Presenters

Holly Devaul is Manager of Educational Programs and Services for the Digital Learning Sciences, Digital Library for Earth System Education, University Corporation for Atmospheric Research (http://[www.dlese.org](http://www.dlese.org/)).  A graduate of the College of the Atlantic and the University of Maine, she now resides in Boulder, Colorado where she has been engaged in a variety of National Science Foundation-funded science education and technology integration projects for the past 13 years. Previous projects include Kids as Global Scientists, an Internet-enhanced middle school weather curriculum; and the Earth and Space Science Technological Education Project, a teacher professional development training program in GIS, GPS and image processing technologies.  In the digital library world she specializes in user support, collection development, and designing methods to incorporate educational standards information in digital library search services.

Karen J. Graham is a Professor of Mathematics at the University of New Hampshire (UNH) and was appointed as the inaugural director of the University’s Joan and James Leitzel Center for Mathematics, Science, and Engineering Education in January 2003. In addition, she directs UNH’s summer Master of Science program for teachers of mathematics.  She holds a Ph.D. in mathematics education from the University of New Hampshire and is an experienced teacher and mathematics education researcher.  Her professional and scholarly interests include the teaching and learning of calculus, mathematics education reform based research, mathematics curriculum evaluation, and mathematics teacher development. Dr. Graham has directed several federal and state-funded projects including the current NSF-funded UNH GK-12 initiative, Promoting Research to Benefit Understanding(PROBE), the  NSF-funded New Hampshire Leadership Network for Mathematics Teachers Grades 5-12 and Making Mathematical Connections in Courses for Prospective Teachers.  Dr. Graham has served on several national, regional, and state committees and has presented numerous lectures and workshops on her work at the state, regional and national level.  In 1998 she was the recipient of New Hampshire Teachers of Mathematics’ Richard H. Balomenos Mathematics Education Service Award for her service to the mathematics education community in New Hampshire. Dr. Graham has served as a member of the documentation and evaluation teams for several national projects including the QUASAR Project funded by the Ford Foundation), the Recognizing and Recording Reform in Mathematics Project funded by NCTM and the Exxon Foundation and the Calculus Consortium Based at Harvard Evaluation and Documentation Project funded by NSF.  She is currently the external evaluator for the Education Development Center’s CME high school curriculum project.

David Hammer is a professor of Physics and Curriculum & Instruction at the University of Maryland in College Park.  He studied physics in college, took a break to teach high school mathematics and physics, then went on to graduate school, first in physics then for his doctorate in Science and Mathematics Education.  His first faculty position was at Tufts University, and in 1998 he moved to the University of Maryland. His research focuses on intuitive “epistemologies” (how students understand knowing and learning) and on how instructors interpret and respond to student thinking.  He is currently pursuing these interests with students and colleagues at levels from elementary school through college physics majors.

David E. Kanter is Assistant Professor in Curriculum, Instruction, and Technology in Education (Science Education) College of Education at Temple University in Philadelphia.  Dr. Kanter arrived at Northwestern University in 1999 by way of a National Science Foundation-funded postdoctoral fellowship in science, math, engineering, and technology education. For his fellowship, in collaboration with the Center for Learning Technologies in Urban Schools and the Engineering Research Center for Bioengineering Educational Technologies, Kanter designed and researched the impact in the Chicago Public Schools of the middle school project-based human biology curriculum, I, Bio. Kanter went on to co-author with Chicago’s Museum of Science and Industry the Science Education Partnership “Supporting Student and Teacher Inquiry in Bioscience,” during which he designed and researched the impact of the high school inquiry biology curriculum Disease Detectives and related educational software Village Park Mystery. Kanter is currently the Principal Investigator of the BioQ Collaborative, a National Institutes of Health-funded Minority K-12 Initiative for Teachers and Students, focusing on the professional development of middle and high school biology teachers for inquiry biology teaching (<http://www.sesp.northwestern.edu/BioQ>).  In this context, he teaches courses on Learning and Teaching Human Biology.  He has recently taken the BioQ Collaborative to the School District of Philadelphia, joining the faculty at Temple University.  Kanter studies the design of project-based science curricula to promote students’ meaningful understanding of content and the design of teacher training to promote teachers’ pedagogical content knowledge in support of their expert use of such curricula.

Megan Paddack is a Ph. D. candidate in mathematics education at the University of New Hampshire (UNH).  Her scholarly interests include mathematics teacher development and the use of proofs and reasoning in the classroom.  She holds a fellowship in the NSF-funded UNH GK-12 initiative, Promoting Research to Benefit Understanding (PROBE), and leads teacher workshops for the state-funded UNH- Middle School Mathematics Partnership.  She has taught undergraduate mathematics courses at UNH since 2003 and in 2005 she was the recipient of the University of New Hampshire Graduate Teaching Award.

David Pysnik is a chemistry/research instructor at Sidney High School.  He is also an Adjunct instructor at Ithaca College in Ithaca, New York as well as the State University College of New York at Delhi in Delhi, New York.  In addition, he works as a research associate at Cornell University in Ithaca, New York.

Pysnik did his undergraduate work at Juniata College in Huntingdon, Pennsylvania and his graduate studies at Indiana University in Bloomington, Indiana.  Some honors and awards he has received include; Teacher of the Year (Sidney Central School), Rotary International Vocational Service Award, Catalyst Award (Chemical Manufacturers Association), Tandy Technology Scholars Award, American Chemical Society Northeast Regional Award in High School Chemistry Teaching, Presidential Award for Excellence in Science and Mathematics Teaching, James Bryant Conant Award in High School Teaching (American Chemical Society, Service to Mankind Award (East New York District Sertoma, and Outstanding Leadership in Science Education (New York State Leadership Association.

He is the author of scores of grants funded by such organizations as New York State Energy and Research Development Authority, Hewlett Packard, Procter and Gamble, Mead-WestVaco, American Chemical Society, National Science Foundation, Camile and Henry Dreyfus Foundation and the Otis A. Thompson Foundation.  His present interests include the development of programs which attract students into the science pipeline.  Two major projects which are ongoing are the Upper Susquehanna Watershed Project and The Sidney Science Express, a mobile chemistry laboratory available to science educators in the southern tier area of New York State.

Donald R. Sprangers is a science teacher at Washington Academy where he teaches chemistry, biology, environmental science, and field ecology.  Mr. Sprangers has 22 years teaching experience and 3 years experience as an industrial chemist.  He earned his bachelors degree in secondary education at the University of Wisconsin, River Falls and his master’s degree in education form the Audubon Expedition Institute, Lesley University in Cambridge, Massachusetts. Sprangers’ master’s thesis involved the development and implementation of a “Sustainable LIFE Curriculum” which is the cornerstone of the Washington Academy Field Ecology Program.

Sprangers earned the Presidential Award for Excellence in Math and Science Teaching in 2003 and is this years’ Maine Agriculture in the Classroom – Teacher of the Year. In 2002, Sprangers lead his students to first place honors at the National Youth Watershed Summit for their work in Atlantic salmon restoration and habitat improvement.  In 2005, Sprangers and his students embarked on an Earthwatch Expedition to study the “Salmon of the Pacific Northwest” and then presented at the Teacher’s Group Symposium of the 2006 Earthwatch Expedition Annual Convention.

In his private life, Sprangers is an advocate for the environment and his community.  He serves as board member to the Maine Council of the Atlantic Salmon Federation and is secretary of the Downeast Salmon Federation.  He is vice President of the East Machias River Watershed Council and serves on the Education Working Group of the Atlantic Salmon Recovery Team.  Sprangers has also been a member of the Boy Scouts of America for 27 years where he holds volunteer leadership positions at the local and district level.  Sprangers is a husband and father of three children, aged 9 to 20 years of age. His wife, Sherrie is equally passionate about salmon and the restoration of populations and habitat, and the entire family enjoys camping, hunting, and fishing.

Michelle Stephan is a 7th grade mathematics teacher at Lawton Chiles Middle School near Orlando, Florida. She has taught middle school mathematics for 3 years. Prior to that, she was a mathematics education professor at Purdue University Calumet and currently resides as a Graduate Associate Professor at the University of Central Florida. Her interests include writing instruction that best supports middle school students’ mathematical development, integrating tools and technology into mathematics classes, and aiding teachers in learning to teach using a mathematical inquiry approach.

Diana Underwood is an associate professor of mathematics education and the director of the Purdue Calumet Center for Mathematics Teaching and Learning at Purdue University Calumet (PUC) in Hammond, Indiana.  She has developed curriculum materials for college developmental-level mathematics and for middle school students using the instructional design principles of Realistic Mathematics Education (RME). She also teaches mathematics content and methods courses for elementary and middle school teachers.  She is currently working with two of her colleagues at PUC on a three-year professional development project for teachers of middle level mathematics. She is also the mother of 4 year old twins and she really needs a vacation (HA!)