

**JENIFER VICTORIA HELMS**  
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## Professional Preparation

1986 University of Washington, B.A., Zoology  
1988 Stanford University, M.A., Education, Curriculum and Teacher Education  
1996 Stanford University, Ph.D., Education, Curriculum and Teacher Education

## Appointments

2002 - Consultant/Senior Researcher – Inverness Research Inc.  
2001-02 Director of Education - Ocean Journey, Denver CO  
1999-01 Vice President of Education - The Tech Museum of Innovation, San Jose CA  
1996-99 Assistant Professor, Science Education - University of Colorado, Boulder CO  
1991-96 Evaluation Associate & Research Assistant - Stanford University, Stanford CA  
1991-96 Instructor & Teaching Assistant - Stanford University, Stanford CA  
1991-93 Student Teacher Supervisor - Stanford University, Stanford CA  
1991 Public Programs Coordinator - The Garage, San Jose CA  
1987-91 High School Science Teacher - Redwood City, San Carlos, and Palo Alto CA

## Publications

See [www.inverness-research.org](http://www.inverness-research.org) for various evaluation reports and briefs.

Carlson, J., Stokes, L., Helms, J., Gess-Newsome, J., Gardner, A. (forthcoming) The PCK Summit: A process and structure for challenging current ideas, provoking future work, and considering new directions. In Berry, A., Friedrichsen, P., and Loughran, J. (Eds.) Re-Examining Pedagogical Content Knowledge in Science Education. Routledge Press.

Anderson, R. & Helms, J. V. (2001). The ideal of standards and the reality of schools: Needed research. Journal of Research in Science Teaching, 38(1), pp. 3-16.

Atkin, J. M., Helms, J. V., Rosiek, J. & Siner, S. (1997). Building on strength: Changing science teaching in California public schools. In Bold Ventures: US Innovations in Science and Mathematics Education. Volume 2: Cases in Science Education. Kluwer Academic Publishers, pp. 13 – 129.

Atkin, J. M., Kilpatrick, J., Bianchini, J. Helms, J. V., Holthius, N. (1997). Conceptions of science, mathematics, teaching and learning. In Bold Ventures: US Innovations in Science and Mathematics Education. Volume 1: Patterns Among Eight Innovations. Kluwer Academic Publishers, pp. 43 – 72.

Atkin, J. M. & Helms, J. V. (1993). Getting serious about priorities in science education. Studies in Science Education, 21, pp. 1 – 20.

Bianchini, J. A., Cavazos, L. M., & Helms, J. V. (2000). From professional lives to inclusive practice: Science teachers and scientists' views of gender and ethnicity in science education. Journal of Research in Science Teaching, 37(6), pp. 511-547.

Helms, J. V. (1998). Science—and me: Subject matter and identity in secondary school science teachers. Journal of Research in Science Teaching, 35(7), pp. 811-834.

Helms, J. V. (1998). Learning about the dimensions of science through authentic tasks. In J. Wellington (Ed.) Practical Work in School Science: Which Way Now? London: Routledge Press.

Helms, J. V. & Carlone, H. B. (1999). The commonplaces of science and science education. Science Education, 83(2), pp. 233 – 245.

Helms, J. V. & Wageman, S. (2000). Response to "Decoding San Jose's Tech Museum of Innovation." Exhibitionist, 19(2), pp. 35-36. Washington, DC: National Association for Museum Exhibition.

### **Synergistic Activities**

Climate Literacy and Energy Awareness Network Pathways Project. Researcher for evaluation of national project to support the collection and dissemination of high quality teaching resources that address climate literacy and energy awareness.

Centers for Ocean Sciences Education Excellence Network. Researcher for evaluation of the national COSEE network.

Graduate Teaching Fellows in Ethnically Diverse Classrooms: A Collaborative Model for Impacting Science Teaching and Learning in Boulder County, Colorado Public Schools. Researcher for external evaluation of NSF-funded GK-12 project seeking to engage science graduate students in public school classrooms.

National Center for Engineering and Technology Education. Researcher the evaluation of NSF-Funded Center for Learning and Teaching which focuses on the improvement of technology education through the infusion of engineering design principles.

Appalachian Collaborative Center for Learning and Assessment in Mathematics. Researcher for evaluation of an NSF-funded Center for Learning and Teaching which focuses on building capacity for research and teaching at the intersection of rural education and math education. (completed)

Knowles Science Teaching Fellows. Researcher for evaluation of Knowles Foundation fellowship program that supports high quality science and math teachers and early career education researchers.

LIGO Science Education Center. Researcher for the evaluation of the LIGO SEC, a hands-on science education center that highlights and shares the LIGO experiment with school children and the public.

Modeling in Mathematics and Science. Researcher for evaluation of NSF-funded Learning Progressions project.

Research + Practice Collaboratory. Researcher for the evaluation of a national NSF-funded Math Science Partnership to create and study stronger relationships between researchers and practitioners in STEM.

### **Collaborations**

Boston Museum of Science	Larry Bell, Christine Reich, Christine Cunningham
Center for the Advancement of Informal Science Education	James Bell
Exploratorium	Rob Semper, Bronwyn Bevan
Knowles Science Teaching Foundation	Nicole Gillespie, Jodie Galosy, Dina Portnoy
LIGO Science Education Center	Joseph Giaime, William Katzman
Montshire Museum of Science	David Goudy, Greg DeFrancis
National Academy of Engineering	Greg Pearson
SRI International	Barbara Means, Carlin Llorente, Ann House
University of Colorado	William Penuel
University of Colorado - Cooperative Institute for Research in Environmental Science	Lesley Smith, Susan Buhr
University of Louisville	William Bush
University of Montana	Kimberly Obbink
University of Washington	Phillip Bell, Andrew Shouse
Vanderbilt University	Rich Lehrer, Leona Schauble
Western Interstate Commission for Higher Education	Pat Shea