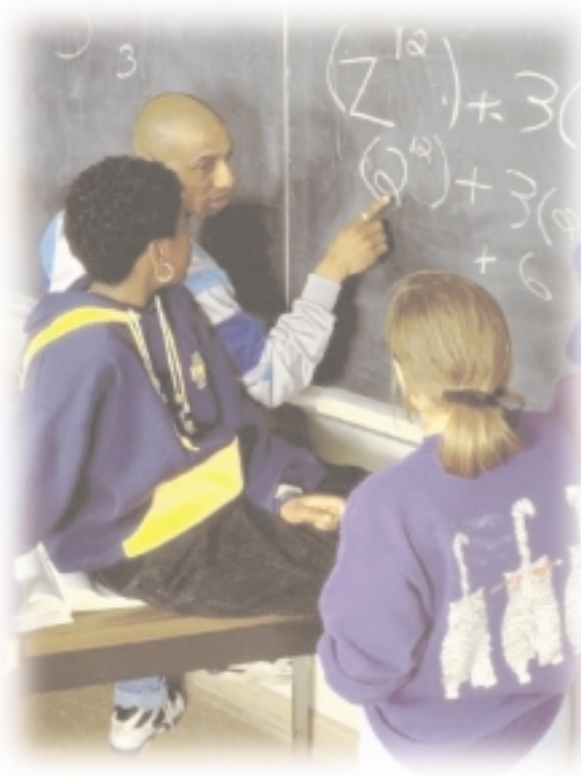


Teachers: Preparing, recruiting, and retaining the best



A college freshman, overwhelmed with the array of courses offered and struggling with making a selection, was advised: Ask other students who the most passionate teachers are, then take one of their classes, regardless of the subject. Why? Because these teachers' passion, knowledge, and love of learning will frame any educational experiences that follow. The speaker knew that having the right teacher makes all the difference.

Although many in education have long agreed, little or no research substantiated this idea. Now, evidence that teacher quality impacts student learning and performance is mounting. Education researcher Linda Darling-Hammond writes in "Teacher Quality and Student Achievement: A Review of State Policy Evidence" that a growing body of research suggests teachers can make a substantial difference in how well students achieve.

What elements come together to make a teacher successful? We know from experience that successful teachers possess certain personal characteristics, such as enthusiasm and warmth. We know from research that successful teachers have a strong knowledge of the subject matter, and many have subject-specific pedagogical skills, such as how to teach English or history on a certain grade level. We know, too, that quality teachers who stay in the profession continually develop their knowledge base and skills.

A teacher's story begins in the college classroom, where skills and knowledge are acquired and attitudes are shaped. Yet, according to the U.S. Department of Education's report "Recruiting and Preparing Quality Teachers," most teachers — possibly as many as four in five — say they are *not* "very well prepared" to work in today's classrooms. President Bush acknowledged this when he said, "Sometimes our teacher colleges do not give [beginning teachers] the skills necessary to be effective."

Teacher preparation institutions are under pressure to produce competent, confident new teachers for the 21st

continued on page 8

on the national front

RAND project focuses on two national priorities — reading and mathematics

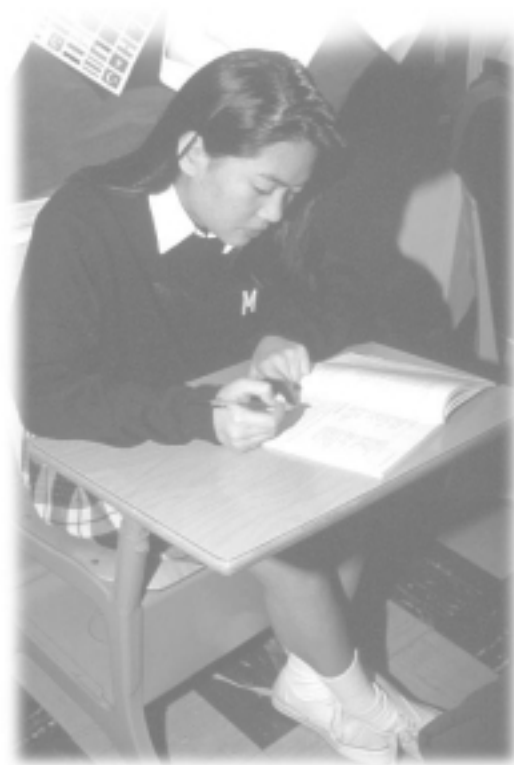
The RAND organization is collaborating with the Office of Educational Research and Improvement (OERI) to examine how to improve the quality and relevance of the education research funded by OERI. Together with the National Educational Research Policy and Priorities Board, RAND has launched a new effort that looks at the need for high-quality programs that impact classroom practice.

They began by identifying two areas that are considered of paramount importance for the educational success of all students — reading and mathematics. They then assembled a wide range of researchers, practitioners, and policy makers to form two study groups. Each study group has been charged with

- developing clear goals in the designated content area,
- evaluating what is known about the problem and strategies currently being applied, and
- proposing suitable long-term guidance for research and development programs.

The work of the mathematics study group is well underway, and the draft report from the initial deliberations of the RAND Reading Study Group (RRSG) has been released online. Visitors to the RAND Web site are invited to comment on the report and to participate in discussions around key issues in the reading field.

The study group identified a central set of issues about literacy and reading, including an increasing demand for literacy skills at a time when the level of reading skills remains stagnant. A primary challenge, according to the report, is that reading comprehension instruction is often ineffective because teacher preparation does not adequately address it. Instead, research-based knowledge must be systematically incorporated into teacher preparation and practice.



McREL Senior Consultant Vicki LaRock agrees that a gap exists between research in reading and the application of that research in the classroom. “I’d like to see a framework or set of guidelines that spells out the research-based strategies and components that teachers can use,” she says. One aspect the RAND study will concentrate on is the need to develop such a model, particularly for use in the primary grades.

“We considered our role one of defining a general area of research,” writes the study group, “and sketching within that area some of the parameters that might help determine a specified research agenda in the future.” Once a reading comprehension agenda is established, future research that fills the gaps left by existing research efforts can be solicited by the U.S. Department of Education.

An executive summary will be written and distributed, and revised reports are scheduled to be available at the end of September 2001. ♦

Read the report at www.rand.org/multi/achievementforall

research from the field

Accountability reform: Do accountability policies improve student achievement?

A recent research report examined the effects of state-level accountability policy on instructional practice in elementary and middle-level schools and classrooms in Washington state. Washington's approach to reform is typical of many states, focusing on standards, measures of student performance, and an accountability system. Although districts and schools throughout the state are still in transition, the state assessment appears to be driving changes in practice, with instructional and curricular changes linked to what is tested.

The study provides a mixed picture about the relationship between school practices and student achievement. In general, schools reporting more alignment between the curriculum and state standards had higher scores on the state assessment. However, some teachers and principals raised questions about the meaningfulness of test scores and score gains as indicators of achievement of the standards. Most Washington state teachers believed that test preparation was responsible for the majority of score gains. Also, some questioned whether the test was appropriate for students at the grade levels it assessed. ♦

Stecher, B. M., Barron, S. L., Chun, T., & Ross, K. (2000). *The effects of the Washington state education reform on schools and classrooms*. [CSE Technical Report 525]. Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California. Available: www.cresst96.cse.ucla.edu/CRESST/pages/reports.htm

Organizational and instructional reforms improve reading achievement

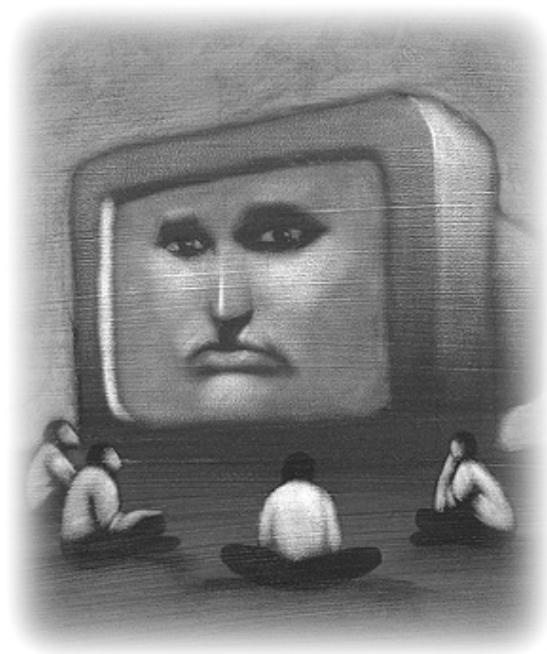
A recent study of 14 elementary schools connected both organizational and instructional reforms to improved reading. Organization-wide, reading development was a priority in the study's four highest performing schools. In first and second grade, 2 1/2 to 3 hours per day were allocated to language arts instruction and reading and writing practice. Title I, reading resource, and special education teachers went into regular classrooms for an hour each day to help provide instruction to small, ability-based reading groups. Classroom-based assessments were used to identify and regroup students according to individual learning needs. The four highest performing schools allocated 10 minutes more instructional time per day to independent reading compared to the four lowest performing schools (28 versus 18 minutes daily).

Key instructional features related to improved primary grade reading were classroom management and teacher attention to both word identification and meaning-making aspects of reading. The most effective grade 1–3 teachers, regardless of school, had high proportions of students who were academically engaged; 96 percent of their students were on task compared to 61 percent of students in classrooms led by the least effective teachers. In addition, the most effective teachers used a repertoire of approaches to assist in word identification (i.e., a combination of explicit phonics instruction, sight word practice, and coaching of different word identification strategies). However, they did not focus on word-level skills alone; the most effective teachers also more frequently asked higher order questions and had students write in response to reading. ♦

Taylor, B. M., Pearson, P. D., Clark, K. & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low-income schools. *The Elementary School Journal*, 101(2), 121–165.

McREL helps build capacity through technology solutions

Try to remember the first time you sat in front of a computer terminal, its mysterious buttons and blank screen mocking your ignorance. Now, imagine that you are charged not only with learning to use this piece of equipment for your own work, but with teaching students raised on video games and electronic gadgetry to put it to good use themselves. Further, imagine that the technology evolves at lightning speed — and its potential increases exponentially.



Intimidating? Yes. This challenge is faced by classroom teachers across the nation, who may have the latest hardware and software but still need the training and experience to truly infuse technology into their curriculum.

“Infusing technology is more than just teaching students how to use a word processor for a report,” observes Kim Fisher of McREL’s technology team. “It also means supporting learning with technology and applying it as a tool to enhance knowledge and skill in creative ways.” This process is exemplified whenever a student creates a multi-media project or corresponds with a “key pal” (the pen pal of the

digital age) to learn about a life that differs from her own.

But teachers need help to bring students to this level of sophistication. In response, McREL’s technology team has developed McREL Technology Solutions, a customized professional development package that helps schools and districts focus their technology resources on the process of learning. Wyoming and South Dakota are host to two of the pilot sites for this program, now in its second year, and McREL has recently identified sites in Nebraska, Kansas, and Missouri to continue field testing the program.

There are three components to McREL Technology solutions, which can be used separately or in conjunction with one another. The first is a technology and learning audit to determine teachers’ and administrators’ attitudes about and proficiencies with technology. The audit provides a snapshot of competencies that can be used to tailor other components. Based on the audit, McREL offers consulting services in action planning, infrastructure development, and professional development planning. In addition, McREL offers a series of 12 workshops related to technology management, training, and use in the classroom. Workshops are available individually or in any combination.

Imagine that you are charged not only with learning to use this piece of equipment for your own work, but with teaching students raised on video games and electronic gadgetry to put it to good use themselves.

Teachers are particularly concerned about how they can use technology to meet local, district, and state curriculum standards. To help address this need, Fisher explains, “We develop an action plan with the school and provide customized workshops with

practical, hands-on activities that support standards-based instruction.”

“What is most exciting is envisioning the possibilities and knowing collaboration will have a concrete impact in the classroom. Ideally, at the end of the pilot, the culture will be self-sustaining.”

- Kathy Brabec, McREL

Mentoring reaps multiple rewards

Mentoring, or peer learning, is a significant aspect of the McREL technology program. According to McREL Technology Consultant Kathy Brabec, “Having teachers learn together and from one another creates a culture of collaboration and professionalism.” This collaboration is sustained through regular meetings, joint projects, and feedback from the mentor on progress.

The mentoring facet has received enthusiastic feedback from leaders and learners alike. One South Dakota teacher commented, “Working with mentors has created a lifeline. The more projects we do together, the safer we feel. The safer we feel, the more ideas that may spring forth.”

At one site, for example, a high school teacher mentored a first-grade teacher who wanted to create a set of instructions for students to use scanners independently. Together, the teachers created a flip chart using PowerPoint slides and screen shots that showed students exactly what they would encounter as they walked through the steps. They discovered that the instructions needed to be brought down to an even more discrete level than they’d first imagined, but when the project was complete, even school board members wanted a copy for their own use. The high school teacher then brought the idea back to her classroom and created step-by-step video production instructions for her students.

This exemplifies, says Brabec, how a single collaboration can resound throughout an entire school system. “What is most exciting is envisioning the possibilities and knowing collaboration will have a concrete impact in the classroom. Ideally, at the end of the pilot, the culture will be self-sustaining.”

When asked whether they thought McREL Technology Solutions would have an effect in the classroom, the response from participants was overwhelmingly positive. Commented one participant, “Any time we can use technology as a learning tool, it brings our students closer to being lifelong learners, seeing the possibilities of technology, and viewing computers as tools rather than games.” ♦

For more information about McREL Technology Solutions, contact Kevin Cooney, McREL project coordinator, at 303.632.5561 or by e-mail at kcooney@mcrel.org.

RURAL EDUCATORS AND LEADERS TO GATHER FOR INSTITUTE

Creating a cohesive technology program is a formidable task for any school or district, but rural educators are often doubly challenged by both a lack of resources and a lack of personnel.

This July, McREL is sponsoring its first annual Rural Technology Institute. The institute will give rural educators the resources, research, and practical hands-on training they need to help increase the capacity of their school or district to use technology for learning.

Teams of 2–3 key individuals from schools and districts across the Central Region will meet in Denver from July 25–27 to develop stronger, more unified technology programs.

There is no registration fee for this event; priority will be given to participants from McREL’s seven-state region. For more information about the institute, please contact Kevin Cooney, McREL project coordinator, at 303.632.5561 or by e-mail at kcooney@mcrel.org. ♦

essential resources



Norms and Tools: A Roadmap to Professional Practice (1999)

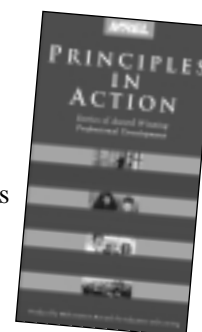
Produced jointly by the Colorado Statewide Systemic Initiative for Mathematics and Science and McREL's Eisenhower Regional Consortium, 64 pages, \$12

This guide contains a set of norms for effective teaching, coupled with the tools that can help educators attain them. Emphasizing exemplary teaching that enables and fosters learning for every student, this publication has three components: (1) a description of norms of exemplary practice, (2) mathematics and science vignettes, and (3) a list of tools to support the norms.

Principles in Action: Stories of Award-Winning Professional Development (2000)

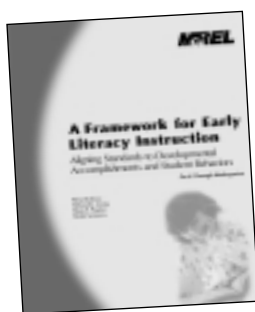
by McREL, \$15

High-quality professional development leading to increased student achievement is the subject of this engaging documentary-style video, which explores the experiences of four winners of the U.S. Department of Education National Award for Model Professional Development. Two schools demonstrate the power of a school team working together with a common focus. Two districts show how to encourage and support an environment for teacher and administrator learning. Suitable for a variety of audiences, from school improvement teams to district administrators to policy makers.



A Framework for Early Literacy Instruction: Aligning Standards to Developmental Accomplishments and Students Behaviors (2000)

by Elena Bodrova, Deborah Leong, Diane Paynter, and Dmitri Semenov, 33 pages, free while supplies last



This publication presents standards and benchmarks for early literacy. These standards and benchmarks reflect the foundational knowledge needs of very young learners and recognize their unique developmental characteristics, as indicated by the research on early literacy development. This document also provides more detailed guidance for early literacy instruction than is currently available from state and national documents.

In connection with this work, McREL also offers workshops in the development and use of these early literacy standards and benchmarks in pre-k and kindergarten classrooms as well as The Early Literacy Advisor, a diagnostic assessment linked to the standards.

Reducing Class Size: Choices and Consequences (2001)

by Robert Reichardt, 8 pages, \$5

**NEW
POLICY
BRIEF!**

There is mounting evidence that policies aimed at class size reduction can improve student achievement, especially for minority students. This policy brief provides information on the effectiveness and implementation of class size reduction initiatives, with a focus on lessons learned from class size reduction programs in Tennessee, California, and Wisconsin.

NOTEWORTHY

Noteworthy Perspectives on Excellence in the Central Region (2000)

by McREL, 64 pages, \$5

This publication features educators in McREL's region — Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming — who have received national recognition for their innovative ideas, exceptional instructional practices, or outstanding leadership. Articles focus on the strategies that schools and practitioners are using with positive results. Collectively, these articles offer a thorough discussion of standards-based education, organizational capacity, human motivation and development, and community outreach and parent involvement.

Noteworthy Perspectives on Implementing Standards-Based Education (2000)

by McREL, 50 pages, \$5

This publication draws on the insights and expertise of teachers from across the country who are engaged in the difficult process of standards-based reform. Teachers relate their fears, frustrations, and successes with implementing standards in the classroom. Also included is practical guidance on supporting teachers in ways that help them realize the potential of standards-based education.

POLICY BRIEFS

Improving Teacher Quality: Issues and Policies (June 1999)

by Bryan Goodwin, 8 pages, \$5

Ensuring Quality Teachers Through Alternative Certification Programs (October 2000)

by Carol Ruckel, 8 pages, \$5

E-SOURCES

National Dialogue on Standards-Based Education

The National Dialogue is a multi-media, multi-site, ongoing nationwide conversation related to standards-based learning. www.nationaldialogue.org

Regional Educational Laboratory Network

The network of 10 regional educational laboratories, serving geographic regions that span the nation, works to ensure that those involved in education improvement at the local, state, and regional levels have access to the best available information from research and practice. This Web site is one of many ways that the network reaches out to make that information accessible. www.relnetwork.org

McREL Mid-continent Eisenhower Regional Consortium for Mathematics and Science (McREL ERC)

One of 10 regional consortia across the United States, the mission of McREL ERC is to promote the development and exchange of information and resources related to math and science education reform. This site offers state-specific and national resources, products, and services, including a unique “score your system” feature that evaluates reform in your system and offers suggestions for improvement. www.mcrel.org/erc

Online Standards Database

This database showcases the work in *Content Knowledge: A Compendium of Standards and Benchmarks for K–12 Education*, now in its 3rd edition. The compendium synthesizes information from more than 137 documents and reports that address what students should know and be able to do. The site also offers a wide range of classroom activities that are directly correlated with the standards and benchmarks. www.mcrel.org/standards-benchmarks

For a complete list and online access to McREL's publications and products, please visit our Web site at www.mcrel.org/products. For more information or to order a 2001 catalogue, e-mail us at info@mcrel.org or call 303.337.0990.

century and to meet increased accountability demands, such as new accreditation standards developed by the National Council for Accreditation of Teacher Education (NCATE). Consequently, many colleges and universities are adopting multi-faceted approaches that include

- more intensive field experience,
- more rigorous curricula for their teacher education programs, or
- greater involvement of the arts and sciences faculty to strengthen teachers' content-area knowledge.

The states in the Central Region are taking action to improve the quality of their teacher preparation programs. They all have either mandated or encouraged the incorporation of K–12 content standards in teacher education curricula. Nationwide, as more states adopt the performance-based standards developed by NCATE, new teachers should enter the classroom better prepared to teach

Today's teacher workforce remains motivated by altruism, but many new teachers also express a desire to be viewed and paid as professionals.

in a standards-based environment. (For more on NCATE and the debate over teacher certification, see the November 2000 issue of

Changing Schools, available at www.mcrel.org/products/change-schools.)

James W. Fraser, professor of history and education and dean of the school of education at Northeastern University in Boston, describes possible future directions for colleges and universities. In his article "Time to Cut the Link Between Teacher Preparation and Certification?" he advises leaders at schools of education to

face a radically changed and changing reality. Let the schools and school districts hire whom they will, certify whom they will. Our [future] role as teacher-educators will be to provide programs with such clear and obvious value added that the districts will hire our graduates in preference to other candidates.

On a national level, in 2000 the U.S. Department of Education sponsored four Teacher Quality Institutes aimed at improving teacher education. After identifying areas most needing improvement, the attendees — faculty and administrators of teacher preparation institutions — outlined areas for change, implementation strategies, and target dates for completion. A clear finding that emerged from these institutes was that there is no single solution, but there *is* a core set of strategies that teacher education programs can use now and in the future:

- Establish a clear mission and set of goals for teacher preparation.

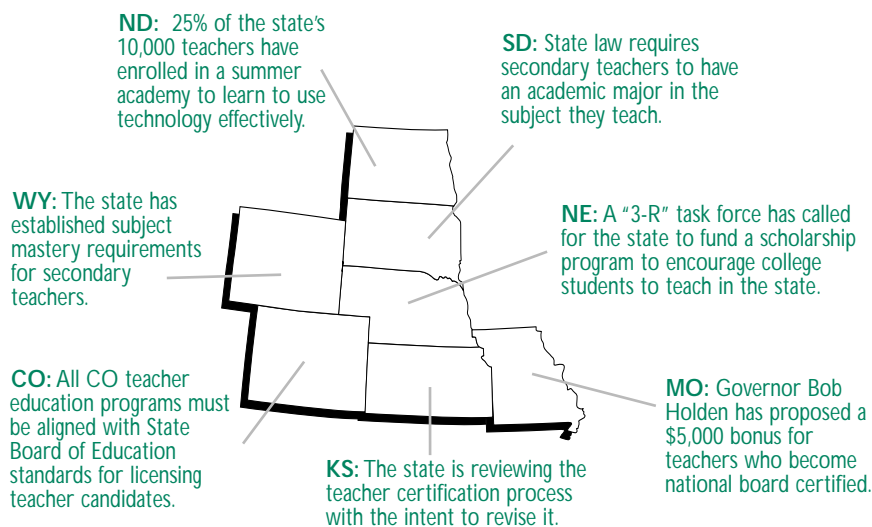
- Use standards to guide program design.
- Exert leadership to make change happen.
- Forge relationships that make change work.
- Mobilize resources and rewards in support of change.
- Use information to assess and improve programs over time.

Attracting professionals

Today's teacher workforce remains motivated by altruism, but many new teachers also express a desire to be viewed and paid as professionals. "What I hear from my teachers is this job is hard, and I don't get paid enough to do it," said an educator who works with new teachers in Colorado. Beginning teachers are voicing their desire for competitive salaries, and experienced teachers want opportunities for personal growth and career advancement. According to a report from the National Commission on Teaching and America's Future (see www.nctaf.org), "Rather than proclamations, schools need policies and working environments that attract the best people to teaching, provide them with superb preparation, hone their skills and commitment in the early years, and keep them in the profession by rewarding them for their knowledge, skills, and good work."

States that are heeding advice on how to attract the best people have become more strategic in recruiting promising candidates. For example:

- The Missouri Teacher Corps recruits 50 college seniors or graduates with non-education majors each year for two-year teaching contracts.
- California has made a school loan assumption program more accessible for education students.
- Massachusetts, aiming to recruit high-achieving individuals who would not otherwise teach, is providing \$20,000 signing bonuses to candidates.



Creating incentives

Teaching once was a lifelong career commitment. Now, heavy workloads, troubled students, inadequate funding of supplies and books, and outdated facilities are taking their toll. After just a few years in the classroom, many teachers leave for other jobs, taking their considerable experience, knowledge, and talent with them.

Finding and keeping teachers is not an insurmountable problem.

In his confirmation hearings, Secretary of Education Rod Paige acknowledged that many teachers are underpaid and that morale is low. In addition, he said we should look at other factors that affect teachers' jobs, such as violent students, a lack of authority, and administrative burdens. These factors, Paige said, are contributing to a reported nationwide teacher shortage.

For some states, teacher shortages are a serious challenge. States with high rural populations, for instance, often offer lower salaries. Missouri, North Dakota, South Dakota, and Wyoming are among the states with rural, more isolated schools that are already scrambling for ways to attract and retain teachers.

Finding and keeping teachers is not an insurmountable problem, however. States are seeking and using research-based strategies to keep teachers in the classroom and moving along a career path from recruitment to retirement. In particular, the states in the Central Region have identified and are addressing these needs:

- More coherent policies, resources, and structures to support effective professional development.
- Teacher preparation, certification, and licensure systems that are consistent with K–12 standards-based education.

- Increased capacity for teachers to assume the new roles and responsibilities required in a standards-based system.
- State and district policies and incentives that establish and recognize differentiated roles for teachers.

Teachers need the right tools, personal growth opportunities, and incentives to successfully remain in an ever-challenging, ever-changing field. Education leaders and policy makers throughout the nation are adopting creative strategies that put qualified, committed teachers in every classroom and contribute to the long-needed professionalization of the field. ♦

For more information on teacher quality, visit these Web sites:

www.ed.gov/teacherquality
www.ecs.org
www.tqclearinghouse.org
www.edweek.org/sreports/qc00

the central region scene

COLORADO

Governor Bill Owens has launched a two-year, \$2.8 million technology initiative to educate Colorado's K–12 school superintendents and principals about how to use technology effectively. The academies will assist educators in building leadership skills by helping them understand how to most effectively use technology in a data-driven, standards-based environment. The initiative is funded through the Fund for Colorado's Future and a grant from the Bill & Melinda Gates Foundation. ♦

KANSAS

Janet Lewandowski, a fifth and sixth grade teacher at Maize East Elementary School, is the 2001 Kansas Teacher of the Year. Commissioner of Education Andy Tompkins praised Lewandowski for creating an atmosphere in her classroom that not only enables students to learn in the manner most conducive for them, but also helps them learn the values of respect, compassion, and collaboration. ♦

MISSOURI

Fifteen Missouri elementary schools have been honored by the Missouri Department of Elementary and Secondary Education as recipients of the 2001 "Gold Star" Schools award.

Established in 1991, the Gold Star Schools program is sponsored by the department, with financial support from Firststar Bank, St. Louis. As part of the award, each of the schools received a \$1,000 check from Firststar. ♦

NEBRASKA

The College Savings Plan of Nebraska approved by the 2000 state legislature went into effect on January 1, 2001. This program is designed to encourage the funding of higher education through tax-deductible savings in a public trust. When the beneficiary of the account is ready to attend an institution of higher education, the principal and interest saved on his or her behalf will be available to cover qualified higher education expenses, including tuition, books, supplies, fees, and room and board. ♦

NORTH DAKOTA

Governor John Hoeven announced a plan to strengthen North Dakota's K–12 schools by earmarking \$50 million of his executive budget for teacher compensation. The plan would provide enough dollars to increase compensation for teachers and administrators by \$3,500 by the end of 2003. ♦

SOUTH DAKOTA

In the 2001–02 school year, South Dakota will become the first state to administer its standards-based tests solely online. A bill establishing the Dakota Assessment of Content Standards has been approved by legislators and is expected to be signed by the governor. The program will initially test students in reading and math at grades 3, 6, and 10; science and language arts will later be added. ♦

WYOMING

The Wyoming Supreme Court has given the state legislature until July 1, 2002, to modify the cost-based model approach to school funding to make it constitutional. The court also ordered lawmakers to provide a plan by that date of how to remedy a total of \$563 million in building deficiencies (related to physical condition, educational suitability, and technological readiness) within six years. Finally, the decision mandated a one-time payment of \$13.9 million to correct an error in the 1998–99 funding formula. ♦

direct from the board

After nearly forty years, Lincoln, Nebraska, superintendent still has more to do

It wasn't until after his junior year in college that Phil Schoo knew he wanted a career in education. That summer, he joined others on a trip to Harlem in New York City. There, he saw first-hand the importance of education and the difference schools and teachers can make in the lives of young people. Today, Schoo applies his nearly 40 years of education experience as a teacher, consultant, and principal to his role as superintendent of Lincoln Public Schools in Lincoln, Nebraska. He has never been disappointed with his career choice.



Lincoln Public Schools Superintendent Phil Schoo unwinds with his 4-year-old grandson, Ian, and one of their favorite books.

Schoo brought his sense of commitment to all children and his extensive knowledge of education issues to the McREL Board of Directors in 1999. Although he works to improve many areas of education, a priority area for him is closing the achievement gap.

Lincoln Public Schools are urban and growing increasingly diverse, he explains. Schoo worries that students who are struggling will be less prepared for success as adults. He is proud of Lincoln Public Schools and recognizes that although they have accomplished much, "There is always more to do."

In a system with more than 31,000 students and 50 schools, there are many issues to address, and like most school systems, Lincoln Public Schools is grappling with teacher quality challenges. (See the cover story for more on this issue.) Schoo describes a good teacher as fair, firm, and loving. "Along with the techniques, skills, knowledge, high standards, and commitment a teacher needs, there has to be a love of children," he adds. To accomplish this, schools must recruit and retain good teachers, which, he acknowledges, is a big challenge.

Schoo maintains balance in his life by pursuing his other interests — reading, skiing, and spending time with his grandchildren. He also strives to find the right balance as he leads the Lincoln public school system into the future. "I know a lot about the schools in our system, but I don't tell them how to do everything. They all have different styles, strengths, and ways of meeting our challenges." ♦

McREL Board of Directors

*Chair - Marjorie Smith
Chair elect - Dan Morris
Past chair - Tim Witsman, Kansas*

Colorado

*Henry Gonzales
Bill Moloney
Dan Morris*

Kansas

*Mickey Bogart
Jim Edwards
Andy Tompkins*

Missouri

*D. Kent King
Mike Middleton
Jim Oglesby*

Nebraska

*Polly Feis
Terry Loschen
Phil Schoo*

North Dakota

*Teresa Delorme
Nancy Johnson
Wayne Sanstead*

South Dakota

*Ray Christensen
Jackie Jarrett
Jay Mickelson*

Wyoming

*Judy Catchpole
Donna Mathern
Judith Richards*

At-Large

*Ron Brandt, Virginia
Kay Jorgensen, South Dakota
Marjorie Smith, Missouri*

Changing Schools Staff

*Tim Waters, executive director
Lou Cicchinelli, deputy director
Barbara Gaddy, editor
Andrea Jachman, editor & writer
Vicki Urquhart, writer
Dawn McGill, graphic designer*

Please send your comments and suggestions to ajachman@mcrel.org.

2550 S. Parker Road, #500
Aurora, CO 80014-1678
phone: 303.337.0990
fax: 303.337.3005
e-mail: info@mcrel.org
www.mcrel.org

changing

schools

a newsletter from the central region
educational laboratory
summer 2001

in this issue

Teachers: Preparing, recruiting, and retaining the best..... 1

On the national front2

Research from the field3

McREL helps build capacity through technology solutions4

Essential resources6

The central region scene10

Direct from the board11

read about
preparing a
quality teacher force

Changing Schools is published quarterly by Mid-continent Research for Education and Learning for the education community in Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming. This publication is funded in part by the Office of Educational Research and Improvement, U.S. Department of Education, under Contract No. ED-01-CO-0006. The content of this publication does not necessarily reflect the views of OERI, the department, or any other agency of the U.S. government.



Mid-continent Research for Education and Learning
2550 S. Parker Road, Suite 500
Aurora, CO 80014-1678

Nonprofit
US Postage
PAID
Aurora, CO
80017
Permit No. 115