

2006 GK12 Poster Presentations

State	Project	Poster Description	Contact & Email
AK	U of Alaska	UAF's GK-12 Teaching Alaskans...Sharing Knowledge (TASK) program provides graduate students an opportunity to connect with Alaska's culturally varied student populations using a wide variety of teaching methods and communication techniques. This experience will enable Fellows to more fully understand cultural differences in the scientific community as well, and more effectively communicate with colleagues during research.	Karina Possenti fytask@uaf.edu
AL	U of Alabama - Tuscaloosa	Graduate Fellows are placed in mathematics and engineering into middle school and high school math and science classes. GK-12 activities illustrate the use of math and science in the growing automotive industry in Alabama. Six of the current fellows have worked on this project for over a year, and the poster describes some of the outcomes from their experiences.	Beth Todd btodd@eng.ua.edu
AR	U of Arkansas	We present the University of Arkansas K-12, I, Do, Science program. Highlighted is the synergistic relationship between the graduate fellow, middle school teacher, middle school student, and the community at large. A quantitative impact is demonstrated at all levels of the program.	Morgan Ware meware@uark.edu
AZ	U of Arizona	CATTS is the Collaboration to Advance Teaching Technology and Science at The University of Arizona. This poster features The CATTS-Miles Project in which a graduate mathematics student has collaborated with Miles Middle School math and science teachers. The goals of the project include integrating math and science learning through exploratory activities.	Josh Chesler jchesler@math.arizona.edu
CA	U of the Pacific	TEAM Science builds collaboration between local classrooms, University professors and graduate students to improve science education. Fellows cooperatively work with teachers to implement standards-based inquiry activities while facilitating a year-long, student-designed research project. Fellows gain an awareness of public educational system needs. TEAM Science has lead to other educational research projects in local schools. A project goal is the implementation of standard rich, inquiry-based education to enhance scientific curriculum in public schools.	Jennifer Harr jennharr@hotmail.com
CA	U of California - Berkeley	"Exploring California Biodiversity" enhances the ability of Graduate Fellows to communicate their specialized knowledge to a broad audience by connecting the UC Berkeley Natural History Museums and Field Stations with the local urban K-12 community and with rural schools near the Field Stations. Fellows develop skills in communication and leadership; K-12 teachers and students a sense of participation in monitoring of biodiversity through development of their own collections and databases.	Rosemary Gillespie gillespi@nature.berkeley.edu
CA	U of California - Berkeley	ADEPT has had a powerful impact on the Fellows. They have taught engineering to middle and high school students in our PEP Summer Academy, worked with teachers in classrooms ten hours a week, developed Pre-Engineering Curriculum Modules, and taught these modules in classrooms. They describe learning about students, classrooms, schools, teaching, and curriculum development in interviews and surveys.	George Gagnon gwgagnon@berkeley.edu
CA	U of California - L. A.	In its third year, the UCLA GK-12 project is looking at the long-term impact of the program on fellows' teaching philosophies, views on inquiry-based teaching, interest in continuing involvement in educational reform, and career paths. We are tracking the web-based dissemination of lessons that have been developed by the fellows for urban classrooms, and will be publishing reports on the lessons that derive directly from the GK12 fellows' own research.	Smadar Gilboa gk12@chem.ucla.edu; Arlene Russell russell@chem.ucla.edu

CA	U of California - Davis	The Collaborative Classroom Based Inquiry project at the University of California, Davis, partners graduate and undergraduate fellows with teachers doing inquiry into their own practice. Our poster will describe cross-project outcomes of this collaboration on fellows and K-12 teachers and describe one such project in detail.	Cynthia Passmore cpassmore@ucdavis.edu
CA	San Francisco State	The SFSU GK-12 Partnership Program supports one-on-one partnerships between SFSU Master's level scientists and SFUSD middle or high school teachers. Participants report these partnership experiences have served as invaluable learning experiences that have influenced their philosophy of science teaching and learning. Using assessment data from GK-12 Scientists, we are investigating the impact science education and partnership experiences have on the scientists' future professional identities.	Allison Busch akbusch@sfsu.edu
CA	Cal. State - L. A.	The SFOS program, now in its third year at Cal State Los Angeles, has had the following impacts: implementation of standards-based lab activities, field trips, science fairs, and other projects in K-12 classrooms; heightened interest by minority and female K-12 students in science careers; financial support and improved science communication skills for graduate fellows; stronger collaborations between public schools and the university to improve science education.	Dave Mayo dmayo@calstatela.edu
CO	U of Colorado Boulder	This poster highlights one of our initiatives: Teaching Evolution: Meeting the Challenge. This education symposium took place in August of 2005 and included professors, teachers and graduate students from 25 schools and institutions. The 100+ participants will gather during the summer of 2006 for part two of the Teaching Evolution symposium.	Kristi Dahl kristi.dahl@comcast.net
CO	U of Northern Colorado	A Case Study of Loch Vale Watershed: Exploring Scientific Process Using Excel, Field Studies and Internet Research. This project highlights the integration of an ecological case study to an AP Environmental Science curriculum and provides a simple format that could be repeated using any ecological data set and study area. The project emphasises initial introduction to a study area, Excel data analysis, research, field observations, laboratory analysis, and impacts on the local ecosystem.	David Swartz dswartz@psdschools.org
CO	Colorado School of Mines	A major outcome of our participation in the GK12 Learning Partnership has been the redefinition of the scholarly activities accepted and rewarded within three participating departments. CSM has traditionally been a school of applied science and engineering and has had limited prior participation in K-12 outreach activities. As a direct result of this grant, the culture of CSM is changing. This poster will illustrate the impact of this cultural shift on CSM and its graduate students.	Cathy Skokan cskokan@mines.edu
CO	U of Colorado Boulder	Tomorrow's Workforce: A Grades 3-12 Engineering Continuum. CU-Boulder engineering Fellows teach applied science and math content weekly to 65 grades 3-12 classes to prepare students for pre-engineering high schools (and to ultimately enter the technology pipeline). The standards-based, hands-on engineering curriculum they develop becomes available to K-12 educators nationwide at TeachEngineering.com—an online, searchable library containing hundreds of engineering lessons.	Malinda Zarske malinda.schaefer@colorado.edu
CT	Yale	Our program has GK-12s placed from kindergarten through high school, so we are highlighting these varied experiences via sharing lesson plans as well as reflective writings by the GK-12s. Our GK-12s have discovered that students in all the pre-college years are in need of science process skill lessons, regardless of content focus. Interestingly, it is the kindergarteners who seem to have gained the most by the GK-12/Classroom teacher partnership !	Terri Stern terri.stern@yale.edu

FL	U of Central Florida	This is the first year for the Greater Orlando GK-12 Partnership. Major emphasis has been placed on developing the fellows communication skills and inquiry pedagogy by engaging in various activities. Fellows and teachers experienced "non-examples", or examples of teaching activities that are not inquiry based, they practiced teaching inquiry lessons, and were supported with weekly "Fellow Friday" meetings, multiple site visits and ongoing monthly workshops.	Mike McKee mmckee@creol.ucf.edu
FL	U of Florida	Graduate students from departments of Environmental Engineering Sciences, Engineering and Zoology help middle school students learn about science through ecosystem health. Three of our fellows have produced modules or unit plans for teaching density, buoyancy and environmental factors. The modules examine aquatic ecosystems, overfishing and bycatch, and pollution remediation strategies in ground water.	Suzan Smith ssmith96@zoo.ufl.edu
FL	U of South Florida	Motivated by the inadequacy of level of science education in the State of Florida, STARS made a paradigm shift in science education by developing pilot modules for all strands of sunshine state standards (SSS) to show how science lessons can be developed by focusing on the mathematics, engineering, and scientific principles that underlie scientific facts. We feel that the SSS and the corresponding grade level expectations (GLE's) must enforce the need to learn the underlying mathematics, engineering, and the scientific principles and not just the scientific facts.	Vishnuteja Nanduri vnanduri@eng.usf.edu
FL	Florida Inst of Tech	Sea-casts: Using iPods to Deliver Ocean Science Content: In addition to assisting with classroom instruction and serving as content resources for teachers, Fellows in Florida Tech's InSTEP program coordinate bi-monthly seminars by nationally recognized scientists. This year's topics included climate change, tsunamis, shark biology, and conservation of marine mammals. Seminars are videotaped and formatted as video podcasts so they can be viewed by students on their iPods or home computers.	Richard Tankersley rtankers@fit.edu
FL	Florida State	Project goals are: 1) to increase the number of science professionals making meaningful contributions to K-12 science and mathematics and 2) to enhance the science and mathematics teaching practice of K-12 teachers. To familiarize Fellows with successful teaching practices, we designed a graduate course, Science Teaching and Learning, focused on: 1) principles of teaching and learning, 2) effective communication of science, and 3) K-12 exemplary curriculum units. The course was grounded in the NSES and interwove the theoretical aspects of teaching with practical lesson applications. In the semester after course completion, Fellows worked in K-8 classrooms. Fellows and Teachers utilize a co-teaching format; Fellows serve as content and curriculum resources and participate in classroom instruction. Short-term benefits of this project include the learning and experience that the program immediately brings to the Fellows, enhancing their communication and teaching skills and thus their value as educators. This poster reflects the experiences of Fellow, Mabry Gaboardi, and the GK-12 Teachers with whom she partnered.	Penny Gilmer
GA	Emory	Over the last three years more than 30 future scientists, graduate fellows from Emory and Clark Atlanta, were introduced to the joys and challenges of developing inquiry curricula that excite students about science learning. We demonstrate the effects of this program on the research, communication, team building, teaching, presentation and organizational skills of the graduate fellows as well as effects on future career goals.	Jaime Rheinecker jrheine@emory.edu
GA	U of Georgia	Our project uses on the theme of food, and the science behind how food is grown, transported, processed, created and packaged, to engage and teach high school learners. This broad focus has allowed us to incorporate all areas of science into our lessons and activities. Our poster showcases some of the unique features developed by The Science Behind Our Food, such as a Lesson Plan CD containing more than 150 Fellow-created lessons and a Food Product Development Competition booklet.	David Knauft dknauft@uga.edu

GA	Georgia Tech Res Corp - GIT	Educational partnerships created between institutions of higher education and K-12 educational communities are complicated entities that defy easy assessment. This poster will use mathematical graph analysis and social science network theory to analyze Georgia Tech's GK-12 partnerships in order to track partnership growth, health, and structure. These parameters have a direct impact on whether GK-12 Fellows, placed at those schools, can effectively work in, and impact, K-12 education.	Donna Llewellyn donna.llewellyn@cetl.gatech.edu
HI	U of Hawaii - Manoa	Hawaii has become an education hotspot with the help of the GK-12 program. Fellows work directly with teachers in local schools to provide diverse educational opportunities and experiences grounded in research that still meet the specific needs of the school groups. This flexibility is key to building partnerships that incorporate scientific research into standards-based education in K-12 classrooms.	Erin Baumgartner erinbaum@hawaii.edu
ID	Idaho State	The GK12 program at Idaho State University partners fellows in Engineering, Biological Sciences or Geosciences with 5-12th grade teachers for 1 year. These partnerships adapt and create activities to engage students in science and engineering projects. They share their successes by entering science and engineering competitions, writing articles, and presenting at conferences. We have documented improvements in the fellows' written and verbal communication skills, are determining features of successful partnerships, and continuously track the career paths of Fellows.	Rosemary Smith smitrose@isu.edu
IL	Illinois State	The NSF GK-12 Program appears to provide an excellent method for the training of graduate students to teach and provide future resources for K-12 education. Our project has documented the following outcomes for graduate Fellows: (1) A new understanding of difficulties in K-12 education. (2) Better understanding of topic areas for Fellows, teachers, and students. (3) Development of new lessons and implementation kits for schools. (4) • Teachers' new understanding of the difficulties of graduate education.	Cynthia Moore cjmoor1@ilstu.edu
IL	U of Illinois - Urbana Champ.	The UIUC GK-12 (www.gk12-uiuc.net) poster will: (1) present an analysis of how participatory design principles employed by teacher-fellow teams represent a successful model for how visualization tools are developed and used in the science classroom; (2) demonstrate how collaborative inquiry can inspire and exemplify critical scientific literacy for learners; and (3) show how students' views of science change as a result of tasks given by the course and tools integrated. The UIUC program focuses on using computer-based modeling and visualization to explore the quantitative aspects of science and social science, especially in fields that have recently begun to rely more heavily on quantitative methods (e.g., biology, environmental science, geography, geology, and history).	Delwyn Harnisch harnisch@unl.edu; Lisa Bievenue bievenue@uiuc.edu
IL	U of Illinois - Chicago	As part of "Scientists, Kids, and Teachers (SKIT): A GK-12 Partnership with the Chicago Public Schools," projects developed for students in the middle grades and high school levels and created by fellows and teachers will be displayed. Examples will include STEM activities and the simulation of scientific phenomena, known as "embedded phenomena." We will also share ways of bringing in culture and community and equity issues in discussions within the seminar for fellows.	Marlynne Nishimura marlynne@uic.edu
IN	Ball State	After three years, the Partners Investigating our Environment (PIE) project was successful in developing a collaboration between Ball State University and Indianapolis Public Schools. The PIE project developed a series of inquiry based lessons adopted into the curriculum by IPS to be used in all 6th grade science classrooms. Additional outcomes for IPS teachers and BSU graduate fellows are highlighted.	Gary Basey gbasey@bsu.edu

KY	Eastern Kentucky	Teams of university students (Fellows) and professors work with middle school teachers in six rural schools to improve the teaching of science and math. Most Fellows have indicated that they plan to pursue higher degrees and a number of them may end up being academicians. Thus, one key area of this project has been to provide Fellows with opportunities to develop skills that would help them succeed in their careers. This presentation examines the impact of the project on the Fellows.	Tom Otieno tom.otieno@eku.edu
KY	U of Louisville - Res Fdn	Our GEMS Fellows have adopted a special project that allows them to bring their own creativity and expertise into the program. Of their own initiative, Fellows researched, developed, and field-tested inquiry-based lessons designed to close identified "curricular content gaps". Fellows were resourceful in integrating more technology into the elementary classroom: multi-meters, lab-top interactive programs in mathematics, even an interactive oscilloscope so students could "visualize sound".	Christine Rich christine.rich@louisville.edu
LA	Louisiana Tech	The Louisiana Tech GK-12 poster showcases our various academic programs and how these programs have enhanced our fellows professional development.	David Mills dkmills@latech.edu
LA	Louisiana State A&M	The GK-12 program at LSU works with nine school teams, with each team consisting of a mathematics teacher, a science teacher, a graduate student and an undergraduate student. The poster will describe the team-specific goals and the impact of the program on the team members and their schools.	Mark Stecher bstecher@math.lsu.edu
MA	Northeastern	Northeastern University participates in an innovative NSF-sponsored fellowship program, achieving graduate, professional and K-12 educational enrichment through the creation of teaching teams of graduate fellows and local K-12 teachers. The NU GK-12 Plus program supports six graduate fellows who have enriched science instruction through presentations, laboratory experiences, and field trips.	Claire Duggan c.duggan@neu.edu
MA	Tufts	This poster will focus on the Tufts plan for future work and sustainability of outreach programs stemming from the GK-12 project. An new method, STOMP, is presented as a more cost-effective method for continuing GK-12 work. This program provides university students with valuable teaching and school experience while also providing teachers and schools with the support and resources vital when attempting to incorporate engineering into the classroom.	Brian Gravel brian.gravel@tufts.edu
MA	Boston University	Our accomplishments and impact include: (1) published articles on curriculum reform; (2) revamping middle school science in-service teacher training; (3) more than 6 new high school courses developed in ecology, engineering, environmental sciences, etc.; (4) a successful partnership with teachers to obtain grants called GRATIS: Grants for Teachers in Schools; and (5) direct interaction with more than 1000 students. Our evaluation of fellows shows that (a) most appear to be highly effective in presenting content to students and engaging them in activities that explore content; (b) they found their work with students highly challenging and often rewarding; and (c) the relationship between Fellows and partner teachers appears to be generally effective, with the effects on the teachers including professional and curricular renewal.	Bennett Goldberg goldberg@bu.edu
ME	U of Maine	The poster describes, in text and photographs, a variety of activities involving Fellows, Teachers, and Students in laboratory and field settings. Several long-term research projects are depicted, as well as some of the measured impacts and outcomes of the 5-year NSFGK-12 activities in Maine.	Stephen Norton Norton@Maine.edu
ME	U of Southern Maine	The University of Southern Maine GK-12 project, the Maine ScienceCorps, works with rural Maine high schools to enrich laboratory based active learning in the biosciences. Interdisciplinary teamwork of the Fellows, university faculty, and teachers in bringing together ecology, epidemiology, microbiology, molecular biology, and immunology in inquiry based laboratory activities for high school students has fostered development of the Fellow's collaborative skills and interdisciplinary interests.	S. Monroe Duboise duboise@usm.maine.edu

ME	U of Maine	Beginning January 2006, the University of Maine NSF GK-12 Sensors! program entered its first year of Track II funding. The 2006 GK-12 Sensors! poster presents a brief history of Track I and bridge-term accomplishments, descriptions of current fellows' activities, related activities (specifically partner & community impact), media attention and a potential sustainability mechanism.	John Vetelino vet@eece.maine.edu
MN	U of Minnesota	Our GK12 Fellows are working in 4 inner city Minneapolis and St. Paul elementary schools, sharing their natural history expertise in traditional and science classrooms, and running after-school science clubs. The science clubs, completely run by the Fellows, give student participants first-hand science experience as they conduct self-directed research projects, create large-scale science displays for their schools (including a 125x life-size cicada), and take field trips to local museums, collections, and natural areas.	Karen Oberhauser oberh001@umn.edu
MO	U of Missouri - Columbia	Overview of our project "NSF InSITE - Integrating Science Industrial Technology and Engineering". The focus will be on the Fellows - special course taught for the Fellows, Fellows have their own Committee which meets each week providing an opportunity to exchange ideas. We will have samples of Fellows' projects, including how they incorporated standards.	Satish Nair nairs@missouri.edu
MO	U of Missouri - St. Louis	The poster describes the mission and objectives of the MO-STEP program at the University of Missouri-St. Louis and illustrates some of the field and laboratory projects that have been developed by the Graduate Fellows. Projects include guppy mate choice experiments, illustrating the nitrogen cycle using fish in aquaria and carnivorous plants in terraria, and introducing the concept of convergent evolution with a phylogeny of pitcher plants.	Patrick Osborne osbornepl@umsl.edu
MO	Washington	Washington University's poster will focus on bringing the fellows' excitement about scientific knowledge and technical creativity into the K-12 classroom to solve engineering problems. A unique structural engineering module is used as an example of how the GK12 program impacts the graduate fellows and middle school students.	Ellen Taylor etaylor@wustl.edu
MS	U of Mississippi	The poster is entitled "Taskforce Measurement" and describes a series of projects our Middle School team has presented to prepare students for the measurement portion of our state standardized test. The poster outlines the reason this series of projects was requested, the ways in which that request was met, and the impact it has had on the students.	Stephen Case scase@olemiss.edu
MT	U of Montana	The University of Montana GK-12 Program promotes the use of schoolyards as outdoor laboratories for learning about the environment, ensuring no child is left indoors! Graduate student fellows have identified 6 roles in which they develop professional skills and confidence: mentor, educator, student, scientist, citizen, and collaborator/partner. In these roles, they strengthen their career paths, contribute to their discipline, and bring their cutting-edge research to the K-12 classroom.	Carol Brewer brewerc@mso.umt.edu
MT	Montana State	MSU's GK12 Fellows are engaged with research in the Greater Yellowstone Ecosystem, which is a natural laboratory for the study of ecosystems and the impacts of development. In the lives of the rural communities in Yellowstone, environmental issues occupy center stage. GK12 Fellows capitalize on students' interest in nature to motive STEM learning. Lasting benefits to the Fellows are an enhanced ability to communicate complex issues effectively to the public.	Lisa Graumlich lisa@montana.edu
ND	North Dakota State U Fargo	Our poster features the work of one successful partnership in an area high school physics classroom. This fellow/teacher team has developed numerous novel enhancement projects which have been successfully implemented by the team. This exemplary fellowship shows the development of the fellows teaching and communication skills, and the corollary benefit on curriculum and teacher professional development.	Dogan Comez dogan.comez@ndsu.edu

NE	U of Nebraska Lincoln	At the University of Nebraska, Lincoln graduate students in science, math and engineering are taking action today to make a better tomorrow. As graduate students in the GK-12 program, or Project Fulcrum, we have stepped outside our specialties becoming well-rounded, worked alongside teachers and students, learned to communicate our research at any level, bridged gaps between educational objectives and practical everyday applications, and stand motivated to keep making a difference.	JoDell Whittington jwhitti1@gmail.com
NH	U of New Hampshire	Through an intensive immersion in high school science classrooms; GK-12 Fellows, teachers, and students have been transformed. This poster describes the changing skills, relationships, and intellectual growth that have successfully emerged from the view of each participant. Exemplary activities developed by the inquiry teams will be displayed as models of inquiry integration for content-based courses. Fellows represent ten STEM departments which provide accessibility to all science areas!	Charles Rice cfrice@unh.edu
NJ	Rutgers - New Brunswick	Providing opportunities for the growth and professional development of fellows continues to be an important goal of our Track II program, "Building a Learning Community through Educational Partnerships." Here we summarize some of the impacts of our program on fellows, including longitudinal data. We also highlight the beginning of the Rutgers Science Explorer program which we hope will enhance fellows' experiences and serve as a vehicle for institutionalization.	Kathleen M. Scott scott@biology.rutgers.edu
NM	U of New Mexico	U of New Mexico GK-12 fellows focus on optics and photonics and collaborate on lessons and demonstrations with teachers in elementary, middle, and high schools in the West Mesa Cluster of Albuquerque Public Schools. These schools service a minority-majority population with over 70 percent of students being from a minority population. Serving outside of the West Mesa Cluster, U of New Mexico fellows have presented at NMSTA/NMCTM State Conferences and sponsored teachers' workshops.	Reed Weber reed.weber@gmail.com
NM	New Mexico State	Data that measure the impact of GK12 on our fellows" communication skills and understanding of interdisciplinary science will be presented.	Nancy McMillan nmcmillan@nmsu.edu
NY	Syracuse	The Syracuse University/Onondaga County Schools Partnership for the Improvement of Science, Technology, Engineering, and Mathematics Education works with a mix of urban and rural schools. This poster shows our GK-12 students in action, from working with laptops in the classroom for the first time and solving crimes using biology, to investigating local streams and studying scientific evolution at the Natural History Museum in New York City.	Amy Vanderlyke avanderl@syr.edu
NY	Columbia	Our Track 1 GK-12 Program fosters partnerships between Columbia University graduate Fellows in biology, chemistry and mathematics and grades 6-8 teachers from NYC public schools. The teaching and learning teams focus on the shared design and delivery of a STEM syllabus that is (1) rich in content and pedagogy, and (2) incorporates new technologies, real-life applications, current research, and college preparation with the aesthetic, historical and civic aspects of science.	Stacey Brydges sb2415@columbia.edu
NY	Polytechnic U of NY	The RAISE project has developed a partnership between Polytechnic University and 4 New York City high schools to integrate modern sensing, instrumentation, and monitoring technologies in the lab curriculum of Active Physics, Marine Science, Living Environment, and Physics courses in these schools. The project team includes 3 investigators, 13 graduate/undergraduate Fellows, and 9 teachers. Our poster will describe various activities developed and events conducted through this GK—12 project.	Vikram Kapila vkapila@poly.edu
NY	Columbia	Our engineering fellow worked with a middle school teacher on a science storytelling project.	Branka Krstic bk213@columbia.edu

NY	Clarkson	"Institutionalization of GK-12 Program: Barriers and successes for long term sustainability" Success to include lots of new partners and getting faculty involved. Barriers to institutionalization include time commitment and graduate student funding level issues.	Susan Powers sep@clarkson.edu
OH	U of Cincinnati	Science and Technology Enhancement Program has successfully sustained a bridge year and has received funding for Track II. We will feature our our accomplishments, outreach projects and goals for the next five years.	Kelly Obarski kobarski@cinci.rr.com
OH	Bowling Green	The poster will describe how the Partnership for Reform through Inquiry in Science and Mathematics (PRISM) has benefited both graduate students and teachers, and has affected their teaching of mathematics and science. It will also highlight how some Fellow-teacher teams have expanded their partnership to include teacher assisting the Fellows in their research.	Stephen Van Hook sjvanho@bgnet.bgsu.edu
OH	Kent State	Kent State's inquiry-based Earth Science GK-12 project places nine Graduate Fellows with teams of teachers in Stark Co. schools. Fellows are prepared for their placement through two courses in which they actively participate in inquiry in earth science and develop inquiry-based activities that address Ohio Academic Content Standards. We will discuss student successes at the schools, such as the Geoscape Project and StarLab, and discuss the Fellows roles in teacher professional development.	Mandy Munro-Stasiuk mmunrost@kent.edu
OH	Ohio State U Res Fdn	The GK-12 Fellows Program at the Ohio State University pairs graduate students from the College of Mathematical & Physical Sciences and the College of Engineering with elementary school teachers, specifically in third through fifth grades, in the Columbus Public School district. Our Fellows and teachers do a wonderful job of engaging young students with science. Students are excited to learn science, and teachers are committed to teaching science.	Mary Allison Timby timby.1@osu.edu
OK	Oklahoma State	This poster describes the Rural Alliance for Improving Science Education program, based at Oklahoma State University. Over the past two school years, RAISE Graduate Fellows have brought Geo-Spatial technology into three central Oklahoma school districts. Using tools such as Geographic Information Systems and Global Positioning Systems, RAISE Scientists have helped to connect classroom activities to this fast-growing technology.	Stephen O'Connell steve.oconnell@okstate.edu
OR	U of Oregon - Eugene	Chemistry and Physics Graduate Students as Content Experts in a Rural Science Network. A K12 STEM Partnership of the University of Oregon Materials Science Institute with Lane and Deschutes County Schools. An innovative model to expand University outreach, bringing content experts and inquiry-based science kit curricula to regions beyond easy commuting distance of the University.	Anae Rosenberg anae@uoregon.edu
OR	Oregon State	The NSF GK-12 Program at Oregon State University (OSU) aims to enrich science education in rural schools. GK-12 Fellows develop and implement inquiry-based science activities in rural classrooms using rural landscapes surrounding the schools. This year's Discovering Partners in Nature program run by a GK-12 Fellow in 3 schools will culminate with a campus conference during which the Fellow's achievements will be showcased through presentations by rural students to the OSU academic community.	Sujaya Rao sujaya@oregonstate.edu
OR	U of Oregon Marine Science Institute	Our poster will briefly outline the structure of our program, and present data and conclusions from our 2004/2005 school year evaluation. We will present evaluation data that focuses on changes in the fellows' abilities to communicate science and teach. Our poster will also give examples of how the fellows have incorporated their research into their teaching, and ways in which our GK12 program is helping the fellows in their growth as graduate students.	Trish Mace tmace@uoregon.edu

PA	U of Pennsylvania	Access Science Fellows support a large group of partnerships with K-12 Philadelphia public schools with the goals of integrating inquiry-based STEM in classrooms, providing content-based professional development to teachers, and enhancing curriculum. Fellows have gained significant experience teaching about their fields to diverse audiences, creating sustained partnerships, developing new pedagogical approaches, serving as role models, and problem solving in complex learning environments.	Leigh Seeleman leighsee@sas.upenn.edu
PA	U of Pittsburgh	The poster compares the dynamics of two partnerships in which I have participated. I will explore the impact on me as a graduate student as well as the perceived impact on both teachers.	Trisha Rossman trrst11@pitt.edu
PA	Pennsylvania State U - U Park	Penn State's GK12 Project, GREATT, performs science and engineering lessons with transportation themes in K-12 classrooms. Impacts of the project are seen not only in the responses and scientific retention of the K-12 students and teachers, but also in the personal and professional growth exhibited by fellows. The program impacts fellows' scientific communication and publications, scientific research, individual careers and teaching as well as other areas.	Laura Pomeroy LPomeroy@psu.edu
PA	Lehigh	The Lehigh Valley STEM Project recruits top-notch graduate students who become leaders in their fields with a passion to reach out to disadvantaged youth. The goal is for students majoring in STEM disciplines to not only excel in their research but also to give back to their communities through education even as they pursue their other career goals. Teachers, students, professors and industry partners work together to create real world applications that fit into each classroom's curriculum.	William Pottenger billp@lehigh.edu
PA	St. Joseph's	Our poster highlights the successful achievements of the unique university-museum-school partnership, providing examples of graduate student progress during the fellowship, the incorporation of their research and university resources into the elementary classroom, the involvement of faculty with elementary children through classroom and university visits, and the development of standards aligned curriculum.	Karen Snetselaar ksnetzel@sju.edu
PR	U of Puerto Rico - Mayaguez	Our initiative, GUEST K-12 is an expository program, which a core university students (fellows) with knowledge, experiences, and skills in science and technology form the link with teachers, students and general public K-12 schools. The fellows have been trained in the activities and leadership providing them the tools to lead (a) science demonstrations, (b) teachers weeklong workshops, (c) Saturday academies, and (d) weekly visit to schools. From 2001-2005, seventy five fellows trained in GLOBE and CBL 1,204 teachers and 13,029 students, resulting in an increase, in our Campus, from 31% to 48% in the number of freshman students choosing Chemistry as their field of study.	Juan Lopez-Garriga sonw@caribe.net
PR	Universidad Metropolitana	The major accomplishment of the Fellow students will be presented in the poster in the following areas: Science and Research in the Curriculum, Community Participation and Communication Skills. The contribution of Fellow students as role model and their participation in local science fair will also be presented.	Carlos Padin cpadin@suagm.edu
SC	Clemson	The poster will contain fellow journal entries describing their assessment of the value of the GK-12 Program to their educational process. Also some data will be presented that shows that having a GK-12 fellow tends to move the classroom students from below basic to basic scores on our state mandated examinations. However, other data is not sufficient to show that the movement is due to the fellow alone - i.e. it may be due to the teacher or not.	John Luedeman luedem_j@bellsouth.net
SC	U of South Carolina-Columbia	The University of South Carolina's Track 2 GK-12 Award is creating a university-wide program called Partners in Inquiry (Pi). Similar in goals and outcomes, GK-12 and Pi differ in time commitment and amount of financial support. Pi Fellows spend 1 day a week in the program over 9 months, and receive a \$10,000 supplement to their regular assistantships. Pi Fellows are supported locally by USC and our partner school districts.	Jed Lyons lyons@sc.edu

SC	Medical U of S Carolina	We will present accomplishments of the fellows, accomplishments of the fellow/teacher team (presentations, papers, etc). We will also present findings of a three year study that addresses the fellows learning constructivist/inquiry teaching via our program. We will follow with an analysis of the methods used to assist fellows to work in urban and urban like public schools.	Meta Van Sickle Vansicklem@cofc.edu
TN	Vanderbilt	The Vanderbilt University, Meharry Medical College, and Tennessee State University poster focuses on the impact of the GK-12 Program on the graduate teaching fellows, the faculty mentors, and the partner teachers. In addition, we will provide a brief description of how our program will be sustained by the partner universities, the local business community, and the local school district beyond NSF funding.	Jeannie Tuschl jeanne.a.tuschl@vanderbilt.edu
TN	University of Memphis	Learn how Tri-P-LETS Fellows use the game-authoring and simulation tool AgentSheets to teach problem solving skills, programming concepts, and software development process steps in introductory programming classes, how they use Lego Mindstorms to enhance the Java intermediate classes, teach object-oriented programming in Java classes, and enhance Java classes with object-oriented lessons using Lego Robotics in intermediate classes. Hear what teachers and Fellows say about their recent visits/presentations at the <i>38th SIGCSE Technical Symposium on Computer Science Education</i> , <i>ED-MEDIA 2005</i> , <i>NECC 2005 National Educational Computing Conference</i> , and the <i>GLS 2005 Games, Learning, and Society Conference</i> .	Linda Sherrill lbshrrll@memphis.edu
TX	Texas A&M Univ	The Advancing Geospatial Skills in Science and Social Science program uses geospatial technologies as the engine to drive the development of spatial thinking skills within the environment of traditional science and social science curriculum. Fellows are enhancing their geospatial skills through learning to communicate complex concepts inherent to these technologies (e.g. GIS, ISS EarthKAM, and Google Earth) to a variety of audiences including teachers, students, and the academic community	Sarah Bednarz s- bednarz@tamu.edu
TX	The Texas A&M U Sys HSC RF	This poster summarizes Graduate Fellow responses to questions: How has the GK-12 program strengthened your career path, contributed to your knowledge of your discipline and personal development, allowed integration of your research and research techniques in K-12 classrooms, improved your presentation and teaching skills, advanced general information in discipline learned, contributed to meaningful experiences in K-12 classrooms, and enhanced camaraderie. Positive responses predominated.	Larry Johnson ljohnson1@tamu.edu
TX	Baylor College of Medicine	An overview of a goal-oriented partnerships between Baylor College of Medicine (BCM) graduate students and selected Houston Independent School District (HISD) biology teachers and ongoing biology professional development open to any life science teacher.	Sonia Rahmati-Clayton srahmati@bcm.edu
TX	UNT Hlth Sci Ctr at Fort Worth	This poster will highlight the many ways in which Fellows contribute to Project SCORE. Fellows connect classroom activities to their research activities at UNT Health Science Center, which positively impacts them and the students they mentor. Fellows receive specific training in a summer course that helps them develop classroom laboratory activities and serve as research mentors. These activities develop strong research skills and give Fellows the confidence to actively pursue a career as a research scientist.	Rusty Reeves rustyr@hsc.unt.edu
UT	U of Utah	Fellows participating in Project WEST (Water, the Environment, Science and Teaching) work in multi-disciplinary teams to research various aspects of the water cycle and its impacts on society. With backgrounds in geology, hydrology, meteorology and biology, fellows combine skills to develop online teaching and learning resources for the mountain, urban valley, wetland and Great Salt Lake ecosystems. The fellows gain the ability to integrate concepts from a variety of scientific viewpoints and learn how to communicate these ideas to audiences of all levels.	Holly Godsey godsey@earth.utah.edu

WA	U of Washington	Our poster presents some main goals and impacts of our project. There are also quotes from teachers that represent the impact our project has had in the classroom as well as reflections from the fellows.	Kim Gunnerson gunnek@u.washington.edu
WA	Western Washington	Our poster will illustrate the use of a constructivist science learning experience in our intensive two week "Thinking to Learn" summer institute. We have made strategic use of the Physics by Inquiry (Pbl) curriculum in the summer institute. Fellows and teachers work together through challenging inquiry material, providing these teams with the opportunity to see each other as learners, develop trust, improve communication skills, and deepen their content knowledge.	Mark Emmet Mark.Emmet@wwu.edu