

*Creating Futures*

University of Colorado *Boulder*



*CU Teach*

*Creating the Next Generation of Math and Science Teachers*

# CU Teach

Established in 2007, CU Teach recruits talented math and science students at CU-Boulder into teaching careers by giving them early, firsthand, K-12 teaching opportunities. CU Teach allows students to experience the teaching profession as an intellectual endeavor that is exciting and fulfilling.

CU Teach's four-year program allows students to complete a major in math or science and earn a teaching license at the same time.

## The ultimate goal of CU Teach is to license 50 math and science teachers per year. Here's how we'll do it:

### Encourage talented students to explore teaching:

CU-Boulder math and science majors can explore the teaching profession early in their college careers through the new Step 1 and Step 2 classes—both one-credit-hour courses. In Step 1, CU-Boulder students discover the excitement of teaching by leading investigative science lessons with local elementary students. In Step 2, they learn more about inquiry-based lesson design and teach math and science to local middle school students.

Step classes give CU-Boulder students the chance to try out teaching to see if it is a fit for them. "Because they are only one credit, the workload is reasonable, the time commitment is easily manageable, and there is no requirement to be enrolled in the licensure program to try these courses," says Craig Schneider, a CU Teach Master Teacher. "Plus, elementary and middle school students always love having college students in their classrooms."

### Create content-specific education classes:

Prior to CU Teach's existence, many School of Education classes enrolled licensure students from different content

areas into the same courses. CU Teach, however, targets its education classes based on math and science content specialization. This content-specific approach allows CU Teach students to learn to teach in ways that will develop a deep understanding of math and science content for their K-12 students, based on research on how students learn.

### Share the wisdom of master teachers:

Vital to the CU Teach program, Master Teachers are veteran math or science teachers with advanced degrees who are recognized as leaders in partner school districts. They are hired by the university and work full-time to recruit, mentor, educate, and support CU-Boulder students as they explore teaching. Master Teachers teach the Step 1 and Step 2 classes. They also collaborate with faculty and staff in CU-Boulder's College of Arts & Sciences and School of Education to develop and implement discipline-specific and field-based licensure courses. Passionate about what they do, Master Teachers help develop the skills and knowledge beginning teachers need to be successful professional educators.

### Offer internship opportunities:

CU Teach students are encouraged to further their education and integrate what they learn through internships. Science Discovery, a CU-sponsored statewide outreach program, employs CU Teach students as interns. Science Discovery enrolls thousands of K-12 students in its programs during the year in hands-on, inquiry-based classes. In the summer, Science Discovery offers courses like Electricity and Magnetism, Rockets for Junior Astronauts, and Fossils, Crystals, and Rocks, to name a few of the 200+ classes available. Last summer, CU Teach interns worked one-on-one with students from the I Have a Dream Foundation, Minority Engineering Science Achievement (MESA), and Upward Bound programs, serving scholarship students who, without these programs, would never have had a chance to be exposed to science outside of school.

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*"We look at science as the job of understanding the world, and teaching as sharing that joy with others. That is what we are trying to foster with CU Teach."*

**Mike Klymkowsky**, Co-director of CU Teach  
and Professor of Molecular, Cellular & Developmental Biology  
*(pictured with Lorrie Shepard, Dean of the School of Education)*





*“CU Teach makes a difference in the way our teachers are educated and in the way we partner with the community for teacher professional education. It is an interactive model for both teacher preparation and professional development.”*

**Valerie Otero**, Co-director of CU Teach and Professor of Education

## Inspiring Future Teachers



Melanie Yee had always planned on becoming a doctor. “I am a hard-core pre-med student and a major in Molecular, Cellular and Developmental Biology (MCDB),” she says.

But when Yee kept hearing great things about a program called CU Teach, she decided to take Step 1, the introductory course, and teach a brief unit on biology to fifth graders at Sanchez Elementary in Lafayette, Colo. Growing up as a privileged professor’s kid in Boulder, her experience at Sanchez was an eye-opener.

At the beginning of her time working with her students, Yee was not sure of the impact she would have. “This

was a different population of students that I knew about, academically, but had never experienced myself,” Yee says.

By the end of the semester, one of the fifth-grade girls told Yee she wanted to study biochemistry when she grew up. Yee was blown away and felt totally gratified in her decision to take the CU Teach Step 1 teaching course. “When I was 10, I think I wanted to be something like a ballerina! Not a biochemist,” says Yee.

Her experience persuaded Yee to pursue her teaching license so that she can teach K-12 students science.

She says that being part of CU Teach and being around other students who want to teach has had a huge influence on her.

“We can change the world by teaching math and science. Not only by teaching kids, but also by having someone tell you that you can do science.”

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**Melanie Yee**, Student in CU Teach

### EARLY SUCCESS

#### Partnering with real teachers to prepare future leaders in math and science education.

While CU Teach is still young, there are strong indicators we are making significant increases in the number of well-prepared math and science teachers we graduate every year.

From 2008 to 2009, enrollment in the Step 1 class grew from 48 to 70 students. And the satisfaction among students who take the class is very high. Nearly 90 percent of students agree or strongly agree that

CU Teach classes have been a positive experience. Moreover, 86 percent of students are satisfied or very satisfied with the CU Teach program.

With interest in teaching rising and satisfaction among our students so high, CU Teach is on track to reach its goal of licensing 50 math and science teachers per year.



# Seize the Opportunity: Make a Difference in So Many Ways



In collaboration with the College of Arts & Sciences, the School of Education won a \$1.4 million grant from the National Math and Science Initiative for CU Teach. CU-Boulder was one of only 13 institutions in the nation that received a grant to replicate the highly successful UTeach at the University of Texas at Austin.

The National Math and Science Initiative has promised CU Teach an additional \$1 million if we raise \$1 million to endow the program. In other words, the challenge grant will match every donated dollar with an additional dollar. If we are successful, CU Teach will have an endowment of \$2 million to use to continue its work into the future.

Annual earnings on the endowment will support the salaries of the Master Teachers as well as scholarships for talented students.

To learn more about the many ways you can make a gift:

## Contact

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*All gifts should be made  
to the University of Colorado Foundation  
for the purpose designated.*

Contributions to CU Teach will create a profound and wide-ranging ripple effect. Gifts, both small and large, will make all the difference for young people who discover their passion to teach, yet need CU Teach scholarship support to do so.

Throughout the nation, especially in high-poverty schools, students are taught by math and science teachers who did not major in those subjects. Gifts to CU Teach will benefit thousands of K-12 students by providing them with talented and well-trained math and science educators well into the future. It is these well-educated students of tomorrow who hold the keys to this country's economic vitality.

**Make a gift to CU Teach and leverage your donation to create an endowment that truly shapes tomorrow.**



*"I had a great experience with CU Teach. When I came to college I had no intention of becoming a teacher. I had set out to be a doctor, but then I took the Step 1 and Step 2 classes and found my niche. It opened my eyes, and I learned that I really do like teaching and working with kids. And now I am planning to teach high school math."*

**Megan Collins**, Student in CU Teach



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