

Insights

ON EDUCATION POLICY, PRACTICE, AND RESEARCH

SEPTEMBER 2004

NUMBER 17

SOUTHWEST EDUCATIONAL

DEVELOPMENT LABORATORY

A Best-Fit Approach to Effective Teacher Policy

Many education agencies feel an enormous strain to meet the federal mandate that all teachers be highly qualified. State and local policies must be established that address effective ways to hire, train, support, and retain teachers who meet the standards specified in the No Child Left Behind (NCLB) legislation. To help policymakers with the difficult decisions they face when evaluating existing policies, establishing new policies, and seeking necessary resources related to improving teacher resources, Jennifer King Rice, Ph.D. from the University of Maryland developed a “best-fit” decision making approach.

SEDL invited Rice to share her best-fit model at our 2003 Annual Policy Forum, “Teacher Resources and Student Success.” State policymakers from our five-state region, our policy staff, and Rice discussed what we know about teacher quality from research, practice, and policy and how we might go about making informed decisions on how to invest in teacher

resources. That is, investment in resources that are both fiscal and non-fiscal, such as teacher compensation, teacher qualifications and skills, and teacher preparation and development.

In This Issue

SEDL invited Jennifer King Rice, Ph.D. to share her best-fit decision making approach to improving teacher resources. This issue describes her model and provides guidance on its use.



Table 1

Public Elementary and Secondary School Teacher Expenditures in SEDL’s Region, 2002

	AR	LA	NM	OK	TX	Nation
Number of teachers	33,079	49,980	21,823	41,632	282,846	2,997,741
Instructional salaries	\$ 1.25	\$ 2.13	\$.90	\$ 1.65	\$ 13.09	\$ 162.48
Instructional benefits	\$.27	\$.57	\$.23	\$.37	\$ 1.90	\$ 41.95
Total education expenditures	\$ 3.11	\$ 5.30	\$ 2.60	\$ 4.19	\$ 33.84	\$ 424.76
Instructional salaries and benefits as percent of total expenditures	49%	51%	43%	48%	44%	48%

Note: All dollar figures are rounded and in billions. National Center for Education Statistics (NCES) defines “instructional spending” as expenditures for activities directly associated with the interaction between teachers and students. Benefits are expenditures made in addition to gross salary that are not paid directly to employees, such as group insurance, social security and retirement contributions, tuition reimbursements, and unemployment and worker’s compensation. Data sources for Table 1 can be found in the reference list.

Why Focus on Teacher Resources?

Why do we place so much attention on teacher resources? One reason is the cost. Teachers are the single largest investment in public education—with instructional salaries and benefits amounting to approximately half of the \$400 billion spent each year on public K-12 education (see Table 1). Another major reason is that teachers are seen as most important to ensuring a high quality education for all students and improving student performance. The difficulty is that we are not entirely clear what makes high quality teachers or how to train, recruit, or retain them.

What Does Research Tell Us?

More often than not, teacher quality is defined as the credentials a teacher brings to the classroom. In teacher hiring and compensation policies, a number of teacher characteristics

(e.g., experience and degree) are routinely assumed to be indicative of teacher quality. In a recent analysis of national data, Croninger and his colleagues (2003) found that teacher certification status, degree type, and years of experience do relate to student learning in early elementary grades, and that teacher qualifications matter in reading and general knowledge acquisition, especially for low-income children. Other research provides further evidence that certain attributes are linked to teacher effectiveness. In her new book, *Teacher Quality: Understanding the Effectiveness of Teacher Attributes*, Rice examines the research evidence on what makes a quality teacher. She focuses on five broad characteristics that are typically thought to reflect teacher quality: teacher experience, preparation programs and degrees, certification, coursework, and test scores (see “What Does Research Say on What Counts as a Quality Teacher?”).

Having a highly qualified teacher

has been shown in the research to matter most for minority and disadvantaged students. For these students it seems to make a difference where the teacher got his/her degree, what the degree is, and how well he/she scored on teacher skills and abilities tests. Schools with high student poverty or in urban locations often have teacher resource deficits, such as fewer teachers with subject-specific certification, more inexperienced teachers, and less money allocated for these teachers’ salaries, which have been linked to lower student performance (Goldhaber & Brewer, 2000; Roza, Miles, & Foley, 2003). As Rice and other researchers clearly tell us, certain teacher characteristics are important in particular settings, for specific grade levels, and with select subgroups of students, making teacher quality far more complex and difficult to assess than just having a checklist of credentials to use in making decisions.

What Does Research Say on What Counts as a Quality Teacher?

Jennifer King Rice, Ph.D. examined empirical research on U.S. public school teacher qualities and performance found in peer-reviewed journals over the past three decades. She found a variety of outcomes, some conflicting; however, a few stood out. The following is a summary of her findings synthesized from her recent publication, *Teacher Quality: Understanding the Effectiveness of Teacher Attributes* (pp. v-vi), 2003, Washington, DC: Economic Policy Institute.

Teacher experience

- Experience can make a difference in teacher effectiveness; specifically, the “learning by doing” effect is most obvious in the early years of teaching.

Teacher preparation programs and degrees

- The selectivity or prestige of the college a teacher attended can impact student achievement, particularly for middle and high school students. (This may partially reflect the teacher’s ability to think and acquire knowledge.)
- Teachers with advanced degrees in math and science are more likely to contribute to increased high school math and science achievement.
- The effect of advanced degrees at the elementary level is mixed.

Teacher certification

- Teachers certified in mathematics can enhance high school mathematics achievement.
- Teachers with emergency or alternative-route certification, as compared to teachers who acquire standard certification, show little difference in their students’ math or science performance.

Teacher coursework

- Teacher coursework in both the subject area taught and pedagogy contributes to positive education outcomes.
- Pedagogical coursework seems to contribute to teacher effectiveness at all grade levels, particularly when coupled with content knowledge.
- The importance of content coursework is most pronounced at the high school level.
- Student-teaching field experience can have a positive effect for new teachers in terms of better understanding the profession and reduced anxiety.

Teachers’ own test scores

- National Teachers Examination and other state-mandated tests of basic skills and/or teaching abilities are not necessarily consistent predictors of teacher performance.
- Tests that assess teacher literacy or verbal ability are related to higher student achievement.

There is no single strategy to deal with teacher quality under all circumstances



Best-Fit Policy Decision Making

Rice's best-fit approach to improving teacher resources is a multi-step decision framework to guide policymakers as they consider alternative investments in policies related to teachers. This approach helps policymakers identify a set or "package" of policies to address their state's specific teacher resource needs. There is no single strategy to deal with teacher quality under all circumstances. Instead policymakers must search out the strategies that will work best within their specific state and local contexts. Policymakers can take three basic steps to apply the best-fit model to their individual contexts:

1. Identify the teacher resource problem using adequate data
2. Explore available policy alternatives to address the multiple dimensions of the problem
3. Evaluate the cost-effectiveness of alternative sets of policies

Teacher quality is multi-dimensional

A key point to remember is that teacher quality is multi-dimensional and teacher resource policies must reflect this. So it is critical to first be aware of what the research says about teacher resources. Then know what data are available at state and local levels to both identify the teacher resource problem and help answer questions related to the various dimensions of teacher quality. Those dimensions include:

- Quality of teacher preparation
- Quantity of training opportunities
- Adequate pool of qualified teachers
- Recruitment of teachers
- Retention of teachers
- Distribution and assignment of teachers
- Quality and availability of professional development opportunities
- Geographic contexts and population demographics

Identify the problem

Specifying the teacher resource problem can be challenging, but is a necessary first step to developing effective teacher policy. The problem may not be obvious or seen as a concern by everyone. Typically, a problem occurs when there is a difference between “what is” and “what should be.” Knowing what your current teacher resources are (e.g., the different characteristics of teachers or avenues to certification) is important in figuring out how to reach your goals to get to where you should be. These goals may be based on legislation, teacher and administrator decisions, or community input.

Understanding the scope of “what is” and “what should be”, especially in relation to the various dimensions of teacher quality mentioned earlier, is an important step in identifying the problem. To begin this process, ask some preliminary questions such as:

- What will it take to comply with teacher quality laws, regulations, or requirements?
- Is the teacher resource problem in particular areas, for particular students, or at particular times?
- Is the problem immediate or long-term, one-time or on-going?
- What do current teacher policies assume about teacher quality and is this supported by data?
- Do we have teacher resource data available to us now? If not, how would we get it?
- Who (e.g., teachers, students, administrators, parents, the community) does this problem affect? And, how does it affect them?

So where do we find the answers to these questions? Answers may come from existing research literature; from organizations conducting research or clearinghouses for information; from communications with teachers, administrators, and other practitioners; and from data sources readily available on

the Internet (see “Useful Data Sources”). Many answers may be found in the community so talk to local teacher organizations or chapters or education service centers. Most importantly, see what the data your state collects can tell you. Another good idea is to examine how other states have looked at the problem and what they have done.

Explore policy alternatives

Once the problem is identified, the search for policy alternatives can begin. Typically, the range of policies implemented to improve teacher resources include:

- Economic incentives
- Teacher preparation program reforms
- Hiring processes
- School environment changes
- Professional development initiatives

The particular teacher resource challenge you face will dictate what policy best fits the problem. Review current and previous state and local policies. Find out when the policies were implemented, how they were implemented, if there was total buy-in from those involved and those potentially impacted, and what investment was made into these policies. Scan the policy strategies being used in practice, i.e., specific actions taken to carry out the various types of policies as listed above. Then develop a package of strategies that align with the dimensions of your identified problem.

Keep in mind that policies can be more effective in combination than as individual stand-alone policies. For example, mentor teacher programs may be much more effective when combined with more functional training, incentive pay for advanced training, and strong induction programs. By themselves, these policy options may not be sufficient, but rather should be part of a package of

Develop a package of strategies that align with the dimensions of your identified problem.

Useful Data Sources

NATIONAL

U.S. Department of Education

National Center for Educational Statistics (NCES)

Education statistics (quick tables and figures):

<http://nces.ed.gov/quicktables/>

Public schools and districts data (Common Core Data):

<http://nces.ed.gov/ccd/ccddata.asp>

2000 census school district data:

<http://nces.ed.gov/surveys/sdds/tablemain.asp>

Schools and staffing data:

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004372>

Postsecondary education data: <http://nces.ed.gov/ipeds/data.asp>

Early childhood longitudinal data:

<http://nces.ed.gov/ecls/KinderDataInformation.asp>

Students, family, and school longitudinal data:

<http://nces.ed.gov/surveys/nels88/>

NAEP achievement data:

<http://nces.ed.gov/nationsreportcard/naepdata/search.asp>

Title II teacher quality preparation state data reports:

<http://www.title2.org/data.htm>

American Federation of Teachers

Teacher salary surveys: <http://www.aft.org/research/salary/home.htm>

Interstate cost-of-living indices:

<http://www.aft.org/research/reports/col/col.htm>

National Education Association

Education statistics reports, rankings, and estimates:

<http://www.nea.org/edstats/>

SEDL REGION

Arkansas Department of Education

School site information: <http://www.as-is.org/>

School, district, staffing, and student data and documentation:

<ftp://165.29.215.34/>

(Access software necessary to view the databases on this FTP site)

Louisiana Department of Education

School, staffing, and fiscal data and reports:

<http://www.doe.state.la.us/lde/pair/1419.html>

Student achievement data: <http://www.doe.state.la.us/lde/ssa/testhome.html>

New Mexico Public Education Department

Data collection and reporting: <http://www.ped.state.nm.us/div/ais/data/>

Oklahoma State Department of Education

School district data: <http://sde.state.ok.us/home/defaultie.html>

Texas Education Agency

School and student data:

<http://www.tea.state.tx.us/perfreport/aeis/2003/DownloadData.html>

Standard data reports: <http://www.tea.state.tx.us/adhocrpt/index.html>

strategies designed to meet multiple demands at the local and state levels. Also, pay attention to the ways various policies interact; are they complementary or do they compete with one another? One state policy might reduce class size, increasing the demand for additional teachers, while another requires all teachers have subject-specific certification, limiting the pool of potential teachers. With careful consideration of the options available, decisions can be made to develop an appropriate policy package.

Let's look at how this step of Rice's model can be applied to one prevalent teacher resource issue across SEDL's region, that of recruiting and retaining quality teachers. First, a review of current and previous teacher quality policies might indicate many new and revised recruitment and retention policies, particularly since 2000 in response to the NCLB teacher quality requirements. The policies may have been prompted by state commission recommendations, teacher and administrator association advocacy, or student achievement improvement goals. The policies might include a variety of means to respond to this problem (see "Teacher Recruitment and Retention Strategies"). These strategies include monetary, staff, time, physical, and parent/community resources.

One set of policy alternatives, we will designate as Policy Package #1, that might respond to the need for improving recruitment and retention of quality teachers could include a significant and sustained salary increase for qualified teachers willing to work in high-need schools, a professional development module for teaching in this type of school, streamlined hiring application and interview processes, and job banks available through a variety of sources (e.g., nationally affiliated internet-based lists, recruitment fairs, state-run databases).

Another, labeled Policy Package #2, might include a signing bonus, an intensive induction program, increased school administrator salary and train-

Teacher Recruitment and Retention Strategies

<i>Policy options</i>	<i>Recruitment strategies</i>	<i>Retention strategies</i>
Economic	<ul style="list-style-type: none"> • Signing bonus • Loan forgiveness • Housing assistance • Tuition assistance • Bonus for National Board Certification (NBC) 	<ul style="list-style-type: none"> • Higher salaries • Tax benefits • Pay-for-performance • Paid time for planning • Benefit packages • Ongoing rewards for NBC
Teacher preparation	<ul style="list-style-type: none"> • Alternative/accelerated certification • Pre-college recruitment • Higher education curriculum aligned with K-12 standards 	<ul style="list-style-type: none"> • Alternative certification (adequate duration, grow your own programs) • Preparation programs focused on specific type of school
Hiring process	<ul style="list-style-type: none"> • Pre-college recruitment • License reciprocity between states • Streamlined hiring process • Job banks • Public relations to attract teachers (especially to high-need schools) • Induction programs • Assigning new teachers to supportive environments • Building relationships with higher education 	
School environment	<ul style="list-style-type: none"> • Modern technology • Flexible scheduling and content (e.g., year round, magnet) • Reasonable class size • Good leadership 	<ul style="list-style-type: none"> • On-going technology updates • Instructional support • Better facilities • Reasonable class size • Good leadership
Professional development	<ul style="list-style-type: none"> • Mentoring programs • Reasonable required hours • Support for ongoing training 	<ul style="list-style-type: none"> • Long-term professional development • Professional development schools • Support for ongoing training

ing, an incentive for teachers holding National Board Certification, and streamlined hiring application and interview processes. Which of these policy packages is preferable to meet the identified need to recruit and retain quality teachers? Taking a look at each policy package's cost-effectiveness will help answer this question, which is the last step in Rice's model.

Evaluate policy cost-effectiveness

How can cost-effective policies addressing teacher resource problems be best established? Ask these guiding questions:

- Do I have information about the costs and effectiveness of policy options?
- Are all costs considered (e.g., hidden costs, short- versus

long-term costs)?

- How do these policies affect the expenditures in other budget areas?
- Could policies be put together in ways that make them more effective and/or less costly?
- How could the state finance the new policy package?

Know the cost and effectiveness of policy options. In estimating the cost

In estimating the cost of policies, consider their full cost, i.e., direct and indirect costs.

of policies, consider their *full* cost, i.e., direct and indirect costs. For example, a reduction in class size can trigger expenses not only for additional teachers, but for additional classroom facilities or equipment, new or different recruitment efforts, and professional development opportunities to help teachers be more effective in smaller classes. Obviously, the most desirable policy package has the lowest cost and greatest effectiveness. Unfortunately, the effectiveness of many policy strategies is not evaluated and hidden costs are not always well documented. Establish more comprehensive and useful data collection systems and ensure cost-effectiveness evaluations of policy alternatives are conducted regularly.

In times of budget constraints, everyone is concerned about investing wisely. One way to do so is to reallocate resources, i.e., use funds previously allocated in the budget for policies not currently aimed at the teacher resource problem. Other options include targeting interventions to save resources. For example, rather than implementing a small teacher salary increase across the state, targeting a more substantial salary increase to specific types of teachers (e.g., high school math or science teachers, teachers in schools identified as needing improvement, or English as a Second Language teachers) might have a greater effect, at possibly a lower cost.

Using a variety of data sources, Rice estimated the national cost of Policy Packages #1 and #2 (described earlier in "Explore Policy Alternatives") for all students and for a targeted population of high poverty students (see Tables 2 and 3). This type of cost analysis is an important first step in determining what set of policies is most cost-effective for responding to the problem. See if state or local fiscal data is available first to get actual costs. If actual costs are not available, estimations like these can be used to provide a sense

of the range of costs associated with various policy alternatives.

The estimations of these two policy packages clearly show that costs can be quite different. Raising salaries and providing increased financial incentives to teachers, especially across the board, are typically at a higher cost than other policy alternatives. That does not automatically mean that these are not good strategies to use. What should be determined is whether these kinds of strategies will produce the desired results more efficiently than other less costly strategies. Ultimately, does the policy package produce the important results we are all looking for – student success? The best-fit model is a tool to help provide answers to this question.

In addition, attention should be paid to packaging various policies in productive ways that address the various dimensions of the problem. For example, if the major problem is the recruitment of teachers to low-performing schools, then a policy that involves signing bonuses targeted to qualified teachers willing to teach in those schools may be preferable to policies that offer long-term salary increases to all teachers, particularly if the signing bonuses are coupled with intensive induction programs to help teachers be successful in low-performing schools.

Clearly, more data-based information is needed to determine the cost-effectiveness of policy options. Our policy research at SEDL focuses on the link between how education resources are allocated and student performance. Currently, we are examining the capacity of state data in Arkansas, Louisiana, New Mexico, and Texas to answer policy questions about instructional resources and student achievement (see "SEDL Policy Research on Instructional Resources"). Our future policy research will more specifically focus on how teacher salaries, and the teacher qualifications those salaries buy, impact student performance in

Table 2

Cost Estimates for Policy Package #1 to Improve Teacher Quality

Policy Package #1 Strategies	Cost across all students		Cost for high poverty students	
	Low estimate (\$M/year)	High estimate (\$M/year)	Low estimate (\$M/year)	High estimate (\$M/year)
Significant and sustained salary increase for qualified teachers	6,238	30,119	1,494	7,470
Professional development for teaching in high-need school	351	585	224	374
Streamlined hiring processes	---	---	---	---
Job banks	---	---	---	---
TOTAL	6,589	30,704	1,718	7,844

Table 3

Cost Estimates for Policy Package #2 to Improve Teacher Quality

Policy Package #2 Strategies	Cost across all students		Cost for high poverty students	
	Low estimate (\$M/year)	High estimate (\$M/year)	Low estimate (\$M/year)	High estimate (\$M/year)
Signing bonus	42	936	23	468
Intensive induction program	1,591	2,339	508	747
Better school leadership	890	2,670	213	340
Incentive for Natl. Board Certified teachers	890	1,770	427	854
Streamlined hiring processes	---	---	---	---
Job banks	---	---	---	---
TOTAL	3,413	7,715	1,171	2,709

Note: High poverty is defined as “greater than 50% free and reduced lunch”. Rice provided no costs for streamlined hiring process and job banks in her estimations. Data sources for Tables 2 and 3 can be found in the reference list.

high need schools (i.e., rural, urban, high poverty, and high minority).

Putting the Best-Fit Model to Use

Too often decisions about teacher resources are made quickly, maybe in response to legislation, state or local requirements, or immediate need.

Following the comprehensive steps suggested in the best-fit model may seem daunting or too time consuming, but this does not have to be the case. One thing is for certain, developing effective policies to enhance teacher quality takes a systematic and systemic model which the best-fit approach provides.

All five SEDL states continue to

devote money, time, and personnel to dealing with the problem, or at least some aspect such as teacher compensation, certification, recruitment, retention, and professional development. Arkansas hired consultants to conduct an education adequacy study with a teacher compensation component. Teacher salary increases and a “Knowledge and Skill Based Pay” salary

schedule were recommended. In Louisiana, two pieces of legislation were passed, one to provide incentive pay to certified teachers to teach in disadvantaged geographic areas and another for reemployment incentives for retired teachers so they can return at full salary and benefit levels one year after retiring. Last year, New Mexico implemented a three-tiered teacher advancement system linking licensure level, teaching experience and competence, and salary. Oklahoma established a four-staged teacher salary increase plan based on teacher experience and degree to take effect in the 2005–2006 school year. And in Texas, alternative certification to teach classes in grades 8–12 was made easier with a new ruling effective this year. Are these efforts a best-fit for the problems each state is facing? How did the states decide on these new initiatives? Will teacher quality improve? Can we afford these policies? Answers to these questions are important to future decision making.

Research-based information; federal, state, and local data; national and local experts in the field (especially school personnel); and technical assistance providers are available to help find answers to guide effective teacher policy. Rice sums up what policymakers must do:

Education policymakers and administrators would be well served by recognizing the complexity of the issue and adopting multiple measures along many dimensions to support existing teachers and to attract and hire new, highly qualified teachers.

The research suggests that investing in teachers can make a difference in student achievement. In order to implement needed policies associated with staffing every classroom—even the most challenging ones—with high-quality teachers, substantial and targeted investments must first be made in both teacher quality and education research (p. vii).

References

Publications

- Croninger, R.G., Rice, J.K., & Rathburn, A. (2003). *Teacher qualifications and early learning: Effects of certification status, degree, and experience*. Paper presented at the Annual Meeting of the American Education Finance Association, Orlando, FL.
- Goldhaber, D.D., & Brewer, D.J. (2000). Does teacher certification matter? High school teacher certification status and student achievement. *Educational Evaluation and Policy Analysis, 19*(2), 129-145.
- Rice, J.K. (2003). *Teacher Quality: Understanding the Effectiveness of Teacher Attributes*. Washington, DC: Economic Policy Institute.
- Roza, M., Miles, K.H., & Foley, E. (2003). *Within-district spending: A tool for unmasking funding inequities across schools*. Paper presented at the annual meeting of the American Education Finance Association, Orlando, FL.

Data sources

The data in Table 1 on the numbers of teachers are from *Public School Student, Staff, and Graduate Counts by State: School Year 2001-2002*, NCES 2003-358R, by Beth Aronstamm Young, 2004, Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved August 2, 2004 from <http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2003358>.

The data in Table 1 on instructional funding are from *Documentation for the Common Core of Data National Public Education Financial Survey: School Year 2001-2002, Fiscal Year 2002*, NCES 2004-336, by Eunice Ave and Cecilia Cohen, 2004, Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved August 2, 2004 from <http://nces.ed.gov/ccd/stfis.asp>.

The data in Tables 2 and 3 are from *Schools and Staffing Survey, 1999-2000: Overview of the Data for Public, Private, Public Charter Schools, and Bureau of Indian Affairs Elementary and Secondary Schools*, NCES 2002-313 by Kerry J. Gruber, et al., 2002, Washington, DC: US Department of Education, National Center for Education Statistics. Data was also drawn from the *Digest of Education Statistics 2003*, Washington, DC: US Department of Education, National Center for Education Statistics.



Jennifer King Rice, Ph.D. is an associate professor in the Department of Education Policy and Leadership at the University of Maryland and is a research associate with the Economic Policy Institute. Her research draws on the discipline of economics to explore education policy questions concerning the efficiency, equity, and adequacy of U.S. public education. She has been published in numerous journals, multiple edited volumes, and is co-editor of *Fiscal Policy in Urban Education*.

SEDL Policy Research on Instructional Resources

In a time of fiscal stress with limited money for education, policymakers need more research-based information about how educational resources most effectively support student achievement.

SEDL's policy team is currently conducting a study about the feasibility of using state education databases to develop policies that address teacher resources. Our goal is to first assess the capacity and limitations of the databases in Arkansas, Louisiana, New Mexico, and Texas. We will then use the results to more specifically study the impact of teachers' salary, experience, educational level, and certification—in the contexts within which they exist—on student achievement.

States collect a variety of data on school and district resource allocation; however, it is not clear whether these data can truly guide policy development regarding how resources are best used to improve student achievement. SEDL hopes to learn to what extent the four state databases allow the investigation of the relationship between instructional fiscal and staffing resources and student achievement.

To answer this question, we are focusing on data about instructional compensation, teacher characteristics, instructional staffing patterns, and student, school, and district characteristics. We are examining these data based on criteria of accessibility, completeness, accuracy, alignment, reliability, and validity.

Our study report will discuss the diversity of quality and capacity of the data collected in the four SEDL states, and identify the important policy questions that can indeed be answered by the state databases. The research results will also tell us the questions that are currently unanswerable but could be answered given expansion and improvement in the state systems of data collection.

For more information about SEDL's current policy research, contact Diane Pan at 1-800-476-6861, ext. 212.

To learn more about SEDL's policy work, visit our website at http://www.sedl.org/rel/pr_overview.html.

Author: Zena Rudo
Content Editors: Celeste Alexander, Rahel Kahlert, Lawrence O. Picus, Lotte Smith-Hansen
Content Reviewer: Jennifer King Rice
Copy Editor: Leslie Blair
Design and Layout: David Timmons

Insights on Education Policy, Practice, and Research may be reproduced and copies distributed to members by educational agencies, organizations, and associations. This publication was produced in whole or in part with funds from the Institute of Education Sciences, U.S. Department of Education, under contract number ED-01-CO-0009. The content herein does not necessarily reflect the views of the U.S. Department of Education, any other agency of the U.S. Government, or any other source.



Southwest Educational Development Laboratory
Wesley A. Hoover, Ph.D., President and CEO
211 East Seventh Street
Austin, Texas 78701
(800) 476-6861
www.sedl.org



INSIGHTS AT A GLANCE

INSIGHTS

Ensuring that all teachers are highly qualified means establishing effective teacher resource policies to hire, train, support, and retain teachers. Jennifer King Rice, Ph.D. from the University of Maryland has developed a “best-fit” approach to improving teacher resources. Her model is a multi-step decision framework to guide policymakers as they consider alternative investments in teacher policy. This issue of *Insights* describes Rice’s best-fit approach and provides guidance on its use.

Research tells us that certain teacher characteristics are important in particular settings, for specific grade levels, and with select subgroups of students, making teacher quality far more complex and difficult to assess than just having a checklist of credentials to use in making decisions. There is no single strategy to deal with teacher quality under all circumstances. Therefore, it is most important to find a package of policies most appropriate for your context. The three basic steps to apply the best-fit model to develop this policy package are:

1. Identify the teacher resource problem using adequate data
2. Explore available policy alternatives to address the multiple dimensions of the problem
3. Evaluate the cost-effectiveness of alternative sets of policies

Identify the problem

Ask some preliminary questions such as:

- What will it take to comply with teacher quality laws, regulations, or requirements?
- Is the teacher resource problem in particular areas, for particular students, or at particular times?
- Is the problem immediate or long-term, one-time or on-going?
- What do current teacher policies assume about teacher quality and is this supported by data?
- Do we have teacher resource data available to us now? If not, how would we get it?

- Who (e.g., teachers, students, administrators, parents, the community) does this problem affect? And, how does it affect them?

Explore policy alternatives

Review current and previous state and local policies and policy strategies being used in practice. Then develop a package of strategies that align with the problem, recognizing policies can often be more effective in combination than as individual stand-alone policies. Pay attention to the ways various policies interact; are they really complementary or do they compete with one another?

Evaluate policy cost-effectiveness

Ask these guiding questions:

- Do I have information about the costs and effectiveness of policy options?
- Are all costs considered? (e.g., hidden costs, short- versus long-term costs)
- How do these policies affect the expenditures in other budget areas?
- Could policies be put together in ways that make them more effective and/or less costly?
- How could the state finance the new policy package?

Putting the Best-Fit Approach to Use

Take the time to follow the necessary steps. Establish more comprehensive and useful data collection systems and conduct regular evaluations of policy cost-effectiveness. Seek out research-based information; federal, state, and local data; national and local experts in the field (especially school personnel); and technical assistance providers to help find answers that can guide effective teacher policy decision making. Be sure to make substantial and targeted investments in both teacher quality and education research to achieve the ultimate goal – student success.