



READINGS AND "THINK ABOUTS"

Leading the Charge on State-Level Teacher Policy

The key to effective learning is effective teaching. The past year has seen tremendous developments in our collective thinking about how we understand, measure, and encourage teacher effectiveness. Some of the levers for change in teacher quality reside at the state level. Others have traditionally resided at the local level, but states are increasingly being asked to weigh in with new policies around such issues as the equitable distribution of highly qualified teachers and compensation schemes that connect teacher pay to student performance. These background readings describe the new context for state teacher policy.

Teacher Pay Reform Challenges States, Kavan Peterson, Stateline.org, March 04, 2006

This article from Stateline.org describes the trend across the country toward compensating teachers based on student performance as opposed to seniority or educational attainment. The article describes initiatives in several states, as well as the opposition these initiatives have faced. The online version of this document contains several links to websites for more information.

<http://www.stateline.org/live/ViewPage.action?siteNodeId=136&languageId=1&contentId=93346>

Teacher Incentive Fund Frequently Asked Questions, excerpts, U.S. Department of Education, August 15, 2006

The federal Teacher Incentive Fund (TIF) is an example of how the current administration is shifting its programmatic emphasis away from promoting “highly qualified” teachers to promoting what they are calling “highly effective” teachers. The frequently asked questions portion of the USED TIF website offers insight into several priorities around performance-based compensation for teachers. The selected overview, questions, and answers demonstrate several of the most challenging issues related to changing teacher compensation schemes. The full FAQ page may be accessed at <http://www.ed.gov/programs/teacherincentive/faq.html>.

Teacher-Pay Incentives Popular But Unproven, Linda Jacobson, *Ed Week*, September 27, 2006

Another key challenge in education policy today is finding teachers for hard-to-staff subjects and schools. This *Ed Week* article provides an overview of different types of pay incentives that states are offering to teachers in these subjects and schools despite limited evidence of their effectiveness.

<http://www.edweek.org/ew/articles/2006/09/27/05incentive.h26.html>

Revising the Equitable Distribution Component in Your State’s Plan for Highly Qualified Teachers, Laura Goe, September 2006

While designed as a “how to” guide for revising state NCLB Title II plans, this publication by the National Comprehensive Center on Teacher Quality provides a thorough overview of state policy considerations related to the equitable distribution of highly qualified teachers and whether or not the goal is compliance with NCLB.

<http://www.ncctq.org/TeacherDistributionPlanningTool.pdf>

“Think Abouts”

Among policymakers at the federal level, attention is shifting from teacher “quality” to teacher “effectiveness”? Is this shift happening in your state teacher policy debates, as well? In what ways might such a shift be beneficial?

What are the opportunities and challenges inherent in looking at teacher effectiveness? For example, how might we measure teacher effectiveness?

What is the appropriate state role in addressing key issues in teacher quality? For example, what can states reasonably do about the equitable distribution of highly qualified teachers? ... about the recruitment of new teachers into the field? ... about compensation plans that account for teacher effectiveness instead of inputs such as coursework and seniority?

What are you doing in your own state to lead this effort? What is working and where is there resistance?

How can chiefs work collectively to advance teacher policy?

What role should CCSSO play in supporting SEA leadership around teacher policy?

SATURDAY, MARCH 04, 2006

Teacher pay reform challenges states

In Stateline.org

By Kavan Peterson, Stateline.org Staff Writer

Paying teachers based on talent and student performance instead of seniority is gaining traction in the states thanks to support from governors and new federal incentives to tie teacher pay to student achievement.

Minnesota and Florida are at the forefront of the movement. Minnesota inaugurated the nation's most sweeping teacher pay changes last fall, and Florida announced last month that all schools must begin compensating the state's top-performing teachers by next year under a system based on student test scores.

Governors in at least five states (Alabama, Alaska, Hawaii, Massachusetts and Mississippi) are pushing for similar changes, arguing that this will attract higher quality educators and reward the ones who get better results in the classroom or take-on tough assignments.

Massachusetts teachers, for example, could earn up to \$15,000 in cash bonuses under a proposal announced by Gov. Mitt Romney (R). It would reward teachers based on a combination of student performance and classroom evaluations. Alaska Gov. Frank Murkowski (R) proposed giving all school employees - including teachers, principals and janitors - bonuses ranging from \$1,000 to \$5,500 in schools that show the most improvement raising students' standardized test scores.

Mississippi Gov. Haley Barbour (R) also wants to give school-wide bonuses to teachers in schools that show the largest test-score gains each year, as well as higher salaries to teachers in hard-to-staff schools. And Hawaii Gov. Linda Lingle (R) proposed in her State of the State address \$10,000 bonuses for teachers with National Board Certification - only 111 Hawaiian teachers have earned the prestigious certificate - that agree to work for three years in a failing school.

"Governors are recognizing that the iron is hot for states to move on this, especially as they're coming under increasing (federal) accountability demands to significantly boost student achievement," said Scott Emerick, a policy expert for the nonpartisan [Center for Teacher Quality](#), a research organization based in Chapel Hill, N.C., and funded by major education foundations and state contracts.

Governors also have an incentive to experiment with ways to reward teachers for student performance: \$100 million in federal grants that will be awarded to states starting in July.

The federal dollars can be used to create performance-based pay systems for teachers and principals in schools that are failing to meet the achievement requirements of the federal

No Child Left Behind law, U.S. Education Secretary Margaret Spellings told governors at the [National Governors Association](#) annual conference in Washington, D.C., Feb. 27.

It's a "dirty little secret" in the education community that the lowest-performing schools in the nation are staffed by the least-experienced personnel, Spellings said.

"We need to be better and smarter about getting our most gifted and talented professionals teaching in our most challenging environments," she said.

Republicans aren't alone calling for "merit" or "performance-based" pay, and other ways that deviate from traditional teacher-salary systems based strictly on the number of years on the job and level of college completed. Four states led by Democratic governors - Arizona Gov. Janet Napolitano, Iowa Gov. Tom Vilsack, North Carolina Gov. Mark Easley and Oklahoma Gov. Brad Henry - currently have policies in place to reward teachers for boosting student test scores or demonstrating excellence in the classroom. However, those governors have been battling with their state legislators to fully fund teachers' bonuses.

Teachers unions have been skeptical of performance-based pay systems, especially those that tie teacher pay directly to student test scores. Packing considerable political clout, state teachers' unions have successfully defeated many attempts to reform teacher pay.

Of the 14 states that considered teacher pay proposals last year, Minnesota was the only state to adopt new legislation, according to the [Education Commission on the States](#), a Denver-based education research group. The biggest defeat was in California, where a proposed constitutional amendment by Gov. Arnold Schwarzenegger (R) that would have required schools to pay teachers based on merit rather than seniority was overwhelmingly defeated at the ballot box last November.

Florida's new teacher pay rules, approved by the State Board of Education on Feb. 22, are the most sweeping in the nation and will require schools to adopt standardized tests in nearly every subject, including art, music and physical education. About half the teachers in Florida already have their students assessed by the Florida Comprehensive Assessment Test (FCAT) in subjects like math, reading, writing and science.

The new program, called Florida [Effective Compensation](#), or E-Comp, will require every school district to give 5 percent salary bonuses to the top 10 percent of teachers based on improvement in student test scores starting next year.

State teachers' unions and school administrators are protesting the new rules and are considering suing on the grounds that only the state legislature, not the state [Department of Education](#), has the authority to force schools to adopt such changes, said Mark Pudlow, spokesperson for the [Florida Education Association](#), the state's largest teachers' union.

"Teachers have no way of knowing what to do to get this bonus. Two teachers could do the exact same thing in the classroom and any number of factors could result in one being in the top 10 percent and the other in the bottom 10 percent," Pudlow said.

Florida lawmakers passed a law in 2002 supported by Gov. Jeb Bush (R) requiring that schools create performance-based pay systems, but so far only 16 out of the state's 57 school districts have complied, said state Department of Education spokesperson Cathy Schroeder. Florida Education Commissioner John Winn and the governor believe the 2002 law gives the state the authority to mandate the new test-based performance pay, she said.

Minnesota's alternative teacher pay system was proposed by Gov. Tim Pawlenty (R) and adopted by the legislature in July 2005. Pawlenty said the program could not have passed without bringing the state's teachers' unions to the table.

"It's very important to work with teachers because even though it may not be their first love as a reform, if you don't have them at least open to the idea they have sufficient clout to kill it," Pawlenty told *Stateline.org*.

Minnesota school districts can voluntarily opt in to the new \$86 million program that requires schools to award salary increases based on performance-based measurements. About one-third of the state's 339 school districts are working on plans to join the program, according to the [Minnesota Education Association](#).

Charles Ellenbogen, a 9th-grade English teacher at Harding High School in St. Paul, Minn., said that paying teachers based on seniority is problematic because being older doesn't make you a better teacher. But teachers are skeptical that schools can fairly and objectively measure what goes on inside the classroom, said Ellenbogen, who has been teaching for 13 years and worked in four different states.

"Everybody wants the chance to get paid more for doing outstanding work, but there must be very specific and very clear standards that allow for a variety of ways to measure students' and teachers' performance," he said.

Send your comments on this story to letters@stateline.org. Selected reader feedback will be posted in the Letters to the editor section.

Contact Kavan Peterson at kpeterson@stateline.org.

Teacher performance-pay plans

Governors' proposals:

Governors in five states are proposing plans to pay teachers based on student performance rather than seniority or to award teachers that work in hard-to-staff schools.

Alabama: Gov. Bob Riley (R) launched a Teaching Quality Commission in January to investigate performance-based pay for teachers and other incentives to get highly qualified teachers to work in high-risk schools.

Alaska: Gov. Frank Murkowski (R) introduced legislation that would award bonuses of \$1,000 to \$5,500 to school administrators, teachers and support staff in schools that significantly boost student test scores on state standardized tests.

Hawaii: Gov. Linda Lingle (R) proposed \$10,000 bonuses for highly qualified teachers who commit to work for three years in schools that are failing to meet state standards.

Massachusetts: Gov. Mitt Romney (R) proposed cash bonuses up to \$15,000 for the state's top teachers based on student test scores and evaluations of the teachers' classroom performance.

Mississippi: Gov. Haley Barbour (R) for the second year in a row has proposed paying teachers more in schools that show the largest test-score gains each year. His plan also would boost salaries of teachers working in hard-to-staff schools.

How states pay teachers now:

Nine states currently are experimenting with ways to reward teachers for boosting student test scores or demonstrating excellence in the classroom, according to Quality Counts 2006, Education Week's annual publication.

Three states - Florida, North Carolina and Oklahoma - give teacher bonuses based on improvements in student test scores.

Two states - Delaware and New Mexico - are developing pay systems in which teachers earn salary increases by demonstrating how they have improved their teaching skills.

Four states - Arizona, Iowa, Minnesota and Nevada - are developing systems that take into account both student test scores and teacher knowledge and skills.

Major teacher pay reforms adopted by cities:

Houston in January became the largest school district in the nation to tie teacher salary increases directly to student performance on standardized tests.

Denver voters last November approved a \$25 million property tax increase to fund new bonuses for teacher performance and incentives for teachers to work in hard-to-staff schools. The ballot measure capped off a six-year program to overhaul the way Denver teachers are paid.

TEACHER INCENTIVE FUND

Frequently Asked Questions – EXCERPTS

<http://www.ed.gov/programs/teacherincentive/faq.html>

PURPOSE

The purpose of the Teacher Incentive Fund is to support programs that develop and implement performance-based teacher and principal compensation systems, based primarily on increases in student achievement, in high-need schools.

GOALS

The goals of the Teacher Incentive Fund program include:

- Improving student achievement by increasing teacher and principal effectiveness;
- Reforming teacher and principal compensation systems so that teachers and principals are rewarded for increases in student achievement;
- Increasing the number of effective teachers teaching poor, minority, and disadvantaged students in hard-to-staff subjects; and
- Creating sustainable performance-based compensation systems.

...

DEFINITIONS

What is differentiated compensation?

Different levels of effectiveness, skill and performance should be recognized through different levels in compensation. Differentiated compensation for this program refers to a system of pay that is not exclusively defined by a career ladder or longevity in a job but rather by quality and effectiveness of performance. The differentiated compensation must be based primarily on improved student achievement at the school and classroom levels, and must also (a) consider classroom evaluations conducted multiple times during each school year and (b) provide educators with incentives to take on additional responsibilities and leadership roles. Beyond these statutory requirements, the differentiated compensation also may take into consideration such other factors as assignments in hard-to-staff subjects or schools.

For purposes of Competitive Preference 2, what is the Department's definition of "hard-to-staff subjects"?

Hard-to-staff subjects are those for which States, districts and schools have had a history of difficulty in finding and hiring highly qualified teachers. Many States and districts have identified mathematics, science, foreign languages, and core academic subjects taught by special education teachers as areas with persistent teacher shortages.

For the peer reviewers to adequately evaluate the extent to which the applicant meets this competitive priority, applicants should provide an explanation, including recent, appropriate

supporting data, for the choice of specific subjects that are considered "hard-to-staff" whose teachers would benefit from the differential compensation system.

What is a "high-need" school?

For purposes of the TIF program, a high-need school means a school with more than 30 percent of its enrollment from low-income families, based on eligibility for free and reduced price lunch subsidies or other poverty measures that the State permits the LEAs to use. For middle and high schools, eligibility may be calculated on the basis of comparable data from feeder schools. (Note: Full-time teachers in schools that meet this definition may be eligible to have portions of their Perkins Student Loan forgiven.)

Eligibility as a high-need school is determined on the basis of the most currently available data.

- ? For schools operating in the '05-'06 school year, applicants use data for the '05-'06 school year on student enrollment and eligibility for free- and reduced price- lunch subsidies
- ? For schools that did not operate in the '05-'06 school year, applicants use current enrollment projections for the '06-'07 school year and data from the '05-'06 school year on prospective enrollees' eligibility for free- and reduced price- lunch subsidies

Applicants and grantees will need to provide the underlying enrollment and poverty data to the Department upon request.

What is a classroom evaluation?

Classroom evaluation refers to the regular on-going evaluations of teachers and principals conducted to evaluate teachers and/or principals in areas such as: competency, effectiveness and growth in providing appropriate and strong instruction /instructional leadership that meets the needs of the students.

PROGRAM QUESTIONS

...

If performance-based compensation must be based primarily on student achievement, how can teachers of subjects such as arts, music, and physical education participate in this program? What about paraprofessionals?

Teachers and other instructional staff may still qualify under some, but not necessarily all, of the criteria designed for the performance-based compensation system. For instance, teachers in subjects for which there are no standardized student assessments can still qualify for compensation benefits based on overall school achievement gains, on classroom evaluations, and perhaps by taking on new assignments. The Department encourages applicants to offer their own strategies by which all teachers can appropriately qualify for teacher incentives through their contributions to student achievement.

...

May a grant application propose to support more than one model of differentiated compensation?

Yes. For example, applications may propose a "planned comparison" approach in which multiple models of differentiated compensation are tried and evaluated. This approach will allow a grantee to select for full implementation the system that best incorporates incentives to promote teacher effectiveness and student achievement.

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EDUCATION WEEK

Published: September 27, 2006

Teacher-Pay Incentives Popular But Unproven

By Linda Jacobson

The idea, in various forms, has become a popular refrain among politicians.

“I ask you to support my proposal to offer more-competitive salaries to teachers across the state,” Louisiana Gov. Kathleen Babineaux Blanco, a Democrat, implored lawmakers in March.

“Combat pay” is the term Republican Gov. Arnold Schwarzenegger gave his plan to attract well-qualified teachers to California’s toughest schools. While that phrase offended some educators, and the plan was eventually dropped last year, his meaning was clear: Reward teachers with bonuses or other financial advantages if they agree to teach in schools that other teachers want to leave.

But as pressure grows to use research-based practices to improve schools, it’s almost a wonder policymakers are so quick to join the trend. States have little evidence that using financial incentives to entice teachers to certain jobs actually reduces turnover or raises student achievement.

Nonetheless, a 2005 review by the Education Commission of the States found that at least 30 states offer such incentives—which can include housing benefits, loan forgiveness, and scholarships, as well as yearly bonuses and salary increases—to address teacher shortages in certain subjects and geographical areas. And 17 states offer incentives specifically for teachers who work in hard-to-staff schools.

Looking for Data

Tricia Coulter, the director of the Teaching Quality and Leadership Institute at the Denver-based ECS, said that policy analysts and others following such initiatives get frustrated when lawmakers approve incentives for teachers but don’t require any evaluation or data collection to determine the effectiveness of the policies.

For example, when Julia E. Koppich, a San Francisco-based author and consultant specializing in teacher issues, began investigating whether California’s \$20,000 incentive to draw teachers with National Board for Professional Teaching Standards certification to high-needs schools was paying off, she found that the state wasn’t keeping data that would enable her to find out.

“That was annoying,” she said.

Margaret Gaston, the executive director of the Center for the Future of Teaching and Learning, located in Santa Cruz, Calif., had similar questions when she

Attracting Teachers

Here are some examples of incentives that states offer to lure teachers to hard-to-staff schools.

- **Arkansas:** Gives \$4,000 bonuses to teachers—not currently employed by the district—who sign a contract to work in a high-priority district, and \$3,000 each of the next two years if they stay employed in that district.

wanted to know whether a slew of incentives instituted during former Gov. Gray Davis' administration—such as college loans and targeted teacher-training programs focusing on high-poverty schools—helped in the recruitment and retention of teachers.

Ms. Gaston said that those programs probably contributed to a significant drop in the number of “underprepared” teachers in the state—from about 42,000 in 2002 to fewer than 20,000 last year. But the data to prove her hypothesis aren't available.

The center's 2003 report on the state's workforce said, “Given the scant reporting requirement of some of these programs, it is difficult to ascertain exactly how much of the money was spent.”

Other researchers have also encountered barriers when trying to study teacher-incentive policies.

“Many of the most ambitious and interesting reforms have collapsed within a few years under pressure from political opposition or fiscal constraints, and attempts to study the few reforms that stayed afloat have yielded little fruit to date,” Steven Glazerman, a researcher at Mathematica Policy Research's office in Washington, wrote in a paper earlier this year.

Promising Results

States, however, are likely to begin taking a closer look at whether their efforts to draw teachers to hard-to-staff schools and subjects are working. A provision of the federal No Child Left Behind Act requires that “highly qualified” teachers be equally distributed in high-poverty and high-minority schools, not concentrated in those serving predominantly white and better-off students. States had to detail those efforts this summer in “equity plans” submitted to the U.S. Department of Education. Some observers suggest data collection could begin to improve as a result.

“Now states are saying, ‘If we're going to put in place an equity plan, then we better start doing a better job of monitoring whether some of these strategies are effective,’ ” said Sabrina W.M. Laine, the director of the Washington-based National Comprehensive Center for Teacher Quality, which was launched last year with funding from the U.S. Department of Education and is a national resource center on such policies.

For example, Virginia is documenting the effectiveness of a pilot incentive program launched in 2004 that awarded bonuses to highly qualified teachers who went to work in Caroline County and the city of Franklin. Four schools are involved—a middle school and a high school in each district. Under the plan, the highly qualified teachers each received a one-time \$15,000 “relocation” bonus, and the highly qualified teachers already in those schools each received a \$3,000 retention bonus.

After the first year, 2004-05, teacher attrition dropped in both sites, but test scores increased only

- **California:** Teachers who are certified by the National Board for Professional Teaching Standards are eligible to receive a \$20,000 bonus over four years if they agree to teach in a high-priority school for at least four years.
- **Hawaii:** Offers \$3,000 per year, for up to three years, for licensed special education or general education teachers who agree to work in hard-to-fill locations.
- **Illinois:** The state's Golden Apple Scholar program offers \$5,000 a year for four years of college for minority and low-income high school seniors who agree to teach in a poor or low-performing school for five years after graduating from college.
- **Mississippi:** Licensed teachers who buy a home and move into one of the state's geographical critical-shortage areas can receive a home loan of up to \$6,000

SOURCE: Education Commission of the States

in the high schools. Preliminary data from last school year, though, seem to show even more improvement in all schools and in both areas, said Connie Fisher, a special-projects coordinator for teacher quality at the Virginia Department of Education.

“The legislature is looking at it, and is looking for results,” she said.

She added that the districts are drawing more applicants than before, and those applicants are more qualified. “So they have a better pool,” Ms. Fisher said.

Mississippi has also closely followed its 8-year-old effort to draw new teachers into 47 “critical shortage” geographic areas—primarily in the Mississippi Delta region—through a combination of college scholarships and housing assistance programs.

According to recent data from the state’s student- and teacher-information system, of the 332 teachers who completed the state’s Critical Needs Teacher Scholarship Program since it began in 1998, 254 are still teaching. And of those, 165—or 65 percent—are still teaching in a critical shortage area.

“That’s a powerful retention percentage,” said Wesley Williams II, the director of the Mississippi education department’s Teacher Center, which focuses on recruiting and retaining teachers.

Models to Follow

California may soon have a database similar to Mississippi’s. A bill waiting to be signed by Gov. Schwarzenegger would create a teacher-workforce data system, which could be used to determine which teachers have taken advantage of certain incentives, where teachers are moving, and whether they are staying in those schools. The fiscal 2007 budget includes nearly \$1 million for the project.

“It would make our job so much easier,” said Ms. Gaston of the Center for the Future of Teaching and Learning, which recommended such a system.

Whatever the evidence, or lack of it, on whether financial and other incentives attract talented teachers to challenging schools, the officials implementing such programs concede that money alone won’t keep teachers in those jobs.

“Many policymakers hear ‘financial incentives’ and think a lump sum of money can attract a lot of people,” said Ben Schaefer, a program manager at the Washington-based National Commission on Teaching and America’s Future, a nonprofit organization that promotes high-quality teaching. “But it might not retain them.”

One model that should not be followed, most experts say, comes from Massachusetts, which in 1999 began offering \$20,000 bonuses to attract new teachers to the state. But after one year, one-fifth of the teachers who took the bonuses left the classroom, and many of the others found different teaching positions in suburban schools.

Mr. Schaefer says that experience suggests that states need to target their incentive programs to specific needs.

Other experts say incentives such as mentoring, professional development, strong leadership, and

even ongoing bonuses for raising achievement are also needed to keep teachers in hard-to-staff schools and fields.

One model being used in 13 states is the Teacher Advancement Program, which was launched in 1999 by the Milken Family Foundation. Now administered by the Santa Monica, Calif.-based National Institute for Excellence in Teaching, the program has four primary elements: multiple career paths for teachers, ongoing school-based professional development, evaluations tied to student performance, and performance-based compensation. The program can also include incentives for teachers who transfer into low-performing schools.

“Signing bonuses,” says Lewis C. Solmon, the president of the institute, won’t be enough to improve student learning if they aren’t coupled with pay that is based on whether teachers are making a difference in the classroom.

“You don’t want just any teacher to come,” he said, “you want effective teachers.”

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FROM THE ARCHIVES

“Report Faults Ed. Dept., States on Teacher-Quality Rule,” July 12, 2006.

“Commentary: Teacher Pay for Performance: Another Fad or a Sound and Lasting Policy?,” April 5, 2006.

“Commentary: Aligning the System: The Case for Linking Teacher Pay to Student Learning,” March 29, 2006.

“Groups Tackle Teacher Quality in Needy Schools,” February 16, 2005.

“Mass. Bonus Program To Favor Ed. Schools,” December 4, 2002.


“Delta Blues,” May 26, 1999.

Read a transcript of our exclusive online chat, [Education Week/ERS Report on Salary and Wages](#).

For more stories on this topic see [Teaching and Learning](#).

For background, previous stories, and Web links, read [Teacher Quality](#).

RESOURCES ON THE WEB

View [resources and get information](#) on how states are handling teacher compensation from the [Education Commission of the States](#). Also, read the November 2005 report, [“Eight Questions on Teacher Recruitment and Retention: What Does the Research Say?”](#) 

Learn more about the [four elements of the Teacher Advancement Program](#), which is administered by the [National Institute for Excellence in Teaching](#).

The [National Comprehensive Center for Teacher Quality](#) offers resources on [recruitment and retention](#), including databases on state policies and regional and national recruitment and retention initiatives.

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DRAFT (September 2006)



Revising the Equitable Distribution Component in Your State's Plan for Highly Qualified Teachers

September 2006

Laura Goe, Ph.D.
ETS

This draft document (revised from March 2006) is intended to provide states with guidance as they revise their state plans to document progress in the equitable distribution of highly qualified teachers.



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Section 1: The Problem

Goals

Under Title I, Part A, of the No Child Left Behind (NCLB) Act, states must provide evidence that they either currently have or are making a good-faith effort to move in the direction of more equitable distribution of teacher quality across the state as well as across and within districts and schools. This planning tool is intended to help states by discussing the types of data that might be useful in demonstrating progress over time. This tool assists states as they (1) take stock of the types of data collection, analysis, and reporting procedures they currently have; (2) consider the types of data they may want to collect in the future; and (3) determine future analysis and reporting procedures.

The Problem: Inequitable Distribution of Teachers

Many researchers have documented that the least qualified teachers are most likely to be found teaching high-poverty, low-achieving, minority students (Carroll, Reichardt, Guarino, & Meija, 2000; Darling-Hammond, 2002; Goe, 2002; Hanushek, Kain, & Rivkin, 2004; Ingersoll, 2002; Lankford, Loeb, & Wyckoff, 2002; Useem & Farley, 2004). These less qualified teachers typically are located in hard-to-staff schools where turnover is frequent and openings often are filled with inexperienced and uncredentialed teachers. States, districts, and schools have an obligation to work toward ensuring that all students—regardless of race, poverty, or geography—have access to highly qualified teachers. Moreover, states, districts, and schools have a responsibility to make concerted efforts toward reducing the concentration of less qualified teachers in high-poverty schools. States, districts, and schools must document both their efforts and the results of these efforts in order to demonstrate progress.

Many states are moving quickly toward 100 percent compliance in meeting the criteria that have been established for teachers to embody the federal definition of a highly qualified teacher. However, there are still many instances in which high-poverty or minority children are taught by inexperienced, unqualified, and out-of-field teachers at higher rates than other children. States must demonstrate that schools with large numbers of high-poverty or minority students and schools that have failed to meet their adequate yearly progress (AYP) targets do not have more inexperienced and less qualified teachers than other schools.

Requirements for the Revised State Plan

From the state education agency (SEA) monitoring protocol for *Highly Qualified Teachers: Improving Teacher Quality State Grants* (U.S. Department of Education, 2005), which relates to the NCLB Act (Title I, Part A, Subpart 1, Section 1111[b][8][C]): Does the SEA also have a plan with specific steps to ensure that poor and minority children are not taught at higher rates than other children by inexperienced, unqualified and out-of-field teachers? Does the plan include measures to evaluate and publicly report the progress of such steps?

Definitions
Equitable Teacher Distribution
Teachers are distributed throughout the unit of analysis (e.g., state, district, school) such that high-poverty, minority, or learning-disabled students or English language learners are just as likely to be taught by an highly qualified, experienced teacher working in their field as are students who do not fall into those categories.
Highly Qualified
The current definition of <i>highly qualified</i> requires that teachers of core academic subjects meet the following criteria: <ul style="list-style-type: none">• They have full state certification.• They hold at least a bachelor’s degree.• They have demonstrated subject-matter competency in each of the academic subjects they teach.
Experience
Experience is defined by the number of years a teacher has taught as the teacher of record, including years while teaching in another state or country but not including internships. Under this definition, new teacher have zero years of teaching experience, teachers who are beginning their second year in the classroom have one year of teaching experience, and so on. For practical usage, it will be useful to divide teachers into two classifications: <i>novice</i> (i.e., zero, one, or two years of experience) and <i>experienced</i> (i.e., three or more years of experience). Note that U.S. Secretary of Education Margaret Spellings has emphasized the need to include teaching experience when considering teacher quality. Thus, for purposes of this planning tool, both the current definition of highly qualified and the added component of experience will be considered when discussing equitable teacher distribution.
Note: States must include both highly qualified and experienced teachers in their plans for improving the equitable distribution of teachers.

Section 2: The Data

Current Data and Processes for Collecting Data

States will be at different stages in the process of building data collection and analysis infrastructures. They also will have different contexts in which to collect data and varying restrictions on what types of data they can collect based on state laws, district policies, and local bargaining agreements. They already will have systems in place for evaluating and reporting on their progress toward increasing the numbers of highly qualified and experienced teachers in their states, but they may lack mechanisms for tracking where such teachers are over time and for correlating that information with classroom, school, and district demographics. For their revised state plans, states should focus on documenting their *current* ability to collect and analyze appropriate data in the short term. For the longer term, states may consider other suggestions offered in this planning tool that may be useful in thinking about the future development of data collection and analysis efforts in the state.

Taking Stock of Current Data: What to Include in Your Revised Report

- A description of the current data system on teachers, including the following:
 - How many years of data exist in an electronic database format
 - Whether there are statewide unique longitudinal identifiers on teachers
 - Teacher experience variable—entry dates for teachers into the following:
 - Teaching as a profession
 - Teaching in the state
 - Whether you can track teachers' school assignments over time so you can see the following:
 - Which schools have high turnover
 - Where teachers go when they transfer (which schools or districts) or leave the teaching profession altogether
 - Whether there is a database that can show course-level teaching assignments by school and connect individual teachers to those courses to determine whether they are highly qualified to teach those courses (secondary-level teachers)
 - What information you routinely collect on teachers, such as the following:
 - Certification (e.g., types, year certified, certification renewal status)
 - Education level (including year degree was obtained)
 - Completion of specific coursework or required professional development
 - Credentialing process (e.g., traditional or alternative route program)
 - Participation in induction program (beginning teachers)
 - Teacher scores on Praxis or other required certification tests

- Information about the quality of the data currently available
 - How the data was collected
 - Teachers entered data directly.
 - Schools or districts entered data.
 - Teachers, schools, or districts provided written data, which were keyed into a database by someone at the state level.
 - Reasons to believe the data are or are not accurate and reliable
 - Missing data
 - Data that make no sense (e.g., 100 years of teaching experience)

What Do We Do If We Have No Data for a Particular Requirement?

Don't panic! States are in varying stages of building data systems to document highly qualified teachers, experience, and out-of-field teaching status at the school level.

If you have no data, consider the following:

- Where are your state's most high-poverty schools concentrated?
- Where are your non-AYP schools concentrated?
- Looking at novice versus experienced teachers
- Looking at teacher turnover.
- Build from there.

Explain in a straightforward manner why you have no data:

- Talk about your goals in terms of data collection (i.e., what you want to be able to demonstrate with the data you will collect). You may have to collect data in incremental steps.
- Describe how you are going to get the data. List steps your state is taking to get the data (e.g., obtaining funding for building a data system at the state level, naming one or more persons whose job description includes an adequate amount of time spent on advancing the state's capacity to collect and analyze data, collecting existing data from schools and districts, enacting legislation to support the collection of data).
- Describe challenges you face in collecting the data and how you are going to address those challenges
- Suggest when you will have each step done, and when you expect to have accurate preliminary data available that will answer questions about the percentage of courses taught by highly qualified, experienced teachers.

School-level data should do the following:

- Give the percentage of classes taught by highly qualified, experienced teachers (i.e., teachers certified and teaching in their field as measured by their degree or test scores) currently teaching in the school broken down by (1) subject; (2) grade level; (3) student characteristics (e.g., English language learners, special education, high-poverty, minority); and (4) advanced or remedial classes.

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- Include the teacher turnover rate for the school (i.e., the number of vacant full-time equivalent positions to be filled each year, minus newly created positions) and information about the grade levels and subject areas for the vacancies.
- Provide the out-of-field teaching rates by the percentage of assigned classes (e.g., a high school teacher highly qualified only in English who is teaching one mathematics class out of five assigned classes would be counted as teaching 20 percent out of field; these would be averaged across teachers for the school rate).
- Collect information about the subjects and grade levels most likely to be taught out of field to target incentives appropriately.

**Reporting From Data: Reports, Tables, and Graphs
You May Want to Include in Your Report**

School-Level Characteristic	How it Is Defined	How it Is Measured	Measurement Shows
Poverty level	State defined	Percentage of high-poverty students	The percentage of highly qualified, experienced teachers by school poverty categories
Minority students	State defined	Percentage of minority students	The percentage of highly qualified, experienced teachers by percentage of minority levels
Out-of-field teachers	Federally defined	Percentage of courses taught by out-of-field teachers	The percentage of courses taught by out-of-field teachers in a school broken down by poverty percentage, minority percentage, and AYP status
Highly qualified teachers	Federally defined	Percentage of classes taught by highly qualified teachers	The percentage of highly qualified, experienced teachers and where they currently are distributed (by school characteristics) compared with the subsequent distribution to show improvement
Teacher experience	State defined	Percentage of novice teachers and experienced teachers	The percentage of novice and experienced teachers and where they currently are distributed (by school characteristics) compared with the subsequent distribution to show improvement
High teacher turnover	State defined	Percentage of teachers new to the school in the current academic year	The location of schools with high teacher turnover so policies and incentives can be targeted directly to them
Whether the school made AYP	Federally defined	Standardized test scores	The location of schools that failed to make AYP so targeted efforts can be applied to ensure the school has highly qualified teachers

Unique Identifiers

In order to document state efforts to support the distribution of qualified teachers across all schools, each student and teacher needs to have a statewide unique longitudinal identifier. To comply with the requirements of the NCLB Act, most states already have created mechanisms to generate statewide unique longitudinal identifiers for students, but fewer states have extended that policy to include teachers.

Most state and federal policies refer to a *unique statewide identifier*. However, the term *longitudinal* has been added in this case for a specific purpose: to clarify that these unique statewide identifiers should follow teachers for their entire teaching careers within that state. This distinction is important because teachers often leave teaching for family obligations, to attend school full-time, or to explore other career opportunities. Where state policy allows, a linked file of Social Security numbers and statewide unique longitudinal identifiers should be maintained for teachers so if or when they return to teaching, their statewide unique longitudinal identifier will be connected to their new teaching assignment. Where it is not possible to link unique statewide identifiers to Social Security numbers, the unique statewide identifiers instead can be linked to a set of variables that when used in combination would identify a unique teacher (e.g., name, date of birth, year first entered state data system as a teacher, last school in which he or she taught).

Having statewide unique longitudinal identifiers for both teachers and students will make it easier for schools, districts, and states to examine trends in teacher and student transfer; identify schools with high teacher turnover; and develop better information on which subjects, grade levels, and students are most likely to be taught by highly qualified, experienced teachers. This type of information will be useful in developing policies and incentives that will apply to these specific subjects, grades, schools, and students.

Data Quality

When describing the data the state currently has, consider the quality of the data. The following are some ideal characteristics for data. When the state's data depart from any of these ideals, mention how the state intends to rectify the problem so the data the state is using are increasingly accurate over time. Ideal data are the following:

- **Accurate**—In general, the closer to the building (the school), the more accurate the data are. Administrative staffers and teachers at the school are more likely to know the current classroom assignments of teachers than district or state personnel.
- **Verified**—Verification means that at least one other person has checked the data for accuracy and confirmed that they have been input correctly into the system.
- **Complete**—Missing data can cause many problems in the analysis. Make every effort to locate missing information and get it entered into the database. This is another reason data tend to be more accurate at the building level—the missing data often can be collected on the spot.
- **Clean**—Sometimes data are entered improperly. A data analyst can identify data that are incorrect and may be able to fix the problem. Data cleaning is an important part of ensuring the accuracy and usefulness of the data.

- **Defined**—Variables should be defined clearly and consistently so there will be no confusion among those entering data and those interpreting and analyzing the data.
- **Organized**—Variables should be organized in a logical fashion within the database. For example, someone looking for teacher credential status should be able to find all variables related to teacher credentials together in one part of the database.
- **Longitudinal**—While there may be reasons to create a new database each year, analyses are more fruitful if done with a database that has as many years of comparable data in it as are available. For instance, if you have five years of teacher assignment data (i.e., what school each teacher is teaching in), it only will be useful for tracking purposes if *all* of those data are in one database.

A Primer on Dummy Variables

Dummy variables are useful in research to indicate the presence or absence of a particular thing. For instance, they may be used to indicate whether or not a person participated in a program. Those who participated would receive a “1” (the “variable”) for that column in the spreadsheet, whereas those who did not participate would receive a “0” for that variable. When the data are analyzed, the researcher compares outcomes for the two groups identified by the dummy variable. Many statistical software programs easily can generate dummy variables by recoding an existing variable to create a new one.

Dummy variables are particularly useful for determining the impact of targeted programs to reduce teacher turnover among schools. For example, if a large district targeted voluntary teacher mentoring programs to its high-turnover schools and tracked teacher participation in these programs, it would be possible to compare transfers among teachers who participated and teachers who did not. Of course, there are other factors to consider when analyzing the results over time, particularly whether those teachers who volunteered for the program were different in some way from those who did not (e.g., more or less inclined to transfer).

Another example is counting an entire school, rather than a teacher, as a participant. If the state has teacher-turnover records for its schools, it can put in place a dummy variable to represent the school’s participation in a teacher-retention strategy for each year the strategy was implemented. Thus a school would have a “0” for the participation variable each year up until the year it participated. The analysis then would compare turnover *before* the strategy was implemented (identified by the dummy variable) with turnover *after* the strategy was implemented. Another use for a school dummy variable is to identify schools that have a particular characteristic, such as failure to meet AYP in a given year. All schools that failed would be given a “1,” and all schools that passed would be given a “0.” This simplifies data analysis and also allows for easy identification of schools.

Dummy variables also can be used to identify teachers who entered the teaching force through a particular program, such as Troops to Teachers. A variable would be created for which only those teachers who entered the profession through that program would be given a “1.” All other teachers in the system would be given a “0.” With this variable, it will be possible to isolate all of the teachers who entered the system through this program for analysis, such as how long they stay in their first teaching assignment or in the profession.

Dummy variables can be used in various combinations of teacher, district, and school participation (Hardy, 1993). They are simple to create and are flexible in terms of the types of data analyses that can be used with them.

Demonstrating Improvement in Equitable Teacher Distribution

States may use several different measures and methods to demonstrate that they are making progress on equitable teacher distribution. Following are some options, along with appropriate circumstances for which they might be recommended:

- **Statistical Methods (Spearman’s Rank Correlation Coefficient)**—This method is most useful for (1) a state in which there are many districts; or (2) a district in which there are many schools, with at least two at each level (i.e., elementary, secondary). Statistical software can generate the rankings based on the percentage of highly qualified, experienced teachers and the percentage of high-poverty students (or minority students or other groups). After schools are ranked, the Spearman’s Rank Correlation Coefficient compares pairs of data and indicates whether they are significantly different, with the goal being to find that they are not. This test is useful when variables are not normally distributed jointly or when statistical outliers skew the data, influencing the calculation of the Pearson’s Product Moment Correlation Coefficient (i.e., a measure of how well a linear equation describes the relation between two variables on the same object). It also is useful because it indicates the direction of the relationship—which makes it superior to chi-square for this purpose.
- **Simple Graphs**—When the district has only a single school at a particular level, one method to show progress is to compare the school to itself rather than to other schools. Use a graph showing changes in the ratio of highly qualified experienced teachers to high-poverty students over time.
- **Comparison of Districts**—Using logistic regression, districts can be compared to each other within the state. Regression holds constant the district characteristics, such as urban or rural location and percentage of high-poverty students. The regression results can be used to indicate which districts are doing better or worse than expected in terms of equitable teacher distribution, given their particular mix of characteristics.
- **Other**—States should be able to demonstrate that they are making a good-faith effort to improve the equitable teacher distribution. There may be other statistical and graphical means besides those indicated above that would permit states to provide evidence of progress in equitable teacher distribution.

Section 3: The Analysis

Experience Counts

It is crucial to include teacher experience—not just highly qualified status—when considering the equitable distribution of teachers. Thus states must discuss how they will work toward the equitable distribution of teachers by experience as well as highly qualified status. This requirement may impact how states plan for the collection of data on teacher qualifications and characteristics. It will be useful for states to create a variable showing the year a teacher was initially certified and began teaching. This will maintain accuracy better than a variable that contains the number of years of experience—that number would have to be updated each year, and mistakes could be made.

Out-of-Field Teaching

Out-of-field teaching means that the teacher is teaching a class for which he or she is not highly qualified to teach. Out-of-field teaching is not determined by the teaching assignment (i.e., assigned to teach mathematics) but by the classes the teacher actually is teaching. However, for purposes of writing state plans, it is useful to think in terms of classes taught by out-of-field teachers not the out-of-field teachers themselves. The key is whether the class being taught matches the teacher's certification. Teachers meet the definition of highly qualified only if they are teaching classes for which they are certified.

Tracking Out-of-Field Teaching

The new federal requirements that must be addressed in the state plans include tracking whether students are being taught by teachers who are appropriately qualified for the subjects they are teaching. This requirement applies particularly to secondary teachers who teach specific subjects, such as mathematics, language arts, and science. Note that this information must be tracked at the individual course level. If a highly qualified high school mathematics teacher has four mathematics classes a day but also teaches one biology class without appropriate certification, the teacher is highly qualified at the 80 percent level (i.e., for teaching four of the five classes).

Because of this course-by-course requirement, states should develop mechanisms to indicate whether a specific classroom is taught by a highly qualified teacher rather than tracking the teachers. Most states have data systems that record whether a teacher is highly qualified for teaching a particular subject (e.g., mathematics), but there is no mechanism to tie the certification to the courses that a teacher actually is teaching on a daily basis. To have 100 percent highly qualified teachers at a school, every teacher must be teaching *only* courses for which he or she is highly qualified. This requirement may be particularly difficult to meet in small rural schools where a teacher may be teaching several subjects, although he or she is only qualified to teach one or two of them.

Moreover, data systems should be structured so they track individual classes, not teachers. This means that a school would be required to report each course taught and whether that class was taught by a highly qualified teacher. For instance, if a high school offered 10 mathematics classes each day, they would need to report 10 records. If all 10 of those classes were taught by highly qualified mathematics teachers, the school has achieved 100 percent highly qualified

status for those classes. However, if nine of the classes are taught by highly qualified mathematics teachers and one is taught by a language arts teacher, the school has achieved only 90 percent of the goal for those classes. Similarly, the school would need to report other classes and whether they were taught by highly qualified teachers, arriving eventually at a percentage of classes taught by highly qualified teachers.

Why should it be reported this way? It is quite possible (though highly unlikely) that a highly qualified teacher would not be teaching *any* classes for which he or she is qualified. Thus if mathematics students are being taught by a teacher highly qualified only in social studies, those students are not being taught by a highly qualified teacher even though that teacher is highly qualified in another subject. Reporting classes taught by highly qualified teachers thus gives a much more accurate picture of whether students in a particular school are receiving instruction from appropriately qualified teachers.

A Closer Look at Inequitable Distribution

Once the current distribution of teacher qualifications and characteristics is documented, states can analyze the data to determine whether schools with large percentages of high-poverty students have higher percentages of classes taught by teachers with significantly lower qualifications, particularly in terms of highly qualified status, experience, and out-of-field teaching assignments. This analysis may reveal several scenarios, such as the following:

- The state as a whole has no significant differences in teacher distribution (i.e., classes taught by highly qualified experienced teachers are distributed fairly evenly among high-poverty and low-poverty schools across the state).
- The state has inequitable distribution across districts. The analysis would show that among districts within the state, there are some with higher proportions of inexperienced or less qualified teachers or higher percentages of classes taught by out-of-field teachers.
- The state has inequitable distribution within districts. The analysis would show that among schools in a particular district, there are some with higher proportions of inexperienced or less qualified teachers or higher percentages of classes taught by out-of-field teachers.

For the first scenario, the state would not have to address policy changes because none would be needed. However, the state will need to provide convincing evidence through data analysis that they do not have inequitable distribution across or within districts.

For the second scenario, the state may want to consider statewide legislation or policy changes to support targeted improvements of teacher quality for the districts that have fewer highly qualified teachers because it is difficult to get teachers to move across districts.

For the third scenario, these kinds of policies could be augmented by additional policies focused on redistribution within districts and within schools.

For both the second and third scenarios, the state might want to develop prescriptive policies at the state level. However, states also might consider legislation or policies that provide support for individual districts to develop their own strategies for improving the percentages of highly qualified teachers and addressing the distribution of these teachers.

Linking Teacher Distribution Data and Policies

States ideally should be able to provide information about the distribution of teachers in all districts and schools based on student demographic data, such as the percentage of high-poverty and minority students; census designations (e.g., urban, suburban, rural); student achievement (e.g., whether highly qualified or experienced teachers are concentrated in high-performing versus low-performing schools or populations within schools); and the school's AYP status (i.e., whether they are making AYP). Preferably, states also should be able to provide documentation of the degree to which the current distribution does or does not disadvantage certain groups of students (i.e., whether high-poverty students are less likely to be taught by a highly qualified, experienced teacher). If there is evidence that some groups of students are disadvantaged in terms of teacher quality or experience (e.g., within schools, within districts, across districts), states should provide documentation in subsequent years that there has been improvement in the distribution patterns such that each year the state, district, or school is moving closer to equitable teacher distribution.

From a policy perspective, states should be able to provide information on strategies that the states or districts are employing to reassign or encourage voluntary transfers of teachers to achieve equitable teacher distribution across and within schools. It also would be helpful to provide documentation on the implementation and relative effectiveness of various incentives and strategies designed to encourage and facilitate teacher recruitment, reassignment, or transfers that will improve district and state teacher distribution. If possible, states may identify and consider ways to correct current policies and practices that inadvertently may work against equitable teacher distribution. A good example of such a policy with inadvertent consequences is reducing class size when teacher shortages exist. As schools scramble to fill newly created classes with qualified teachers, the most experienced teachers transfer to “preferred” schools, leaving high-poverty schools to choose from among the most inexperienced and least qualified applicants, thus exacerbating teacher distribution inequities.

Policies that states may want to implement will accomplish the following:

- Establish acceptable levels of improvement in distribution of highly qualified and experienced teachers that are based on an improvement curve that approaches equity.
- Provide guidance to districts and schools for how to achieve acceptable levels of improvement in teacher distribution, including assistance in developing or implementing policies, funding incentives, and recruiting highly qualified or experienced teachers.

States may want to use the following strategies for increasing the percentage of highly qualified, experienced teachers:

- Increase the number of uncertified teachers who achieve certification by prioritizing teachers in high-poverty schools for incentives and assistance.
- Decrease the number of qualified teachers who are teaching out of field through various strategies, such as reassignment; teacher sharing (i.e., one teacher traveling among two or more schools to teach the subject for which he or she is highly qualified, thus eliminating the need to assign unqualified teachers to those classes when additional full-time equivalents cannot be justified); and distance learning (i.e., a teacher highly qualified provides the instruction through distance-learning technology).

- Increase retention rates for highly qualified teachers, prioritizing teachers in high-poverty schools through school-based incentives—such as additional planning periods, professional development days, and support staff—and improving the school climate and working environment.
- Increase retention rates for less experienced teachers through mentoring and induction programs so they stay in their original schools, or at least in the profession, long enough to become effective.

Documenting Changes

For the state as a whole, the focus is on demonstrating that high-poverty students are increasingly more likely to be taught by a highly qualified teacher (measured year-to-year). To document progress toward this equitable teacher distribution, states will want districts to demonstrate that this is becoming increasingly more likely for one of two reasons:

- There are proportionally more highly qualified, experienced teachers in the district overall, which increases the likelihood of any given student having a highly qualified, experienced teacher. Unfortunately, this likelihood is dependent on those additional highly qualified, experienced teachers being distributed equally throughout the schools in the district. Unless there are incentives or policies in place to attract teachers to specific schools, simply increasing the number of highly qualified, experienced teachers will not improve high-poverty students' chances of having one of these teachers.
- Teachers have been redistributed (e.g., through transfer, possibly driven by incentives; through reassignment, possibly driven by policy changes) in a manner that increases the percentages of highly qualified, experienced teachers in high-poverty schools.

Tracking Transfer Patterns

An important use of the teacher statewide unique longitudinal identifiers is to track teachers' transfers between schools and districts and analyze patterns. This tracking is crucial to developing data to support policies at the state and district levels in order to address teacher transfers away from high-poverty, high-minority, and low-achieving schools. A number of reports have documented that teachers tend to transfer or move out of these schools (Carroll, Reichardt, Guarino, & Meija, 2000; Hanushek, Kain, & Rivkin, 2004; Lankford, Loeb, & Wyckoff, 2002; Useem & Farley, 2004). Tracking data will allow districts and states to identify schools with high turnover rates and examine their transfer patterns longitudinally to determine whether the schools are improving (i.e., transfers slow down until they are equivalent to the average rate for all schools within a district, region, or state).

What Do the Transfer Patterns Mean?	
Patterns	What it Might Mean
<p>Pattern 1: Teachers in hard-to-staff schools stay only a year or two, then move to a school with a lower percentage of high-poverty or minority students. They also tend to move to higher performing schools in terms of student achievement and schools closer to where they live.</p>	<ul style="list-style-type: none"> • All things being equal (e.g., salary), many teachers prefer a less challenging assignment.
<p>Pattern 2: Teachers in average or low-poverty schools move to schools with higher percentages of high-poverty or minority students or to schools with more challenging environments or lower student achievement.</p>	<ul style="list-style-type: none"> • There are attractive, targeted incentives in place that make transferring to these schools seem like a good opportunity. • Teachers are attracted to a strong administrator, a particular school reform, or some other characteristic of the school that makes them feel they will be successful in the school. • There are policies in place that make it easy to transfer to these hard-to-staff schools but difficult or impossible to transfer to other schools.
<p>Pattern 3: Teachers are seldom transferring and are staying in their current assignments.</p>	<ul style="list-style-type: none"> • It has become too difficult to transfer due to policy changes. • Teachers who used to transfer out of hard-to-staff schools are happier with their assignments because of improvements, such as better training, more support, improved working conditions, or incentives to stay in the schools to which they are assigned.

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