SUMMER 2007

education views

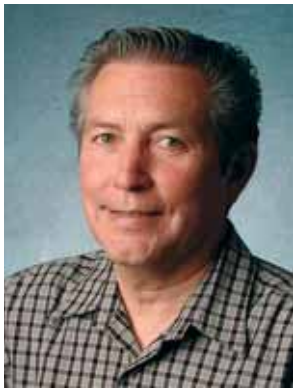
UNIVERSITY OF COLORADO AT BOULDER SCHOOL OF EDUCATION

BUENO Founder Receives High-Profile Award

BUENO's far-reaching impact has changed thousands of lives.

Professor Leonard Baca is no stranger to the awards scene, and he's done it again. This time Baca earned a Business Social Responsibility Award in memory and honor of Dr. Martin Luther King Jr. for his extensive contributions to multicultural education.

At a special luncheon titled "Celebrating Content of Character" held January 12 at the Denver Performing Arts Center, businesses, non-profit organizations, and individuals such as Baca were recognized for their commitments to the values and legacy of Dr. Martin Luther King Jr.



Professor Leonard Baca

Speakers and presenters included Governor Bill Ritter, Mayor John Hickenlooper, journalists Tamara Banks and Ernie Bjorkman, US Bank President Hassan Salem, and the Reverend Samuel Billy Kyles. Proceeds from the event were donated to the Colorado Scholarship Coalition, the agency awarding Martin Luther King Jr. scholarships to deserving youth.

A leader in higher education for over 35 years, Baca is the founder and executive director of the BUENO Center for Multicultural Education, one of the nation's most widely known technical resource centers. It is designed to improve educational opportunities for culturally and linguistically diverse students through teacher training and research projects.

Established in 1976 with only Baca on staff, BUENO has now grown to include 20 staff members and has generated $57 million in private and federal funding.

Under Baca's direction, BUENO's far-reaching impact has changed thousands of lives. Center programs have helped more than 10,000 migrant farm workers earn high school equivalency diplomas, provided assistance to 1,200 bilingual and English as a Second Language teachers, supported 400 paraprofessionals earning AA and BA degrees, and funded 200 migrant workers in college programs. The center has also supported 90 doctorates in bilingual-multicultural education.

Concerned about the large numbers of bilingual students placed in special education in the 1970s, Baca pioneered a new field of research: Bilingual Special Education. "Professor Baca is known nationally as the father of bilingual special education," according to Dean Lorrie Shepard. "By working at the intersection of these two areas, he has addressed both the over-identification of second-language learners and the failure to serve true special needs children who are non-English speakers."

Baca is currently the co-principal investigator for a research grant from the U.S. Department of Education to study the Spanish version of the Colorado Student Assessment Program, or CSAP, and has authored numerous articles and books. His book, *The Bilingual Education Interface,* is required reading in many college and university classrooms.

The Martin Luther King Jr. Business Social Responsibility Award is sponsored by 15 Front Range chambers of commerce and other partnerships, councils, and bureaus.

Baca's co-recipients included Alex Cranberg, Margaret RedShirt Tyon, Rachel B. Noel, Civil Technologies, Inc., Quest Communications, and the Colorado Housing & Finance Authority.

Students in BUENO's College Assistance Migrant Program (CAMP) assemble at the School of Education to attend a scholarship workshop.

Colorado
University of Colorado at Boulder

Message from the Dean

The purpose of this newsletter is to stay in touch with our alums. Please send an e-mail if you would like to know about a favorite professor or tell us about your accomplishments. We would love to hear from you.

There's been a lot of talk lately about tenure and the university's standards for awarding tenure. The process that faculty members must go through to receive tenure and promotion is rigorous. I can update you with specific examples highlighting the qualities of our current faculty evident in the review process.

Tenure reviews occur during an assistant professor's seventh year. In addition, a comprehensive review is conducted in the fourth year that mirrors nearly all of the aspects of the tenure evaluation. Each faculty member prepares a dossier including detailed statements explaining their work in teaching, research, and service; student evaluations from their courses; and copies of their publications. CU requires "multiple measures of teaching," so in addition to student evaluations, faculty also conduct peer observations of teaching and phone interviews with former students and advisees.

For tenure and promotion, faculty dossiers are reviewed by six or more scholars at other universities who write confidential evaluations of the candidate's work. All of these materials are then reviewed by a faculty Evaluation Committee, the faculty, a dean's level review committee of faculty from other units on campus, the dean, a campus faculty committee, the provost, and the chancellor. At each stage a vote is recorded and reported back to the candidate. This year the School of Education had four faculty members who successfully passed comprehensive review and two faculty members who were promoted to full professor.

Derek Briggs was successfully reappointed as assistant professor in research and evaluation methodology. His research has focused on Value-Added Modeling and the development of diagnostic assessments based on underlying learning progressions. Fittingly he won AERA's Mary Catherine Ellwein Outstanding Dissertation Award in 2004.

Elizabeth Dutro works in schools serving high concentrations of poor and minority children. She studies the development of children's identities and the ways that classroom literacy practices can create greater opportunities for participation. Professor Dutro also works at the policy level, studying the ways that state content standards in literacy lead to changes in district-level curriculum and teacher professional development. She was reappointed as assistant professor in literacy.

Susan Jurow was reappointed to her joint position in educational psychology and instruction and curriculum. Professor Jurow studies how students learn disciplinary content in math and science and how they develop identities of competence in that content. She is also highly skilled in qualitative methods and discourse analysis and helped to develop our new PhD core curriculum courses in qualitative methods.

Brian Sevier, reappointed as assistant professor in social studies, is also an expert in educational history and gender studies. He has studied anti-racist curriculum from the 1950s and the normative challenges faced by male teachers in elementary classrooms. Most importantly, he uses his own classroom to examine how teacher educators can better prepare future elementary school teachers to work with diverse school populations through service learning and social action projects.

Historian of education, Ruben Donato, was promoted to full professor. An award-winning teacher, Professor Donato is also widely recognized for his first book, *The Other Struggle for Equal Schools: Mexican Americans During the Civil Rights Era,* which documents how Mexican American parents fought for equal educational opportunities. His most recent book focuses on *Mexicans and Hispanos in Colorado Schools and Communities, 1920–1960.*

Janette Klingner is a nationally recognized expert in three fields: special education, bilingual education, and reading. In voting to promote her to full professor, the campus committee said they were "stunned" by her productivity: books in 2005 and 2006, 5 books in press, 8 book chapters with 5 in press, 25 articles with more in press. More importantly, Professor Klingner draws powerful connections between theory and practice and speaks directly to teachers with much of her work.

Obviously, I am proud of the wonderful faculty in our community and pleased that they so admirably meet the university's standards.

Lorrie Shepard, Dean
Lorrie.Shepard@Colorado.edu

Counterclockwise from top: Derek Briggs, Elizabeth Dutro, Brian Sevier, Janette Klingner, Ruben Donato, Susan Jurow.

Making a Difference

Faculty Give Teaching Scholarships

Collectively they've given almost 90 years of their professional lives to improving teaching and learning, and now they have found one more way to make a difference in the lives of education students at CU-Boulder. Jacalyn Colt and Jaye and John Zola have recently established scholarships to ensure that teacher candidates are supported in their endeavors.

Colt and her husband, Jim, had been giving Christmas gifts to relatives for years when they decided to try something different. "This wasn't working for us," Colt said, "so we started giving named contributions to other organizations instead." This approach to gift-giving evolved into a scholarship named for Colt's mother, Jeanette L. Dooley, in 2006.

As the literacy coordinator for St. Vrain Valley Schools until her retirement last year, Colt saw a need to improve literacy instruction in high-poverty schools. The scholarship targets practicing teachers at Spangler and Rocky Mountain elementary schools in Longmont and pays full tuition, fees, and books in the CU-Boulder master's degree/endorsement program in K-12 literacy. In exchange, the teachers agree to stay in those schools for at least three years.

In designing the scholarship terms, Colt addressed a serious issue facing schools today: keeping good teachers in the profession, especially in the schools where they're needed most. "We want to keep experienced, high-quality teachers at these schools," Colt said. "Keeping good teachers is the key."

Four teachers are currently supported through the Jeanette L. Dooley Scholarship.

Colt is part of the School of Education literacy faculty and currently teaches two courses in the master's degree program.

John and Jaye Zola travel extensively and consult with teachers worldwide. Here, they enjoy a break rug shopping in Bahrain.

Jackie & Jim Colt (far left and far right) celebrate with Jeanette L. Dooley scholarship recipients Jodie Cooper and Christy Bashor.

Also regular instructors in the School of Education, Jaye and John Zola decided to show their appreciation. "We wanted to do something to thank the School of Education for providing us the opportunity to teach prospective teachers," they commented. "This has been a very powerful and important part of our professional lives."

The Zolas's scholarship, due to take effect next fall, assists social studies teacher candidates during their student teaching semester, when financial need is highest.

"We want to support new social studies teachers who, we hope, will continue our efforts to make the subject engaging and meaningful for young adults," they said. "We also hope to support teacher candidates who are under-represented in the teacher ranks."

As master teachers and leaders in the field of social studies, the Zolas have high hopes for their scholarship recipients. "We hope that they will, in fact, bring social studies alive in their classrooms in an effort to create engaged citizens who understand their roles in our democracy," they said. "Too often, social studies is seen as merely a collection of trivia. It should be one of the most engaging and exciting disciplines in the school day. We hope that recipients will make a commitment to active, authentic, and student-centered instruction."

Jaye and John Zola have taught in both middle and high schools, and for nearly 10 years they job-shared while raising their two sons. Jaye Zola spent the last few years of her career as the head librarian of Boulder High School. For the past three years, John Zola has split his time between directing the Partners in Education (PIE) Program at the School of Education and teaching social studies at New Vista High School.

If you would like to learn more about supporting the School of Education, contact Margot Neufeld, director of development at 303-492-2990 or margot.neufeld@cufund.org.

Fulbright Awards Link Faculty to International Communities

Associate Professors Michele Moses and Jeff Frykholm have received Fulbright Fellowships to share their work internationally and to exchange ideas with scholars around the world.

Moses was recently named a 2007–08 New Century Scholar. This arm of the Fulbright Scholar Program brings 36 top international scholars together to collaborate on important global issues, 12 from the United States and 24 from other countries.

Fulbright Fellowship recipients Jeff Frykholm and Michele Moses extend their work to international audiences.

Moses's own academic interests and accomplishments are a perfect match for this year's theme, "Higher Education in the 21st Century: Access and Equity." Her work focuses on educational equity issues related to diversity and poverty, such as affirmative action and welfare-to-work policies. In her book *Embracing Race: Why We Need Race-Conscious Education Policy,* Moses studies moral disagreements over controversial United States education policies and the relationship between moral disagreement and theories of justice.

As a New Century Scholar, Moses will study cultural and societal norms that affect access and equity. She is conducting a comparative analysis of affirmative action in Brazil and the United States and will spend two or three months in Brazil this summer.

Moses and other program participants will meet three times this year in collaborative work groups and write policy briefs and white papers on access and equity issues worldwide.

Moses is an associate professor in educational foundations, policy, and practice within the School of Education, and is affiliated with the Education and the Public Interest Center. She specializes in philosophy, education policy studies, and ethics.

Frykholm's knowledge of cutting-edge mathematics curricula and teacher development earned him a Fulbright Scholar award in Santiago, Chile, as a resident math educator at La Universidad de Los Andes.

He accomplished a lot during his nine-month stay. He team-taught Mathematics Content for Teachers and Elementary Mathematics Methods courses, conducted two seminars for 60 public school teachers on number sense, supervised six master's theses, and re-designed the entire mathematics stream for the teacher education program.

Of course Frykholm, too, benefited from the exchange. "I learned that a lot of the problems are the same [as in the United States]," he said. "Getting highly qualified teachers, preparing those people, and keeping teachers in the field are huge problems. There is so much education to be done there. There are wonderful people who think very deeply, but the issue is one of practice. How do you bridge between the ideas they know and what they can do? They have to live with a national curriculum, huge classes, and a lack of resources."

If his own record is any indication, Frykholm is sure to keep seeking answers to those questions. Well known as an exceptional teacher, researcher, and school consultant, Frykholm's work includes the integration of mathematics and science, the impact of reform-based mathematics curricula on teachers' beliefs and practices, and teacher professional development.

Frykholm recently completed a NASA-funded, integrated research and development project titled *Earth Systems Connections.* He is also a co-investigator on a five-year Interagency Education Research Initiative (IERI)-funded project, Supporting the Transition from Arithmetic to Algebraic Reasoning (STAAR), that investigates the teaching and learning of algebra in the middle grades.

The Fulbright Scholar Program for faculty and professionals is administered by the Council for International Exchange of Scholars (CIES) under an agreement with the U.S. Department of State.

SUMMER 2007
SEVENTH IN A SERIES
eye on research

Creating Coherent Formative and Summative Assessment Practices

by Lorrie A. Shepard

New ideas about how to use formative assessment in classrooms to enhance student learning must confront the ominous presence of summative assessment and grading. Because of the paramount importance of grades, students worry about what will be on the test rather than thinking about learning. They finish assignments to "be done" and don't expect to use this knowledge again. Worst of all, they've learned to pretend competence and hide their confusion from the teacher. Teachers likewise worry about having a point system that can be defended to students and parents, rather than seeing assessment as a means to illuminate learning goals and further deep understanding.

Recent research has shown that formative assessment can be a powerful tool to improve learning (Black & William, 1998). But to realize the full potential of formative assessment requires a fundamental shift in how learning goals are represented and how assessment insights are used. To create a learning culture (Shepard, 2000) instead of a grading culture, students have to know why what they are studying is important and how it connects to things that they've studied before. They need to gain experience talking about their thinking and trust that their teacher's questions are intended to help them learn.

Using sociocultural theory in classrooms

According to sociocultural theory, children develop cognitive abilities through social interactions that let them try out language and practice their reasoning. Instead of being born with an IQ of a certain size, children become "smart" through what Barbara Rogoff (1990) calls an "apprenticeship in thinking." In various learning contexts—talking at the dinner table, helping in the kitchen, doing math in classrooms—learners have both expert models and supports from adults or peers to enable them to participate in that activity. This process of providing support to help the learner attempt and then master increasingly complex tasks is called *scaffolding*.

The steps in formative assessment are closely tied to the idea of scaffolding and Vygotsky's (1978) zone of proximal development (ZPD). The ZPD is the space between the student's actual level of mastery, where he or she can perform independently, and the level of potential development where he or she can perform with help from adults or in collaboration with peers. Similarly, Sadler (1989) offered a model of formative assessment where the learner has an understanding of the goal, is aware of his or her present level of performance, and then takes action to close the gap.

Specific formative assessment strategies

In addition to the general notion that formative assessment is used to "form" and "inform" learning, there are specific formative strategies that have a solid foundation in learning theory and cognitive research.

Prior knowledge assessment. Learning occurs when students make sense of new experiences and ideas and connect them to what they already know. Effective instructional strategies, therefore, build on what students already know. However, this means knowing more than students' *scores* on a pretest. Engaging with students' relevant knowledge requires a *qualitative* understanding of students' existing conceptions. What words do they use to describe a phenomenon? How is "coherence" in writing like "cohesion" in chemistry? What have they learned about this topic in school? What do they know about it in real life?

Feedback. We know that feedback is essential for learning, but surprisingly, in a comprehensive synthesis of 131 studies, Kluger and DeNisi (1996) found that one-third of feedback studies showed negative effects. According to Kluger and DeNisi, positive learning outcomes are more likely when feedback focuses on features of the task—such as how the student can improve in relation to the standards—and emphasize learning goals instead of lavishing non-specific praise or making normative comparisons.

Teaching for transfer. A goal of learning is for students to be able to apply their knowledge in new contexts. Yet, this is often difficult for novices because their knowledge is fragmented and tends to focus on the surface features of problems. By contrast, experts have deeper and more principled understanding. Just as prior knowledge techniques are intended to help students "be more metacognitive" about their use of knowledge resources, teaching for transfer also makes metacognitive goals explicit by asking students to talk about how and whether they understand the principle that can let them generalize from one application to the next. "What do we already know about fractions that can help us understand decimals?" or "How is learning about ratios and proportions the same as—and different from—learning about fractions?"

Relevant to the idea of transfer is students' often narrow conception of what makes a test *fair*. A famous example is the physics student who

Cognitively-Based Formative Assessment Strategies	
Prior Knowledge Assessment	When students share what they know about a topic when starting a unit of study, they learn that it helps to think about what they already know when trying to solve a new problem.
Feedback	Focusing on features of the task, such as how to improve in relation to criteria and emphasis on learning goals, results in positive learning outcomes. Lavishing non-specific praise or making normative comparisons undermines learning.
Teaching for Transfer	Talking about how and whether students understand the principle can help them generalize from one application to the next. A wide range of questioning in the classroom helps make students more comfortable in the face of extensions, applications, reformulations, and connections.
Self Assessment	Students must think about and apply criteria in the context of their own work and thus learn to self monitor and take responsibility for their own learning.

complained that the class hadn't yet learned how to calculate the depth of a well (given the time it takes for a penny to reach the bottom) despite having practiced numerous problems with pennies dropped from the top of a building. While it would be unfair to surprise students on a test with the first extensions and applications of what they had learned before, it is not unfair to ask for applications that are within the range of transfer tasks that are routinely practiced in class.

Self-assessment. Student self-assessment is not about saving teachers from the work of grading papers. In addition to acquiring specific knowledge and skills, becoming competent in a field of study means learning and internalizing the standards by which others in the discipline judge performance. The process of self-assessment requires students to think about and apply criteria in the context of their own work. In so doing, they make sense of and come to understand what the criteria mean in a deeper way than if they merely read posted grading criteria. This kind of supported practice, where students learn strategies to monitor their own learning, helps develop students' metacognitive abilities. At the same time, self-critique can increase students' responsibility for their own learning and make the relationship between teacher and student more collaborative.

Grading That Supports Learning

- Make sure that grades are faithful representation of learning goals.
- Spell out what evidence of understanding looks like.
- Focus instructional activities and assessments on rich and authentic tasks.
- Emphasize the value of increasing one's skill and participation in an endeavor.
- Focus on achieving competence: create a learning environment that is intrinsically motivating and engaging for students.
- Allow students to apply what they learn from feedback: review how earlier assignments are relevant.
- Avoid "compliance grading": using points to control behavior.
- For students who struggle, allow more time, intermediate goals, and differential scaffolding.
- Instead of extra credit, unrelated to student mastery, allow replacement assignments or throw out poor scores when learning is verified by later assessments.

Rich embodiment of learning goals

Assessment cannot promote learning if it is based on tasks or questions that divert attention from the real goals of instruction. Historically, traditional tests have often misdirected instruction, if they focused on what was easiest to measure instead of what was important to learn. Similarly, all of the nurturing and insightful formative assessment processes thus far envisioned will be undone if learning activities encourage rote learning or if grading practices misdirect effort. To be mutually supportive, formative and summative assessments must be conceptually aligned. They must do a good job of representing important learning goals and should use the same range of tasks and problem types to tap students' understandings. Summative assessments can be thought of as important milestones on the same learning trajectories that undergird formative assessment.

Summative assessment and grading

Keeping instructional activities and assessments focused on rich and authentic tasks and making sure that grades are faithful representations of achievement are the first requirements for a grading system that supports learning.

Just as important as content, however, is the effect of grading practices on motivation and interest. The use of grades as rewards contributes to what Lave and Wenger (1991) termed the "commoditization of learning" (p. 112). When there is no "cultural value" for increasing one's skill and participation in an endeavor, the only reason to participate is to obtain surface knowledge that can be displayed for evaluation. As explained by Stipek (1996), rewards work to decrease intrinsic motivation when they are perceived as controlling and are not directly related to successful performance. Consistent with the positive findings from research on feedback, rewards or praise that convey *positive information about competence* are more likely to increase intrinsic motivation.

Thus, both the cognitive and motivation literatures argue for a standards-based grading system that focuses on achieved competence. Unfortunately, this recommendation is inconsistent with data showing that most teachers, at least in the United States, tend to also consider effort, improvement, ability, and behavior when determining grades. Often grading practices reflect what I call "compliance grading" such as points given for turning in homework or even giving points for bringing a pencil to class. Teachers also tend to adopt safety-net or peacekeeping mechanisms such as extra-credit points that typically do not connect back to the original learning goals.

To create a grading system focused on attainment of learning goals and at the same time allow for the learning potential of formative assessment, teachers may literally have to abandon micro-managing point systems. To help students stay focused on substantive feedback, teachers may need to postpone giving grades or use only student self and peer assessment and, when needed, provide "as if" grades if students are worried about how they will eventually measure up to standards. Importantly, for formative assessment to contribute to learning it must occur in the midst of learning. That means that when pieces of work are evaluated there must be subsequent occasions for students to apply what they learned from feedback. This could be accomplished either by allowing time for revision or by making transparent in subsequent units how earlier assignments are relevant (in prior knowledge conversations, for example).

In heterogeneous classrooms, grading in terms of mastery standards will require other support systems for students of different abilities. These could include strategies such as differential pacing for learning and timing of formal assessments; identification and assessment of intermediate, attainable goals; and differential scaffolding. If taken seriously, the commitment that grades represent attainment of learning goals would mean doing away with compliance grading, like giving points for turning in note cards. Instead, the benefits of assignments that enable performance on culminating assignments should be made transparent for students. Rather than allowing mindless extra-credit points, better ways to soften student worries about grades would at the same time provide opportunities for students to demonstrate mastery—e.g., replacement assignments and replacement tests or throwing out poor test scores when learning is verified by later assessments.

Ultimately our goal is to develop a learning culture where the normative practices in the classroom make it normal and customary to learn from mistakes, to critique one another so that our reasoning can improve, and to develop in students a clear, internal sense of pride and accomplishment on the occasions when summative demonstrations of achievement are needed.

Note

Adapted from Shepard's article by the same name in *Orbit: OISE's Magazine for Schools,* 36(2), 2006, and from the original work in Shepard, L.A. (2006). Classroom assessment. In R. L. Brennan (Ed.), *Educational measurement* (4th ed.). Westport, CT: Greenwood Publishing Group.

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Science Educator's Influence Spans Decades

After 43 years in science education (42 of them at CU), professor Ron Anderson is retiring. Students and colleagues know him as a proponent of innovative, reform-based science teaching, a professional commitment that has not waned since he held his first academic post in 1964 at Kansas State University.

Anderson's research, teaching, and service have touched thousands of students, practicing teachers, and colleagues. His signature style has been to help educators develop both research-based and personal approaches to becoming the best teachers possible.

Former student Paul Stecina said that he wouldn't be where he is today without Anderson's support. A science, math, and technology teacher at Erie High School for 10 years, Stecina credits Anderson with seeing not only his potential, but also "the person behind it—motivated, excited, and passionate about making a change in the lives of students in our community." Stecina said, "Ron was a major influence on my career . . . his guidance, influence, and advice saw me through the earliest and most delicate period of my career—its origin."

Dr. Janet Carlson Powell agrees. Now the associate director and chief science education officer at the Biological Science Curriculum Study in Colorado Springs, Powell had the good fortune to have Anderson as her doctoral advisor and mentor.

"Ron was the rare faculty member who honored the experiences one brought into the program and quietly made opportunities available that built upon those experiences," Powell said recently. "He leads and mentors by example, not by preaching or bullying. He let me learn from my own mistakes, but didn't let me go forward blindly. I graduated from CU having learned that sometimes what Ron doesn't say is more important than what he does say, that family is more important than career, and that work well done contributes to one's character."

Anderson's teaching assignments have included Methods and Materials in Secondary School Science for teacher candidates, Modern Trends in Teaching for master's degree candidates in all fields, and a seminar in science education for PhD students.

Anderson also supervised teacher candidates during their student teaching semesters, and facilitated a partner-school program at West Middle School in the Denver suburb of Cherry Creek that brought practicing teachers and student teachers together in a seminar designed to improve student learning.

Anderson's research agenda has focused on policy and reform that influence how teachers like Stecina approach their work. He has directed projects funded by the National Science Foundation and by the U.S. Department of Education that examined the effects of curricular programs in science, instructional approaches, teaching techniques, and teacher education programs. To this end, he has conducted meta-analyses of over 700 research projects and case studies of schools engaged in successful science education reforms.

Now that he's retiring, Ron Anderson (foreground) has more time to enjoy with his family, such as at this backyard barbeque.

Never one to be satisfied only with specialized journal publications, Anderson has targeted practitioner audiences directly. A co-authored book, *Local Leadership for Science Education Reform* (1995) interprets a variety of research and makes specific recommendations for local school leaders.

Anderson's recent work on educational change has extended into religion. Through work sponsored by the John Templeton Foundation, he is contributing to a book of case studies on religion and teaching.

Anderson said that his most significant professional experiences have come about through his affiliation with the National Association for Research in Science Education (NARST), of which he was president. In fact, he hasn't missed a single NARST conference since 1965.

For all of his efforts, Anderson has seen some positive changes in the way science is taught. "Things have changed positively in a very gradual way," Anderson said. "Now we see more of an emphasis on 'science as inquiry,' a more constructivist, hands-on, minds-on approach to science teaching."

Although Anderson has been in the forefront of science education movements, his current advice to practicing science teachers is probably very similar to what he might have said back in 1964. "I would say, try to maintain that connection between the content and the students. It's easy to go off in one direction or another. But it's so important to keep kids actively engaged."

That Anderson himself modeled that connection is part of his legacy. According to Powell, "My life, and that of many other students and teachers, is better because of Ron Anderson's contributions to science education and the University of Colorado."

Anderson lives in Beulah, Colorado (west of Pueblo), on 65 acres of forested land. Two sons and their families—including five grandchildren—live on adjoining properties. As for his retirement, he is starting a Christian retreat center, plans to continue hunting and hiking, and has resolved not to take up golf.

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Pension Protection Act Benefits Donors and CU

Nationwide, donors often report that one of the greatest joys in making a charitable gift is seeing that gift "in action"—supporting the institution to which the donor is committed. In fall 2006, the president signed into law the **Pension Protection Act of 2006**, which offers charitably minded individuals a golden opportunity to make gifts from their IRAs, making it even easier for donors to witness first-hand their gifts at work.

This new law provides an exclusion from gross income for otherwise taxable IRA distributions of up to $100,000. Plan owners who are at least 70½ years old can make charitable contributions in 2007 from traditional and Roth IRAs. Here are some specifics:

- In 2007, you can transfer up to $100,000 to the CU Foundation, as long as you are 70½ when you make the transfer. You can designate the School of Education as the recipient of your gift.
- Also, at 70½ you must begin taking required minimum distributions (RMD) from your IRA, regardless of whether or not you need the money. A distribution to the CU Foundation can cover or count toward your RMD.
- Although you will not receive an income tax deduction, you will *never* need to pay income tax on the withdrawal either.

If you would like more information on making a gift through the Pension Protection Act, or any other instrument, please contact Margot Neufeld, director of development at the School of Education at 303-492-2990 or margot.neufeld@cufund.org.

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