The network of 10 Regional Educational Laboratories, in partnership with state and local educators, helps schools use research and proven practice to make a difference for children. This report highlights major 1998 accomplishments of the laboratory program supported by contracts with the U.S. Department of Education. In 1998, the Regional Laboratories expanded core support to schools, and new initiatives were mounted. In particular, the Comprehensive School Reform Demonstration Program galvanized activity across the United States, with the Regional Laboratories providing critical assistance. In addition, in 1998 the number of development sites supported by the Regional Laboratories increased from 494 to 615, and the number of application sites increased from 236 to 328. In the same year, the Laboratories more than doubled the number of clients receiving products, and they participated in 171 different partnerships. Laboratories also delivered more than 100 technical assistance workshops attended by 6,000 people. Stories from the individual laboratories illustrate the nature of development and partnership efforts and the products and benefits they offer students, educators, and parents. A capsule description of each Laboratory is provided. (SLD)
Improving America's schools through R&D
The network of 10 Regional Educational Laboratories, in vital partnership with state and local educators, help schools use research and proven practice to make a difference for children. This report highlights major 1998 accomplishments of the Laboratory Program supported by contracts with the U.S. Department of Education, administered by the Office of Educational Research and Improvement (OERI).

Inside this report

California school principals report deeper parent involvement in school reform using WestEd's approach to whole school change.

A struggling Tennessee school district turns around, as AEL helps teachers and community match curriculum with state standards.

Southwest schools help diverse students learn to think critically through SEDL's blend of technology with group learning.

Children in Northwest schools are becoming better, more active readers, thanks to NWREL's six-trait assessment model.

New York City implements school improvement teams for 1,000 schools, with help from the LAB at Brown.

Educators across the nation are creating new state and local academic standards using McREL's comprehensive database.

Urban school districts are adopting comprehensive school reform, aided by LSS planning institutes and follow-up assistance.

Pacific islands educators overcome isolation and gain new skills through PREL's networking activities.

Nineteen Illinois school districts take on the national goal of becoming first in the world in math and science, with NCREL's assistance.

School leaders from southeastern states improve low-performing schools, as SERVE helps them exchange problems and solutions.
Translating research into better teaching and learning: The pivotal role of Regional Educational Laboratories

Education is a top priority across the nation. Parents and the broader public are demanding clear evidence of increased student achievement. Policymakers seek strategies to propel improvement. Schools face the challenge of making far-reaching changes as they seek to meet these demands with an increasingly diverse population that reflects the society of our times.

Schools can't do it alone. If research and experience have taught us anything, it's that educational change is complex, it happens school by school and community by community, it takes time and hard work. Real, not fleeting, school change is information hungry, demands risk taking, and often requires an outside helping hand.

Regional Laboratories exist to provide this help. Expert in educational research and development, experienced as agents of change, their role is to provide schools with the understanding, tools, and support they need to make a difference for children. This means:

- Creating powerful new tools and knowledge—better strategies, innovative programs for improving school practice—that are developed and tested in real-world settings.

- Providing direct assistance—in vision-building and planning, training and staff development, coaching, and ongoing technical support—to help school leadership teams and policymakers risk setbacks and go the extra mile in school change.

- Getting research-based knowledge to those who need it, in forms they can use—from highly readable print publications to seminars and forums to electronic "dialogue"—to solve real problems.

- Linking schools with each other and the larger community, forging strategic alliances, helping educators become networked in ways that overcome isolation, pool talents and resources, and foster continuous learning.

In 1998, Regional Laboratories expanded core support to schools. More educators used our products and services, reporting benefits in knowledge, decision-making and practice. New initiatives were mounted. In particular, the Comprehensive School Reform Demonstration program galvanized activity across the country, and Regional Laboratories provided critical assistance (see page 26). The payoff to schools and children from these collective efforts is perhaps best conveyed in the stories that fill this report.
Education today, much like industry and medicine, depends on strong R&D for improving practice. To help all students achieve at higher levels, schools need research-based solutions—not fads. They need powerful instructional programs and strategies for change that build on accumulated knowledge and have been shown to really work in school settings.

That’s where Regional Laboratories come in. Labs specialize in using R&D to spur meaningful school change. They dig in with field partners—from urban districts to isolated rural schools—to define local needs and guide improvement efforts. They draw on past research, generate new tools and strategies, and test the results for schools and children.

But they don’t stop there. Labs don’t just help solve the immediate school problem; they think about how other school communities can benefit from these proven strategies. Labs design models, create tools, capture practical wisdom, articulate policies and develop processes that educators across the state or nation can use. This twist—from problem solving to transferrable solutions—is the essence of development, a special focus of Laboratories under this contract.

A new strategy for assessing students’ reading skills, and a training package to help teachers use these new assessments... A method for aligning the school curriculum with local standards, and a guidebook to lead others through the process... A more meaningful way to engage parents as partners in improving student performance, and a video showing others the process in action. These are all outcomes of field development.

But schools and Laboratories go beyond focusing on a single strategy, like those just mentioned. We know that a key to greater success is to bring these elements together into a customized, comprehensive approach. So, Labs work with schools to develop a set of skills and strategies. They combine a classroom focus with ways to help schools perform better as organizations—through ongoing opportunities for teacher learning, or processes for using achievement data to drive schoolwide improvement in teaching and learning. Labs develop educators’ capacity to keep doing better over time; and they find ways to spread these deeper, capacity-building strategies.
To develop and test better tools and comprehensive strategies for school reform, Laboratories work intensively with school teams at selected development sites. Looking at such work across the laboratory system, in response to the 1993 Government Performance and Results Act, the Laboratories began in 1997 to report data on several key indicators. In this second year of system-wide reporting, both trend and more extensive outcome data are available.

The chart below documents increasing numbers of both development sites and application sites. During 1998, the number of development sites increased from 494 to 615, as new problems were being tackled with new partners. Almost 7,000 teachers and nearly 100,000 students participated during 1998 in these front-line partnerships to improve teaching and learning. In surveys of participants, 88% rated the efforts as contributing to comprehensive school reform. Compared to development sites, there was an even bigger proportional increase in the number of application sites, where promising innovations are further tested and refined. The increase from 236 to 838 represents a 39% increase in the number of application sites.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Sites</th>
<th>Number of Students</th>
<th>Number of Teachers</th>
<th>Number of Administrators</th>
<th>Number of Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Development Sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>494</td>
<td>83,147</td>
<td>5,899</td>
<td>512</td>
<td>14,437</td>
</tr>
<tr>
<td>1998</td>
<td>615</td>
<td>93,788</td>
<td>6,950</td>
<td>749</td>
<td>16,062</td>
</tr>
<tr>
<td></td>
<td>Application Sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>236</td>
<td>52,840</td>
<td>2,025</td>
<td>206</td>
<td>9,576</td>
</tr>
<tr>
<td>1998</td>
<td>328</td>
<td>54,000</td>
<td>2,219</td>
<td>308</td>
<td>9,651</td>
</tr>
</tbody>
</table>

The stories that follow illustrate more concretely the nature of these development efforts and the benefits for students, educators, and parents.
Parents at a Bay Area public school worked side-by-side with teachers, poring over student performance results, and discussing expectations for what their children should know and be able to do. Parents kept journals of this experience, remarking on the openness of the school personnel. Parents, however, weren't the only ones thrilled.

"It changed perspectives," the school principal said, "and was the most exciting event in my career."

The give and take these parents and teachers took part in was fostered by the Western Assessment Collaborative (WAC) as it helps schools shift to standards-based practice. This school, like all the others participating in a multi-year partnership, reports an increase in the number of parents involved in school activities, a greater focus on student performance, and more lively concern among parents about what students are doing in the classroom.

A project of WestEd, WAC is a research and development effort to help schools meet the hard challenge of rethinking old norms and building a school culture focused on high achievement for all children. The school teams and districts that work intensively with WAC come to understand whole school change as the process of answering some deceptively simple questions: What do we (the school-community) expect our students to know and do...and how well? How will we know when they know and can do those things? And what will we as a school-community do to assure that every student achieves to those standards? Educators
grappling with these fundamental questions are no longer preparing lessons to "cover the material," or using performance standards that differ from classroom to classroom. Instead they are forging a coherent system in which agreed-upon standards for high quality student work guide school practice.

"Getting more people to the table," as one principal put it, is a key early step, involving all members of the school community in defining the quality of the system. WAC helps schools broaden this participation through "Accountability Dialogues," ongoing, action-oriented discussion about what it means to focus habitually on excellence. Together examining student essays, test scores, math problem solutions, portfolios, looking at the strengths and weaknesses in student work, parents and teachers reach common understanding of what quality performance consists of. Some principals are reporting increases in parent involvement of up to 300 percent.

"As a result of our participation we are pushing ourselves harder and taking more risks than we would otherwise," reported one assistant superintendent. "Whenever we are about to take the easy and less potent route, our WAC coach reminds us of our beliefs and values and challenges us to do what's right." Parents as well as teachers come to see that an underlying aim is the shift from accounting to authentic accountability: not just reporting grades and test scores, but using that information to improve teaching and learning. Several schools reported that if this project ended tomorrow, they would continue to hold Accountability Dialogues: "Once you've opened yourself up to this level of interest and engagement, there is no going back."

"Parents are always suspicious of being asked to be on a committee," a district superintendent says. "They're usually asked to bake something or told of a decision that's already been made. This time they felt that their voice counted. Parents felt that they played an important role in planning."

A parent agreed: "Bottom line—the more we get parents involved, the better kids do...When kids at the bottom do better, all do better. Bring the bottom up and all benefit. Accountability Dialogues allow for more participation by those who usually are not involved."

WestEd's broad aim is to develop powerful, replicable strategies and tools other communities can use to support this kind of whole school change. WAC's work is in great demand throughout the Western region. Drawing on the experience in school sites, WAC has successfully responded to state departments' needs in both Arizona and California in their unique efforts to provide professional development to support the implementation of standards-based practice.
On a hot August day in Tennessee, teachers sit in a required training session. Their district's test scores are among the lowest in the state. Almost half the county's adults didn't finish the ninth grade. The superintendent has been removed from office. Teachers are expected to help turn things around. Under the circumstances, you might find them eagerly waiting for the bell signaling their escape, right?

Wrong.

"At the end of the training session, teachers just would not leave," according to AEL's Joy Runyan. "They wanted to discuss what they'd learned." What they learned was a powerful new method for seeing clearly how their classroom teaching and assessment matches—or doesn't match—curriculum frameworks and state tests. What excited them was gaining a workable, practical, user-friendly way to help students achieve at higher levels. "We can do this," they said.

AEL staff were already developing the Teaching and Learning Mapping Strategy before the state commissioner of education requested assistance for this particular high-needs district. Tennessee's invitation seemed a perfect opportunity to put new intensive school site initiatives, including the curriculum mapping strategy, to the test.
"The Teaching and Learning Mapping Strategy doesn't ask teachers to make immediate, drastic changes," says AEL's Becky Burns. "It shows them how to take a unit they've been teaching and build on it." Teachers identify gaps in what they're teaching, both across grade levels and across subject areas. They modify lessons to address state standards and help students connect new information to what they already know or are studying in other classes.

The new director of curriculum and instruction says district teachers are "totally onboard, excited, and are already beginning to realize some benefits," including increased interaction with colleagues, more creative lessons, and a greater sense of direction. Individual teachers are now tracking their students' strengths and weaknesses as measured on the state test.

Teachers' efforts are supported by school and district administrators, who've arranged daily planning time for grade level or subject area teachers. AEL conducts workshops every six weeks and visits schools several days a month to help teachers link research and practice. "A 180-degree turn." That's how one science teacher describes recent changes. Innovative instruction and meaningful use of technology is apparent in classrooms. Newly posted student work in hallways and the reestablishment of Parent Teacher Organizations signal changes outside the classroom as well.

In a series of public meetings, AEL project leaders are engaging school staff and community members as they examine current conditions in the county (ranked among the poorest in the nation) and imagine the conditions they want 10 years from now. A resident-drafted vision statement emphasizes providing students with academic and vocational skills, preserving the area's cultural heritage, and developing industry so that young people can live and work in their home community.

Development of a five-year strategic plan based on the community statement is underway.

Such dramatic changes don't happen without local commitment and sensitive, sustained external support. While helping this district build capacity for change, AEL is also increasing its own capacity for providing such support to other school districts committed to improvement. The Lab will further refine its assistance efforts based on results of a 1999 evaluation of its work with the district, and through field tests of various initiatives in other districts.
Teachers in Low-Performing Schools Use Student-Centered Instruction and Technology to Spark Learning

"I can't imagine going back to teaching the way I used to," commented a teacher at Carencro Middle School in the heart of Acadiana, six miles northwest of Lafayette, Louisiana. Professional development sessions from SEDL's Technology Assistance Program (TAP), encouraged teachers at Carencro and five other school sites throughout the SEDL region to combine technology with project-based activities that foster students' ability to think critically and solve problems.

The schools participating in SEDL's project are largely poor and located in culturally diverse communities, ranging from Canutillo, TX in an agricultural area along the New Mexico/Texas border; to a cluster of schools in Cherokee County, Oklahoma; to Carencro, located in a semi-rural, working-class area steeped in Cajun culture, where bilingual means speaking French and English. The schools are alike in one way—in less than a year, SEDL's professional development has changed teaching and learning.

Most of the Carencro Middle School teachers, growing up in Acadiana, learned to teach in traditional ways. Principal William Butcher realized it would take changes in instruction to improve student performance at the school, where a majority fall into the lower 20 percent of the test scores for Lafayette Parish. Money for technology was available, so the timing was right to combine technology with student-centered teaching in the classroom.
Carencro school staff report that blending technology with cooperative learning activities has energized teaching and learning. Not only are students more enthusiastic about classes and their work, but teachers collaborate more. Their professional learning community has expanded via technology—they are sharing instructional ideas via email and an electronic bulletin board. Butcher now finds that teachers who initially declined to participate are eager for the in-service training.

At the Canutillo site, word of success spread so quickly that a nearby school principal invited SEDL to come and give professional development sessions, even though a commercial technology group had provided training at the school the year before. SEDL’s approach does more than simply instruct teachers in the use of software. Staff model how teachers can embed technologies in their lessons to create a more active, engaging classroom. And SEDL training helps them reflect on and evaluate classroom activities to ensure curricular goals are met.

Enthusiastic about using computers, Carencro students run spreadsheet, presentation, and concept-mapping software in classes, while using the Internet to research topics. The real payoff, for social studies teacher Chris Cormier, is that students retain more knowledge by working in groups to create technology-based reports.

Science teacher Janet Castille agrees that such student-centered projects help students internalize new concepts much more quickly. “The activities help them understand the background material—they aren’t just reading something, they have to work their way around to the concept.” Castille stresses that using student-centered activities does not mean there isn’t structure in the classroom. She says that such activities require ground rules and the teaching of basic concepts before students can begin the projects.

Language Arts teacher Kay Chadwick, who has taught since 1965, reports that because of her SEDL training she now gives her students some control over their projects. “The more they have a part in learning, the more they learn things they can use—they are not just regurgitating facts,” Chadwick says.

As Carencro teachers integrate group projects into their curriculum, students teach each other about subject matter and technology. This interaction helps students clarify their own understanding. Math teacher Tori Guzzetta believes that the children actually work harder to learn material when they must explain it to someone else.

Guzzetta says, “SEDL has emphasized how important it is that we all learn together—learning is a team sport. It gives more kids an opportunity to shine—some kids are good with paper and pencil tests, but this way of teaching gives everyone a chance to do a variety of things to show what they have learned.”
Six traits of "good reading" help teachers improve student achievement

Kids in the Northwest are becoming good readers, with the help of the Northwest Regional Educational Laboratory (NWREL).

They are confidently answering questions showing they comprehend what they have read. They can infer meaning and interpret passages. They are synthesizing ideas and critiquing text, using well-chosen examples. They are moving from being passive to active readers.

Based on two years of studying how students develop critical reading skills, NWREL has developed an assessment model that breaks reading down into a manageable group of teachable—and thus assessable—skills. Separating reading performance into six discrete skill areas—or traits—identifies what good readers do and describes "good reading."

In Washington state, Beverly Henderson, Assessment and Staff Development Coordinator in the Kennewick School District, believes these reader traits provide teachers and students an organized, sequential process that helps reach the new standards both in reading and content areas. "No longer are tests just asking students to read a passage and select a multiple-choice response. Students answer questions in which they must apply their reading skills," she says. "The NWREL workshops have helped our district make a giant step towards understanding how to teach students critical reading skills."
Henderson reports that "social studies, math, science, and vocational teachers voiced a giant 'aha!' when they discovered that the lessons and rubrics would make a difference in their content-area classrooms." The research, student examples, lessons, and assessment tools can be applied equally to literature as well as to math or science reading.

Focusing on the assessment of students' reading skills, NWREL's model is appropriate regardless of classroom instructional methods, ranging from whole language to focused skill-based instruction. It spans elementary and secondary grades, it helps teachers and students in both reading skills and content areas, and it's proving useful as states, districts, and schools strive to reach rigorous standards.

At the Nevada State Department of Education, Jacquelyn Moore, English Language Arts/Fine Arts consultant, says, "We are going to be strengthening our reading proficiency exam (exit exam) for high school seniors based upon our new and more rigorous state language arts standards. The six traits of reading will help to inform us on ways to strengthen that test."

Working with reading teachers at NWREL's partner schools in the Stevenson School District in Washington state, NWREL pilot tested strategies for assessing the six traits of a good reader with elementary and secondary students. This research and development work generated two major products to help teachers gain the knowledge and skills for teaching and assessing students in reading. Titled The Journey of a Reader, this instructional package for teacher training includes a 37-minute video presenting 17 classroom activities relative to effective reader traits and a 200-page resource book for teachers with a K-3 developmental continuum; two scoring guides for assessing reading in grades 4-12; and activities, assessment models, and lesson plans.

A study is currently underway in Salem, Oregon's Waldo Middle School where teachers are using the NWREL model to validate students' achievement gains.

NWREL conducted 15 training workshops and institutes for K-12 educators during the last half of 1998 addressing specific interests of individual schools and districts, including the relationship of the assessment model to state and local standards.

Thousands of teachers are now using the six-trait assessment and instruction model in teaching reading.
A teacher who wants to learn better ways to teach reading to her diverse group of learners,
A principal who wants an appropriate comprehensive approach to mobilize the faculty toward whole school reform,
A policymaker who wants to understand options for holding schools accountable.

These and other clients across the country benefit from the products and services Laboratories provide. Responding to regional priorities, targeting dissemination strategies and using a variety of media, Laboratories reach an increasing number of clients, helping them improve their practice.

In 1998, the Laboratories more than doubled the number of clients receiving products: from 419,927 in 1997 to 988,055 this year. Products like resource directories, policy briefs, research syntheses, and training materials were provided in print and electronic formats. They ranged from topical newsletters, mailed out to every school in the region, to tailored policy analyses for state legislators.

The World Wide Web is an increasingly important communication tool. In 1998, there were 19,305,052 hits on the websites of nine Laboratories reporting exact figures. In 1999, an enhanced central laboratory system Website, with search capabilities, will make it even easier for clients to find what they need.

But information is only the beginning. We know that changes in practice, the kind that will truly increase student learning, require ongoing external support and assistance.

Laboratories provide service to regional clients. They conduct workshops on key topics: standards-based practice, instructional strategies, assessment techniques—bringing to scale the tools and processes first tested in development sites with field partners. 178,555 clients were served in 1998, up from 148,966 the previous year.

More than the numbers themselves, the nature of laboratory service is important. Knowing that one-shot assistance is of minimal benefit, we dig in with clients for the long haul, helping them work all the way through a problem. As a state reform unfolds, for example, we help design the multiple components needed to shape and support changes in practice.

We aim not just to address an immediate need but to build the skills and capacity of educators at all levels. As one principal put it, "they help me do my job better."
Overall, 90% of the educators receiving such assistance rated products and services of high quality. Surveys also tracked three broad outcomes: increased knowledge and skills, use of information in decision making, and enhanced professional practice. The percentage of clients reporting these different outcomes is shown in the figure below. Sixty-eight percent of survey respondents in 1998 reported enhanced professional practice, a slight increase over 1997.

Client Feedback on Laboratory Products and Services

<table>
<thead>
<tr>
<th></th>
<th>New knowledge and skills</th>
<th>Used for decision-making</th>
<th>Enhanced professional practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>74%</td>
<td>70%</td>
<td>63%</td>
</tr>
<tr>
<td>1998</td>
<td>85%</td>
<td>55%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Partnerships are key to providing the breadth and depth of assistance schools need. Since no one service provider can do it all, Laboratories specialize in promoting networks and alliances that create an ongoing infrastructure of support for schools. In 1998, Laboratories participated in 171 different partnerships, an increase from 145 the year before. Some were job-alike networks of educators, in which Laboratories bring people together to learn with and from each other. Some were formal partnerships with cross-institutional groups for long-term improvement projects. Many of these alliances included federally funded research centers or assistance agencies such as the Comprehensive Assistance Centers or the Eisenhower Regional Mathematics and Science Consortia. Surveyed about the value of these partnerships, 94% of respondents replied that they addressed significant concerns or expanded their capacity to work effectively.
A short subway ride along the East Side of New York City offers a vivid glimpse into the character of a neighborhood school district. The train crawls from the new immigrant quarters of Lower Manhattan through trendy Soho and into the posh surroundings of the Upper East Side. Passengers, whose children might be classmates, sit side-by-side but are fixed on vastly different destinations.

Such is the fabric that makes up just one of the city's 42 community school districts, in a public school system comprising 1.1 million students. Serving this large complex population became a particular challenge when a school governance law passed by the New York State Legislature required the chancellor to create a plan that put in place shared decision-making teams at each school by October 1999. Because local community input is critical to getting reform efforts to take hold, the chancellor would need to undertake a broad-based consultation process to make the teams actually work. But two questions emerged: How to engage everyone in the same conversations? and How to capture results in a meaningful, usable way?

To find answers, officials sought assistance from the Northeast and Islands Regional Educational Laboratory at Brown University (LAB). A primary goal was to get an accurate reading on stakeholders' beliefs and concerns so that principles guiding this city-wide plan would enable teams to collaborate on decisions ranging from curriculum issues to professional development to the school budget. A new emphasis on establishing standards meant the teams would have more of a hand than ever in decisions affecting student performance. School-based leadership teams were not new to New York's education system. But they'd been
unevenly implemented. Certain schools had them; others did not. Some teams represented parents and community members, while others didn’t.

Things were about to change. The new teams would need to include a balance of parents and school staff along with an established process for resolving impasses and conflicts. To be sustainable over the long haul, the leadership team plan must be based on an accurate reading of community members’ belief systems. The LAB’s role, then, was to help the city’s administrators not just hear all the voices of its disparate residents, but in a way they could use to shape a workable plan.

“We didn’t want to get into a numbers game, where we were counting up how many people agreed or disagreed with a principle; we wanted to know why,” says Richard Giordano, who helped lead development of the project database at the LAB. “And we wanted to trust the data, which you can only do by approaching it a number of different ways.”

The key was taking a voluminous amount of data—gathered from nearly 7,000 participants between November 1997 and April 1998—and organize it into a usable format. Flipchart notes from meetings were entered right along with structured “check-off” surveys, school-team surveys, participant reactions to a need for supports, and individual responses to open-ended questions about the state of affairs in the city’s schools.

Results showed an eclectic range of perspectives—from teachers who wished parents would become more involved in school happenings to parents who felt educators don’t structure schools in ways that make parents feel like welcome contributors. “The way some staff greet you,” explained one parent, “makes you not want to come back.” A member of a community-based organization felt schools needed professional development that would help them see beyond their closed environment into “a bigger world.”

Ann Horowitz, senior assistant to Deputy Chancellor of Operations Lewis H. Spence, said the information gathered is invaluable in shaping the policies that will guide city-wide implementation of the teams in each school beginning this year. Based on what was learned through the meetings, the New York City school system will spend about $10,000 per school team for training and support in the first year.

“T he LAB partnered with us from the conceptual stage,” said Horowitz. “They helped us think through then design the actual process.” Because of this partnership, we were able to design a public engagement process, gather a huge array of information, and synthesize it into something useful for policymaking. This isn’t something we could have done without the LAB’s help.”
As the standards-based education movement swept the country, countless new academic standards accumulated like so many mismatched puzzle pieces. States as well as administrators and teachers were at a loss about how to build a logical, coherent set of standards to guide improved teaching and learning.

In the early 1990s, as more districts sought help from the Mid-continent Regional Educational Laboratory (McREL), its researchers began wading through the myriad pieces of the standards puzzle, identifying those that were similar, conflicting or overlapping, and figured out how to fit the pieces together so they make sense to educators. Their work synthesizing more than 116 documents and reports, compiled by professional education organizations and other content experts, created a database of 256 standards and nearly 4,000 accompanying benchmarks. This database serves as a rich resource to state and local educators, in the central region and throughout the country, as they set clear public standards for student achievement.

Standards identify what students should know and be able to do at particular points in their education, providing an agreed-upon foundation teachers can use to assess student performance. Benchmarks are more specific descriptions of the skills and content students should master at each level of schooling.

McREL researchers have continually updated the database, now in its fourth edition. Titled *Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education*, the database...
is available in print and can be downloaded from McREL's Web site. By the end of 1998, McREL had disseminated more than 18,000 copies in print. During the 1998 calendar year, more than 120,000 Web site users visited and downloaded portions of McREL's standards database.

Teachers and administrators using this resource soon learned that writing the standards was only the first of many steps required to insure higher levels of student learning. Again McREL responded to educator questions about how to implement a standards-based approach to classroom learning. Organizing instruction around helping students to meet standards requires teachers and administrators to rethink not only what they teach but also how content is taught and how progress is measured.

McREL staff routinely work with states, districts and schools to help them create standards-based learning environments. For example, the North Dakota Department of Public Instruction, with McREL's help, launched a 1995 initiative to develop state standards and benchmarks paired with standards-based assessments in English language arts and math. Teachers from across the state working in design teams developed a set of state standards, four language arts and two math assessments. "This process has been such a beneficial experience," one math teacher said. "It has made me think about my teaching style and substance, why I'm teaching, what I'm teaching, and ... what the children are learning." Another concurred. "I have incorporated new topics and techniques in my classroom. Not to 'teach to the test,' but to teach to the standards, and I now work to incorporate them fully in my classes."

Building on state frameworks, schools and districts throughout the nation are working to translate this guidance into classroom practice. In Kansas, for example, McREL has worked since 1997 with the Spring Hill School District to develop an elementary charter school, helping staff create a curriculum aligned with state and national content standards. "It's been a very successful partnership," explained lead teacher Michelle Toon, adding that McREL served as a vital resource, providing research-based knowledge on specific topics. As a result, what students learn and how their performance is assessed will be consistent with state standards.

These examples illustrate the kinds of help educators are receiving all over the country. In 1998 alone, McREL produced over 100 standards documents with more than 250 classroom tasks for clients in 12 states. Other work included the analysis of 120 state standards subject-area documents. McREL will continue to expand the knowledge base about standards-based education in ways that will most impact the nation's classrooms.
Helping schools adopt comprehensive reform approaches shown to work in achieving student success is a major aim of the Urban School Enhancement program of the Laboratory for Student Success (LSS) at Temple University. A primary focus in working with states and school districts is to put into practice well-researched programs that have demonstrated success in improving learning for students in urban schools with high concentrations of students from economically and educationally disadvantaged backgrounds.

LSS assists districts and schools as they assess their needs and plan for change, and provides ongoing professional development and assistance to local schools. One example is the district-wide reform initiative of the Elizabeth School District, a low-income, urban community in Northern New Jersey. The district serves 18,709 students in 27 schools. Seventy-five percent of students receive free and reduced lunch, and 87% are from minority backgrounds, with 27% African-American, and 59% Latino.

As the result of a class action parity lawsuit, known as the Abbott Decision, Elizabeth School District and 27 other urban school districts in New Jersey are receiving extra funds from the New Jersey State Department of Education to carry out comprehensive approaches to significantly improve
student achievement. One stipulation is that districts receiving the Abbott funding must develop a plan to meet the state's standards for student achievement by implementing a research-based comprehensive school reform model that has been shown to be effective in improving student achievement.

The Superintendent of Elizabeth School District asked LSS staff to assist the district in planning and implementing a district-wide professional development program focusing on: (a) what research and practice have shown to work in achieving significant improvements in student learning, and (b) how to bring this knowledge to bear in making informed decisions about which model programs will best meet the particular needs of each school as a part of the Abbott Decision.

The planning process began with a series of "What Works Seminars" for district and building leadership. Central office administrators, principals, vice-principals, and supervisors from the Elizabeth School District attended a sequence of four daylong professional development sessions focused on (1) providing up-to-date information on what works, and (2) providing hands-on work sessions on the leadership role in carrying out such comprehensive reform, including, for example, using school data to improve student achievement; strategies for aligning district and state standards to curriculum and performance standards; and systematic procedures for selecting the model approach that matches the school's improvement needs.

As a result of the schools' participation in the LSS What Works Seminars and Planning Institutes, every school in the Elizabeth School District was able to complete a plan to begin implementation of a proven comprehensive approach to school reform for the 1998-99 academic year. The research-based models selected by Elizabeth schools include: Coalition of Essential Schools developed by Ted Sizer at Brown University; the Community for Learning Program developed by Margaret C. Wang of LSS at Temple University; the School Development Program founded by James Comer at Yale University; and Success for All, initiated by Robert Slavin, Director of the Center for Research on the Education of Students Placed at Risk at Johns Hopkins University.

In addition to the planning efforts, LSS is providing ongoing professional development and technical assistance to 14 schools in Elizabeth that have chosen to implement LSS's Community for Learning Program to ensure that a high degree of program implementation is maintained to achieve student success. Altogether LSS is currently working intensively with close to 200 schools in the mid-Atlantic region and selected urban schools across the country, supporting their comprehensive reform efforts. Work such as that being accomplished in Elizabeth schools enables LSS to continue to improve its capacity to support other schools as they implement what is known to work to turn around failing schools.
Pacific Educators
Gather to Promote Educational Excellence in the Region

What began in a humble library on a remote tropical island has now blossomed into the premier gathering of educators in the Pacific region.

Each year for 15 years, teachers, students, parents, and community members travel hundreds, even thousands of miles from their island homes to attend the Pacific Educational Conference (PEC), a strategy to bring the Pacific educational community together to share new knowledge, facilitate each other’s work, and strengthen networks among educators and service providers. Starting in 1984 at a Guam school library with 12 workshops and 125 participants, today the PEC has grown to include more than 150 workshops and 1,000 participants.

For many educators, separated by vast distances navigable only by sea or air, the PEC is the only opportunity to share instructional techniques, attend workshops on topics ranging from mathematics and science to parental involvement in schools, network with other educators facing similar challenges, and learn about each other’s
cultural traditions. Sponsored by the Pacific Regional Educational Laboratory (PREL), this quality event stands apart from other professional educational conferences because it is done in the "Pacific way." Among the distinctive learning experiences is the sharing of cultures, with each entity offering a sampling of song and dance performances, arts and crafts, and local lore and myths.

PEC '98 offered both adults and children a cornucopia of exciting learning experiences. Pre-conference institutes featured such topics as first-and-second language literacy, program evaluation, comprehensive school reform, transition from school to work, and El Niño climate changes in the Pacific. Other pre-conference activities included Teaching the Pacific Forum, a four-day workshop on Pacific history textbook writing; and Implementing IDEA '97, a three-day workshop exploring the implications of new legislation aimed at students with disabilities.

PREL's Technology Center offered conference attendees a chance to participate in several videoconferences with students and teachers in American Samoa and Sweden, and an opportunity to try out new software at the 30-computer CyberCenter. Those fascinated by the stars could check out Starlab, a portable planetarium with projection cylinders that display information in numerous curriculum areas.

Other conference sessions focused on using distance-learning technology, serving students at-risk of school failure, storytelling as a teaching tool, creating and using authentic assessments, early childhood development, school improvement designs and strategies, professional development for Pacific teachers and administrators, and best teaching practices.

During a shared forum, educators and students were inspired by two great speakers: one who told of a historic voyage on the legendary Polynesian voyaging canoe Hokule'a, and another who spoke on a futuristic journey into space on NASA's Pathfinder, a high-technology aircraft that runs exclusively on solar power. For the past 15 years, participants at the Pacific Educational Conference have been doing just that—coming together to learn from the past, appreciate the present, and anticipate the future as issues are explored to reach new frontiers and discover how best to teach the Pacific child. The PEC has become the most unique, dynamically evolving, and significant annual professional development activity for educators in the Pacific region.
Data-driven decision making—using hard facts about student and school performance to improve learning—is a hot topic in schools these days. But do educators really understand what that two-pound computer printout of test scores says about the school curriculum or their instructional practice? Or do they rely on intuitive observations and hope for the best?

It was in responding to the Goals 2000 challenge of becoming the best—first in the world, to be exact—that a group of 19 Illinois school districts seriously started using student achievement data to examine their curriculum and practice. And with the help of the North Central Regional Educational Laboratory (NCREL), the First in the World Consortium is on the road to using data to drive improvement.

The First in the World Consortium initially gained attention by accepting the national goal of "becoming first in the world in math and science," and arranged for its fourth, eighth, and twelfth graders to participate in the Third International Math and Science Study (TIMSS). "For years, we had heard that American schools don't measure up," explains Paul Kimmelman, superintendent of the West Northfield School District No. 31 in Northbrook, IL, and the Consortium leader. "It was time to pick up the gauntlet and find out if they
were correct. We knew that we were putting ourselves at risk by doing it, but it had to start somewhere." Congressman John Porter, the U.S. Department of Education, NCREL, and local business leaders supported their efforts.

The students scored well, ranking right up at the top with Singapore. But more importantly, the districts learned the value of using schoolwide data to pinpoint what they should be doing better, a process essential to real change. Specifically, the TIMSS experience provided credible data to drive the process of improving the districts' math and science programs. But even the most credible information can be confusing, so the Consortium enlisted NCREL's help to analyze, restructure, and disseminate the TIMSS data in ways that would make it more approachable and meaningful to their schools.

By conducting in-depth analyses of student achievement, student survey, and teacher survey data and by working with TIMSS analysts, NCREL helped shed light on several areas that had been less evident in previously published TIMSS information. For example, NCREL's analysis helped

First in the World focus on three factors critical to improved student learning: offering challenging content to all students, engaging the teachers, and promoting frequent communication among teachers about instructional practice. A Web site designed and maintained by NCREL (http://www.ncrel.org/fitw/homepage.htm) helps First in the World share their story with the rest of the world.

NCREL also has helped in many of the Consortium's other activities, including the establishment of teacher networks that enable teachers and administrators to take part in reform and improvement efforts. By conducting their own analyses of published TIMSS data, these networks link the results of research to their instructional practices.

"NCREL's ongoing support has made a significant impact on our ability to get the most out of the TIMSS experience and to share what we're learning with others," says Kimmelman. "By guiding us through the data in ways that help our teachers gain a deeper understanding of their practices, NCREL played a critical role in the development of our learning networks."
The dilemma confronts every school leader across the country—How do we help low-performing schools improve teaching and learning? Not long ago, schools may have hoped to get by with comfortable practice and marginal performance. Now the spotlight on education and the demand for results make that impossible. The challenge is to marshal the resources and expertise to help them do better.

This challenge is being met in the southeast, with the assistance of the Regional Laboratory, SERVE. In one of the poorest regions of the country, the states in the southeast have recognized low-performing schools and are mobilizing to assist them. With the tide turned from denial to proactive response, states are open to—looking for—ideas about how to succeed. SERVE is there to provide research-based information and to facilitate networking among states for mutual problem solving and support.

To help meet both needs, SERVE brings together educational leaders from the six southeastern states, together with experts in education reform, in their annual Southern States Seminar on Accountability. The 1998 summer seminar held in Charlotte, North Carolina, building on the previous year's gathering, allowed participants to share new state policies aimed at school improvement, lessons learned from their past year's work with low-performing schools, and changes they've witnessed in student achievement.

These states have fielded support teams to work directly with low-performing schools, helping them come to grips with the need to improve teaching skills in ways that focus on clear student
achievement goals. States have received a boost in providing these services not only from the annual Seminar, and other workshops and conferences provided by SERVE, but also through the cross-state networking it stimulated.

A key benefit of the ongoing seminars is the way they enable colleagues to exchange ideas and solutions. The time educational leaders spend networking becomes a mentoring process for some. "State borderlines are not a barrier to reform," as one school chief discovered. "After the seminar, a group from our office visited schools in another state and saw first-hand the changes being carried out and the reform taking place. We were able to come home and reshape the services we provide and better define our own process for helping schools within the confines of a limited state education budget."

"Learning what our sister states are doing to help schools not meeting the state accountability standards," said another participant, "gave us better ideas for providing assistance, rewards for improvement, and specific consequences when necessary. It's one thing to encourage change; it's quite another to truly support growth."

Results are encouraging. Each of the states reported gains in student performance during the past year. Schools are going off the low-performing list or making substantial progress. When surveyed, 88 percent of the state education leaders reported that information gleaned from the first Seminar in 1997 contributed to performance improvements.

The 1998 Seminar addressed some important issues for further growth. A highlight was a 3-hour workshop by Dr. Allan Odden on reallocation of resources. Schools often claim that they could do more if only they had more money. Dr. Odden provided concrete examples of how schools do have the resources if they rework how those resources are used. Both tradition and misinformation about what's possible hold schools in dysfunctional patterns of resource allocation. Armed with Dr. Odden's information, with follow-up planned, support teams will be able to guide schools in rethinking and making more substantial changes in practice.

Participants are eager for a continuation of the SERVE network. They see its value and know that the challenge of helping low performing schools continues. Where schools have progressed, they need to sustain momentum for continued achievement gains. Other schools need new strategies or further assistance to make the major shifts that are necessary. "As we continue to meet, share, and learn from one another, together, we will improve our schools."
The authors of the Comprehensive School Reform Demonstration program (CSRD) had a sweeping vision for America's schools...every child—even those from low-performing schools and poverty-stricken areas—would have the opportunity to receive a quality education. During 1998, the CSRD program—with its emphasis on proven, research-based models—jumpstarted activity across the nation to make that vision a reality.

From the beginning, there were questions. States wanted to know how to conduct the competition for federal funds. Schools wanted more information about the models: What features did they have; how would they fit each school's unique needs; how would the schools be evaluated once the models were in place? To answer these questions and many more, the Regional Educational Laboratories accepted the challenge to assist states, districts and schools in their regions through the myriad issues involved and help them take advantage of this opportunity.

During the first half of 1998 alone, Labs hosted more than 25 major school-reform model showcases, each of which drew an average of 250 district and school personnel. In partnership with state and local education agencies, Labs also delivered more than 100 technical assistance workshops attended by 6,000 people from more than 1,000 schools and districts. These sessions were aimed at informing school communities about the new reform initiative; helping schools and districts to reallocate personnel and financial resources, and make good choices among available models.

Tools developed by the Laboratories have helped educators across the nation. The Catalog of School Reform Models, developed by NWREL, provided early information about models for schools to consider. NCREL's Making Good Choices provided tools to guide needs assessment and model selection. These and other regionally tailored documents, videotapes, and audiotapes have been broadly disseminated to schools in every state.

Websites linked across the nation provide ready access to these resources, to research reports, and to model developer information. SEDL maintains the database of funded schools, which by the end of 1998 profiled 349 funded schools from 15 states. Between April and January, SEDL's Website alone tallied 21,636 hits. Future projects will make even greater use of the Web to promote networking among schools and to increase access for rural schools.

While working together to establish a national system of CSRD resources, Labs have also developed programs designed for their particular regions. For example, PREL in the Pacific region,
and Atlantic-based LAB at Brown, which works with schools in New York and Puerto Rico, adapted their CSRD materials and workshops to the needs of various ethnic groups for whom English may be a second language.

Labs have also focused on building the capacity of regional educators to carry out comprehensive reform, and the capacity of service providers to support their efforts. For example, SERVE collaborated on a district-wide workshop for principals in Dade County and featured CSRD in its Regional Forum on School Improvement. AEL, like other Labs, has built a regional network to support CSRD. In 1999, AEL will begin a two-year External Facilitators Academy for support providers.

Thanks to active involvement on the part of the laboratories, signs of success are already evident. With McREL’s help, for example, all seven states in its region have completed funding applications. As a result of schools’ participation in the LSS’s “What Works” seminars and planning institutes, 200 schools completed school reform plans that were implemented during the 1998-1999 school year.

Although much has been accomplished, concerted efforts are still ongoing. In response to demand by school districts, additional regional conferences have been planned. WestEd’s three-state conference for funded schools, for example, has launched an ongoing series of events for those schools. Labs will continue to provide training, help schools refine their reform strategies, reinforce the links between reform and the achievement of state and national standards, study implementation strategies, and report lessons learned.

Comprehensive school reform works: At Sheppard Elementary School in Santa Rosa, California, the majority of students are economically disadvantaged and 50% have limited proficiency in English. After Sheppard instituted comprehensive school reform, a study of achievement gains showed that Sheppard students outpaced their peers across the United States by 20%.

This example is not unique. A number of schools that have reorganized and revitalized their entire systems have seen similar results. Now, thanks to CSRD funding and with the help of the Regional Educational Laboratories, thousands more schools across America will be able to help students reach their full potential.

Labs also delivered more than 100 technical-assistance workshops attended by 6,000 people from more than 1,000 schools and districts.
Each Laboratory Provides National Leadership in a Specialty Area.

Appalachia Educational Laboratory
Rural Education
AEL's rural education specialty promotes the integrity of rural, small schools in a global economy by focusing on the essential school-community relationship. Staff work regionally to help rural schools and communities improve school readiness, school-to-work opportunities, and academic achievement. Nationally, staff provide leadership, share expertise, establish partnerships, and inform debate. Two recently published resources focus on planning new school facilities and on ways educational service agencies can provide leadership and frontline support to rural districts. AEL contact: Dr. Dan Branham

Northeast and Islands Regional Laboratory
Language and Cultural Diversity
The LAB at Brown University seeks to learn how schools can develop a curriculum that connects to the critical questions. NCREL development resources was begun in developing a technology learning, and instruction with high standards for all students.

North Central Regional Educational Laboratory
Curriculum, Learning, and Instruction
McREL's specialty area work focuses on infusing curriculum, learning, and instruction with high standards for all students. This work, which also addresses the needs of diverse populations and educational contexts, is broadly disseminated across the region and the nation. McREL concluded a study to identify content standards that the public views as essential elements of a K-12 education. A system has been developed to help teachers assess academic abilities of migrant, language minority, and mobile students in language arts, math, and science. In a variety of formats, McREL provides educators with high-quality professional development designed for increased student achievement. McREL contact: Dr. Lou Cochinielli

Mid-continent Regional Educational Laboratory
Urban Education
LSS developed the Urban Education Enhancement Program to address the multifold problems faced by children and their families who live in inner-city communities. The program focuses on providing coherent and caring learning environments that link the school with the family and the community in efforts to achieve student success. The program: (1) fosters collaborative programs of field-based development and applied research to build the capacity of local schools and school districts, and (2) convenes national, international, forums and discussion forums to address emerging issues and next steps in scaling up urban education reform. LSS contact: Dr. JoAnn Manning

SouthEastern Regional Vision for Education
Early Childhood Education
SERVEing Young Children's (SYC) purpose is to build national resource and referral networks, share successes through products, programs, and publications, and establish early childhood demonstration sites.

Southwestern Educational Development Laboratory
Language and Cultural Diversity
SEDL's specialty work develops, field tests, and disseminates resources to schools and communities to help all students succeed. Work currently focuses on five areas: adapting comprehensive school reform models to meet the needs of language minority students; helping teachers understand language development. Through its research, PREL identifies appropriate instructional practices and classroom language use patterns that produce higher levels of student literacy. This leads to the development of curriculum materials, training modules, and revised language policies. PREL contact: Dr. Zoe Ann Brown

SouthWest Educational Development Laboratory
Urban Education
LSS developed the Urban Education Enhancement Program to address the multifold problems faced by children and their families who live in inner-city communities. The program focuses on providing coherent and caring learning environments that link the school with the family and the community in efforts to achieve student success. The program: (1) fosters collaborative programs of field-based development and applied research to build the capacity of local schools and school districts, and (2) convenes national, international, forums and discussion forums to address emerging issues and next steps in scaling up urban education reform. LSS contact: Dr. JoAnn Manning

Urban Education
LSS developed the Urban Education Enhancement Program to address the multifold problems faced by children and their families who live in inner-city communities. The program focuses on providing coherent and caring learning environments that link the school with the family and the community in efforts to achieve student success. The program: (1) fosters collaborative programs of field-based development and applied research to build the capacity of local schools and school districts, and (2) convenes national, international, forums and discussion forums to address emerging issues and next steps in scaling up urban education reform. LSS contact: Dr. JoAnn Manning

WestEd
Assessment
The assessment specialty focuses on developing syntheses, products, and services on issues related to assessment and accountability for dissemination to practitioners and policymakers in the areas of school-to-work, teacher assessment, high-stakes assessment, and technical issues surrounding innovative assessments. Through WestEd leadership, the cross-Laboratory work group in assessment released two exemplary products: a Web site and database of best Laboratory-developed practices in assessment and accountability, and a revised toolkit filled with high-quality, hands-on resources for professional developers in classroom assessment. WestEd contact: Dr. Stanley Rubinstein

Northwest Regional Educational Laboratory
School Change Processes
Work in the school change process specialty area brings people and organizations together to improve the results of school improvement efforts. In collaboration with the Annenberg Institute for School Reform at Brown University and the Consortium for Policy Research in Education, national forums were conducted on two key issues: lateral accountability and scaling up school reform. Annual school improvement conferences are conducted for those who assist schools in change efforts. A cross-Laboratory partnership is producing training and self-study materials to assist schools and bring student views into the center of school reform. NWREL contact: Dr. Bob Blum

Pacific Resources for Education and Learning
Language and Cultural Diversity
PREL uses research-based practices to improve instruction and student learning in culturally and linguistically diverse settings. A focus of its work is to help educators improve student literacy through maximizing both indigenous and English language development. Through its research, PREL identifies appropriate instructional practices and classroom language use patterns that produce higher levels of student literacy. This leads to the development of curriculum materials, training modules, and revised language policies. PREL contact: Dr. Zoe Ann Brown

SouthEastern Regional Vision for Education
Early Childhood Education
SERVEing Young Children's (SYC) purpose is to build national resource and referral networks, share successes through products, programs, and publications, and establish early childhood demonstration sites.

In 1995 SYC's focus expanded from its previous efforts in preschool-to-school transitions to include children from infancy through age eight. The 1997 Early Childhood Policy Conference, a collaborative effort between SERVE and the National Center for Early Development and Learning, convened state and district decisionmakers to address emerging early childhood issues. SERVE contact: Catherine Scott-Little

SouthWest Educational Development Laboratory
Language and Cultural Diversity
SEDL's specialty work develops, field tests, and disseminates resources to schools and communities to help all students succeed. Work currently focuses on five areas: adapting comprehensive school reform models to meet the needs of language minority students; helping teachers understand cultural differences between themselves and their students; modify their classroom practices to address these differences; increasing communication among educators along the Mexican-American border; examining a deliberative dialogue model to encourage the participation of people of color; and identifying and disseminating resources on Native education programs. SEDl contact: Dr. Joan L. Buttram
NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (9/97)