Teachers—They matter most

Inside

Are Our Teachers Good Enough?, PAGE 3
Are Alternative Certification Programs a Solution to the Teacher Shortage?, PAGE 8
Dumas Invests in Future with Permanent Sub Program, PAGE 13
Tough Enough to Teach, PAGE 17
Mentoring Program to Put Arkansas Teachers on Path to Success, PAGE 19
E-Mentoring for Math and Science Teachers Made Easy, PAGE 21
A Click Away: Online Resources for Recruitment, Retention, and Quality Issues, PAGE 22
For the past several years we’ve read predictions that the teacher workforce will change. During a recent “meet the teachers” night at my son’s high school, I realized this may be coming true. Only one of my son’s four teachers fit my conception of a traditional teacher, or at least my conception of a teacher who had followed a traditional career path.

One teacher, in his early 50s, had spent 25 years running a successful software programming company. The second teacher had retired two years ago, but came out of retirement to teach three classes because the high school desperately needed a calculus teacher. The third had traveled the world and attended law school before deciding what he really wanted to do was teach.

These teachers represent what may be a trend in the teaching profession, especially as schools and districts struggle to meet the estimated need of more than 2 million teachers over the next decade. Our educational workforce is changing — more and more we will see teachers coming into the classroom after they have had other careers. And with the core of the current teaching force comprising baby-boom generation teachers on the brink of retirement, districts and schools may need to lure teachers from retirement or tempt them to postpone retirement.

Nationwide, we have a more diverse and growing student population, a general population that is expecting more from its schools, and a dwindling supply of graduates who want to make teaching a career — roughly 30 percent of the college graduates who have been prepared to become teachers choose not to teach. In light of this situation, we should keep in mind that student achievement is related to teacher quality. To paraphrase the National Commission on Teaching and America’s Future, teaching is what matters most. It will be up to those of us in the field of education to “think outside of the box” to recruit and retain the best and the brightest into the teaching force. We must also work more diligently to recruit and retain a more diverse teaching force, to ensure that we have teachers of the highest quality for all of our students.*

Articles in this issue of SEDLetter take a look at challenges associated with building the teaching force and at some of the strategies used by schools, districts, and state education agencies to address these challenges. “Are Our Teachers Good Enough?” considers teacher quality and ways to strengthen quality. “Are Alternative Certification Programs a Solution to the Teacher Shortage?” presents the good and bad sides of alternative certification programs, which increasingly are seen as a promising solution to the teaching shortage.

Teaching shortages in certain areas may also mean a substitute teacher shortage, which sends many school administrators scurrying to the classroom to help out when no subs are to be found. SEDLetter will visit one Texas school that has found a solution to its substitute shortage while helping to increase its supply of regular teaching staff, too. We are also going to take a look at two different mentoring programs — one that is focused on inducting new teachers in Arkansas and a SEDL mentoring project that takes advantage of the Internet to help math and science teachers.

This issue marks the debut of a column — “Voices from the Field” — that we plan to run on a regular basis. Each column will feature an essay from a teacher or administrator. In this issue, high school teacher Carey Clayton writes about why she considers leaving the profession and why she stays. We would love to hear from other teachers who would like to write essays related to these upcoming SEDLetter topics: family and community involvement in schools; teaching reading or mathematics; or professional development. If you are interested in contributing or sharing your comments, please contact me at lblair@sedl.org.

We at SEDL hope your school year is off to a great start!
Are Our Teachers Good Enough?

A few years ago, Dallas Independent School District’s Robert Mendro started comparing the test scores of elementary school students. He had a hunch that the teachers a student had made a difference in that student’s test scores. But Mendro, the district’s chief evaluation officer, says even he was startled at the size of the achievement gap he uncovered.

After three years with very effective teachers, students were able to raise their test scores by 16 percentile points in both reading and math. By contrast, classmates who started out performing at the same level but had been assigned to very ineffective teachers for three years in a row saw their scores drop dramatically — by 18 percentile points in reading and 33 percentile points in math (see chart, p. 4).

The lesson learned in Dallas was obvious: Teacher quality counts. At about the same time, other researchers were reaching similar conclusions. In a recent analysis, the Center for the Study of Teaching and Policy asserted that the percentage of well-qualified teachers in a state is the most powerful and consistent predictor of its average achievement level on the National Assessment of Educational Progress (NAEP). And in Educating Teachers: The Academy’s Greatest Failure or Its Most Important Future? (1999), Stanford University researcher Linda Darling-Hammond showed that teacher ability is a stronger determinant of student achievement than poverty, race, or parents’ educational attainment.

The expanding body of research on the topic, amplified by the past decade’s increasingly urgent calls for improving student achievement, has made teacher quality arguably the hottest issue in education today. But the challenge of improving teacher quality is greater than ever.

Teacher Effectiveness

In the mid-1990s, the Dallas Independent School District conducted a mathematics study that examined student testing data and associated teacher effectiveness data. The math study found effective teachers

• are knowledgeable about content and able to provide better in-depth explanations to students,
• cover the entire curriculum, including higher-order skills and concepts,
• assess student learning frequently and through multiple means, and
• engage in deep instruction — they go beyond the printed curriculum to help students gain insights into the subject matter.


Geoff Camphire is a senior manager with KSA-Plus Communications, based in Arlington, VA. He has written on education issues for more than 10 years.
Quality vs. Quantity

Considering the longstanding push for higher standards in education, one might suspect that focusing attention on teacher quality would be a no-brainer. But policymakers and education leaders nationwide are wondering whether they can sustain even current quality levels, given today’s teacher shortage. And this shortage is expected to deepen and continue throughout the next decade.

U.S. schools, which currently employ more than 2.9 million teachers, will need to hire more than 2 million teachers during the next 10 years to accommodate record-breaking increases in student enrollment, retiring baby boom-generation teachers, and high rates of attrition among new teachers.

Some places will feel the pinch more acutely than others will. Many of the areas likely to be hit hardest by shortages are in the country’s southern and western regions due to increasing student populations.

So where are all the teachers? Either they are moving on to greener pastures or they never gave teaching much chance. In fact, Education Week reported in a recent analysis that more than one out of five new teachers leaves the profession after four years.

Why They Walk Away

Teachers give many reasons for turning their backs on the classroom. Some cite poor working conditions, school bureaucracy, and lack of support. Others say problems stem from inadequate preservice training and limited opportunities to upgrade their skills. According to a nationwide survey by the U.S. Department of Education, only one teacher in five feels very well prepared to teach in today’s classrooms.

“Our colleges of education and departments of education are too often treated like forgotten stepchildren in our system of higher education,” former U.S. Secretary of Education Richard Riley remarked in an address on teacher quality. “And when eager new teachers enter the classroom for the first time, we give them little, if any, help.”

Clearly, those who choose other options are signaling that what teaching asks of them is not worth what it offers in return. Low compensation is a major barrier to staffing schools with qualified teachers. In 1999, U.S. teachers averaged starting salaries of less than $27,989, far below starting salaries of more than $36,200 for all other college graduates, a recent American Federation of Teachers survey showed (see chart, p. 6).

The pattern of poor pay for teaching, a field traditionally dominated by women, has been well established for decades. Some states and districts have started addressing the problem in recent years, but overall little has changed. U.S. teachers’ average salaries inched up only 19.7 percent from 1991 to 1999, increasing at roughly the same rate as food-service workers’ salaries but not enough to keep pace with inflation, reports one economic consulting firm.

Close to home, the picture is even more disappointing. According to Education Week, the states of Arkansas, Louisiana, New Mexico, and Oklahoma rank among the “Bottom 10” states in the nation in terms of teacher pay.

“Concerns about the quantity of the supply have paralyzed people from acting on quality. There’s a kind of assumption that if we raise standards for who teaches, we will automatically worsen the shortage.”

Kati Haycock
Director, The Education Trust
## Supply and Demand Statistics

### Percentage of Schools Reporting Difficulty Filling Vacancies in Selected Teaching Fields

<table>
<thead>
<tr>
<th>School</th>
<th>Math 7-12</th>
<th>Physical Science 7-12</th>
<th>Biology 7-12</th>
<th>English 7-12</th>
<th>Special Education K-12</th>
<th>English as a Second Language K-12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K-6</td>
<td>7-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td>10.2</td>
<td>12.1</td>
<td>19.0</td>
<td>14.9</td>
<td>9.2</td>
<td>17.6</td>
</tr>
<tr>
<td>Louisiana</td>
<td>20.2</td>
<td>20.1</td>
<td>19.8</td>
<td>16.4</td>
<td>17.4</td>
<td>29.4</td>
</tr>
<tr>
<td>New Mexico</td>
<td>13.0</td>
<td>32.1</td>
<td>21.1</td>
<td>14.0</td>
<td>6.6</td>
<td>37.3</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>5.7</td>
<td>13.9</td>
<td>11.0</td>
<td>8.2</td>
<td>12.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Texas</td>
<td>11.8</td>
<td>37.6</td>
<td>22.2</td>
<td>17.0</td>
<td>16.9</td>
<td>26.8</td>
</tr>
</tbody>
</table>


### Rates of and Reasons for Public School Teacher Attrition

<table>
<thead>
<tr>
<th>State</th>
<th>% Moved to Another School</th>
<th>% Left Teaching</th>
<th>% Who Retired</th>
<th>% Who Left Due to Dissatisfaction, Salary, or Career Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>6.6</td>
<td>4.7</td>
<td>4.7</td>
<td>57.2</td>
</tr>
<tr>
<td>Louisiana</td>
<td>6.4</td>
<td>8.1</td>
<td>26.4</td>
<td>53.9</td>
</tr>
<tr>
<td>New Mexico</td>
<td>10.5</td>
<td>3.6</td>
<td>10.1</td>
<td>51.7</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>7.2</td>
<td>3.4</td>
<td>14.5</td>
<td>79.2</td>
</tr>
<tr>
<td>Texas</td>
<td>8.2</td>
<td>4.4</td>
<td>9.0</td>
<td>79.6</td>
</tr>
</tbody>
</table>


### Total Number of Teachers and Their Ages, 1993-1994

<table>
<thead>
<tr>
<th>State</th>
<th>Total Numbers of Teachers</th>
<th>Mean Age</th>
<th>% Under 30</th>
<th>% 30-39</th>
<th>% 40-49</th>
<th>% 50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>31,000</td>
<td>41.6</td>
<td>11.9</td>
<td>30.0</td>
<td>38.4</td>
<td>19.6</td>
</tr>
<tr>
<td>Louisiana</td>
<td>49,000</td>
<td>41.8</td>
<td>13.7</td>
<td>26.5</td>
<td>38.6</td>
<td>21.1</td>
</tr>
<tr>
<td>New Mexico</td>
<td>19,000</td>
<td>42.4</td>
<td>10.2</td>
<td>25.9</td>
<td>42.2</td>
<td>21.7</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>42,000</td>
<td>41.7</td>
<td>11.7</td>
<td>26.5</td>
<td>43.0</td>
<td>18.8</td>
</tr>
<tr>
<td>Texas</td>
<td>224,000</td>
<td>41.6</td>
<td>13.6</td>
<td>26.9</td>
<td>39.0</td>
<td>20.6</td>
</tr>
</tbody>
</table>

“Everybody has opinions of who the good teachers are, but in point of fact there is no way, in most school systems, to deliver any evidence about whether they are or not.”

Richard Elmore
Education Professor,
Harvard University

Oklahoma, where teachers earned an average salary of $29,525, was the second-lowest-paying state in the country during the 1999-2000 school year.

Meanwhile, public education systems are asking teachers to take on a dizzying array of new challenges, including:

- helping students meet unprecedented academic standards,
- being held accountable for student test scores,
- competing with charter-school and voucher-supported education innovations,
- using new technologies for teaching and professional growth, and
- instructing students in matters of character as well as academics.

For educators around the country, the high-stakes testing and other accountability systems already in place heighten the sense of urgency around teacher quality issues. “They’re [public education systems] going to have to address these issues eventually anyway, so they had better get on with it,” warns Richard Elmore, a Harvard University education professor who has written extensively on teacher quality. “We’re at a kind of critical stage.”

Making Quality Matter

Will public education systems that demand higher levels of teacher quality find their pools of candidates shrinking? On the contrary, some education leaders say, promoting teacher quality can be a dramatic way of supporting the profession — and making it more desirable to qualified candidates and current practitioners.

“Concerns about the quantity of the supply have paralyzed people from acting on quality,” says Kati Haycock, director of The Education Trust, a Washington, D.C.-based organization that advocates effective education for all students. “There’s a kind of assumption that if we raise standards for who teaches, we will automatically worsen the shortage. But there is a fair amount of evidence that that’s actually not the case, especially among the high-end people who will be needed to join this increasingly complex work — and who are attracted by higher standards, not repelled by it.”

Haycock and others have recommended several promising strategies for strengthening teacher quality and raising the status of the field, including:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>0</th>
<th>10,000</th>
<th>20,000</th>
<th>30,000</th>
<th>40,000</th>
<th>50,000</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$47,112</td>
</tr>
<tr>
<td>Math/Statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$46,744</td>
</tr>
<tr>
<td>Computer Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$46,495</td>
</tr>
<tr>
<td>Economics/Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$41,102</td>
</tr>
<tr>
<td>Business Admin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$40,242</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$38,210</td>
</tr>
<tr>
<td>Sales/Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$37,946</td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$37,688</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$36,201</td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$27,989</td>
</tr>
</tbody>
</table>

• Explore new approaches to recruit and retain capable candidates. For example, many districts are encouraging candidates from non-traditional backgrounds, such as business or the military, to enter teaching while ensuring that they meet high professional standards.

• Require teachers to demonstrate classroom ability through rigorous evaluations. “Personality traits tend to dominate people’s conception of what good teaching is rather than knowledge and skill,” says Elmore. “Everybody has opinions of who the good teachers are, but in point of fact there is no way, in most school systems, to deliver any evidence about whether they are or not.”

• Strengthen collaborations between K–12 schools and teacher education programs. “One of the things that superintendents and principals can bring to teacher preparation is reality of everyday classroom life,” says Margaret Gaston, co-director of the Center for the Future of Teaching and Learning, based in California. “Teacher candidates who have a familiarity with the campus are more comfortable with taking a job there. Principals and superintendents should shop early and begin their guidance and support for these teachers, not when they enter the classroom as employees, but when they’re in teacher education programs.”

• Provide meaningful induction programs for teachers. “The extent to which teachers feel they are supported regularly and substantially, especially in the first year of teaching, impacts their persistence rate — whether they stay in a profession,” says Gaston. “High-quality induction programs really make a difference.”

• Tap experienced teachers to mentor their novice colleagues. “You have to look at the pool of people who are actually doing this work, and you have to begin to use the people who are good at it in different ways,” says Elmore. “People who are good at this work can’t continue to be full-time classroom teachers. They have to actually start to be mentor teachers and professional developers.”

• Provide professional development that is ongoing, interactive, and focused to a large extent on academic content, not just technique. Federal 1998 survey data show that a U.S. teacher typically receives less than eight hours of professional development per year. Yet, according to an October 2000 study by the Educational Testing Service, students whose teachers receive professional development score better on assessments than peers who do not have the benefit of such teacher practices.

• Increase pay for teachers who demonstrate high performance to levels comparable with other professions. “Teaching must compete more aggressively than ever before for a competent workforce,” Darling-Hammond observes, “but the incentives offered in many communities simply are not enough to attract and keep capable individuals in education.”

Finally, Haycock points out, education leaders must recognize the multiplicity of factors that lead to shortcomings in teacher quality. “Unless you understand that there are various roots of the problem, you’re not likely to be able to solve it because there’s no single way of solving it,” she asserts. “You have to take a comprehensive approach.”

The stakes are indisputably high. In the words of David Haselkorn, president of the Massachusetts-based Recruiting New Teachers, Inc.: “Teaching is the profession that makes all other professions possible.”
Francisca Ramirez-Sorenson says teaching runs in her family. Her mother was a teacher, as was her grandmother. But until a year ago, Ramirez-Sorenson was on a different career path — one that made use of her master’s degree in anthropology. “I was not going to be a teacher under any circumstances,” she recalls. “But I think I was born with certain talents.”

In September, Ramirez-Sorenson was certified as a teacher. The route she took to the front of the classroom, however, is different from the traditional four-year college program. She is a graduate of the Houston Independent School District’s Alternative Certification Program — the first district-based program of its kind in the country.

This year-long program prepared her well for the classroom, says Ramirez-Sorenson. “They taught us a great deal about child development, child psychology, strategies for teaching, and how to encourage children to learn. They also taught us how to work with foreign students — and the cultural shock they might go through when they come here — and how to help them.”

She took the required 15 hours of university courses in education, received four hours of additional instruction by district staff every week, and worked closely with a mentor during her first year in the classroom.

“You almost feel like a fish in a fishbowl,” Ramirez-Sorenson says. “You’re watched, watched, watched.”

Are Alternative Certification Programs a Solution to the Teacher Shortage?

By Lesley Dahlkemper

Denver-based writer Lesley Dahlkemper is a senior consultant with KSA-Plus Communications, a firm based in Arlington, Virginia. KSA-Plus provides specialized expertise in communications strategy, writing, editing, design, and publications management.
scrutinized. You’re taken aside and told how you could do it better. My mentor took charge of me. She observed me regularly and gave me pointers."

Ramirez-Sorenson recently completed her first year as a certified bilingual teacher at J. W. Oates Elementary School in Houston.

Her story is a familiar one to others who have completed alternative certification programs. Supporters of these programs say they are a win-win for districts scrambling for teachers and for adults interested in pursuing a more meaningful career.

Why Now?
Faced with severe teacher shortages, states are looking at new ways to certify teachers. Alternative certification programs were introduced in the 1980s as a short-term solution to the problem but are fast becoming a permanent fix. In the past, colleges and universities took the lead on teacher certification. Now, they are competing with alternative certification programs administered by state education agencies and local school districts.

According to the National Center for Education Information in Washington, D.C., public schools will need 2.2 – 2.7 million teachers — both veteran teachers and new teachers* — to fill classroom positions in the next decade. That’s at least 220,000 teachers a year for the next 10 years.

Why the shortfall? Fewer traditional college students are enrolling in education courses, while more veteran teachers are retiring from

What does an effective alternative teacher certification program look like? Here are some common elements:

- Rigorous screening process: Candidates must demonstrate mastery of content, undergo an interview process, and pass tests.
- Strong mentor program: Mentors are well-trained and work regularly with teaching interns.
- Field-based experience: Prospective teachers receive hands-on training in the classroom before they are expected to teach on their own.
- Location, location, location: Programs not only target geographic areas where the demand for teachers is the greatest but also are located in those areas.
- Tailor-made: Programs are designed for people who have a bachelor’s degree and are keenly interested in pursuing a teaching career.
- Collaboration among partners: Districts, local universities, state departments of education, and others work closely to ensure a seamless, high-quality program.

Fast Facts

- 41 states and the District of Columbia have alternative certification programs.
- New Jersey was the first state to approve alternative certification, followed by Texas.
- Houston was the first district in the country to create its own alternative certification program.
- Some states have more than 35 different alternative certification programs.
- More than 24,000 teachers were certified through alternative routes in the 28 states that collected such data in 1998–1999.
- 125,000 prospective teachers graduated from alternative programs in the last five years.

Sources: The Southeast Center for Teaching Quality and the National Center for Education Information

*See Hussar, William J. (1999). Predicting the Need for Newly Hired Teachers in the United States to 2008-09. Washington, D.C.: National Center for Educational Statistics. Hussar predicted the number of teachers needed based on three scenarios, thus the range of numbers from 2.2 million—2.7 million. The first scenario held the student/teacher ratio constant throughout the period 1998-2008, and resulted in an estimate of 2.4 million teachers that would need to be hired during the decade. The second scenario held the supply of teachers at a constant number, and resulted in an estimate of 2.2 million teachers to be hired during the decade. The final scenario was based on Projections of Education Statistics to 2008. It resulted in an estimate of 2.7 million teachers to be hired during the decade. The report may be downloaded at http://nces.ed.gov/pubs99/1999026.pdf.
newer instructors are leaving after only three to five years in the classroom. “We’re producing 200,000 fully qualified teachers per year who are coming out of colleges that prepare teachers,” says Emily Feistritzer, president of the National Center for Education Information. “But we know that many of them aren’t going into teaching after they graduate.” And those who do pursue a teaching position when they graduate are less likely to teach in the challenging inner-city and rural areas that are in desperate need of qualified teachers. “The perceived crime and violence in inner cities is a real turn off, particularly to young people who are going into their first job,” Feistritzer says.

Donna Zornes, who helps coordinate nontraditional licensure for the Arkansas Department of Education, agrees. “We have had a hard time placing teachers in certain geographic areas of the state, especially the Delta region. There’s a higher poverty rate there, and it’s more difficult for districts to attract highly qualified teachers.”

The competition for new teachers is fierce, especially for teachers in high-demand areas such as special education, math, science, and bilingual education. In New Mexico, prospective teachers in these specialized areas are recruited heavily by school districts in Texas and other neighboring states. “Eastern New Mexico University reported that every bilingual teacher it produced last year went to teach in another state,” says Marilyn Scargall, director of professional licensure for the New Mexico Department of Education.

In an effort to recruit more teachers, some states are making their alternative certification programs more attractive by placing heavier emphasis on mentoring, hands-on learning in the classroom, and flexibility in scheduling and requirements for candidates. Some argue that these approaches and other improvements have helped strengthen alternative certification programs. “When our program was implemented in the late 1980s, the rigor and quality were uneven,” Scargall says. “Mentorship wasn’t a requirement. Now it is. We’re able to attract people into the teaching profession that might not be interested in pursuing a teaching career.”

Is Alternative Certification the Answer?

Supporters say alternative certification programs provide a fast track for midcareer professionals and retirees who may be less inclined to return to college and pursue a traditional education degree. Advocates say alternative certification programs offer districts more flexibility to recruit and hire teachers, especially in the urban districts with large minority populations that have been hardest hit by the teacher shortage.

New Jersey was the first state to approve alternative routes to teaching in 1985; Texas followed when the legislature authorized a similar program in the same year. Patrick Shaughnessy is the director of communications for the Texas State Board for Educator Certification. “Our program is geared toward working college graduates,” he says. “It could pose a great hardship to them to give up a career and return to college for a year or two. They would have to give up their incomes to become full-time college students in order to become full-time teachers.”

Once prospective teachers are enrolled in one of Texas’s 35 alternative certification programs, they typically begin teaching within a few months and are paid during their internship. More than 35,000 teachers have been certified through the state’s alternative certification programs, many of which are affiliated with the state’s Education Service Centers. Although the programs vary, all prospective teachers are required to pass the same certification tests as are students enrolled in a more traditional four-year college or university program.

“We did an analysis of our current cohort, and 60 percent of folks in alternative certification are 35 years or older,” Shaughnessy says. “We’re talking about true career changers here, not merely people who have been unsuccessful at past careers but people who want to pursue teaching.”

Supporters of alternative certification echo Shaughnessy’s sentiment. They say older,
more mature candidates offer a world view and are more patient — qualities, they contend, that work well in the classroom.

**Alternative Certification Programs Vary Widely**

As of 2000, 41 states and the District of Columbia had approved alternative certification programs, according to the National Center for Education Information.

Some states require courses on classroom instruction, trained full-time mentors assigned to prospective teachers, and lots of support during a prospective teacher’s internship in the classroom. Other, more lenient, programs offer certification based on a transcript and a resume. Still others require individuals to complete the equivalent of a traditional teacher preparation program.

Critics say that some alternative certification programs are merely a euphemism for emergency certification. The broad inconsistencies in alternative certification programs concern teacher-quality experts like Barnett Berry, managing director of the National Commission on Teaching and America’s Future in Washington, D.C. While Berry supports high-quality alternative certification programs, he says too many programs lack rigor and uniform standards.

“You have folks graduating from these programs with good academic credentials, but they have no training in how to teach literacy, no training in how to assess student work, and no training in how to work with parents and families.”

Berry argues that the more uneven the program standards are, the more likely it is that alternative certified programs will produce teachers with varying skills in knowledge and ability. “We know, for example, a whole lot more about how to teach reading. How can we ensure that all these programs offer uniformity in terms of a knowledge base? Guess which teachers are going to know less about literacy? The teachers who are coming out of short-cut alternative certification programs. They are the ones who will be teaching kids who need teachers who need to know a lot more.”

Critics also contend that teachers who are certified through nontraditional avenues abandon classroom teaching sooner. “You need a talented, stable staff to turn around a school, not teachers who are going through the revolving door at the speed of light,” says Berry. “We know from data we have assembled — and we need more — that those who go through short-cut programs with no mentoring and no support are the first to walk out the door.”

More data do need to be collected. Studies on how long teachers stay in the profession seem to vary as much as the alternative certification programs themselves. One study, conducted by the Texas State Board for Educator Certification, shows that nontraditionally licensed teachers stay in the profession for about as long as traditionally licensed teachers — five years. Early data from the National Center for Education Information indicate that individuals entering teaching through alternative routes show a higher retention rate than those graduating from traditional programs.

---

<table>
<thead>
<tr>
<th>State</th>
<th>Where are the best alternative teacher certification programs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td></td>
</tr>
<tr>
<td>Colorado</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td></td>
</tr>
<tr>
<td>New Mexico</td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td></td>
</tr>
</tbody>
</table>

The National Center for Education Information (http://www.ncei.com) ranked state alternative certification programs using the following criteria:

- The program has been specifically designed to recruit, prepare and license talented individuals for teaching who already have a bachelor’s degree.
- Candidates pass a rigorous screening process that includes assessments such as entry tests, interviews, and demonstrated mastery of content.
- The programs are field-based.
- The programs include coursework or equivalent experiences in professional education studies before and while teaching.
- Candidates for teaching work closely with trained mentor teachers.
- Candidates meet high performance standards for completion of programs.

How Good Is Good Enough?

One of the core issues for supporters and detractors alike is, how good is good enough. Supporters contend that if a prospective teacher has strong content expertise in math, science, or other subject areas, the teaching — with proper training and mentoring — will quickly come. Other say not so fast. Learning how to teach takes time, instruction, and lots of experience.

Joan Snowden, director of the educational issues department for the American Federation of Teachers, says “I do think that there’s more than one way to learn this stuff, but I don’t think this is something that you’ll just pick up because you know the content. I do think there are ways to help you learn it.” Snowden and others question whether alternative programs provide enough mentoring, support, and instructional strategies for incoming teachers. Opinions, not surprisingly, vary greatly.

State education agency and district leaders say their backs are up against the wall. When schools fail to recruit new teachers, districts must hire uncertified teachers, assign teachers out-of-field, and increase class sizes. “In the past we had to hire long-term substitute teachers,” says Zornes. “I’d rather hire someone who is interested in teaching as a profession and meets the qualifications for the program who has had intensive support than to have a long-term substitute.”

A Look into the Future

Supporters and critics agree on one thing — there’s more work ahead. They say states have to do a better job of collecting data on alternative certification programs and offer more guidance on what constitutes a high-quality alternative teacher education program.

Some observers, like Berry, recommend a stronger investment in performance assessments for prospective teachers who are enrolled in traditional and nontraditional programs alike.

Feistritzer predicts that more colleges and universities will offer alternative certification programs. She says many of the newer programs are housed on college campuses. “Initially, they were the biggest critics because they saw it as a big threat. Being smart people, they decided not to follow the train but to get on the front end of it.”

Others, like Snowden, are less optimistic about the impact of nontraditional licensure on the teaching profession. “I believe that people are going to take the easy way out — and the cheapest way out — as the teacher shortage continues. They will be more willing to hire people with fewer credentials and less experience, and not have to pay for mentoring.”

Still others take a wait-and-see approach. “I don’t think alternative certification will solve the problem, but it will attract more people into the teaching profession,” Scargall says. “It remains to be seen how many of these folks who went through the program stay in teaching.”
It's 7:45 a.m., and children are pouring out of school buses ready for another day of class. The phone rings in the principal’s office. It is a third-grade teacher who had to rush her father to the hospital because he had a heart attack. She won’t be able to teach her class today, and she won’t be able to leave the hospital to prepare lesson plans for a substitute.

During a substitute shortage and those hectic 15 minutes before school begins, the principal may likely split the students into groups and send them to other teachers’ classes. Or, a teacher’s aide or school monitor may fill in while the principal scrambles to find a sub. The principal may even wind up at the front of the classroom for at least part of the day.

Sound familiar? It isn’t in the Texas panhandle town of Dumas, population 13,000. Dumas school officials and area colleges are teaming up to ensure the town’s 4,200 students and 270 teachers have qualified substitutes on campus every day. Better yet, this partnership may eventually relieve the town’s teacher shortage without draining its education budget.

The Birth of an Idea

Until a year ago, the Dumas Independent School District (DISD) relied mainly on a pool of local residents with high school or general equivalency diplomas to fill in for absent teachers. “Most of them don’t have college degrees,” says Sharla Wilson, principal at Green Acres Elementary in Dumas. “They’re just good people who want to help out.”

Then DISD superintendent Larry Appel attended a planning session of similar-sized districts in Spring 2000. There, he learned about another district’s system of assigning permanent substitutes to each of its campuses on a daily basis and paying them the same salaries classroom assistants earn.

Serendipitously, Appel was the chair of the Moore County Campus Advisory Committee, which just welcomed a satellite campus of Amarillo College to Dumas in January 2000.

“That led me to think about young adults and others who want to go back to college but, because of financial obligations, are unable to quit their jobs to attend school,” Appel says. “I thought maybe we could use these people at least 50 or 60 percent of the time and let them attend classes on the other days. Allowing them to work 50 percent of the time would provide them with health insurance, which is so important.”

After completing their degrees and obtaining Texas teacher certificates, students participating in the program would be required to teach for five years in Dumas, giving the town a bigger and “homegrown” supply of teachers.

Appel brought up the idea at the annual DISD planning retreat. “The school board was very interested because we struggle to hire minority teachers and other teachers outside the Panhandle area who will stay with us,” he says. By August 2000, just in time for the new school year, the DISD Board of Trustees established the Permanent Substitute Incentive Program.
Program Particulars

During each year of program participation, college students must earn a minimum of 30 semester hours toward a degree plan that results in eligibility for a Texas teacher certificate. Those hours must be completed successfully between September 1 and August 31 of the following year, and official transcripts of hours earned must be submitted to the assistant superintendent no later than September 1 of each year.

In September, Permanent Substitute Incentive Program participants receive a lump sum stipend equal to $15 for each semester hour they’ve completed toward their bachelor’s degrees up to a total of 130 semester hours. They also are placed on the local salary schedule at pay grade 1. This makes them eligible for all employment benefits offered to full-time and half-time DISD employees, including professional development and vacation. Because participants agree to teach five years in the district, Dumas has a steady supply of qualified teachers.

“We came up with this plan by looking at the amount of money we were spending on subs over the past few years,” says Lawrence Bussard, the assistant superintendent who runs the Permanent Substitute Incentive Program. “During this first year of the program, we’re still within what we spent last year for subs—about $200,000. And we’re actually ahead because we’re training people to work in our system long term.”

So far, Dumas partners with two colleges—the Amarillo College branch in Dumas and West Texas A&M University in Canyon—to spread the word about the program to education majors. Along with these two colleges, DISD plans to work with Oklahoma Panhandle State University, about 60 miles north of Dumas in Goodwell, Oklahoma, next year. Nearly 30 potential program participants applied in August 2000 and interviewed with Dumas school principals and Bussard, who selected 20 college students for the program’s first year.

Half of the program participants reported to assigned campuses on Mondays, Wednesdays, and Fridays, while the other half reported to the campuses on Tuesdays, Thursdays, and Fridays. Each elementary school received one permanent sub Monday through Thursday and two on Friday. Each junior high received two permanent subs Monday through Thursday and four on Friday. The high school received three permanent subs Monday through Thursday and six on Friday. The permanent subs attended college classes during their days off, the evenings, and the summer term.

Faculty Feedback

Because the permanent subs are assigned to one campus, the program has created stability for the teachers while allowing the subs to gain experience teaching different grade levels and different subjects offered by that campus.

“These subs pretty much know every classroom, every teacher, and most of the kids,” says Green Acres Elementary Principal Wilson, who was assigned two program participants for her campus. “When teachers hear one of our permanent subs will be in their classrooms, they feel it. They know they don’t have to leave such detailed plans. Plus, if there’s an emergency, these permanent subs know other teachers well enough that they can ask those teachers for help.”

At Green Acres, the permanent subs have an opportunity to teach kindergarten through sixth grade as well as physical education and music classes. This allows the subs to determine their true likes and dislikes, Wilson says. “So when it comes closer to time for them to finish college and get jobs, they already have a good idea where they’re going to be happiest.”

Andrea Cox, an education senior at West Texas A&M and permanent sub for Green Acres, says she first got the teaching bug when she coached gymnastics in Dumas when she was 16. Her participation in the permanent sub program confirmed that she had made the right career choice.

“I really love this program,” Cox says. “It’s made me realize how much I want to teach.”

It also helped her realize she’d rather teach third and fourth graders—not fifth and sixth graders, as she initially thought. Plus, she feels that she is ahead of her college classmates majoring in education but not participating in the program.

“I have learned more by substituting than I have through my observation and field experience at college,” Cox says. Being a permanent presence on campus also helps with
classroom management, Cox says. “I think the kids look at me like I’m a real teacher. They have that respect for me—they see me all the time and they know who I am. I really feel like they treat me differently from other subs.”

Cox, who graduated from Dumas High School, is grateful for the opportunity to teach in her hometown. “I wanted to come back here and teach, and this program provided me with more incentive to do it.”

The Challenges

The program has alleviated DISD’s need for an average of 30 substitutes a week, but some bugs must be worked out, Bussard says. For example, at the beginning of the school year, permanent substitutes went directly to their assigned campuses, some of which did not necessarily need subs. In these cases, Permanent Substitute Incentive Program participants generally ended up completing administrative tasks while other Dumas campuses needed the subs to teach students.

In May, DISD installed an automated calling system that contacts Permanent Substitute Incentive Program participants first and notifies them if they are needed at campuses other than their assigned schools.

For the 2001–2002 school year, 18 of the program participants are returning, which is a big boost to the teachers who trained the permanent subs for a year. But the subs’ depth of experience introduces another challenge. As program participants advance in their college coursework, their schedules become more rigid and may threaten continued participation in the program.

“It becomes more difficult to keep these subs on a three-day work week when they have more college hours,” Bussard says. “Also, some students may want to attend the mini-semesters some colleges offer, and that becomes a problem.”

This is where a strong relationship with DISD’s partnering colleges really helps, says Renée Vincent, executive director of the Moore County Campus of Amarillo College. “We’ve worked really hard with these students to try and facilitate their education so that they could substitute teach for the district three days a week,” she says.

To assist these students, Amarillo College offers courses in Internet, distance-learning, and telecourse formats in addition to the standard instructor-student format. Officials at Amarillo College, a two-year school, also are trying to bring more college courses to Dumas as well as to ensure these courses are transferable to four-year universities.

“We do our best to assist these students, and we feel like we are a valued partner,” Vincent says.

Looking back

During its first year, the Dumas Permanent Substitute Incentive Program lost only three participants—one who decided she’d rather get a degree in business, one who wanted to finish school more quickly than the program allowed, and one who moved to Houston. Bussard replaced one of these participants during the 2000–2001 school year. “So we’ll replace those other two over the summer break. In fact, I’m getting calls now. People are hearing that we have some vacancies,” he says. As of June 2001, Bussard had received eight queries for the 2001–2002 school year.

The permanent substitute program gained national attention when it was featured as an innovative solution to the sub shortage in a January 2001 Pittsburgh Post-Gazette series called “A Substitute for Education.”

And what does Appel, the father of the Permanent Substitute Incentive Program, think of the program’s introduction? “I am very satisfied with the first year of implementation,” he says. “The program is all that I envisioned and will provide the district with homegrown teachers, who, hopefully, will stay with us.”
In May 2000, the National Education Association (NEA) released their study findings on credentialing, licensing, and training standards for substitute teachers in the 50 states, Puerto Rico, the District of Columbia, and the federal school systems. The following findings, as well as innovations that prevent substitute teacher shortages, were collected from state NEA affiliates and state education agencies, and they are on NEA’s website at www.nea.org/teaching/substudy.html.

Arkansas
Arkansas has no requirements concerning substitutes. Some of the state’s 310 school districts have their own local policies, and they set the pay scales. Before this school year, substitute qualifications were left entirely up to school districts. But a law that the Arkansas Education Association introduced and the state legislature recently passed now requires substitute teachers who teach the same class for more than 30 consecutive school days to have either a bachelor’s degree from an accredited college or university or an Arkansas teacher’s license. The law exempts those who substitute for non-degreed vocational teachers, and it allows the state education department to grant a waiver if the requirement creates an undue hardship on a district. One district uses a temporary service to get substitutes. For the past few years, it has been more difficult for districts to find enough substitutes, much less enough qualified ones.

Louisiana
Louisiana has a critical shortage of certified teachers now, its lack of substitute teachers is even worse. There are no uniform rules for substitutes. Some schools “sweeten the pot” to get higher-quality substitutes. Temporary services are heavily courting several larger districts.

New Mexico
New Mexico has no requirements for substitute teachers, and the lack of substitutes makes it doubtful that any will be adopted soon. Funds for making substitute teaching more attractive are not available in most districts. There are shortages almost everywhere, largely because of the pay. The attorney general ruled that substitute teachers must be licensed, and legislation has been passed authorizing the state education department to do so. The school districts are required to approve a list of substitutes who can then be licensed for up to three years if they are at least 18 years old.

Oklahoma
Oklahoma’s state guidelines govern the credentials necessary for substitute teaching, but the state has no exemplary substitute teacher programs. Many classes must double up because of a lack of substitutes. Most districts pay $40 to $55 daily for substitutes. Lower rates are paid to those who are not certified. The Tulsa Public Schools (the largest district in the state) just raised substitutes’ pay to $90 daily in order to recruit substitutes. Substitutes do not have collective bargaining rights.

Texas
Texas has no state substitute teacher requirements, according to the Texas Education Agency. Local districts decide what substitute standards to enforce in their own districts.
Teachers walk away from their chosen profession every year because of a growing sense of isolation and futility. Sharing strategies, stories, and goals with other caring professionals was once the cornerstone of a teacher’s support system. Now, there’s a scramble every fall to keep up with the new names and faces among our faculty. The time when I knew everyone in my department is long past. Faculty meetings revolve around TAAS “pep-rallies” and emergency procedures for Columbine-type contingencies. Department meetings center on pressing issues unrelated to teaching: Why are the restrooms always locked, and who has a key? Where is the safest place to park your car? Does anyone have any extra desks?

I’ve been teaching for sixteen years, and have considered quitting for the last six. How has the dream of teaching eager, admiring students and making a difference in the world transformed itself into a nightmare of standardized tests, litigious parents, and gun-toting kids? Many teachers remember the time before tests for minimum skills became our “ruler” for measuring academic achievement. Our professional associations didn’t offer malpractice insurance for teachers, and staff development didn’t include orientation to the legal intricacies of avoiding a lawsuit, making a drug arrest, or filing an assault complaint. Imagine staying in a profession where the best, brightest, and most experienced leave every year, never to return.

“I stay because in 16 years I’ve never been bored. I stay to witness the thrill of happy kids with opening minds and awakening dreams who want to be shown the way.”

Carey Clayton is a teacher and freelance writer who lives and works in Wimberley, Texas. She aspires to teach until her retirement, then write full time.
Texas Assessment of Academic Skills (TAAS), would consume students, teachers, counselors, administrators, and parents alike? Dealing with “test anxiety” has become the main component of my classroom instruction. Constant practice tests mandated by worried administrators lead jaded students to rebel. It is hard to strike a balance between emphasizing the importance of successful test performance and affirming a student’s worth and intelligence in the face of repeated failures. Conversely, there are students who ace the TAAS test and want to stop learning as soon as the scores come in. My job is to convince them that learning is not an event but a process that doesn’t stop when they pass a test.

In the high school English classroom — and probably in others as well — TAAS preparation often occurs at the expense of creative learning activities such as writing stories, designing book jackets, or turning short stories into one-act plays. It is paradoxical that educators are faced with simultaneous pressure to raise test scores and use more creative and diverse teaching strategies.

Americans’ perception of teachers as second-class citizens pervades schools more than ever. Every year, at least one of my high school students confides to me condescendingly, “I make more money as an assistant manager at Pizza Hut than you do with a college education!” One child said earnestly, “Miss, I bet you could do something besides teach if you really wanted!” Poor me. He thought teachers must be losers who can’t make it in the “real” world. Why else would they put up with so much from so many for so little? A crippling blow lands on public educators when schools shoulder the blame for truancy, discipline problems, failing grades, low test scores, drug use, teenage pregnancy, and student violence.

As administrators scramble to avoid problems with unreasonable parents, support for teachers steadily diminishes. Earlier in my career, after a series of parent conferences turned verbally abusive, I sought clarification of my role from my supervisor: “Am I the designated punching bag?” He explained a parent who “vent” on the teacher without interference is less likely to pursue legal action. He advised me to “develop a tougher skin.”

To many teachers, low salaries represent a lack of respect for their important role in the community and their years of training. In a touching TV commercial, a small boy tells his dad he wants to be a teacher when he grows up. The dad says, “Don’t you want to be a doctor instead, so you can be admired and respected and make lots of money?” The boy replies, “Then, where will the doctors come from?” Where can I find this child?

Teachers treasure admiration and respect more than they seek financial reward. No one begins in the teaching profession thinking they will amass a fortune, but we all want to make a difference. New teachers, who enter the profession despite low salaries, are overwhelmed with the wide range of challenges they face in and out of the classroom. Teacher education programs often don’t prepare them to deal with personal safety issues, discipline management problems, and school politics. Developing supportive relationships with other teachers is imperative and, at the same time, almost impossible because of exhaustive schedules. Feeling alone and desperate, most rookies move on without knowing how often all teachers feel overwhelmed and inadequate. I was fortunate to have had several veteran teachers as friends and family members who took time to share war stories. Their insight and humor led me to understand that being a teacher means constantly adapting to new situations while holding fast to the goal of touching young lives in a positive way.
Mentoring Program to Put Arkansas Teachers on Path to Success

They enter the field of education with a “missionary zeal,” but many teachers in Arkansas leave the profession shortly after they begin, says Dr. Melanie Kennon, mentoring program advisor for the Arkansas Department of Education (ADE).

Nationwide, one-third to one-half of new teachers quit teaching before completing their fifth year. At the beginning of the 2000–2001 school year, 250 Arkansas classrooms stood vacant due to a lack of qualified teachers.

“The teacher shortage has hit Arkansas squarely between the eyes,” Kennon reports.

Reality Bites
Kennon credits much of the shortage to the reality new teachers often face during their first few years in the classroom. Novice teachers, who have had only one semester of student teaching experience, are commonly given scarce resources and troublesome students whom long-time faculty members don’t want in their classrooms.

“New teachers get in the classroom and think that the kids are going to be as excited as they are about the content and that the students are all going to sit there and listen,” Kennon says. She notes that novice teachers are surprised when they find they’ve got students who don’t want to be there, students they can’t seem to reach, and parents who don’t appreciate what they do.

That frustration, often combined with limited support from administrators and the hectic pace of trying to keep up with everything, can cause teachers to “slip into survival mode,” where they “just try to make it until Christmas or spring break,” Kennon notes.

“That’s when salary becomes an issue,” she adds. “That’s when they begin to wonder, ‘Why in the world am I doing this for this amount of money?’”

To keep Arkansas teachers out of survival mode and in the classroom, the state has invested $2.9 million in the Pathwise Mentoring/Classroom Observation System, which has been piloted in 30 school districts across the state since August 2000. Developed by the Educational Testing Service of Princeton, New Jersey, the Pathwise system is the main component of the state’s new performance-based teacher licensure system, to become effective January 1, 2002.

The state education department selected school districts in every geographic region of Arkansas to participate in the Pathwise pilot study — large districts, such as North Little Rock with 8,311 students and Texarkana with 4,306 students, and small districts, such as Hamburg with 1,656 students and Waldo with only 454.

“We wanted to make sure it was fine-tuned to the large variety of school districts we have in Arkansas,” says Kennon.

Under the Pathwise system, first-year teachers are given trained mentors, who help them through their first one to three years of teaching — traditionally the most difficult years. Pathwise provides new teachers the opportunity to get objective feedback and ideas from an experienced teacher. Arkansas currently has 185 qualified Pathwise mentor trainers and more than 4,300 trained mentors.

The state provides school districts with $2,000 per year in Pathwise funding for each new teacher. Of that money, $1,200 is used to compensate the mentor and $800 is reserved for the new teacher’s professional development. Professional development might include funding memberships to professional organizations, subsidizing journal subscriptions, or paying a substitute teacher to give the novice teacher more time to spend with his/her mentor. ADE provides all Pathwise materials to school districts free of charge.

Allotting time for mentoring is key to the success of the Pathwise program. School districts are encouraged to release their first-year teachers from teaching duties once a week for mentoring.

By John V. Pennington

John V. Pennington is a freelance writer who lives in Hot Springs, Arkansas.
Pathwise program's success. Kennon says teachers must have time during the school day to meet with their mentors in order for “collaborative problem solving” to occur.

“You can't do this on the way to the teacher's lounge,” she explains. “You can't do this standing back to back on the playground watching the kids.”

The Pathwise system is already being implemented this school year in districts that are on ADE's academic distress or watch list. Beginning January 1, all school districts in Arkansas will implement the Pathwise Mentoring Model for any teacher hired with less than one year of classroom teaching experience.

Preparation for Praxis III

The Pathwise system focuses on preparing teachers to pass the Praxis III Classroom Performance Assessment. The Praxis III has three components: observation of classroom practices, review of written materials, and interviews with the teacher before and after being observed. Under the new teacher licensure system, Arkansas teachers must pass the Praxis III to receive their standard license.

Upon college graduation, new Arkansas teachers will receive a non-renewable initial teaching license, good for no less than one year and no longer than three. During this time, the teachers will participate in the Pathwise system, giving them time to grow professionally.

“This is about making sure that folks meet the competencies that are outlined in the Arkansas Teacher Licensure Standards and that they can meet those in a real-life situation once they get in there with kids,” Kennon says. “Sometimes people look really good on paper. They can pass the test, they can bubble in the answers. But when they get in the classroom with real kids, they fall flat on their face.”

Teachers in other states who have been inducted through the Pathwise system have had great success on the Praxis III. In Ohio, 98 percent of new teachers passed the Praxis III after one year of mentoring. The Arkansas Department of Education hopes for similar success.

“We feel like most of our teachers, after one year of good-quality mentoring, will be able to pass the Praxis III and get their standard license,” says Kennon.

By producing better teachers, the state expects to see higher test scores in the future. “We know that the single most important factor in raising student achievement is the quality of the instruction,” she acknowledges. “We know that if we provide focused professional development for teachers, support for teachers, and the tools they need to do the job we ask them to do, then we’re going to see the results in increasing student achievement.”

Inquiring minds want to know: “What are some good resources for teaching data analysis and statistics that are relevant to primary grade students?” “How does hydroponic gardening work?” “How can I assess students’ scientific knowledge through games?” “What is the difference between binary and trinary numbers? How do I best teach that difference?” These are some of the questions received from math and science teachers, submitted through a telementoring project sponsored by SEDL’s Eisenhower Southwest Consortium for the Improvement of Mathematics and Science Teaching (SCIMAST) program.

Officially called the Online Mentoring Project for Mathematics and Science Teachers, the effort got its start in the fall of 1999. That’s when SEDL program specialist Phillip Eaglin, who works in the SCIMAST program, met with New Mexico teachers who had received the Presidential Award for Excellence in Mathematics and Science Teaching. The awardees wanted to make a contribution to math and science education beyond their own teaching and decided the best way to do so would be by mentoring other teachers, especially new teachers.

It was suggested that an electronic mentoring project might be a good way to begin. The New Mexico Presidential Awardees acknowledged that most schools had computers and Internet access that likely were being underutilized, and with electronic mentoring large numbers of science and math teachers could access such a program.

After several months of planning, the SCIMAST team and SEDL’s Web administrator firmed up plans for a moderated telementoring program. SEDL invited teachers in Arkansas, Louisiana, New Mexico, Oklahoma, and Texas who had received the Presidential Award for Excellence to be mentors. Nineteen Presidential Awardees, who are named on the mentoring Web page, agreed to participate and submitted information about their areas of expertise, which SEDL staff entered into a database.

Teachers who visit the mentoring Web page may submit questions related to teaching math and science or questions about the ways their students are learning math and science. When questions are submitted online, the subject, specialty area, and grade level are simultaneously matched to the mentor teachers’ background and expertise. When the questions received relate to issues such as state standards and assessments, the database matches questions to mentors according to the state in which they teach. Three mentors receive each question; when they return their answers, the responses are compiled into a single answer by a SCIMAST team member, who might also contribute to the answer posted online.

The mentoring project differs from an “ask an expert” or virtual reference desk service in that the responses can result in further discussion or raise additional questions. Also, the questions are often not the sort that can be answered quickly—they can pose challenges for the mentors and SCIMAST team as well as for the math and science teachers seeking help.

In answering other teachers’ questions, the mentors try to encourage the teachers to closely observe their students, expand teaching strategies, and reflect on their practice. Eaglin says “Encouraging reflection is probably most critical. We want to assist teachers in looking back to discover what did and did not work in their classrooms. By supporting and encouraging reflection, the mentors can help other teachers learn and grow professionally.”

Eaglin notes that the service is not limited to novice teachers seeking assistance. “Even an experienced educator needs to ask questions now and then,” he says.

The SCIMAST mentoring project may be found at http://www.sedl.org/scimast/archives/. Visitors to the site may pose a question, browse through previously submitted questions and answers that are sorted by topic, or sign up to receive email notification of new archive submissions.
A Click Away:
Online Resources for Recruitment, Retention, and Quality Issues

By Leslie Blair

Teacher Quality and Preparation

Solving the Dilemmas of Teacher Supply, Demand, and Standards: How We Can Ensure a Competent, Caring, and Qualified Teacher for Every Child, written by Linda Darling Hammond, and published by the National Council on Teaching and America’s Future, examines the balance between the hiring enough teachers to staff our nation’s schools and ensuring high teacher quality. The report looks at differences in standards across states and presents teacher retention data and student achievement data based on teacher preparation program. A PDF file may be downloaded at http://www.nctaf.org/publications/solving.pdf.

Better Teachers, Better Schools is a collection of essays and studies edited by Marci Kanstoroom and Chester E. Finn, Jr., and published by the Thomas B. Fordham Foundation. The publication examines teacher quality, standards, and certification from a number of perspectives and may be found online at http://www.edexcelcellence.net/better/cthrs/teachers.html. Two of the pieces in Better Teachers, Better Schools take a critical look at reforms proposed by the National Board for Professional Teaching Standards and the National Council for Accreditation of Teacher Education.


The National Center for Education Information recently published Alternative Teacher Certification: A State-by-State Analysis 2001. A summary of the report and ordering information may be found online at http://www.ncei.com/2001_Alt_Teacher_Cert.htm. The summary includes information on the history of alternative certification and a brief discussion of research that has been conducted on alternative certification.
**Teacher Recruitment and Retention**

Recruiting New Teachers, Inc., a nonprofit corporation based in Belmont, Massachusetts, has developed informative and practical toolkits and publications designed to help schools and districts face the challenges of recruiting and retaining a qualified, diverse workforce.


RNT also offers online *A Guide to Developing Paraeducator-to-Teacher Programs* and *A Guide to Developing Teacher Induction Programs*. *A Guide to Developing Paraeducator-to-Teacher Programs* offers the advantages and obstacles to instituting such a program and provides some real-life examples. *A Guide to Developing Teacher Induction Programs* points out the need for induction programs and describes elements of good induction programs. It also discusses mentoring and peer review programs as components of an induction program.

*Creating a Teacher Mentoring Program*, published by the National Education Association's Foundation for the Improvement of Education, may be accessed at [http://www.nfie.org/publications/mentoring.htm](http://www.nfie.org/publications/mentoring.htm). This paper is a result of a mentoring symposium sponsored by NFIE and the United Teachers of Los Angeles. It touches on the usefulness of mentoring, how to create the structure needed for an effective mentoring program, and how to measure the effectiveness of a mentoring program.

SEDL's study, *Mentoring Beginning Teachers: Lessons from the Experience in Texas*, may be downloaded at [http://www.sedl.org/pubs/catalog/items/pol23.html](http://www.sedl.org/pubs/catalog/items/pol23.html). The study examined three questions: (1) How have schools and districts in Texas planned and implemented mentoring programs to respond to state policy on teacher induction? (2) What are the characteristics of district or school mentoring programs in the state with respect to resource allocation, range of activities, and effectiveness? and (3) What are the implications of current mentoring activities for the retention of teachers in districts or schools with increasingly diverse student populations?

The report features case studies of three school districts and a chapter profiling the first year of teaching.
Annual Conference
"Family and Community Connections with Schools — Emerging Issues"

Friday, November 16, 2001
8:30 a.m. – 4:00 p.m.
The Riviera at Charleston Place
Charleston, South Carolina
No registration fee

"Family and Community Connections with Schools — Emerging Issues” is being hosted by the Southwest Educational Laboratory’s National Center for Family and Community Connections with Schools. The one-day conference is being held in conjunction with the National Community Education Association’s Annual Conference November 17-20.

The Family and Community Connections with Schools conference agenda includes a discussion of research findings and what these findings mean for schools, families, communities, and students and an open discussion with national experts about programs, policies, and practices from the field.

Please visit the National Center’s Web site at http://www.sedl.org/connections/2001conf.html for more information about the conference.

SOUTHWEST EDUCATIONAL DEVELOPMENT LABORATORY
Building Knowledge to Support Learning

211 E. Seventh St., Austin, TX 78701-3281
512/476-6861

Read SEDLetter on the Web!
http://www.sedl.org/pubs/sedletter/welcome.html

Many of SEDL’s publications are available via the Internet on SEDL’s World Wide Web site:
http://www.sedl.org/