Resume for KAREN S. HOLLWEG

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EDUCATION

Stanford University, Biology, B.A., 1964.

Stanford University, Science Education, M.A., 1966. Post Graduate Work: 26 units in science and education.

SUMMARY OF EXPERIENCE

Science & Environmental Education Consultant (currently). Designs and leads professional development focusing on new standards, learner-focused inquiry, and ongoing classroom assessment to inform instruction and enhance rigorous learning. Facilitates virtual professional learning communities. Clients have ranged from Florida's and Austin's science education leaders to Biological Sciences Curriculum Study (BSCS), University of Pittsburgh's Institute for Learning, Council of Great City Schools, University of Colorado CIRES, OECD/PISA, and USEPA/Cornell University.

<u>Fulbright Scholar</u>, Indo-American Environmental Leadership Program, 2007. Studied exemplary environmental education for sustainability programs.

<u>Senior Program Officer</u> and <u>Director</u>, The National Academies - National Research Council, 1999 to 2002. Directed the NRC's Standing Committee on K-12 Science Education. Promoted and provided professional development to state and local leaders in the use of the *National Science Education Standards*, especially in the areas of inquiry and classroom assessment. Led initiatives to identify, analyze, and review research regarding the influence of *Standards* on curriculum, professional development, assessment, teaching practices, and student learning, and to assess practitioners' views regarding next steps needed for the *Standards*.

<u>Urban Program Manager</u>, North American Association for Environmental Education, 1993 to 1999. Worked with interest groups and networks to provide direction and support for their efforts to promote quality environmental education in urban settings. Designed and facilitated short- and long-term professional development opportunities that fostered collaborative efforts among formal, informal and university educators. Formed and led a NSF-funded network of institutions in 18 cities to support implementation of standards-based programs. Wrote articles, books, grant proposals and reports.

Education Director and Dissemination Grant Director, Denver Audubon Society, 1984 to 1993. Led the development, implementation and evaluation of a volunteer-based Urban Education Project that reached approximately 1,500 inner-city youth each year in their own neighborhoods/schoolyards. Expanded the organization's income three-fold. Developed dissemination strategies and guided 12 new cities as they established locally designed education projects similar to Denver's.

<u>Regional Representative</u>, Central Midwest Region, National Audubon Society, 1980 to 1984. Organized conferences, conducted leadership workshops, and worked with leaders of 55 chapters in six states and local coalitions. Collaboratively set goals, planned, and carried out citizen education programs.

Environmental Resource Specialist and Primary Integrated Curriculum Program Manager, Division of Instruction, Jefferson County Schools, Colorado, 1975 to 1980. Developed district's prospectus for environmental education. Led planning, teacher in-service, and implementation of environmentally-focused social studies and science courses in secondary schools. Coordinated over 100 district leaders in developing and implementing a first grade integrated curriculum that won NSTA's Excellence in Education award.

<u>Staff Consultant</u>, Biological Sciences Curriculum Study, 1973 to 1974. Co-authored, field tested and revised <u>Investigating Your Environment</u> (Teachers' and Students' Handbooks and Environmental Resource Papers), published by Addison-Wesley. Directed NSF-sponsored Summer Institute for implementing these instructional materials.

<u>Teacher of biology, field biology, and physical sciences</u> in public schools in California, Massachusetts, Germany, Colorado, 1965 to 1972 and 1974 to 1975.

RECENT PUBLICATIONS

- Hollweg, K. S., Taylor, J. R., Bybee, R. W., Marcnikowski, T. J., McBeth, W. C., & Zoido, P. (2011). <u>Developing a framework for assessing environmental literacy</u>. Washington, DC: North American Association for Environmental Education.
- Hollweg, K.S., "Collaborating to Create Environmentally and Economically Sustainable Businesses." Applied Environmental Education and Communication, 2009, 8:67-77.
- Hollweg, K.S. and David Hill, <u>What Is the Influence of the National Science Education Standards?</u>: Reviewing the Evidence, A Workshop Summary. Washington, D.C.: National Academy Press, 2003.
- Berkowitz, A., C. Nilon, K.S. Hollweg (editors), <u>Understanding Urban Ecosystems</u>. New York, N.Y.: Springer Verlag, 2002.
- Weiss, I.R., M.S. Knapp, K.S. Hollweg, G. Burrill, <u>Investigating the Influence of Standards</u>. Washington, D.C.: National Academy Press, 2002.
- Hollweg, K.S., C. Kubota, P. Ferrell, <u>Changing What We Do: Constructing a Team-Based, Problem-Centered Professional Development Experience</u>. Washington, D.C.: North American Association for Environmental Education, 1998.
- Hollweg, K.S., <u>Are We Making a Difference?</u>: <u>Lessons Learned from VINE Program Evaluations</u>. Washington, D.C.: North American Association for Environmental Education, 1997.

PRINCIPAL INVESTIGATOR FOR GRANTS WRITTEN AND RECEIVED

Teacher Enhancement Program, National Science Foundation

VINE Follow-Through: Developing Strategies and Materials for Promoting More Meaningful Classroom Follow-up to Informal Science Hands-on Investigations, 1994-1998, \$524,214 Ecology in Education: Southeast and Rocky Mountain Regional Workshops for Scientists and Educators, 1992-94, \$57,770 and 1993-96, \$42,970

Informal Science Education Program, National Science Foundation

Development of a Kit to Support Cost-Efficient Dissemination of Volunteer-Based Ecology Education Outreach Projects, 1992-1996, \$359,249

Development & Dissemination of Denver Audubon's Urban Education Project, 1985-92, \$536,698 National Fish and Wildlife Foundation

VINE Network Expansion and Summer VINE for Inner-City Youth, 1993-95 and 98-99, \$51,000

NATIONAL ADVISORY BOARD MEMBER for

US Department of Education, STEM Open Educational Resources (OERs) for Adult Education, 2012-15 Keystone Center Board of Directors, 2006-12

Council of Great City Schools, Improving Standards and NAEP Data Use in Great City Schools, 2009 North American Association for Environmental Education, President-Elect and President 2006-09 National Ecological Observatory Network Design Consortium, Education Committee, AIBS, 2005-07 Improving Evaluation of Professional Development in Math and Science, CCSSO, 2005-06

COLLABORATORS: Marianne Krasny, Cornell University; Harold Pratt, NSTA; Susan Buhr, University of Colorado; Rodger W. Bybee, BSCS (retired).

GRADUATE ADVISOR: Paul DeHart Hurd, Stanford University (deceased).