

views education

FALL 2010

UNIVERSITY OF COLORADO AT BOULDER

SCHOOL OF EDUCATION

Giving back to education

Carol Robinson Reynolds knows about teaching. She was a teacher and administrator in the Denver Public Schools system for nearly 30 years. Carol and her husband, Charles Reynolds, also seriously believe in the value of higher education. And, through the couple's generosity, generations of School of Education students and the children they teach will benefit, too.

The couple named the School of Education in their estate plans with a gift of approximately \$750,000. Half of their gift will provide additional support to a scholarship they established in 2007 that aids graduate students and their research. The other half will be unrestricted and left to the discretion of the dean to use for the school's most pressing needs.

When the two determined their estate planning, they looked at various options and organizations.

"The more we pursued it, we thought we really wanted to give to the schools of our past," Carol said. She earned all three of her degrees at

the University of Colorado at Boulder: BA in 1958, MA in 1968 with a specialization in guidance and counseling, and her EdD in 1978. She quips that her husband is also officially a Buff because he took one course at CU-Boulder!

"We wanted to give something that would be ongoing and that we knew would be well used. We knew the University of Colorado Foundation would be there in the future," Carol said. "We wanted to make sure the funding would be available and the people running things would make good use of it. We trust the people at the University of Colorado."

"There are no words to thank Carol and Charles adequately for their forward-thinking generosity," said School of Education Dean Lorrie Shepard. "Theirs is a wonderful gift to the school and they will have a long legacy of Reynolds Scholarship recipients to honor their philanthropy and the mission of the School of Education."

For a dedicated teacher and her husband, who worked in computer operations at the Denver Water Department, giving back to higher education seems natural. And, for aspiring teachers, Carol offers this advice: "First, you



Carol and Charles Reynolds chose the School of Education for a major gift.

have to decide if you really want to be a teacher. Then, get your college training and teacher's certificate from the beginning of college, not as a fallback plan. You also have to be absolutely well organized, like what you're doing, and continue to improve your education as you go along." ■

Shelby Wolf

Handbook debuts and Tate Modern project ends

Professor Shelby A. Wolf accomplished two major professional achievements recently. First, her eagerly awaited book, the *Handbook of Research on Children's and Young Adult Literature*, was published by Routledge. The landmark *Handbook* is a collaboration between Wolf and fellow editors Karen Coats (Illinois State University), Patricia Enciso (The Ohio State University), and Christine Jenkins (University of Illinois at Urbana-Champaign). The 548-page book combines multidisciplinary scholarship in education, English, and library and information science. Professor Wolf also completed a three-year research project, *Looking for Change*, with the Tate Modern museum in London, which culminated in a final exhibition celebrating the accomplishments of elementary students during their three years with the project. The exhibition was held in mid-June at the Tate Modern. *Looking for Change* aided students in developing their visual literacy through the core creative skills of discussion, drawing, and reflection. Wolf worked with artists Roy Smith and Claire Smith on the project, which involved students from England's Burbage Primary School and Vauxhall Primary School. Wolf and Roy Smith also created a booklet, *Looking for Change*, for use by teachers to enhance their teaching within gallery spaces. Tate Modern and UBS, the second-largest bank in Europe, supported the project. ■

A child in the *Looking for Change* project looks intently at a Tate Modern painting, sketching the piece. More information can be found on Wolf's website at: <http://www.colorado.edu/education/faculty/shelbywolf/>



Photo by Catherine Warfe, Tate Modern

Message from the Dean



"I am in favor of experimenting with test-based evaluation systems so that their validity can be examined."

This past August the *Los Angeles Times* published a surprising story in which they rated the effectiveness of 6,000 elementary school teachers based on their students' gains on standardized state tests in math and English. Teachers (and schools) were listed by name and received ratings from most effective to least effective "value-added" teacher. This story is part of a national trend to rate and pay teachers based on student test scores.

Value-Added Methodology (VAM) is a sophisticated and still relatively new statistical technique intended to "level the playing field" when analyzing achievement test results. Most policymakers now understand that high test scores—in Beverly Hills and Cherry Creek, for example—most often reflect the advantages of the students served and are not necessarily a measure of teaching quality. By adjusting for prior achievement and other student characteristics, proponents promise that VAM can isolate the unique effect of individual teachers and schools. In Colorado, the Colorado Growth Model attempts to do something similar by comparing each student's growth with the growth of students with similar starting points.

Defining teacher and principal effectiveness in terms of test-score gains has been a key component of the Obama administration's education policy agenda. As part of Arne Duncan's Race-to-the-Top competition, states were required to demonstrate that they had in place a system to: a) measure student growth, b) use student

growth as a significant factor to evaluate teachers and principals, and, c) in addition to coaching and induction support, use student growth as the basis for teacher pay, for granting tenure, and for removing ineffective teachers. Last May, Colorado legislators rushed to enact Senate Bill 191 to establish such a system in law in hopes of strengthening Colorado's Race-to-the-Top application, which ultimately was not selected for funding by the Department of Education.

Despite its grand claims for fairness, Value-Added Methodology has serious limitations. In October of 2009, the National Academies Board on Testing and Assessment issued a rigorously reviewed letter report cautioning Secretary Duncan against the use of VAM for high-stakes purposes. VAM techniques cannot control fully for differences in student motivation and parent support and are therefore "unable to provide objective comparisons between teachers who work with different populations."

This summer I joined a group of scholars to write a policy brief explaining, "Problems with the Use of Student Test Scores to Evaluate Teachers." Our paper is available from the Economic Policy Institute. We acknowledged that the current system of teacher evaluation is inadequate and needs to be strengthened. At the same time, there is no research evidence that a test-based evaluation system will improve student achievement and quite a bit of evidence that it is likely to produce harm. The narrowing effects of test-driven curricula are well documented. Tying

teacher pay and tenure to test scores can only worsen these distorting effects, which are known to produce deadening drill, especially in low-performing schools. We likewise summarized the problems with VAM noting especially that it is normal for teacher VAM ratings to fluctuate dramatically from year to year. Of the top 20% of teachers, for example, in one recent study, only a third were ranked in the top 20% for a second year, and another third of the top teachers had moved to the bottom 40% of teachers in year two.

I am in favor of experimenting with test-based evaluation systems so that their validity can be examined. But results for individual teachers and schools should not be publicly reported. I am also in favor of evaluating teachers using more systematic and rigorous classroom observations by peers and principals along with surveys of parents and students. These data sources are important quality indicators in their own right and as validity checks on test-score gains. As a member of Colorado's Council on Educator Effectiveness, it is my hope that we can recommend a balanced set of indicators for evaluating teachers and at the same time urge that the validity of the system be evaluated before it is used to make high-stakes decisions for individuals. ■

Lorrie Shepard, Dean
Lorrie.Shepard@colorado.edu

Faculty Retreat

Collegiality, serious discussions, and lush surroundings formed the backbone for the School of Education's Faculty Retreat at the lovely Lake Shore Lodge in Estes Park, Colo. For two days in mid-August faculty gathered at the lodge to share information and solidify plans for the academic year.

Dean Lorrie Shepard kicked off the retreat with a talk on the politics of education schools. This was followed by a presentation by Professors Kathy Escamilla and Lucinda Soltero-González on issues facing English language learners and a later discussion on reputation and recruiting. The next day included teacher education planning, program area meetings, and colloquium planning. ■



Patty McDonald, Executive Assistant to the Dean, confers with Associate Dean for Research, Barry Sloane (at left), and Professor Guillermo (Willy) Solano-Flores.



Lunch at the Faculty Retreat included breathtaking views of the Rocky Mountains seen from the deck of the Lake Shore Lodge.



Bruce Alberts

Keynotes the Best Should Teach

The Best Should Teach Initiative generated a tremendous turnout this year. Nearly 300 people watched Aug. 19

as CU-Boulder faculty, public school teachers, and lead graduate teachers received awards for outstanding teaching.

The Best Should Teach Initiative is managed by the Graduate Teacher Program in coordination with the School of Education, the College of Arts and Sciences, and the Graduate School at CU-Boulder. This was the 12th year for the annual event.

Keynote speaker, Bruce Alberts, engrossed the audience with his discussion of “Science and the World’s Future.” Alberts is the editor-in-chief of *Science* magazine and Professor Emeritus at the University of California, San Francisco. He is also a United States science envoy to Indonesia and Pakistan and a former president of the U.S. National Academy of Sciences.

While encouraging changes in colleges regarding science education, Alberts praised CU-Boulder as “the national leader in driving improvements in college science education, with leadership by some of the world’s best scientists.” He called CU Professors Bill Wood and Dick McCray “nationally recognized education heroes” and praised School of Education Dean Lorrie Shepard for her research and leadership, including while she was president of the National Academy of Education.

Alberts focused on the importance of science for the success of nations and for building a better world. He extolled the “creativity, rationality, openness, and tolerance that are inherent to science,” referring to what Indian Prime Minister Nehru called a “scientific temper.”

However, he challenged that we must redefine the term science education and must emphasize “active inquiry.” Using the process of active inquiry, Alberts contended, students will become more rational human beings, “people who are able to make wise judgments for their family, their community, and their nation.”

He said that science learning that focuses on testing for science words rather than for science understanding and abilities forces a “trivialization of science education and drives most students, including many potential scientists, away from science.” He noted that a challenge of the “No Child Left Behind Act” is to develop criteria for a good test that motivates good teaching and learning.

Alberts urged educators to use scientifically obtained evidence and to focus research on the classroom. He also stressed that the nation’s best science teachers needed to have more influence in the decision-making done by school districts, states, and the federal government.

For additional information on Alberts’s views, see his *Science* editorials, “Considering Science Education” (March 2008) and “Redefining Science Education” (January 2009), among others, from <http://www.sciencemag.org> and enter his name in the search field. ■



Collaborative Strategic Reading project wins i3 grant

Professor Janette Klingner’s leadership in a project called Collaborative Strategic Reading Colorado (CSR-CO) paid off big—it was selected from 1,698 entries to receive a portion of \$650 million in grant funds in the government’s Investing in Innovation federal grant contest, known as i3.

Klingner, through the School of Education’s BUENO Center, is partnered with the Denver Public Schools and Padres Unidos for the project. CSR focuses on improving reading comprehension and content learning in diverse middle school classrooms that include English language learners and/or students who have learning disabilities.

Klingner said the program delivers extensive professional development to middle school content teachers. She explained that the project will “build capacity so that Denver Public School personnel have the knowledge and expertise to support teachers in how to implement CSR.”

In addition to professional development, “CSR-CO also provides students with opportunities to work in small cooperative groups in which each student plays a role associated with effective reading comprehension (e.g., brainstorming, monitoring understanding, and summarizing),” according to the government’s award site.

The grants were announced by the U.S. Department of Education and

are funded through the American Recovery and Reinvestment Act passed by Congress in 2009. The CSR-CO award requested \$25,202,752 in funding, of which \$4,248,610 is slated for the University of Colorado at Boulder.

The Department of Education also utilized experts from its researchers in the Institute of Education Sciences (IES) to help determine whether the applicants satisfied the evidence requirements.

School of Education Dean Lorrie Shepard said: “We in the School of Education at the University of Colorado at Boulder are tremendously proud of our partnership with Denver Public Schools and with the many ways our faculty and graduate students in the BUENO Center have worked together with dedicated teachers in Denver schools to address the needs of second language learners. Professor Klingner, who developed the Collaborative Strategic Reading project and who has led research studies of CSR over the past 14 years, has expertise in reading, in biliteracy and language development, and in special education.

“I believe we were successful in the highly competitive Investing in Innovation competition because Collaborative Strategic Reading provides rich, engaging, learning experiences with a strong focus on strategic skill development and at the same time has a strong empirical research base. CSR has been shown to be effective in well-controlled comparative studies and therefore was able to meet the stringent IES criteria for validation studies,” Shepard said. ■



Associate Dean for Teacher Education, Jennie Whitcomb (seated in center rear), presents her winning proposal to WISE members.

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2010 WISE grants

Six projects receive \$30,000

At its mid-September meeting, WISE members heard in person from faculty and a graduate student about 12 different projects in need of funding. Afterward, members discussed the proposals and voted on how to spend \$30,000 available for awards distribution. The following six projects were named the recipients of the 2010 WISE grants with \$5,000 each:

- Elizabeth Dutro: *"The Joy of Teaching with a Broken Heart: Reconsidering Difficult Experiences in K-12 Students' Lives and Relationships to School"*
- Ben Kirshner: *"Student Voice in School Reform"*
- William McGinley: *"Memoir, Performance, and the Poets of Nature Project: Integrating Visual Arts and Language Arts"*
- Monette McIver: *"The Elementary Writing Conference: Is It an Effective Instructional Strategy?"*

- Valerie Otero and Ben Van Dusen: *"Towards the Classroom of Tomorrow"*
- Jennie Whitcomb: *"Developing a Video-Based Training and Coding Manual for the Quality Urban Classroom (QUC) Observation Tool"*

WISE is a giving circle composed of alumnae and friends of the University of Colorado at Boulder School of Education. Collectively, members are fully in charge of their own philanthropy by voting on the projects and allocating their resources. WISE members donate \$1,000 for three consecutive fiscal years, for a total of \$3,000. Support goes for graduate assistantships, research, teacher education, outreach, or other special projects in the school.

If you would like to learn more about WISE, please contact Senior Director of Development, Margot Neufeld, 303-492-2990, or margot.neufeld@cufund.org. ■

WOMEN INVESTING IN THE SCHOOL OF EDUCATION (WISE) HAS GROWN FROM 18 TO 30 WOMEN.

NEW MEMBERS ARE:

Anne Arnold	Janet Orton
Tommie Atanasoff	Mary Sander
Ann Chrisbens	Karen Shay
Ruth Cline	Eloise Timmons
Arlene Heinz	C. Cristine Tovani
Susan Ieuter	Mary Tyler

When there's a will,
there's a way.

make a difference

Your will may be your way to nourish promising, bright minds. Build the educators of tomorrow. Illuminate new thinking. Spark discoveries.

dream big

So dream big. Support your passion, make a real difference, and leave your imprint on the School of Education (and, perhaps, your mark on the world) with a bequest.

To find out how easy it is to make a gift through your will, obtain sample bequest language, or learn about other planned giving options, contact Margot Neufeld at 303.492.2990 or margot.neufeld@cufund.org.

support your passion



UNIVERSITY OF COLORADO
FOUNDATION

Partnering to build the educators of tomorrow.



*Erin Marie Furtak is assistant professor in Curriculum and Instruction specializing in science education. Her work as a teacher in public schools in the Denver area inspired her to pursue a career in educational research to make reforms more attainable for science teachers. Furtak conducts classroom-based studies of practicing teachers enacting science education reforms, with an emphasis on formative assessment and inquiry-based teaching. She is a former Chancellor Fellow of the Humboldt Foundation and Research Fellow of the Knowles Science Teaching Foundation, and she was awarded a CAREER grant from the National Science Foundation. In 2009, she published a book based upon her research experiences, *Formative Assessment for Secondary Science Teachers* (Corwin).*

Learning Progressions

How making maps of content learning trajectories helps science teachers and students

As a former high school teacher, my research questions have evolved out of authentic classroom experiences. While working on my advisor's research project during graduate school, I spent a good portion of 2003-2004 visiting middle school science classrooms across the country to observe teachers enacting formative assessments to get students to share their ideas about what makes objects sink and float. The formative assessments the teachers were using were designed to foster classroom discussions at the points in the unit where students needed to have a particular conceptual understanding in order to keep learning. For example, there was an assessment about the effect of mass on sinking, and another on the effect of volume on sinking. The assessments became sequentially more complex as students moved through the unit.

The next school year, I went back to talk to a number of those same teachers about their experiences in the research project, and how it had influenced their teaching. I was surprised to learn that, while many of the teachers were only using a subset of the formative assessments from my advisor's study, many of them were deeply impacted by the progression of concepts on which the formative assessments were sequenced. In fact, through their experience in the research project, several of them felt better equipped to notice student ideas about sinking and floating (Furtak, 2009).

This experience led me to wonder how sequences of the important concepts in science might support teachers in reform-oriented science lessons, in which students ask scientifically oriented questions, collect and evaluate evidence, and communicate and share their explanations with their teacher and the class. In lessons such as these, teachers ask open-ended questions to encourage students to share their developing ideas about scientific phenomena, and then take up and work with those ideas to help students develop more sophisticated understandings. Asking questions and facilitating discussions in this way is much harder than simply ask-

ing a question and telling students they are right or wrong. It requires the teacher to have a complex understanding of the content and a deep knowledge not only of students' prior ideas, but of productive teaching strategies that could help address those ideas. Furthermore, when teachers ask open-ended questions it can feel like opening Pandora's box—the ideas students share are often surprising, convoluted, and as a result difficult to interpret on the fly.

“My interest in learning progressions lies in how they might serve as supports for teachers learning new content, to guide them in leading lessons in which students are sharing their developing ideas about a core scientific concept.”

*Erin Marie Furtak
Assistant Professor
School of Education*

For the past three years my research has involved developing new tools to support high school teachers in developing content knowledge and pedagogical skills to navigate classroom discussions designed to elicit student thinking. The research is built on the premise that, if we are able to somehow represent the knowledge teachers need to teach in this manner, and then embed this representation into a sustained professional development program in which teachers iteratively go through a process of reflecting on student thinking, developing formative activities to elicit and work with student ideas, reflect on the effectiveness of those activities, and then revise them for the following year, teachers should over time become more capable of facilitating discussions about student ideas.

The representation I am working with builds on a current innovation in science education that involves making maps of the content and practices students are expected to learn across multiple courses and grade spans. These maps are different from standards because the maps are built around single concepts in science, and map out a learning trajectory for how students' knowledge about that concept should develop in school. Science education researchers are currently putting a lot of effort into creating these maps, which are called learning progressions. Pick up any recent issue of the *Journal of Research in Science Teaching* and you will likely see the most recent learning progressions representing content from atomic molecular theory to celestial motion. The influence of this research



Erin Furtak's video camera captures a biology lesson.

eye on research

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innovation is apparent in the conceptual framework for the new science education standards, recently released in draft form by the National Research Council, which includes these learning progressions as new ways of representing standards-based science content.

However, there is also disagreement in the science education community about what kinds of content should be represented in these learning progressions, and what purpose these progressions serve in furthering science education reforms. Some argue that the learning progressions should represent how correct ideas about science should ideally develop from kindergarten through grade 12 as a way of sequencing content efficiently to guide curriculum design. Others argue that the learning progressions should start with students' prior ideas about natural phenomena and then trace how those naïve understandings develop into scientifically accurate ideas through a course of instruction (Corcoran, Mosher, & Rogat, 2009). Two National Science Foundation-funded conferences were held in the summer of 2009 to begin developing consensus on what the learning progressions are for and how to develop them. A book on the subject from researchers who presented at one of the conferences is forthcoming (<http://www.education.msu.edu/projects/leaps/>).

My interest in learning progressions lies in how they might serve as supports for teachers learning new content, to guide them in leading lessons in which students are sharing their developing ideas about a core scientific concept. In my project, I work with the concept of natural selection, which is the key to understanding biology and its unifying framework. However, students often have difficulty understanding it. For example, students often think that organisms are able to change themselves to adapt to the environment, much as Lamarck imagined that giraffes that stretched their necks to reach leaves on tall trees had offspring that also had longer necks. Similarly, students who hear the phrase "survival of the fittest" come to believe that living things always fight for access to food, and that this is the only reason that some live and others die. I chose this concept so that I could begin my research in a unit that had the potential to impact an entire biology course.

For the past two school years, I have partnered with the biology department at a high school to work with teachers to develop a learning progression representing the content of natural selection. The teachers and I have met monthly to talk about specific pieces of student work, to watch videos of each other teaching, and to develop, revise, and refine a set of formative assessments designed to get at student ideas (Furtak et al., 2010). Each year of the project I have seen students move away from the misunderstandings described above toward accurate descriptions of natural selection, and these changes have shown up as significant increases in student learning as measured by a pre- and post-test on natural selection

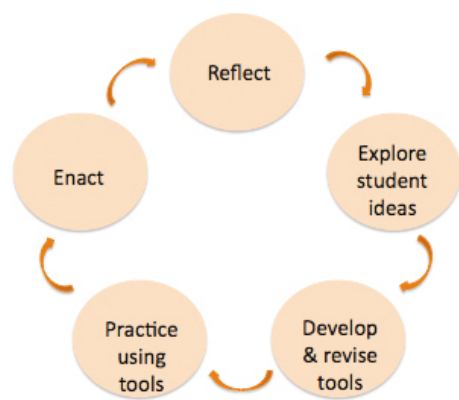
(Furtak, 2009). One teacher in the project described how she learned to pay attention to nuances in student ideas, and how to watch those ideas change through the course of the unit: "At the beginning [the students] just didn't have the language, or they were using the wrong language to describe what they were talking about. But their underlying ideas were correct, so that was kind of interesting...then I think there was some growth, some overcoming some of their ideas of the environment causing the change, or the organisms making a choice."

In addition, I have seen teachers open up their classrooms for discussions about heritability, population dynamics, variation among organisms in a population, and differential reproduction and survival. Teachers solicited student thinking through the activities they developed with their colleagues, and then related the ideas they heard to our learning progression for natural selection. Most remarkably, we have seen the teachers begin to work, talk, and plan together in new ways as they have engaged in professional development. One teacher said the experience had been personally "really great" and another noted that the most useful part of the study was "the collaboration we had, the discussions we had, because you always get good stuff usually from talking to other people, like good

ideas, or find misconceptions that you weren't really thinking about, or how to get around those things."

This summer I was awarded an early career grant from the National Science Foundation to extend this work into two additional high schools, and this fall my research team—doctoral students Heidi Iverson, Deb Morrison, and Sara Heredia—and I are in the process of getting the project up and running. The new project will follow two departments of teachers across four years, studying how the teachers' knowledge grows and changes as a result of engaging in ongoing professional development centered on the learning progression, and will also track student learning within each year of the project. We are looking forward to continuing to learn alongside these teachers how best to support them as they engage students in discussions about the core ideas of science. ■

Professional Development Model



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Student teachers thrive at Mapleton Early College

Mapleton Early College (MEC) in Denver offered the ideal setting for three School of Education students to complete their student teaching last spring. And, they did so with the benefit of another University of Colorado alumna, Sarah Park, the director of MEC, who graduated from the Master's Plus program in 2005.

Park, who left the business world to pursue her passion for education, has found an ideal fit with MEC. She describes MEC as serving approximately 64% free-and-reduced lunch students and 30% English language learners in a highly migratory population. Many of the 180 MEC enrollees who are preparing for college will be first-generation college students.

"MEC is a hybrid of Big Picture Learning and the Early College model," said Park. In this design, every student has an individualized learning plan centered around the student's interests and passions, including a professional internship and the opportunity to achieve an associate's degree concurrent with his or her high school diploma. MEC also has a focus on

personal character and community, including student-led restorative justice. MEC students learn through direct instruction in high school classes and college courses, through real-world learning at professional internships, and through student-centered project-based learning, all in the context of a strong, relationship-based school culture. "At MEC," Park offered, "I get to do all those things we learned about at CU that research shows we should do."

The three student teachers, Laura Musser, Jarrett Henson, and Danny Nagel, taught small classes in a content area, first at Boulder's New Vista High School for six months, then finalized their student teaching at MEC to develop more skills in dealing with an at-risk population.

"The student teachers get a chance to be part of a very dedicated, highly collaborative staff culture and the MEC staff gets the benefit of the student teachers' energy, motivation, and enthusiasm. The student teachers will be very well prepared to go to any school with at-risk kids and really make a difference," Park said.



Laura Musser, left, while a student teacher, chatted with Mapleton Early College Director Sarah Park.

Musser found that working in the Boulder Valley School District and then in an urban school provided an invaluable experience. She noted that she was afforded opportunities to practice and learn more about classroom management and curriculum building.

"MEC is a wonderful school that is built upon ideals I really value," Musser commented. "The staff was welcoming and supportive and wanted to give me the best, most well-rounded experience possible. The schedule was flexible so that I was able to work in a variety of settings with different students." She increased her skills in advising, working in small groups, and teaching literacy and English.

"Overall, this was a terrific experience," she said. "As I approached the job market, I was able to speak to a variety of audiences about my experiences. I felt prepared to enter any school district."

Musser accepted a position within the Boulder Valley School District at Peak to Peak Charter School upon graduation. ■

Newbery Award-winning author Avi encouraged students to write by Katie Hayes

"Writing is hard for everyone...and I mean everyone!" said Avi, award-winning author of over 70 books for children and young adults. "The hardest part is making what you write really good."

Avi, who uses only this penname, shared insights with the students in Caroline McKinney's EDUC 5265 class (Processes in Writing). He discussed some of the challenges of writing and how, despite symptoms of dyslexia and a lack of support from his family, he was able to achieve success as a writer.

Avi struggled in school and was not informed by his parents that he had symptoms of a learning disability. After failing every subject in public high school, he was transferred to a private school. In danger of failing English, his parents hired a tutor. After seeing his writing, she told him: "You're an interesting person. If you wrote better, people would know it." He said this piece of advice changed his life and helped encourage him to pursue writing professionally.

After finishing college he worked as a playwright, librarian, and greeting card designer. A publisher who was impressed by Avi's artwork encouraged him to write and illustrate a children's book. Avi's first book, *Things that Sometimes Happen*, was published in 1970 and was based on stories he told his son. Avi won the Newbery Honor Award in 1991 for the *True Confessions of Charlotte Doyle* and won the Newbery Award in 2003 for *Crispin: The Cross of Lead*.



Caroline McKinney introduces acclaimed children's book author, Avi.

Avi credited his success as a writer to his voracious love of reading. The key to good writing, he stated, is writing as a reader and engaging readers right from the start. He told the group that he has "too many ideas" and is interested in everything. Curiosity is a crucial trait for writers, he said, adding that he "sees the world as a story."

The classmates enjoyed Avi's presentation and he signed books for them afterward. Student Fran Katnik said: "Having an accomplished author come to our class and share his perspective on writing and the publishing process gave me a broader understanding of what it means to write for a living."

"Avi has been coming to speak to children's literature and writing classes that I teach for many, many years," said McKinney, "and I deeply appreciate this gift of his time and wisdom." ■

education

by James R. Sanders, LER '70

Faculty recall growth of research methods training in the CU School of Education

During the mid-1960s, the stars seemed to align to bring together a unique set of events and people that would have a lasting impact on research methods training in education at CU-Boulder and beyond. As Professor Emeritus Kenneth Hopkins recalls, Professors Daryl Sander, Harold Anderson, and others developed a position paper in 1964 making the case that the School of Education should move from a teacher-preparation emphasis to a more research-oriented posture congruent with a research university. This led to the first faculty position with primary emphasis on research methodology, a position filled by Dr. Hopkins, who arrived from the University of Southern California to begin the 1965-66 academic year.

In 1965, Dr. Hopkins was selected for a post-doctoral fellowship at the Laboratory of Experimental Design at the University of Wisconsin. This summer program was taught in part by Dr. Gene V Glass, who had just completed his PhD at Wisconsin. During their brief time together, these two young professors found that they had common interests in research and basketball.

As fate would have it, the U.S. federal government committed significant funds to support research training in education in 1965 through Title IV of the Elementary and Secondary Education Act (ESEA). In 1966, Dr. Hopkins applied for and received ESEA funds that would be used to establish the Laboratory of Educational Research (LER) and to add a second faculty position in research methodology. Hopkins offered that position to Dr. Glass in 1967; the fame of the CU research training program would soon begin to build.

The first group of eight gifted LER Fellows began in 1967. Federal fellowships continued to support doctoral students for several years before the winds in Washington changed direction, but the research training program initiated in 1966 continues today with support from CU graduate fellowships, assistantships, grants, and contracts.

What has sustained the growth and development of research training in CU's School of Education? According to Drs. Hopkins and Glass, it has been a combination of factors: engagement in "real world" research experiences by faculty and students working together through practicum and consulting activities, rigorous technical coursework, gifted students, and a closeness of faculty and students. The University of Wisconsin Laboratory

Author's Note: Many thanks to Drs. Glass and Hopkins for their willingness to be interviewed for this article, and to the following LER alumni who shared memories about their research training in CU's School of Education: Drs. Marilyn Averill, Zoe Barley, Evelyn Brzezinski, Alan Davis, Roy Gabriel, Arlen Gullickson, Ralph Hakstian, Stephen Jurs, Tom Miller, Larry Nelson, Beverly Parsons, Rory Remer, W. Todd Rogers, Robert Stonehill, Victor Wilson, and David Williams. Dean Lorrie Shepard proposed this article as a follow-up to a conversation we had at a CU football game in November 2009.



Alums and spouses from the LER era include, from left, George Kretke, Carol Willson, Vic Willson, Lorrie Shepard, Ken Hopkins, Colleen Hopkins, and Todd Rogers.

of Experimental Design (under the leadership of Dr. Julian Stanley) and Harvard University (under the leadership of Dr. Frederick Mosteller) were models for CU's LER.

Alumni from LER have become research leaders in universities, state and federal agencies, private research firms, nonprofit organizations, and as private consultants. And they in turn have become mentors for second- and third-generation researchers. Their memories of the LER experience echo those of Professors Hopkins and Glass, but also include fond feelings for the experiences provided by these two faculty mentors.

In the words of one alumnus who graduated in the early 1970s, "The lab was a wonderful place for me. It changed the direction of my life and I've benefitted greatly from it; my family has too. It is hard to encapsulate all that happened in those two years from being scared to death at the beginning to being confident by graduation. I know much of my growth was due to my peers and the faculty."

These themes were repeated frequently as LER alums reminisced. It is exciting to see that the tradition that began in 1965 continues with different faculty and students but with the same dedication to excellence in educational research training.

For the full story that includes more comments from alums, please visit: <http://www.colorado.edu/education/about/news-letters.html>. ■



Current School of Education Professor Greg Camilli, left, meets with his mentor, former LER Professor Gene Glass.

NEW FACULTY



Kevin O'Connor is Assistant Professor of Educational Psychology. His scholarship focuses on human action, communication, and learning as socioculturally organized phenomena. One major strand of research has explored the varied trajectories taken by students as they attempt to enter professional disciplines such as engineering, and focuses on the dilemmas encountered by students as they move through these institutionalized trajectories. Another strand of research has explored community organizing efforts that aim to construct new trajectories into valued futures for youth, especially those of nondominant communities. He is co-editor of the National Society for the Study of Education yearbook, *Learning Research as a Human Science*. Other work has appeared in *Linguistics and Education*; *Mind, Culture, and Activity*; the *Journal of Engineering Education*; *Anthropology & Education Quarterly*; and the *Encyclopedia of Cognitive Science*. His teaching interests include developmental psychology; sociocultural theories of communication, learning, and identity; and discourse analysis.

He earned his PhD in Psychology from Clark University in Worcester, Massachusetts, and his BA in Philosophy from Saint Joseph's University, Philadelphia, Penn. ■

views

Phil Langer, PhD, was given a recognition rose when Dean Lorrie Shepard announced his upcoming retirement at the School of Education Faculty Retreat in August. Professor Langer has inspired and challenged students at CU for four decades.



Professor Phil Langer to retire next spring

Most mornings, Phil Langer is among the first of the faculty to arrive at the School of Education. And, prior to his arrival, he has already had a thorough workout at the CU Recreation Center. He isn't bashful about admonishing others for not having completed comparable morning workouts, either. Not too bad a routine for someone who, at age 83, has served the University of Colorado for 39 years.

Although Professor Langer will maintain his workouts, he will be ending his active teaching career when he retires next spring. Langer, who specializes in educational psychology, said the impetus for teaching was stirred when he was in elementary school.

"Since I was a child of the Great Depression, teaching was considered a very sound and stable profession," he said. But, what kept him piqued to continue has deeper roots. "It's because I really like to teach. Teaching leaves you with a legacy that does not vanish. You have to tell yourself that there are people in that class whose lives you may have changed—unlike material things, a teaching legacy may exist for a long time."

Langer said he never lectured by reading his notes, although he does review them thoroughly prior to each lesson.

"I like to establish eye contact—that way I can reevaluate during the course of the lesson and do something else" if the students seem to be losing interest. He said he learned an important lesson from students, too: "that I wasn't as good as I thought I was. I think professors always like to think our students are enthralled, but students do represent a challenge. I have had students come to me and indicate that my lectures were not challenging enough or that they were too challenging. This always forces me to reinvent myself."

Langer noted that the classroom has evolved in four decades, particularly through the use of technology. He is concerned that the Faculty Course

Questionnaires (FCQ) may be misleading in that they "overemphasize the immediacy of a learning experience." Professor Langer referred to Stanley Fish (a professor of humanities and law at Florida International University) who contended the learning value may lie in the future. The FCQs unfortunately can well reflect a higher rating for a classroom approach that provided "a nice dog-and-pony show rather than the course that gave you mental bruises," Langer said, even though those bruises may eventually produce more learning that students can apply in the future.

While Langer established a real identity and sense of community at CU-Boulder teaching educational psychology at the undergraduate and graduate levels, doctoral seminars, and single-n research and instructional psychology, he also lent his expertise to special education, which is both an academic and a personal matter since he has a mentally handicapped son. He also has three daughters. Langer earned his PhD in Education at the University of Connecticut in 1957, his MA in Science Education at New York University in 1951, and his BA in Chemistry at the University of Michigan in 1948.

His leaving is bittersweet, yet he views it philosophically. When he started teaching in 1949, "I was very young and the students were my generation. As distance in the generations grows, you find yourself dealing perhaps with academic content and not fully recognizing how that relates to your students and their needs," he said. "There comes a point when you may think it's important to recognize the inevitable."

Retirement sounds full for Professor Langer. His morning workouts at the Recreation Center will give structure to his days and he also intends to continue his research and his work on several papers. Not surprisingly, he is looking forward to pursuing various other items he has been "postponing a long time."

Meanwhile, thousands of students can thank him for his dedication to teaching and know that they had the opportunity to learn from a passionate and exacting professor, mental bruises and all. ■

NEW FACULTY



Julie A. Andrew joins the School of Education as a Master Teacher in the CU Teach program. She brings an international flair, having begun her teaching career in 1986 as a chemistry teacher in Nice, France, at the American International School and then at the International Grammar School in Sydney, New South Wales, Australia. She is also fluent in French and has traveled extensively in

Southeast Asia, including Vietnam, Laos, Myanmar, Thailand, Malaysia, Indonesia, and Nepal, as well as bicycled in New Zealand and Australia. She began teaching in the U.S. in 1993. She has worked at several schools in the Boulder Valley School District (BVSD), including Centaurus High School and Monarch High School, been employed by the BVSD as a science coordinator, and was an Honorary Instructor at the University of Colorado at Denver, where she taught various chemistry classes and coordinated the CU Succeed Silver Chemistry Program for area high schools.

Andrew earned her Graduate Diploma (equivalent to an MA in the U.S.) in computer science in education from the University of New South Wales, Australia, and her BA in chemistry from Carleton College, Northfield, Minn., where she completed the teacher certification program. ■

NEW FACULTY



Penny Scott-Oliver brings her experience as a clinical professor, classroom teacher, and teacher mentor to her new role as the School of Education's Partners in Education (PIE) Coordinator. For the past three years, Scott-Oliver has been an induction mentor and staff developer for the Boulder Valley School District, where she mentored approximately 45 novice elementary teachers and facilitated professional development experiences

in literacy education for colleagues. She was a Clinical Professor and district induction program administrator for Boulder Valley Schools from 2001-2007. In her role as Clinical Professor, she taught literacy and social studies methods classes for preservice teachers as well as literacy and second-language acquisition classes for preservice teachers in the Master's Plus/BUENO Center program cohort at CU-Boulder. She also coached teachers enrolled in the PIE and other programs during this time. Her additional teaching experience includes 22 years as a classroom and ESL teacher. She was honored with the Best Should Teach Gold Award by the School of Education in 2007 and the CU-LEAD Alliance Faculty Appreciation Award in 2005.

She earned her BS degree from CU and returned to earn her MA in Instruction and Curriculum in the Content Areas, including her Professional Teaching License Endorsements in reading, K-12 and ESL, K-12. ■



Dr. Protopsaltis shared his bicultural background and discussed policy issues with students at the CAMP orientation.

education

Polis aide talks at CAMP orientation

Spiros Protopsaltis, senior policy advisor to Congressman Jared Polis, spoke at the College Assistance Migrant Program (CAMP) orientation at Aims Community College, Ft. Lupton, Colo., in mid-August.

Protopsaltis drew rapt attention as he shared his personal experiences as a Greek-American bicultural college student, second language learner, and public servant, providing a warm glimpse into his background. He also explained efforts by the current administration to help make college affordable for the average student and discussed the funding appropriations procedures in Congress that guide CAMP funding.

"It's wonderful to see how the federal education funding that Congressman Polis fights so hard for in Washington helps these first-generation college students pursue their dreams," said Protopsaltis. "Education is the key to success,

but without effective programs such as CAMP, many qualified students cannot afford to go to college. My visit provided further evidence of the need for strong financial aid policies targeted at low-income students and I applaud CU's School of Education and its CAMP-HEP teams for their outstanding work to expand college access and success."

CAMP Director Tammy Molinar-LeBlanc said that the School of Education's BUENO Center CAMP and High School Equivalency Program (HEP) directors visit Congressman Polis's office annually in Washington, D.C. Congressman Polis represents 718,000 residents in Colorado's second congressional district.

"We are excited that our program is getting this attention and that Dr. Protopsaltis took time out of his busy schedule to visit with our CAMP students," said Molinar-LeBlanc. "It is wonderful to be recognized by Congressman Polis's office

for the work we do for the Office of Migrant Education, the BUENO Center, and especially for our CAMP students. Dr. Protopsaltis has been a great advocate in the appropriations process, and always welcomes our Capitol Hill visits each July. We appreciate his support to keep the funding for the HEP and CAMP grants a priority in this administration's agenda. I am sure that he will continue to inform Congressman Polis of our positive work and the inspirational stories of our migrant students."

There were 37 new CAMP students (2010/2011 cohort) and various CAMP staffers in attendance: Molinar-LeBlanc, Director; Robert Garcia, Coordinator; Cristina Antillón, Recruiter/Retention Specialist; and Liliana Vazquez, Graduate Assistant; as well as the Ft. Lupton Campus Dean, Heather Lelchook. Four CAMP alumni spoke on a panel. ■

Launching NEPC Education research at the forefront

Experts and researchers from across the United States announced the establishment of the National Education Policy Center (NEPC) in September. NEPC addresses the demand for education research at its highest level. Housed in the School of Education at the University of Colorado at Boulder, NEPC (nepc.colorado.edu) stands at the forefront of efforts to bring the highest-quality education policy research to bear on policymaking and public understanding of key schooling issues.

"We are launching NEPC at an important time for American education research and policy," said Kevin Welner, NEPC director and professor at the University of Colorado at Boulder. "The National Education Policy Center brings together some of the most important



education research and analysis currently being conducted across the nation and around the world."

NEPC brings together work that has been done previously by two organizations—the Education and the Public Interest Center (EPIC) at the University of Colorado at Boulder and the Education Policy Research Unit (EPRU) at Arizona State University.

Those organizations drew on the expertise of 97 researchers from across the country, who now join NEPC as Fellows committed to helping improve public education through research and analysis.

"The national demand for education reform and improvement makes it more important than ever that policy be based on reliable research," Welner said. ■

KUDOS

FACULTY

Greg Camilli, **Kathy Escamilla**, **Kris Gutiérrez**, and **Margaret LeCompte** were chosen as Fellows of the American Educational Research Association.

Anne DiPardo is president-elect of the National Conference on Research in Language & Literacy and Chair of the National Council of Teachers of English Research Forum.

Elizabeth Dutro received a grant from the CU Office of Diversity, Equity, and Community Engagement for Implementation of Multicultural Perspectives and Approaches in Research and Teaching. She also received grants from the Center for Advancement of Research in the Social Sciences and CU Outreach to continue her collaborative project, "Teacher Research for Equity and Opportunity," with **Andrea Bien** (third-year doctoral student, Literacy Studies) and several K-12 teachers from CU's partner districts.

Five School of Education faculty received Outreach Awards for 2010-2011: **Elizabeth Dutro** for "Classroom Advocacy in Action: TREO Teachers Identifying Practices Toward Equity in Diverse Classrooms," **Jeffrey Frykholm** for "Helping Teachers Implement the Haitian National Math Curriculum," **Erin Furtak** for "Professional Learning

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KUDOS Current news of faculty, students, and alumni

as Leadership: Building Capacity in High School Biology Teaching,” **Kris Gutiérrez** for “Challenging the ‘In and Out’ of School Dichotomy: Building New Communities for the 21st Century,” and **William McGinley** for “The Art of Composing a Life.”

Margaret Eisenhart was awarded two new research grants from the National Science Foundation. One, “Diverse Women Traveling Pathways to STEM,” allows her to follow the college careers of the young women she first worked with as high school students in Denver. The second, “Implications of High School Opportunity Structures, Figured Worlds of STEM, and Choice of Major and College Destination,” focuses on differences across Denver-area public high schools in the opportunities they provide for students to develop STEM interests.

Erin Furtak has received an early career grant from the National Science Foundation that supports Furtak’s research on improving teachers’ understanding of natural selection.

Margaret LeCompte had *Designing and Conducting Ethnographic Research*, which was written with Jean Schensul, published by Altamira Press of Rowman and Littlefield Publishers. It is the second edition of the first book in the seven-book series, *The Ethnographer’s Toolkit*. Four of the remaining books of the second edition are expected to be published in January.

Linda Mizell was recognized as one of the area’s “Champions of Higher Education” for outstanding contribution to Black students and Black communities in Colorado by the Colorado Black Round Table.

Michele Moses had the following article published: Moses, M. S. (2010). Moral and Instrumental Rationales for Affirmative Action in Five National Contexts. *Educational Researcher*, 39(3), pp. 211-228.

Valerie Otero has a personal essay in the CU alumni magazine, the *Coloradan*, which highlights her journey from her childhood in Albuquerque, N.M., to her position as tenured faculty: <http://www.coloradanmagazine.org/2010/08/22/struggling-with-the-college-equation/>.

STUDENTS

Erin Allaman, Educational Foundations, Policy, and Practice graduate student, was selected to present her study of Mexican youth in Colorado and Mexico at the Promising Young Scholars Symposium of the American Anthropological Association in November 2010.

Kate Allison, a PhD candidate in the Research and Evaluation Methodology program, was selected for a 2010 Education Pioneers Summer Fellowship. Education Pioneers is a national non-profit that awards summer fellowships to graduate students to work in urban school districts.

School of Education teacher candidate **Brittney Barickman** has been selected as a 2010 Biology Fellow of the Knowles Science Teaching Foundation.

The Association for Institutional Research awarded Research and Evaluation Methodology doctoral candidate **Matthew Gaertner** a Dissertation Fellowship. The fellowship funds Gaertner’s research on class-based affirmative action in undergraduate admissions at the University of Colorado at Boulder.

Darrell Jackson, Educational Foundations, Policy, and Practice PhD candidate, was awarded an American Educational Research Association Minority Dissertation Fellowship in Education Research for 2010–2011.

David Meens, PhD student in Educational Foundations, Policy, and Practice, has won the Stahl Prize from the CU Philosophy Department for his work resulting from a 2009 trip to Mexico as part of the INVST Community Leadership Program.

PhD candidate **Kristen Pozzoboni** was awarded a 2010-2011 Graduate School Dissertation Completion Fellowship.

Ian Renga was awarded the Elizabeth A. Wilson Scholarship from the School of Education. He is a second-year doctoral student in Curriculum and Instruction.

Amy Subert and **Darrell Jackson**, PhD students in Educational Foundations, Policy, and Practice, were awarded the Beverly Sears Graduate Student Grant from the Graduate School.

ALUMNI

Joslyn Cohen was hired for a biology position at Peak to Peak Charter School in Lafayette, Colo. She completed her student teaching in the fall of 2009 and is a candidate for her MA+ in Instruction and Curriculum–Secondary Science.

Mark Lewis, a former doctoral student in Literacy Studies, recently accepted a position as assistant professor of Literacy Education at Loyola University Maryland in Baltimore.

The Boulder Faculty Assembly announced that one of its 2010 four awards for excellence



Alumna **Deidre Ray** approached a unique opportunity with a “why not” attitude when she agreed to a one-year teaching contract with the Northwest Arctic Borough School District for the 2010-2011 school year. She now lives in Kotzebue, Alaska, and teaches 21 first grade students at June Nelson Elementary School. Most of her students are Alaskan Inupiaq natives.

She noted, “I am learning so much about being a teacher. Classroom management is the hardest part of the classroom—and it is not any easier up here. But school here is a safe haven for kids who have often come from a broken and struggling home life. So it is my job to produce a safe, engaging, and meaningful learning environment for these students.”

Ray earned her bachelor’s in communication in December 2009 and completed her student teaching and licensure requirements the following spring.

“I hope to test my boundaries and find my limits. The school has so much to offer—it has every piece of technology I could dream of, a student population of nearly all ESL students and a completely different culture from what I am used to. I hope to embrace these challenges and learn from them. It could not possibly be more rewarding.” ■

in teaching was awarded to **Mary Nelson**, a 2005 PhD graduate of the School of Education Research and Evaluation Methodology program. She is an assistant professor in Applied Mathematics at CU-Boulder.

The Association of Test Publishers awarded **Stuart Kahl**, PhD, the 2010 ATP Award for Professional Contributions and Service to Testing. Kahl is the CEO and co-founder of Measured Progress.

Brian Sevier, **Allison Sampish**, and **Katie Webb**, along with co-author Maria Barnes, had an article, “Story Quilts: Communicating Content and Creating Connections,” published in *Social Studies and the Young Learner*.

Beth Arnold retired after 30 years of teaching in the Boulder Valley School District, including 26 years at Coal Creek Elementary School that included teaching 3rd, 4th, and 5th grades as well as serving as the assistant principal. She also taught at Burke Elementary, Kohl Elementary, and Flatirons Elementary Schools.

We are always eager to hear what our alumni are doing. Send your news, including updated contact information, to Barbara.Darling@colorado.edu. ■

Lorrie Shepard receives Distinguished Professor award



Lorrie Shepard (holding her Distinguished Professor plaque) is joined by, from left, her husband, Physics Professor Jim Shepard; Distinguished Professor Margaret Eisenhart; and CU-Boulder Chancellor Philip DiStefano.

Dean Lorrie Shepard, PhD, was among three professors awarded the university's highest faculty honor, designation as Distinguished Professor, by the University of Colorado Board of Regents. The recipients were nominated by an academic committee of their peers. The other two recipients announced Sept. 17 are Zoya Popovic, PhD, and Margaret Tolbert, PhD, also from the University of Colorado at Boulder.

Distinguished Professors are leaders in their fields and are recognized for their outstanding contributions in teaching, research, and distinguished scholarship or creative work. To date, 56 professors across the CU system hold the title. Two other School of Education faculty members previously received the honor: Margaret Eisenhart, PhD, and Robert Linn, PhD.

Shepard is dean of the School of Education and a professor of statistics, research methods, and testing and assessment policy. Her research focuses on psychometrics and the use and misuse of tests in educational settings. Dean Shepard has previously served as president of the National Academy of Education, the American Educational Research Association, and the National Council on Measurement in Education. She is the only person to have served as president of all three associations.

Recommended by Vice Chancellor for Research Stein Sture, Shepard was lauded for her exceptional 36-year career, along with the 3,000 citations of her scholarly work by other researchers and her service commitment to the Boulder campus through a variety of committees. ■

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