. This includes planning of mission-driven, large-scale capital projects. It is my belief that successful twenty-first century institutions of teaching and learning increasingly depend on adaptive and entrepreneurial cultures and the kinds of structures and networks of relationships that these cultures elicit.

Current Career Highlights:

- Research, instruction and program development in graduate New York State teacher certification programs in STEM, including Co-PI on a New York City teacher Certification program for STEM teachers developing new tools and metrics for pedagogical content knowledge, and reflective practice, live and online teaching of STEM integration courses for New York State instructional technology certification program, self-study for accreditation (MSCHE) and development of curriculum for equivalent masters program for United Arab Emirates.
- Principal Investigator for collaborative research for investigating and articulating the state of, and developing major initiatives around ocean literacy; leading to publication of a report by an expert panel, doing social network analysis of regional and national ocean education networks, the first ocean science festival for the public in New York City, and development of a new cultural institution in New York City devoted to ocean literacy.
- Lead a decade long initiative to develop programs, research and develop policy in data literacy and network science in education, including the first public museum exhibition on network science, hosting and organizing international symposia and conferences on network science in education both in the U.S. and abroad, an ongoing high school program for over 100 public high school students, teachers, and graduate student mentors to engage in year long network science research projects, development of a set of Network Literacy Essential Concepts, ongoing professional development for teachers, development of a transdisciplinary research agenda for using network science to understand how people learn, and innovative uses for network science in understanding social influences and impacts to persistence in STEM careers.
- Principal Investigator in a major initiative to understand and build programming around the intersection of systems thinking and sustainable development, including: creation of among the largest scale, fully immersive, CGI museum experiences devoted to sustainability that captures visitor movement and gestures to initiate interventions in interconnected biomes and respond to their effects.

Positions:

1999 - Present   **The New York Hall of Science**
Flushing Meadows Corona Park, New York

Business: Science Center
Position: Vice President for Science and Technology
Duties: Provide vision, leadership and fundraising for science and technology exhibitions, public programs and learning research; plan, develop and manage infrastructure capital projects in support of science and technology; create professional development programs and curricula for teaching and learning; partner and collaborate with government, research laboratories and universities in developing projects and organize conferences and workshops; develop and supervise research in STEM learning, particularly in complex, interdisciplinary and data-driven science.

2006 – Present   **New York Institute of Technology**
Old Westbury, New York

Business: University
Position: Adjunct Professor, Graduate School of Education and Professional Studies
Duties: Teach Math/Science/Technology integration courses for MS in Instructional Technology, MS in Childhood Education and Advanced Certificate in STEM Education programs; participate in accreditation process, curriculum and program development and mapping for both state and international standards and teach grant-funded professional development (STEMi) programs for New York City Department of Education.

1996 - 1999   **The Castilleja School Foundation**
Palo Alto, California

Business: Independent School Foundation
Position: Director of Information Resources
Duties: Supported $11 million capital campaign through solicitation and management of donations and development of industry/academic partnerships to promote women's leadership in science and technology; served as liaison for board advisory council and chair of technology committee; performed strategic long-range capital and operations planning, faculty training and classroom science/technology integration; developed STEM professional development program, curriculum and assessment metrics, managed information resource center (including computer labs, library and faculty resource center staffing, capital and operating budgets); provided project management of building renovation projects including a new science teaching facility, IT infrastructure, library and faculty resources center.

1992 - 1996   **Suffolk Research Group, Inc.**
Dix Hills, New York

Business: Educational leadership/planning, faculty development and environmental education consultant
Position: Vice President
Duties: Education consulting for universities, K-12 school districts, regional boards, and government in facilitation of: academic/industry/government partnerships; grant writing and program development; professional development programs; long-range technology planning and capital budget development.

Positions (continued):

1990 - 1992   **Rainbow Network Communications**
                                        (GE-NBC/Cablevision)
                                        Woodbury, New York

Business: Satellite television network (Bravo/American Movie Classics/Sports Channel/News 12).
Position: Director of Engineering: Broadcast Business Development and Operations
Duties: Project management and design for new technical operations center, production studios, news, and program origination facilities; management and training of department of 14 managers, supervisors, engineers, and technicians; new project development; facilities relocation; engineering of data/audio/video communications systems; budget development/ management.

1985 – 1990   **New York Institute of Technology**
                                        Old Westbury, New York

Business: Computer graphics, interactive and broadcast media research labs
Position: Video Center: Director of Engineering
Duties: Interactive and satellite distance learning systems design; grant proposal preparation; budget management, technology evaluation; computer graphics/audio/video system engineering, technical proposal and documentation writing, documentary film and video production engineering; computer-based learning system development.

1983 - 1985   **Catholic Television Network**
                                        Uniondale, New York

Business: Distance learning network.
Position: Chief Engineer
Duties: Engineering and design for distance learning network, including: 12 channel terrestrial instructional television fixed service (ITFS), satellite earth terminals, and production studios; also interference analysis and mitigation, management and training of engineering and operations personnel, budget management and fundraising.

1981 - 1983   **Warner Amex Satellite Entertainment Company**
                                        (Warner Communications and American Express Company)
                                        Smithtown, New York

Business: Satellite television network (Music Television, Movie Channel, Nickelodeon)
Position: Technical Engineer
Duties: Construction and maintenance of computer-controlled satellite uplink terminal and high-band broadcast videotape origination systems, management and training of operations staff, second and third shift.

1978 - 1981   **Half Hollow Hills Community Libraries**
                                        Dix Hills/Melville, New York

Business: Public Library System
Position: Radio Station Manager/Media Specialist
Duties: Management of audio/video department and educational FM radio station (WHHJ), grant funded programs management, equipment maintenance, audio production, and on-air operations; planning and deployment of inventory control systems.

Positions (continued):

1976 - 1978   **Eder, Connor and Associates**
                                    Locust Valley, New York

Business: Environmental Consultants
Position: Lab Assistant
Duties: Management of engineering library and environmental testing lab; collection, handling, transport of samples; editing/compilation of environmental impact studies and engineering plans; drafting.

Education:

- Ph.D.: Network Theory and Environmental Studies, Union Institute 2007.
- Professional and Continuing Education 1980-1999, including:
  - Educational management and leadership (Stanford University, National Educational Computing Association)
  - Project management (Sun Microsystems, Pryor Seminars)
  - Database administration (IBM, Lotus, Association of Computing Machinery, Apple Computer)
  - JAVA programming (Sun Microsystems)
  - Robotics (Parker Automation, Sony, Ampex, New York Institute of Technology)
  - Analog and digital data acquisition and control (National Instruments, Tektronix, National Semiconductor)
  - Video and data transmission and storage systems (Sony, Ampex, Association of Computing Machinery, Society of Motion Picture and Television Engineers)
  - High-speed data networking, (Nortel Networks, Association of Computing Machinery, National Computer Graphics Association)
  - Satellite/microwave communication systems, (Scientific-Atlanta, Andrews)
  - Remote Sensing (NASA Ames, American Society for Photogrammetry and Remote Sensing)
  - Image processing and computer modeling (Massachusetts Institute of Technology, New York Institute of Technology, Association of Computing Machinery)
  - Scientific visualization, (Association of Computing Machinery, Society for Information Display)
  - Color science (Stanford University, Kodak, Association of Computing Machinery, Society of Motion Picture and Television Engineers, Society for Information Display, Imcotek)
  - Science communications. (Massachusetts Institute of Technology, National Science Teaching Association, Association of Science-Technology Centers)
- B.A.: Long Island University, Music/Education 1979.

Courses, Workshops, and Lectures

- Fall 2014 - New York Institute of Technology: EDSC626 Math, Science and Technology in Education II (instructor).
- Summer 2014 - New York Institute of Technology: EDSC626 Math, Science and Technology in Education II (instructor).
- Summer 2014 – Boston University: NetSci High Summer Workshop. (co-PI/co-organizer)
- Spring 2014 – U.C. Berkeley: International Workshop & Conference on Network Science NetSciEd3 Symposium on Network Science and Education. (organizer/speaker)
- Spring 2014 - New York Institute of Technology: EDSC626 Math, Science and Technology in Education II (instructor).

Courses, Workshops, and Lectures (continued)

- Winter 2014 – Technopolis, Mechelen: Science Centre World Summit: <u>Big Data and the Legible City: Connected Worlds</u> (invited panelist).
- Winter 2014 – University of Bologna, 5th International Workshop on Complex Networks: <u>Toward a Network Model of Learning</u> (invited speaker).
- Fall 2013 - Association of Science-Technology Centers Annual Conference: <u>The 4th Paradigm: Connecting Visitors to Complex Science</u> (panel organizer/speaker).
- Fall 2013 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Summer 2013 – Boston University <u>NetSci High Summer Workshop</u>. (co-PI/co-organizer)
- Summer 2013 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Spring 2013 – Denmark Technical University <u>International Workshop & Conference on Network Science</u> <u>NetSciEd2 Symposium on Network Science and Education</u>. (organizer/speaker)
- Spring 2013 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Winter 2013 – University of Maryland, National Socio-Environmental Synthesis Center: <u>The 4th Paradigm: Connecting Learners to Complex Science </u>(invited speaker)
- Winter 2013 – American Society for Limnology and Oceanography <u>Sensor Networks and Social Networks: Effective Strategies for Education and Outreach</u> (co-author)
- Winter 2013– Berlin Free University: <u>4th International Workshop on Complex Networks</u> (program committee/reviewer)
- Fall 2012 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Fall 2012 – Jackson Hole Wildlife Film Festival Symposium: <u>Collaboration+Metrics=Funding</u> (panel) & <u>Deconstructed: Connected Worlds (lecture)</u>. (invited speaker)
- Summer 2012 – Boston University: <u>NetSci High Summer Workshop</u>. (co-PI/co-organizer)
- Summer 2012 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Spring 2012 – Northwestern University: <u>International Workshop & Conference on Network Science</u> <u>NetSciEd Symposium on Network Science and Education</u>. (organizer/speaker)
- Spring 2012 – Metropolitan Museum of Art: <u>Evaluating Meaning and the Visitor Experience</u>. (invited speaker)
- Spring 2012 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Winter 2012 – Massachusetts Institute of Technology/Florida Institute of Technology: <u>3rd International Workshop on Complex Networks</u>. (program committee/reviewer/presenter)
- Fall 2011 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Fall 2011 – National Academies of Science/National Board on Science Education: <u>Authentic Data Workshop</u> (invited panelist/domain expert)
- Spring 2011 – Central European University: <u>International Workshop & Conference on Network Science</u> NetSci High School Research Poster Competition (co-organizer)

Courses, Workshops, and Lectures (continued)

- Spring 2011 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Spring 2011 – Indiana University: <u>Modeling and Mapping Science Workshop</u> (invited panelist)
- Fall 2010 – American Association for the Advancement of Science: <u>Mapping the Structure and Evolution of Sustainability Science</u> (invited panelist)
- Summer 2010 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Spring 2010 – Massachusetts Institute of Technology: <u>International Workshop & Conference on Network Science</u> (lecturer)
- Spring 2010 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Winter 2010 – White House Office of Science and Technology Policy: <u>National STEM Education Exchange Working Group</u> (invited domain expert, panelist)
- Winter 2010 – National Academies of Science/National Research Council: <u>The Right Approach: Methods for Computational Thinking both Formally and Informally</u> (invited panelist/domain expert).
- Fall 2009 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Fall 2009 – Indiana University: <u>NSF Workshop on How to Measure, Map and Dramatize Science</u> (host/co-organizer)
- Summer 2009 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Summer 2009 – Oregon State University: <u>20/20 Vision: Next Generation of STEM Learning Research</u> (invited speaker)
- Summer 2009 – Magdalen School, Oxford University: <u>Gordon Research Conference on Scientific Visualization and Education</u> (invited speaker)
- Spring 2009 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Winter 2009 – Discovery Science Channel: <u>Connected: The Power of Six Degrees National Launch Event</u> (host/organizer)
- Autumn 2008 – Association of Science-Technology Centers Conference: <u>PubScience</u> (lecturer).
- Summer 2008 New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Summer 2008 - <u>International Workshop & Conference on Network Science</u> (invited convener, lecturer).
- Spring 2008 – Indiana University: <u>NSF Workshop on Knowledge Management & Visualization Tools in Support of Discovery</u> (co-organizer, co-facilitator and host)
- Spring 2008 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Summer 2007 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (Instructor).
- Spring 2007 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Spring 2007 – New York Hall of Science/Notre Dame University: <u>International Workshop & Conference on Network Science</u> (co-PI/host/co-organizer).

Courses, Workshops, and Lectures (continued)

- Fall 2006 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Fall 2005/2006 – Indiana University: <u>Places & Spaces Exhibition</u> (co-organizer).
- Spring 2006 - Good Experience Live (GEL) Conference (co-host/lecturer).
- Spring 2006 - New York Institute of Technology: <u>EDSC626 Math, Science and Technology in Education II</u> (instructor).
- Spring 2006 - Indiana University: <u>International Workshop and Conference on Network Science</u> (lecturer/panelist)
- Fall 2005 – Indiana University: <u>Places & Spaces</u> (session collaborator)
- Spring 2005 – Massachusetts Institute of Technology <u>Image and Meaning 2</u> (session collaborator).
- Spring 2004 – National Association of Museum Exhibition and Association of Science-Technology Centers Roundtable for the Advancement of Professionals: <u>Exhibits and Expansion in the 21st Century</u> (panelist).
- Winter 2003 - Union Institute. <u>The Sixth Extinction: Biodiversity and Sense of Place</u> (facilitator).
- Spring 2002 – Association of Science-Technology Centers Roundtable for the Advancement of Professionals: <u>Changing Technological Trends in Science Centers and the Consequences</u> (panelist).
- Fall 2000 – Association of Science-Technology Centers Annual Conference: <u>TryScience</u> (lecturer).
- Fall 1998 – Stanford University: <u>Learning Design and Technology Masters Program</u> (presenter, graduate student advisor and mentor).
- Fall 1998 – Castilleja School Foundation: <u>Using Emerging Technologies in Classroom Teaching</u> (curriculum developer/instructor).
- Summer 1998 – Castilleja School Foundation: <u>Summer Faculty Development Program</u> (curriculum developer/instructor).
- Spring 1998 – National Coalition of Girls Schools, National Conference: <u>Models for Successful Faculty Development Integrating Technology</u> (invited speaker).
- Spring 1998 – California Language Teaching Association Annual Conference: <u>Teaching Secondary French with Multimedia</u> (lecturer).
- Summer 1997 – Castilleja School Foundation: <u>Summer Faculty Development Program</u> (program developer/instructor).
- Fall 1995 - Nassau Board of Cooperative Educational Services NEXUS V Conference: <u>Internet in the Classroom</u> (invited speaker).
- Summer 1995 – State University of New York: <u>MST Pre-service Faculty Preparation Standards Workgroup</u> (advisor/participant).
- Summer 1995 – Bay Shore Union Free School District: <u>Summer Faculty MST Curriculum Development Workshop</u> (curriculum developer/instructor).
- Spring 1995 - Nassau County Science Supervisory Association Spring Conference: <u>The Internet for Science Education</u> (invited speaker).
- Winter 1995 – Southampton School District, Community Planning Conference: <u>Internet Resources for Parents & Students</u> (invited speaker).
- Winter 1995 - New York State Board of Regents: New York City Schools Under Registration Review Annual Conference: <u>Technologies and Applications for K-12 Assessment</u> (invited speaker).

Courses, Workshops, and Lectures (continued)

- Winter 1995 - Mid-Suffolk Tech Prep Consortium: <u>Applied Science Workshop in Math Science, and Technology for Environmental and Marine Sciences</u> (invited speaker).
- Winter 1995 - Group for the South Fork, <u>Seals of Blackfish Rock</u> (program leader/instructor).
- Winter 1995 - National Science Teaching Association: National Convention, <u>Telecommunications with a Costa Rican Rain Forest</u> (lecturer).
- Summer 1994 – Roskilde University: <u>Marine Science and Fisheries Program</u> (advisor/host).
- Spring 1994 - Farmingdale Public Schools, Superintendent's Conference Day: <u>Multimedia in Constructivist Teaching and Learning Environments</u>. (invited speaker).
- Spring 1994 – Bay Shore Union Free School District: <u>New Media for Language Instruction</u> (workshop developer/instructor).
- Winter 1994 - The Nature Conservancy/Group for the South Fork: <u>Sachem's Neck in Winter</u> (program leader/instructor).
- Fall 1993 - McGill University Center for Northern Studies and Research, International Design for Extreme Environments Assembly Two, Growth and Environment: Challenging Extreme Frontiers: <u>Imaging in Extreme Environments</u> (lecturer).
- Summer 1993 - Group for the South Fork: <u>The Tombolo of Upper Beach, Shoreline Morphology of Shelter Island</u> (program leader/instructor).
- Summer 1993 – Bay Shore Union Free School District: <u>Faculty In-Service Professional Development Program</u> (curriculum developer/instructor).
- Winter 1992 - Bay Shore Union Free School District: <u>Image Banks and Barcode Technology for Science Teaching</u> (organizer/instructor).
- Summer 1989 - Association of Computing Machinery: SIGGRAPH Conference: <u>Discrepancies in Color Reproduction Technology</u> (course developer/instructor).
- Spring 1985 – J.C. Penney Corporation: <u>Use of Electronic Bluescreen Traveling Mattes in Live Distance Learning and Professional Development Programs</u> (invited speaker).
- Winter 1984 – Photographers East: <u>Nature Photography Workshop</u> (invited speaker).
- Spring 1980 – Half Hollow Hills Community Library <u>Wilderness Backpacking Workshop</u> (developer/instructor).

Project and Program Development

- 2013-present – City University of New York/New York Hall of Science/ New Visions for Public Schools: <u>Mathematics and Science Teacher Education Residency</u> (Co-PI for research and development of new NSF-Funded preservice learning program for STEM high school teachers through PCK).
- 2012-present – New York Hall of Science/Indiana University <u>Pathways: Sensemaking of Big Data</u> (Co-PI in an NSF-funded research project to improve the understanding of how museum visitors learn through data visualization)
- 2012-Present – Long Island Sound Study/National Fish and Wildlife Foundation <u>Fresh Pond River Herring Fishway Restoration Project</u>. (Site Coordinator/Volunteer for community participation in installing a fish ladder at a neighborhood location).
- 2011-present – SUNY Binghamton/Boston University/New York Hall of Science: <u>Network Science for the Next Generation</u> (PI in three year, NSF-funded project to mentor high school students in year-long network science research projects with university labs).
- 2010-present – University of Massachusetts/New York Hall of Science: <u>Centers for Ocean Science Education Excellence-Ocean Communities in Education and Social Networks</u> (PI)

Project and Program Development (continued)

- 2009-present – New York Hall of Science/Columbia University/New York University/Yale University: Connected Worlds, (PI for development of a new immersive public experience on systems thinking about sustainability science)
- 2009-2011 – IBM/New York Hall of Science: Teachers Tryscience. (Project Director for a social website for K-12 teachers to develop, share and rate STEM lesson and unit plans)
- 2006-present - Indiana University: Places and Spaces (Advisor for 10 year series of traveling exhibitions on science mapping)
- 2009–present - National Mathematics Museum (Advisor).
- 2009 – Trinity College, Dublin: Science Gallery, "Infectious" (Advisor).
- 2006 – 2009 Real Pictures, Pty.: "Connected: The Power of Six Degrees" (Advisor)
- 2008 - Papalote-Museo Del Niño: Laberinto de La Ciencias y Las Artes (Advisor).
- 2007 - International Workshop and Conference on Network Science 2007 (co-PI/host/co-organizer).
- 2005-2006 - Long Island Museum: Long Range Technology Plan (facilitator/consultant).
- 2001-2003 - New York Hall of Science: Long Range Plan for Technology (facilitator).
- 2000-2004 – New York Hall of Science & New York City Department of Design and Construction: Phase IIa Development Project: (project manager for technology for $52M capital project to develop infrastructure and support new exhibitions).
- 2000-2004 – New York Hall of Science: Connections: The Nature of Networks (exhibit and program developer/researcher for the first museum exhibit and programs on the science of complex networks).
- 1999-2002–IBM/New York Hall of Science/Association of Science-Technology Centers: TryScience. (technical and content manager for a global website for science center content and programs for 800 ASTC and ECSITE member museums).
- 1996-1999–Castilleja School foundation/AAUW/Silicon Graphics, Inc./Stanford University: Technical Education and Mentoring Program. (supervisor/evaluator)
- 1996-1999–Castilleja School Foundation: Program for the Twenty-First Century (director of information resources for program and capital development project to provide new STEM teaching facilities, programs and professional development).
- 1995–Bay Shore Union-Free School District: MST Integrated Program for Physical Science (curriculum and technical coordinator for program to team teach high school science, math technology and literacy).
- 1995 Bay Shore School District: Literacy Evaluation and Assessment Program (co-PI for public literacy program).
- 1995–Northport School District: Long Range Plan for Technology (advisor).
- 1994-1995–State University of New York, Brookhaven National Laboratory, Suffolk Board of Cooperative Educational Services, Bay Shore UFSD: Sciences of the Environment and Advanced Technology Education Consortium. (PI for NSF-funded CTE program to teach vocational STEM).
- 1993–1995–The Long Island Aquarium (advisor).
- 1993-1995 Bay Shore Union-Free School District: Long Range Plan for Technology (project manager/facilitator)

Project and Program Development (continued)

- 1992-1995–Bay Shore School District: <u>Computer Integration into Restructured Collaborative Learning Environments</u>. (PI for grade 5 technology integration program including some of the early uses of programmable data loggers in education).
- 1990-1992–Rainbow Programming Enterprises: <u>Rainbow Networks Consolidation Project</u> (project director for $12M capital project to build a new network operation and studio facility to consolidate existing operations).
- 1988-1990–New York Institute of Technology/Howard University: <u>Joint Center for Computers, Learning, and Technology</u> (director of engineering/technical proposal writer).
- 1988–Space Studies Institute/Princeton University: <u>CIS-Lunar Teleoperations Simulation Project</u> (advisor/engineer).
- 1987-1988–NYIT, Pratt Institute, Apple Computer, The Albers Foundation, and Yale University Press <u>Interaction of Color</u> (engineer in charge of production).
- 1981–Warner Amex Satellite Entertainment Company: <u>Network Operations Center and Mtv Launch</u> (technical engineer).
- 1976-1980–Long Island Indian and Archeological Museum (assistant field archeologist).

Certifications

- New York State: Teaching Certification.
- Professional Association for Diving Instructors: Basic SCUBA
- Federal Communications Commission: Radiotelephone Broadcast License
- Blackboard Academic System.

<u>Membership</u>

(current)
- American Cybernetics Society
- Association of Computing Machinery
- ACM Special Interest group on Computer graphics and Multimedia (SIGGRAPH)
- International Society for Systems Science

(previous)
- American Society for Photogrammetry and Remote Sensing
- ACM Special Interest Group on Computer Uses in Education (SIGCUE)
- Association for the Development of Computer-Based Instructional Systems
- Association for Supervision and Curriculum Development
- Human Factors Society
- Institute of Electrical and Electronic Engineers/IEEE Computer Society
- Instructional Television Association
- International Society for Technology in Education
- Society for Information Display
- Society of Motion Picture and Television Engineers

Advisory

- Airborne Instruments Laboratory
- Association of Zoos and Aquaria
- Brooklyn Children's Museum
- Bay Shore Union Free School District Technology Advisory Committee (chair)
- Blue Sky Productions
- Castilleja School Foundation Board Technology Advisory Committee
- Castilleja School Foundation Faculty Technology Advisory Committee (chair)
- Central Intelligence Agency
- Concept Web Alliance Board of Directors
- Dutchess County Community College Communications Advisory Committee
- Education Development Corporation
- Greenport Schools
- Group for the South Fork
- Half Hollow Hills Youth Development Corporation
- Harvard University Professional Extension, Museum Studies Program.
- Huntington Youth Board
- Indiana University, Information and Library Sciences
- Institute of Digital Media and Child Development
- Lawrence Hall of Science
- Long Island Aquarium Development Advisory Board
- Long Island Indian and Archeological Museum
- McGill University Undergraduate Earth Science Program
- Metropolitan Museum of Art
- Monteverde Conservation League
- National Academies of Science
- National Museum of Mathematics
- National Aeronautics and Space Administration
- National Oceanographic and Atmospheric Administration
- National Research Council
- National Science Foundation
- Nature Conservancy, South Fork-Shelter Island Chapter
- New York City Department of Education
- Northport-East Northport School District Board of Directors Technology Advisory Committee
- Real Pictures, Pty.
- Roskilde University Marine Science Program
- Southampton Schools
- Space Studies Institute
- Stanford University Learning Design and Technology Masters program
- State University of New York
- Suffolk Board of Cooperative Educational Services
- Televisio Catalunya
- Trinity College, Dublin

Advisory (continued)
- U.S. State Department
- University of North Dakota Aerospace Program

Publications

- COSEE OCEAN Inquiry Group Report: Opportunities for Creating Lifelong Ocean Science Literacy. Boston, MA: School for the Environment, University of Massachusetts, Boston. 2014.
- Puntacana Ecological Foundation and the Scaling of Sustainable Tourism Development. Ecology and Society, Vol. 18 No. 4. Resilience Alliance. 2013.
- Ripple Effects: Small-Scale Investigations Into the Sustainability of Ocean Science Education Networks. In Complex Networks, Studies in Computational Intelligence, 424. A. Evsukoff, M. González, R. Menezes, Eds. Berlin: Springer Publishing Company. With R. Chen, C. Cramer, P. DiBona, and R. Faux. 2012
- Report of a Workshop of Pedagogical Aspects of Computational Thinking. Washington, DC: Computer Science and Telecommunications Board, National Academies Press. 2011.
- Connections: The Nature of Networks, Communicating Complex and Emerging Science. In Science Exhibitions, Curation and Design. Edited by Anastasia Filippoupoliti. Edinburgh: MuseumsEtc. With Eric Siegel. 2010.
- Knowledge Management and Visualization Tools in Support of Discovery: NSF Workshop Report. Indiana University, Los Alamos National Laboratory, Yale University and the New York Hall of Science. With Luís M.A. Bettencourt, Mark Gerstein and Katy Börner. 2010.
- Teaching Children the Structure of Science, Paper 7243-6, Proceedings of SPIE Conference on Visualization and Data Analysis, 2009, San Jose, CA: International Society for Optics and Photonics. With Katy Börner , Fileve Palmer, Julie M. Davis, Elisha Hardy and Bryan J. Hook.
- The Man Who Spoke to Stones. In anthology "Terra Nova – Writing the Future: Progress and Evolution". Edited by David Rothenberg and Wandee Pryor. Massachusetts Institute of Technology Press, Cambridge: MA. 2004.
- Light and Imaging in Extreme Environments: Proceedings, 2nd International Design for Extreme Environments Assembly, 1993, McGill University, Centre for Northern Studies, Montreal, PQ.
- Discrepancies in Color Reproduction Technology: Computer Output Technology Course Notes (Course #1) Association for Computing Machinery, SIGGRAPH Conference, 1989, Boston, MA.