With the passage of the No Child Left Behind act America came to consensus on one point: The achievement gap in American education must be closed. Unfortunately, no consensus exists so far on how to do this and the resulting debate disregards the single most important key to closing that gap — adequately preparing America’s teachers to work with diverse student populations.

The need is less for highly qualified teachers than for teachers who are highly qualified to teach students on both sides of the achievement gap — mainstream English-speaking students and students of cultural, language and racial minorities. Currently, there is a disconnect between teachers and students. The predominant methods used in the classroom do not engage and motivate students, and teachers themselves recognize the need for a different kind of preparation. Eighty percent of teachers polled report that they feel ill-equipped to teach diverse populations (Futrell & Bedden, 2003).

The effects of poorly prepared teachers are devastating. Estranged from their students and under increasing pressure to produce higher test scores, newly credentialed teachers leave the field in hordes. According to one study, the national attrition rate of new teachers reaches 46 percent by the fifth year (“No Dream Denied: A Pledge to America’s Children,” National Commission on Teaching and America’s Future, 2003), leaving our students with fewer and fewer highly qualified teachers. The same study also shows that teacher turnover and student performance are closely correlated.

**See Teacher Quality, page 7**

New teacher attrition in the U.S.

**In This Issue**

**Getting Technical**
How one professor uses the Five Standards CD-ROMs in her teacher education courses.
Page 2

**CD-ROM Guide**
How educators, administrators, school board members and parents can make use of the Five Standards CD-ROM series.
Page 3

**Greenlanders Visit CREDE**
They came, they saw, they learned pedagogy. Why Greenland’s educators care about education in America.
Page 4

**Ed Reform that Works**
Why America — and especially American policymakers — should care about education in Greenland.
Page 5

**News**
Updates on the latest events, publications, and activities at CREDE
Page 6
Sharon Brockman has been a teacher educator for the past twelve years, but even a veteran like Brockman sometimes discovers something new that can dramatically change her practice. In this case, it was CREDE’s Five Standards for Effective Pedagogy CD-ROM series. Brockman discovered the series last year in New Orleans when wandering through the vast exhibition aisles at AACTE’s annual meeting and quickly incorporated them into her curriculum.

“This is the first time I’ve seen something that works this well,” said Brockman, an associate professor of education at University of the Pacific in Stockton, California. “For me this is the way to bring our teaching methods into the next century.”

The CD-ROM series was developed as a joint effort by CREDE and Brigham Young University’s Center for the Improvement of Teacher Education and Schooling. The series portrays the work of master teachers in diverse classroom settings using CREDE’s Five Standards, and is accompanied by a rich library of text and interviews relating to the clips.

Most of the 32 students in Brockman’s “Curriculum 130” course have classroom placements through other classes they’re taking, so Brockman uses the CD-ROMS in place of field work in her course. “Every student buys their own disks, just like they would a textbook. I have students working at elementary and secondary levels, so they buy whichever CD is appropriate,” she says.

Typically, Brockman is using the CD-ROMs for assignments she gives every two to three weeks based on one of the Five Standards. Students are directed to first go to web and read background information on the assigned standard. Then they look at the related clips of classroom examples on the CD-ROM and write a paper on what they’ve seen. “They summarize what the standard means to them and discuss how the clips overall reflect the standard and pick one clip that they think best exemplifies the standard,” Brockman says.

Brockman divides her students into small groups of about five each and they share their best examples. Each group settles on one best example and then the groups share with the whole class. “With the large group we talk about where the good teaching is that exemplifies that standard,” she says.

To make sure the ideas really settle in, Brockman has each student practice teach a group of other students, using the standard in their lesson.

Brockman has been thrilled with how the CD-ROMs have enhanced her teaching. They’ve been valuable in the following ways:

• Using clips as exemplars, teaching practices are standardized and systematically explored. Learners can explain, compare, apply, and interpret multiple perspectives.

• As with text, the CD-ROMs increase learners’ vocabulary, language, and discourse about theory and practice.

• Students get the rare experience of repetitive viewing. Exemplary teaching moments can be reviewed and discussed repeatedly. “I would never say do not do fieldwork but this is a fantastic addition,” Brockman says. “Students can look at a moment over and over until they understand it and in field work it’s a one-time shot.”

• Representing diverse classrooms. For students in classroom placements with homogenous student bodies or for students unable to find classroom placements, the series offers a way to explore diverse classrooms being taught with a culturally sensitive pedagogy.

• In addition to all the other advantages, simply using the latest technologies in education is important, says Brockman. “It’s not the way we learned, but it’s the way our students learn and the way their students will learn.”

—Barbara McKenna
These CD-ROMs have been designed for interactive use. Users can not only navigate through studies at their own pace using the Study Explorer mode, they can actually design their own studies of practice using the Study Builder mode. Student authored studies are saved as Custom Studies. Here are some ways teachers have used the CD-ROMs:

- In pairs or small groups, as a whole class using a data projector, or individually outside of class.
- Connecting studies to course readings, written assignments, portfolios, poster sessions, roundtable discussions, or teaching and observational activities.
- In Custom Studies mode, assigning students to author a new study by selecting existing video clips, writing new perspectives, and connecting professional literature to teaching practice.
- Assigning students to share an original study with peers by accessing a saved study using the Custom Studies button or by posting it on the Internet.
- Demonstrate student learning by authoring a study alone or with peers using specific performance criteria and submitting it for evaluation.

Additional suggestions on how to make the most of these cases:

Preservice Teacher Candidates
- Help teachers link theory with practice by connecting professional literature and interpretations on the CD-ROMs to the video clips of live teaching examples.
- Prepare teachers to interpret classroom culture by exposing them to real-life teaching situations on multiple levels through the clips.
- Evaluate teachers’ skills in interpreting classroom culture by requiring them to identify relevant clips and write out rationales for their choices.

Inservice Educators
- Link teachers in schools across the district or state using the CD-ROMs as a shared tool to identify commonalities in problem solving, collegial support, standards, and assessment.
- Prepare teachers for qualifying exams, such as the National Teachers Exam, and state endorsements by exploring content on the interface.
- Broaden teachers’ techniques by comparing and contrasting their interpretations of video clips with other teachers and educators in the ethnography.

School Administrators
- Prepare users to make evaluations of teachers by having them use the Study Builder to view clips and write evaluations.
- Expose parents to classroom culture by showing them clips at Back to School Night.

School Board Members
- Contextualize board discussions by using appropriate cases as examples when issues of pedagogy or content arise.

Parents and Students
- Prepare children to know what to expect in the classroom by showing them clips of real teaching situations.

For a complete listing of available case studies or to order additional case studies go to www.crede.org

Five Standards for Effective Pedagogy

- Teachers and students working together
- Developing language skills in all curriculum
- Connecting lessons to students’ lives
- Engaging students with challenging lessons
- Emphasizing dialogue over lecture
Talking Leaves

This past winter, CREDE headquarters in Santa Cruz, California, was invaded by Greenlanders. It was a quiet invasion and quite peaceful but it caused great excitement at CREDE, as it gave staff researchers and professional development specialists a chance to work with a very unique and visionary group of people.

The 20-odd visitors included government officials, classrooms teachers, teacher educators, administrators and others participating in a national effort to dramatically overhaul the country’s educational system. Most are Greenlandic, but some came from Denmark, Greenland’s sovereign country.

The visitors arrived in February to attend CREDE’s Teaching Alive! Professional Development Institute in Albuquerque and followed up with additional training in Santa Cruz.

The visit to the U.S. is one of several made as part of the process to reform Greenland’s educational system. “Educators there were not happy with the number of students finishing school and going onto higher education, so they decided to address that,” said William Demmert, a professor of education at Western Washington University.

As a first step, Greenlanders wanted to know what was working elsewhere in the world. Demmert was recruited to provide leads on effective education reform in other countries.

A CREDE researcher, Demmert’s history with the Greenlanders goes back some 20 years, when he began chairing a steering committee focused on education in Arctic countries. Demmert also co-chairs a group of members of the ministries of education from these circumpolar countries. “I brought them up to date on the current research in U.S., and how that was impacting school reform,” Demmert recalls. “Then I connected them with people doing good work, among them [CREDE Director] Roland Tharp.”

Diversity is an issue in this country of approximately 56,000 people. While 87 percent are Greenlanders — Inuit and Greenland-born Europeans — and only 13 percent are from Danish or other groups, students learn in a multi-lingual environment that includes Greenlandic and Danish, and usually one or two other languages in later years.

“Greenland reformers wanted to know about approaches incorporating cultural awareness,” Demmert said. “They recognized that the Greenlandic cultural base is a very important part of any school reform effort they implement. All of us are influenced by the language and culture we grow up in, and if you don’t take that into account in education you get the problems that we see here in the U.S. where we have minorities becoming isolated and dropping out of the system.”

The Greenlanders’ vision for reform included a pedagogy closely aligned with CREDE’s — one that emphasizes language development and critical thinking skills and is based on teaching in meaningful local contexts. “They wanted to move away from the old European lecture method but they wanted to make sure the principles they incorporated were research-based,” Demmert explains.

The reform effort in Greenland began about five years ago, and a partnership between CREDE and the Greenlanders was quickly established. Initially Tharp traveled to Greenland. That trip has been followed by several to the U.S. by the Greenlanders. The partnership between the Greenlanders and CREDE has flourished because of a shared common vision.

“So much of CREDE research is based on our studies of Native Americans, Alaskans and Hawaiians,” says CREDE Director Roland Tharp, professor emeritus of education and psychology at the University of California, Santa Cruz. “The Inuit people of Alaska are the same as those of the circumpolar north, so the pedagogical techniques we have built to be effective for Native Americans and other minorities struck the Greenlanders as being highly congruent with their values and goals.”

“We all work so hard, sometimes in the dark and on faith. I often long for direct feedback, but what I heard from the Greenlanders made me speechless”

—Roland Tharp
The methodology being developed by the Greenlanders will sound familiar to anyone using the Five Standards. According to Tharp, this includes working together to build consensus through dialogue, an orientation to problem solving, value for the use of challenging curriculum and intensive language development (they want students to become trilingual).

During this latest trip, visitors did intensive work learning CREDE’s Five Standards and examining ways to incorporate the standards into their national teacher education program.

“They had very practical goals,” Tharp said. “They were here not only to learn, but also to design and create stage one of their national education transformation. They were working with CREDE folks for half a day and the other half they were transforming topics into real and immediate plans. It was a very intelligently designed trip.”

At the end of their U.S. stay, the Greenlanders debriefed with Tharp. “I was moved, emotionally and intellectually,” Tharp said. “We all work so hard, sometimes in the dark and on faith. I often long for direct feedback, but what I heard from them made me speechless (for only a moment, of course). The Greenlanders know clearly how important to them this work is and how indispensable we and they are to the cause of a better Greenland and a better world.”

After the final meeting, Tharp walked down the street, stopping for coffee at a sidewalk cart. The vendor asked about his lapel pin. “Nuuk is a Greenland city; it’s their 275th anniversary,” he told her.

See Greenlanders, page 7

Jan Soelberg, Frank Demmert, and Ezekias Therkelsen listen during a professional development planning session in Santa Cruz.

Reform that Works

Educators and policymakers around the world are recognizing that we need to change how we teach our students. But, while everyone seems to agree that change is needed and needed now, some are implementing it far better than others.

Battle-weary Americans, scarred from the quagmire also known as No Child Left Behind, might do well to look at the process in Greenland. Reform there has been steady and effective — astounding as that may seem.

How is wide scale effective reform possible? “Greenland’s school reform effort is a partnership between municipalities, school teachers, administrators and organizations, including the Greenlandic Parliament, the Ministry of Education, and institutions of higher education,” according to William Demmert.

“One of the most important pieces of this reform is that they have been willing to look outside the country to see what the rest of the world is doing. Also, they are willing to take time and sit down and reach some consensus. That’s a major difference between their reform and ours.”

Although consensus takes more time to achieve, Demmert notes that forward progress is preferable to the majority rule method, which tends to leave reform ping-ponging from one extreme to another as power changes hands.

U.S. Legislators, take note, here are some keys to effective education reform:

• Use consensus. Build a climate of cooperation and ownership amongst all participants
• Provide adequate funding for reform mandates
• Value the role teachers play as experts in providing quality education and in motivating kids
• Employ informed and thoughtful governance
• Include early childhood education in reform efforts as the preschool years are the most vital in education.
Professional Development Institute a Success
Some 60 educators from around the world came to CREDE’s Teaching Alive! Professional Development Institute, held in Albuquerque last February. Attendees came from as far away as Greenland and as close as New Mexico to learn how to apply the Five Standards in the classroom. This professional development work is vitally important as ongoing studies confirm that pedagogies such as CREDE’s Five Standards are vital for improving academic achievement for minority students.

Synthesis Team Update
As CREDE research concludes, the seven synthesis teams are compiling findings into manuscripts. The first public announcement of the work will take place April 14 at AERA, with final manuscripts published in 2005 through Cambridge University Press.

Dr. Chang Goes to China
CREDE’s international expansion continues in May when Ji-Mei Chang, professor of education at San Jose State University, presents as one of the plenary speakers at an international conference on Multiple Intelligences theory in Beijing. Chang has worked extensively with Taiwan’s ministry of education in recent years, helping them with school reform efforts. For more on the conference, visit http://conferenceschina.org

CREDE in Latest Issue of NAEYC’s Young Child
The latest issue of NAEYC’s magazine Young Child includes a feature story written by CREDE Director Roland Tharp and educator and CREDE early childhood education specialist Sue Entz. Titled, “From High Chair to High School: Research-Based Principles for Teaching Complex Thinking,” the story gives an overview of effective education for early learners based on CREDE’s Five Standards using real-life samples of exemplary teaching from the practice of preschool teacher Sheri Galarza. A PDF version of the story is accessible through the CREDE website.

New Pubs and Products
Designing Effective Activity Centers for Diverse Learners: A Guide for Teachers at all Grade Levels, 2004, by R. Soleste Hilberg, Ji-Mei Chang, and Georgia Epaloose. $20

Secondary School Newcomer Programs in the United States, 2004, by Beverly Boyson & Deborah Short. $8

The Proceedings of the First Annual Conference for Educators of Newcomer Students, 2004, edited by Beverly Boyson, Bronwyn Coltrane, & Deborah Short. $18.50


See News, next page

News

The Five Standards, courtesy Ji-Mei Chang

補教教學的五個「有效的教學與」標準
1. 師生及同儕共同創作
2. 在各科目中發展學生的語文及學科素養
3. 將學校學習與學生生活聯結
4. 教導高層次的思考技巧
5. 經由對話進行教學

The Five Standards, courtesy Ji-Mei Chang
related, with low-performing schools having the highest teacher turnover rate.

That’s the bad news. The good news is, we have the tools right now to reverse this disturbing trend. Research-based teaching methods that work effectively with kids of all backgrounds have been tested and refined for the past decade by CREDE researchers, who represent the largest collective of diversity researchers in the country. These researchers, totalling nearly 70, have identified the challenges that cultural, racial, and linguistic minorities face in the classroom, and have found effective ways to teach these students using an approach we call the Five Standards for Effective Pedagogy.

The Five Standards work for all students. Classrooms in which these methods have been measured show increased test scores, and an improvement in actual student learning. The result is successful teachers, successful students, and a true community of learners.

Although we know these approaches work, we face a challenge — implementing change in the country’s teacher education programs. The pedagogy CREDE has found to be effective is quite different from those predominantly in use in America’s classrooms — approaches that have changed little since the beginning of the Industrial Age.

Up-and-coming teachers are mostly being schooled in the traditional methods, which emphasize rote and memorization, lecture and worksheet formats, and are structured mainly for whole group learning. To create effective learning situations we must engage students using effective, research-based approaches that enable all kids to reach their potential. This is accomplished by working in small groups, emphasizing problem solving and critical thinking, and learning in contexts relevant to life.

To anyone who has seen excellent teaching with diverse students, the Five Standards will look familiar. The standards are distilled from best teaching practices of master teachers observed throughout the country for the past four decades. Through our work as a national center we’ve been able to standardize these practices so that they can be passed on systematically in preservice and inservice settings.

Now there are small pools across the country where new teachers are learning these approaches, among them Brigham Young University, San Jose State University, the University of Louisville, the University of Connecticut, the University of Hawaii, the University of Houston and Bellarmine University. The task at hand is to spread the word so that the pools grow into lakes, and the lakes into oceans that carry all of our children forward on a tide of meaningful, engaging, lifelong learning.

Waxman, Roland G. Tharp, and R. Soleste Hilberg, eds. $25


Observing the Five Standards in Practice: Development and Application of the Standards Performance Continuum, CREDE Research Brief #11.

Engaging Students in Reading Comprehension Using Instructional Conversation (video), Peggy Estrada, producer (2004). $25

To Order
To purchase online, visit CALStore at calstore.cal.org/store/ or the CREDE website. To order toll-free, phone 800.551.3709 or fax to 888.700.3629. Books by other publishers can be found at crede.org or amazon.com.

Greenlanders, from page 5

“All she heard was ‘Greenland’ and she was off and running,” Tharp said. “You’re from Greenland?” she asked. “These people from Greenland are so wonderful! They’ve been here all week! Are you a Greenlander?” she asked.” Tharp thought it over a minute. “I hope so,” he said.
Sequoyah, a Cherokee born in the 18th century, used the phrase “talking leaves” to refer to the European’s way of putting words on paper. Sequoyah created the first Cherokee syllabary, which transformed their society from non-literate to literate in one generation.

This newsletter is supported under the Educational Research and Development Center Program (Cooperative Agreement No. R306A60001-96), administered by the Institute of Education Sciences (IES), U.S. Department of Education. The findings and opinions expressed here do not necessarily reflect the position or policies of IES.

This issue and past issues are available online at crede.org.