Emerging Trends in Teacher Recruitment and Retention in the No Child Left Behind Era

Terry E. Spradlin and Kelly A. Prendergast

The No Child Left Behind Act of 2001 (NCLB) included a mandate that by July 1, 2006, all public schools employ only teachers who are highly qualified at every grade level and in every core academic area (English, reading or language arts, math, science, history, civics and government, geography, economics, the arts, and foreign language). This mandate is the result of a body of research demonstrating teacher quality to be one of the most important predictors of student academic achievement. School districts across the nation are struggling to fully comply with this provision of law.

According to a recent report from the Education Trust, several teacher characteristics have been linked to the ability to produce gains in student academic achievement (Peske & Haycock, 2006). These characteristics include teachers' own academic skills and knowledge (especially level of literacy), mastery of content (such as a major or minor in the subject area they teach), experience (at least two or three years of teaching experience), and pedagogical skill (knowledge of and skill in effective teaching methods). Yet, research illustrates that not all students have an equal chance of being taught by a teacher with these characteristics. Students in high-poverty and high-minority schools are disproportionately more likely to have non-certified and inexperienced teachers. For example, the percentage of students in high-poverty secondary schools taught by a teacher without at least a minor in the subject was found in one study to be nearly twice that of the percentage of students in low-poverty secondary schools (Education Week, 2003).

A primary goal of NCLB is to ensure that every child, regardless of race, ethnicity, class, disability, or English proficiency, is taught by well-prepared, highly qualified teachers. To be considered highly qualified, new teachers must: (1) have at least a bachelor’s degree, (2) have full certification and licensure as defined by the State Education Agency (SEA), and (3) demonstrate competence (as defined by the SEA) in the subject area to be taught (United States Department of Education [U.S. ED], 2006). Veteran teachers must also possess at least a bachelor’s degree, and if they lack the academic coursework required for new teachers, they can demonstrate competency in the academic subjects they teach by meeting the High Objective Uniform State Standard of Evaluation (HOUSSE) established by their state (Sexton & Reichardt, 2006).

In Indiana, HOUSSE consists of a rubric that veteran teachers must complete. It assesses college coursework and experience, as well as professional development, curriculum development, and scholarship. Secondary veteran teachers must earn 100 points on the HOUSSE rubric for each core academic subject they teach. Elementary veteran teachers must earn 100 points total (IDOE, 2006a).

No states were able to meet the July 1 deadline for employing only highly qualified teachers, thus the U.S. ED required SEAs to submit revised highly qualified teacher plans by July 7, 2006, document-
This Education Policy Brief explores the factors and circumstances behind the national struggle to meet the highly qualified teacher requirement under NCLB, focusing on recruitment and retention issues for both subject-area and geographic shortages. Strategies that have been implemented or are being considered in Indiana and other states to improve the recruitment and retention of highly qualified teachers are presented. Research examining the effectiveness of such strategies is discussed, and policy recommendations are offered.

RECRUITMENT AND RETENTION: A NATIONAL PROBLEM

Teacher shortages were a concern even before the implementation of NCLB in 2002. In 1997, the National Commission on Teaching and America’s Future (NCTAF) released a report estimating that America’s schools would need to hire “at least 2 million teachers over the next 10 years” (NCTAF, 1997, pp. 15-16). The report cited increasing student enrollments and an aging teacher workforce as the main factors that would contribute to this shortage. The idea that we simply needed to produce more teachers in order to combat the shortage quickly became conventional wisdom.

An aging teacher workforce and increasing student enrollment are certainly realities in many states including Indiana. Public school student enrollment in Indiana steadily increased from less than 1 million students during the 2000-01 school year to 1,034,727 during the 2005-06 school year (see Figure 1). Additionally, the average teacher age in Indiana during the 2005-06 school year was 42.78 (see Table 1), although there was considerable variation of teacher age by subject (Sexton & Reichardt, 2006) (see Figure 2). Average teacher age also varies as a function of locale, as demonstrated in Table 1, which shows a variety of Indiana teacher characteristics broken down by locale type of the school districts in which they are employed.

<table>
<thead>
<tr>
<th>TABLE 1. TEACHER PROFILE BY LOCALE TYPE</th>
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<tbody>
<tr>
<td>Hoosier Teacher Snapshot (2005-06)</td>
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<tr>
<td>State</td>
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</tr>
<tr>
<td>Average Salary</td>
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<tr>
<td>Average Age</td>
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<tr>
<td>Avg. Years in Service</td>
</tr>
<tr>
<td>Degree Type (% Bachelor's / % Master's and above)</td>
</tr>
<tr>
<td>% Minority / % White</td>
</tr>
<tr>
<td>Female / Male</td>
</tr>
<tr>
<td>TOTAL FTE</td>
</tr>
</tbody>
</table>

*Note. From: K. Lane, Educational Information Systems, Indiana Department of Education.*
Finally, 16% of Indiana teachers are currently eligible to retire, and about one third will be eligible to retire within five years when including teachers eligible to retire now (see Figure 3) (Sexton & Reichardt, 2006). However, it should be noted that retirement eligibility estimates are approximate (see Figure 3).1

Despite these trends, researchers have more recently pointed out that the recruitment and retention of teachers in schools should be the focus of attention rather than preparing higher numbers of new teachers to enter the profession. Consider the following:

- While adequate numbers of teachers complete preparation programs, only about 60% of those trained take teaching jobs (NGA Center for Best Practices, 2000).
- Nationally, almost half of new teachers leave the profession within their first five years of teaching, demonstrating that teacher attrition is not just due to an aging workforce. In fact, during the 1999-2000 school year, retirees accounted for only about 28% of the total leaving the teaching profession (NCTAF, 2003).
- Teacher turnover data also indicates that a large number of teachers move from one school to another each year. During the 1999-2000 school year, movers made up about 47% of the total departures experienced by schools (NCTAF, 2003).
- During the 2000-01 school year, the turnover rate for America’s schools was 15.7% (NCTAF, 2003).
- An analysis conducted by the Center for Evaluation and Education Policy (formerly the Indiana Education Policy Center) of Indiana teachers who began their career during the 1994-95 school year found that five years later, 44% had left their original school district, with 16% having moved to different districts and 28% having left teaching altogether (Theobald & Michael, 2002).

![Figure 2](image-url)

**Figure 2**

![Figure 3](image-url)

**Figure 3**

Note. Adapted with permission from Reed (2006)

* Teachers eligible to retire in five years includes teachers currently eligible to retire.
The turnover rate is seemingly high for all teachers, but it is especially high for teachers in high-poverty schools, which are typically located in urban and rural areas. These schools are commonly referred to as ‘hard-to-staff’ schools. During the 2000-01 school year the turnover rate among teachers in high-poverty urban public schools was 22% and 16.4% among high-poverty rural public schools, while the turnover rate in low-poverty public schools was 12.8% (Ingersoll, 2004).

As Ingersoll (2004) points out, there is extensive research demonstrating that low levels of employee turnover are normal and beneficial to organizations since limited turnover helps to prevent stagnancy and eliminates many of the least-committed, low-caliber workers. However, a high level of turnover, such as that in the teacher workforce, has been connected with performance problems in organizations. In addition to making the 100% high quality teacher goal difficult to achieve, a high turnover rate has negative consequences for America’s schools.

The financial cost of continually hiring and supporting new teachers is significant. A Texas analysis estimated that the annual statewide cost of teacher turnover was between $329 million and $2.1 billion (Texas State Board for Educator Certification, 2000). Another major consequence of having teachers constantly in flux is the ‘disruption of the coherence, continuity, and community that are central to strong schools’ (NCTAF, 2003, p. 13). Schools that have chronically high turnover rates experience a substantial loss of time and money invested in instructional improvement and curriculum development because it is impossible to “build and sustain the professional teaching communities needed to support reform” (NCTAF, 2003, p. 14).

Not only do some schools struggle to retain the teachers they hire, but they also have trouble recruiting high quality teachers to fill the vacancies. In particular, many schools often have a difficult time recruiting high quality teachers in the subject areas of math, science, special education, and English as a new language (ENL), and this problem is exacerbated in high-poverty schools. The issuance of emergency licenses has become one of the most common strategies for filling shortage areas (Hare, Nathan, Darland, & Laine, 2000). This practice may result in students being taught by teachers who are not adequately trained in pedagogy, who are inexperienced, or who do not possess the content knowledge necessary to teach the subject area they are expected to teach. Consider the following:

- During the 1999-00 school year, 16% of science students, 15% of math students, and 12% of English students in high-poverty schools in the United States were taught by teachers without certification or a major in the field they teach, compared with 5% of science students, 7% of math students, and 4% of English students in low-poverty schools (NCES, 2004).

- Between 2001 and 2006, a total of 9,897 emergency permits were issued in Indiana (see Figure 4). The vast majority of these, 73%, were issued in special education. Of the remaining emergency permits, 8% were issued in science, 6% in world languages (including ENL), 5% in mathematics, and 8% in all other content areas (Reed, 2006).

- The number of emergency permits issued in Indiana has been steadily increasing over the past decade. A total of 970 emergency permits were issued during the 1995-96 school year, 1,656 were issued during 2000-01, and 2,033 were issued during 2005-06 (IDOE Division of Professional Standards, n.d.).

- A total of 16% of special education teachers in Indiana held emergency permits during the 2004-05 school year, compared with 2% of science teachers and 2% of math teachers (Sexton & Reichardt, 2006).

Why Do Teachers Leave?

There are several factors that contribute to teacher turnover. Ingersoll (2004) used data from the Teacher Follow-up Survey (TFS), a large, nationally representative survey conducted by the National Center for Education Statistics (NCES), to analyze factors that contribute to turnover in high-poverty schools. The TFS reports the reasons teachers themselves cite for their departures.2

Retirement: During the 1994-95 school year, 14% of teachers leaving urban high-poverty schools and 25% of teachers leaving rural high-poverty schools cited retirement as a reason for their departure.

Family/Personal: A total of 36% of teachers leaving urban high-poverty schools and 44% of teachers leaving rural high-poverty schools cited family or personal reasons for departing.

School Staffing Actions: A total of 40% of teachers leaving urban high-poverty schools cited school staffing actions, such as lay-offs, terminations, school closings, involuntary reassignments, and reorganizations as a reason for departing, while only 13% of teachers leaving rural high-poverty schools cited school staffing actions as a reason for departure.

Job Dissatisfaction: Nearly 40% of all teachers leaving high-poverty schools reported either job dissatisfaction or the desire to pursue a better job or improve job opportunities as a reason for departing.

- Among those reporting job dissatisfaction as a reason for departure, teachers leaving urban high-poverty schools gave the following reasons for their dissatisfaction, in descending order of importance: Poor administrative support (50%), lack of teacher influence and autonomy (43%), classroom intrusions (39%), inadequate time to prepare (31%), poor salary (27%), student discipline problems (26%), lack of opportunity for profes-
• Among those reporting job dissatisfaction as a reason for departure, teachers leaving rural high-poverty schools gave the following reasons for their dissatisfaction, in descending order of importance: Poor salary (57%), poor administrative support (49%), lack of teacher influence and autonomy (23%), student discipline problems (19%), poor student motivation, large class sizes, classroom intrusions, inadequate time to prepare, and lack of opportunity for professional advancement (each cited by less than 10%).

What Teachers Suggest

In Ingersoll’s (2004) analysis of the TFS, he also identified several factors that teachers moving from or leaving their jobs in high-poverty schools cited as possible strategies schools could use to retain teachers. Although poor salary was only cited as a source of job dissatisfaction by 27% of urban high-poverty teachers departing for dissatisfaction-related reasons, the most often cited incentive for both rural and urban high-poverty school teachers was better compensation. Other commonly cited strategies include better student discipline, smaller class sizes, more parental involvement, and more faculty authority, especially over decisions relating to student behavioral rules and sanctions. Interestingly, although many studies cite teacher induction and mentoring programs as a valuable strategy for improving retention (e.g., Ingersoll & Kralik, 2004; NCTAF, 2003), Ingersoll (2004) found that only 16.1% of teachers leaving rural high-poverty schools and 8.8% of teachers leaving urban high-poverty schools cited induction and mentoring as strategies that schools should use to improve retention.

In contrast to the findings of the TFS, Tye and O’Brien (2002) found that experienced teachers who left the profession did so primarily because of the increasing pressures of accountability (e.g., high-stakes testing, test preparation, and standards). Another study concludes that hard-to-staff schools struggle to recruit and retain high-quality teachers because of a failure to provide effective training, valuable induction programs, and a supportive teaching environment (Hanushek, Kain, & Rivkin, 2002). Yet another study analyzed the importance of school facility quality in retention and found a statistically significant effect of the quality of a school facility on a teacher’s decision to stay, even after controlling for other contributing factors (Buckley, Schneider, & Shang, 2005).

Theobald and Michael (2002) asked novice Indiana teachers who were still teaching after five years to rate the importance of 21 job characteristics in the decision to keep teaching. There were seven job characteristics ranked as important by a large majority of the teachers:

• Opportunity to teach small classes (92%)
• Support from students’ parents (92%)
• Support from superintendent (91%)
• Amount of time spent working outside regular school day (90%)
• Level of fringe benefits (89%)
• Potential salary level (88%)
• Current salary level (87%)

The multitude of research on teacher turnover leaves us with a complex and sometimes contradictory picture. It is clear, however, that turnover must be addressed if hard-to-staff schools hope to recruit and retain highly qualified teachers to meet the requirements of NCLB. What is already being done in Indiana and in other states? What practices or strategies have evidence of effectiveness? Are there other strategies that Indiana should consider? These questions are addressed in the following sections.

STRATEGIES FOR IMPROVING RECRUITMENT

There are several strategies that have been implemented across the country to improve teacher recruitment in hard-to-staff schools and to reduce subject area shortages by decreasing the use of emergency permits. Table 2 presents some of the more common strategies as well as examples of how they have been implemented in various states. It also presents information on how these strategies have been implemented in Indiana.

Duration, Costs, and Outcomes of Recruitment Strategies

The duration of recruitment strategies varies depending on the program. Many of the strategies that include monetary incentives (e.g., loan forgiveness and scholarship programs, bonus pay, housing assistance) require one to five year teaching commitments. Alternative route
programs vary in the amount of time spent in training, from as little as three months to as long as two years. Some alternative route programs also require a minimum time commitment, such as the Academy for Urban School Leadership in Illinois (five years). Others, such as the Transition to Teaching program in Indiana, do not. Some strategies seem designed for more long-term impacts on recruitment, such as improved hiring processes.

### TABLE 2. RECRUITMENT STRATEGIES

<table>
<thead>
<tr>
<th>Strategy</th>
<th># States with Programs</th>
<th>State Program Examples</th>
<th>Indiana’s Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarship Programs</td>
<td>32</td>
<td>Illinois Special Education Tuition Waiver Program: Individuals in Illinois who pursue careers as special education teachers are exempt from paying tuition and fees for up to four years.</td>
<td>Minority Teacher/Special Education Scholarship: The State Student Assistance Commission of Indiana (SSACI) provides minority teacher/special education scholarships of $1,000 per year (or up to $4,000 annually depending on financial need) to Black and Hispanic students seeking teaching certification, or students seeking special education/occupational or physical therapy certification. SSACI allocates funds each year to public and private universities with eligible programs. In 2005, a total of $415,759 was granted to 268 students.</td>
</tr>
<tr>
<td>Loan Forgiveness Programs</td>
<td>39</td>
<td>California’s Assumption Program of Loans for Education: Teachers who teach in subject shortage areas, low-income, low-achieving, or rural schools are eligible to have up to $19,000 of their outstanding education loans forgiven.</td>
<td>Federal Teacher Loan Forgiveness Program for Federal Family Education Loans (FFEL), Direct, and Perkins Loans: Teachers who have been employed in low-income schools or subject shortage areas (In Indiana: math, science, Spanish, and special education) for five consecutive years are eligible to have loans or portions of loans forgiven.</td>
</tr>
<tr>
<td>Alternate Route Programs</td>
<td>47</td>
<td>California’s Sojourn Credential: Individuals who are native Spanish or other non-English language speakers and have at least 90 hours of college credit can be nominated by an LEA to teach Spanish or bilingual classes at the secondary level.</td>
<td>Transition to Teaching (T to T): All accredited teacher preparation programs in Indiana are required to offer T to T for degreed career changers. The intent of T to T is to produce more teachers in subject shortage areas, such as math, science and special education. Superintendent can request a permit for an applicant from T to T if there is no qualified applicant or if the T to T applicant is the best qualified candidate. During the 2004-05 school year, 163 T to T program completers were employed in Indiana schools.</td>
</tr>
<tr>
<td>Recruitment Bonus / Housing Assistance</td>
<td>14/13c</td>
<td>Arkansas Signing Bonus: Teachers signing an initial contract in a school district with less than 1,000 students and more than 80% of those students eligible for free or reduced lunch (high priority district) will receive a $4,000 signing bonus.</td>
<td>Not available</td>
</tr>
<tr>
<td>Improved Hiring Process</td>
<td>35d</td>
<td>Teach in Virginia: Recruits licensed and non-licensed applicants to teach in high-need subject areas in 50 understaffed school districts throughout the state. Participants submit one application to multiple districts.</td>
<td>Consolidation of Professional Standards Board and Indiana Department of Education (IDOE): One motive for this consolidation was to reduce licensure processing time.</td>
</tr>
<tr>
<td>Grow-Your-Own Initiatives</td>
<td>11</td>
<td>Illinois “Grow Your Own” Teacher Education Initiative: Provides funding to teacher preparation programs to identify and support paraeducators and parents who have been leaders in hard-to-staff schools in becoming teachers, with the goal of placing these teachers in hard-to-staff schools and positions.</td>
<td>Professional Education Employee Referral (PEER): A statewide database that includes job openings voluntarily posted by school corporations as well as resumes posted by job seekers.</td>
</tr>
</tbody>
</table>

*Not available

Federal Family Education Loans (FFEL), Direct, and Perkins Loans: Teachers who have been employed in low-income schools or subject shortage areas (In Indiana: math, science, Spanish, and special education) for five consecutive years are eligible to have loans or portions of loans forgiven.
The costs of recruitment strategies and programs vary widely. Programs initiated at the state level will have higher associated costs, especially for those states offering monetary incentives such as loan forgiveness programs, signing bonuses, and housing assistance. For example, New York City’s housing subsidy plan is projected to cost about $1.5 million per year. The U.S. ED has estimated that Indiana will receive nearly $48 million in funds through the Improving Teacher Quality State Grants for 2007, the same amount allocated in 2006, for recruitment, retention, and professional development programs (U.S. ED Budget Service, 2006). The IDOE is responsible for administering the largest portion of the grant (about $40 million) to school corporations, while the remaining portion is administered by the Indiana Commission for Higher Education through a competitive grant program which funds partnerships between higher education institutions and high-need school corporations for the purpose of providing professional development.

Table 3 describes the nine activities for which school corporations are allowed to use Title II Part A funds administered by the IDOE, as well as the amount actually spent by school corporations during the 2005-06 school year.

While an abundance of recommendations exists within the literature for improving recruitment, a 2002 review of state and local recruitment efforts by the U.S. ED concluded that there is more experimentation actually occurring than is being reported in the literature, and that valuable information about successful strategies is not being disseminated often enough to other researchers and practitioners. It is far too common that states and school districts implementing a new strategy do not even collect data that would allow an evaluation of its effectiveness (Jacobson, 2006). The ECS (2005a) literature review found a lack of adequate studies on the majority of the specific recruitment strategies implemented by states and school districts, including scholarship and loan forgiveness programs (which are widely implemented).

### STRATEGIES FOR IMPROVING RETENTION

It appears that although the most recent research points out the importance of addressing retention issues and recommends various strategies for doing so, the majority of strategies being implemented in states appear to focus mainly on recruitment. For example, most scholarship or loan programs require teachers to stay in a low-income school for a certain number of years. These programs may get high quality teachers into the schools that need them, but they are not designed to keep them there for longer than the requisite number of years. However, there are some specific retention strategies that are currently being implemented as well as some that are being considered around the nation. Table 4 provides examples of some of the retention strategies used by states as well as their implementation status in Indiana.

### Duration, Costs, and Outcomes of Retention Strategies

The duration of most beginning teacher mentoring and induction programs initiated at the state level is one to two years. Indiana’s program, for instance, assigns mentors to new teachers for two years, and the new teachers are evaluated through a portfolio assessment at the end of the second year. If the new teacher’s portfolio is not acceptable, he or she must complete a third year of the mentoring program and submit another portfolio. Professional development should be...

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**Table 2. Recruitment Strategies**

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<thead>
<tr>
<th>Strategy</th>
<th># States with Programs</th>
<th>State Program Examples</th>
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</thead>
<tbody>
<tr>
<td>Rehiring Retired Teachers</td>
<td>17a</td>
<td>Hawaii House Bill 1862: Signed into law in July 2006, this bill allows the department of education to employ teachers who have been retired for at least a year to teach full time in teacher shortage areas and serve as mentors for beginning teachers. Rehired teachers will not earn retirement service credit, contribute to the retirement system, or gain additional retirement system benefits while re-employed.</td>
<td>Indiana Code 5-10.2-4-8: Provides a teacher who has retired but not reached the age of normal Social Security Benefits may be reemployed 90 days after retirement in a Teachers Retirement Fund (TRF) covered position, earn up to $35,000, and continue to receive retirement benefits. If the reemployment occurs within 90 days of retirement, or the salary exceeds $35,000, the TRF benefits stop and the member shall begin making contributions again as required by 5-10.2-3.2.vc</td>
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</table>

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ongoing for all teachers, however specific programs vary widely in duration. For example, some in-service programs last from one day to one week. Programs that partner universities with local schools (such as the Indiana Math and Science Partnership Program) can last for a year or more depending on funding. Most retention bonus plans are designed to pay teachers extra for staying in the same school or district for about three years.

Some states provide funds to districts for the operation of mentor and induction programs, or provide state-level mentor training programs. Other states require districts to provide their own funds. In Indiana, there has been no direct appropriation of state funds specified for mentoring and induction since the $600 per-mentor stipend was eliminated by the General Assembly in 2005. Current efforts are underway to restore the funding during the 2007 Legislative Session. Despite the lack of specified funds, during the 2005-06 school year the Division of Professional Standards was able to pay all mentors a stipend of $336 in June 2006. A month later, Dr. Suellen Reed, Superintendent of Public Instruction, was able to secure the additional funds necessary to pay the remaining $264 to each of the 2005-06 mentors, for a total cost of nearly $2 million.\(^5\)

As noted in Table 4, the Indiana Professional Development Grant distributes nearly $14 million to all accredited schools with professional development plans that have been approved by the IDEO. Additionally, it is not uncommon for Indiana’s targeted professional development programs to receive funding from outside the state (see Table 4). The Math and Science Partnership Program, funded with federal Title II Part B (Math and Science Partnerships) money, awards competitive grants depending on the type and intensity of professional development provided, as well as the overall improvement expected. The U.S. ED has projected that Indiana will receive over $2.5 million in Title II Part B funds in 2007, and grants usually range between $3,000 and $5,000 per teacher (IDOE, 2006b). The National Science Foundation (NSF) granted $6.2 million to the Indiana University Center for Mathematics Education to implement the Indiana University Mathematics Initiative (see Table 4). Due to the fact that diversified compensation initiatives can signify a major overhaul to a state’s salary schedule, the amount of funding provided for such initiatives is usually quite large. For example, Florida appropriated $147.5 million for its Special Teachers Are Rewarded (STAR) program, which provides a method for districts to implement the performance pay plan required under A++ and access state funds (Winn, 2006).

While the ECS literature review (2005a) concludes that there is only limited evidence that mentoring and induction programs increase teacher retention, it also concludes that it may be a worthwhile strategy for states and districts to implement. One problem in determining the relationship between mentoring programs and retention is the wide variation in how these programs are implemented across states and even districts. Another is the fact that many studies do not account for the variety of other factors that may affect a beginning teacher’s decision to stay or leave. The existing body of research on professional development is geared towards assessing the effect of professional development on student achievement, not on its effect on teacher retention. It is therefore difficult to determine whether professional development plays a direct role in the retention of teachers, but quality professional development is still considered necessary for its role in bringing teachers up-to-date on teaching skills and content knowledge (National Conference of State Legislatures [NCSL], 2006b).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Expenditures (2005-06) *</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Develop strategies to assist schools in the recruitment and retention of highly qualified teachers.</td>
<td>$129,691</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>2 Implement hiring and retention strategies.</td>
<td>$388,096</td>
<td>1%</td>
</tr>
<tr>
<td>3 Provide professional development for content knowledge and pedagogical practices.</td>
<td>$6,108,618</td>
<td>15%</td>
</tr>
<tr>
<td>4 Provide professional development for instructional practices.</td>
<td>$2,428,000</td>
<td>6%</td>
</tr>
<tr>
<td>5 Implement retention strategies for teachers and principals in low-achieving schools, such as beginning teacher mentoring and induction or merit pay.</td>
<td>$1,688,747</td>
<td>4%</td>
</tr>
<tr>
<td>6 Implement strategies to improve teacher quality, such as tenure reform, professional development focused on technology, and evaluation of teachers in their subject area content.</td>
<td>$347,104</td>
<td>1%</td>
</tr>
<tr>
<td>7 Provide professional development for administrators, including leadership development.</td>
<td>$1,002,600</td>
<td>3%</td>
</tr>
<tr>
<td>8 Hire highly qualified teachers with the goal of reducing class sizes.</td>
<td>$27,317,933</td>
<td>69%</td>
</tr>
<tr>
<td>9 Develop and implement teacher advancement initiatives that emphasize career paths and diversified compensation.</td>
<td>$15,000</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

**Total Spent** $39,425,789

* Figures have been rounded to the nearest dollar.

Sources: 2005-06 Indiana school corporation application for Title II Part A funds; expenditure data provided by Tracy Brown, Center for School Improvement and Performance, Indiana Department of Education.
States with Ohio's Reconfigured Professional Development Programs

Indiana's Programs

A few years due to political opposition or many initiatives of this type die out within diversified compensation, partly because on the effectiveness of various models that there is a lack of scientific evidence ing teacher compensation reform notes in retention. A 2006 report on evaluation and deployment to schools with the most need.

<table>
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<th>TABLE 4. Retention Strategies</th>
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<tr>
<td><strong>Strategy</strong></td>
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<td>Teacher Mentoring and Induction Programs</td>
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<tr>
<td>Improved/ Targeted Professional Development</td>
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<td>Diversified Compensation/ Retention Bonuses</td>
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*Includes only states that require and finance mentoring and induction programs for beginning teachers.

This number reflects those states that have written standards for professional development.

Represents states that base diversified compensation on student achievement or shortage area subjects/schools, and states that offer incentive pay for teachers to continue in the profession.


Note. From: Education Week (2005), Education Week (2006), ECS (2006b)

ECS (2005a) found that evidence strongly supports the conclusion that compensation plays a key role in teacher recruitment and retention, although there was also evidence that working conditions may, in some cases, trump salary as a factor in retention. A 2006 report on evaluating teacher compensation reform notes that there is a lack of scientific evidence on the effectiveness of various models of diversified compensation, partly because many initiatives of this type die out within a few years due to political opposition or fiscal constraints (Mathematica Policy Research, Inc., 2006).

Nevertheless, ECS (2005b) presents several general findings related to diversified compensation systems, based on studies that have evaluated them as well as on the experiences of those who have implemented them. In creating a diversified compensation program, it is important to: (1) Involve all stakeholders (including teachers, administrators, parents, and policymakers) from the begin- (continued on page 13)
Academic success for Indiana students requires a variety of skills and knowledge. As the largest association of professional educators in the state, representing some 45,000 teachers, we believe that highly qualified, experienced teachers are the base of educational accomplishment for every student. Yet, trends over the last decade show us that teacher shortages across the nation mimic the retention struggles here in Indiana. How does Indiana recruit the best teachers? How does Indiana keep its teachers? And how does Indiana pay its teachers? Answers to all of those questions can help us provide better success for Indiana's more than 1 million public school students.

**How does Indiana recruit the best teachers?**

For Hoosier students to realize their potential and for Indiana to compete in the global economy of the 21st century, a teacher who is both highly knowledgeable about subject matter and highly skilled in disciplining and motivating students is essential every day in each class.

Indiana has established a rigorous framework for high quality teaching. The adoption of the Interstate New Teacher Assessment and Support Consortium (INTASC) standards establishes performance-based standards for the preparation and licensure of teachers. Through a partnership with the National Council for Accreditation of Teacher Education (NCATE), college teacher preparation programs are accredited according to professional standards.

Before ever receiving a license to teach, every new Indiana teacher must pass a rigorous test. After being hired, Indiana law establishes a schedule of mandatory teacher evaluations in which school principals are required to periodically review the performance of each teacher and provide for the “growth, development and improvement of performance” of teachers.

**How does Indiana keep its teachers?**

Within the next 10 years, Indiana faces significant change in its K-12 teaching staffing. According to the Indiana State Teachers Retirement Fund, nearly 30,000, or 41%, of Indiana's 73,000 K-12 teachers and administrators are age 50 or older. A study by the Indiana Pension Management Oversight Commission has determined that by 2016, more than half of the currently active teachers and administrators will retire.

Indiana educators, Republicans and Democrats have put in place two policies to address potential teacher shortages, and in particular, the critical shortage of minority teachers:

The Transition to Teaching Program allows mid-career professionals with a degree to complete an expedited teacher training program.

The Minority/Special Education/Scholarship Program provides college tuition assistance to minority individuals who are preparing to teach and to other individuals who are training to become special education teachers.

**How does Indiana pay its teachers?**

The economic status of Indiana teachers mitigates against many highly talented individuals becoming teachers. A 2002 study by Ball State University concluded that Indiana teachers are paid less than teachers in three of the four neighboring states. The same study concluded that Indiana teachers’ salaries are less than those of other professions.

In 1995, the Indiana General Assembly enacted a merit pay plan for the Indianapolis Public Schools which provided minor salary bonuses to a few teachers based on improvements in a single student test score. The legislation prohibited collective bargaining for merit pay and excluded the salary bonuses from retirement benefit calculations.

In 1999, the Indiana General Assembly enacted a school rewards program to identify and support schools where student learning is improving. Although some schools have demonstrated improvement according to Indiana’s school accountability law, the legislature has never provided any funding for the school improvement rewards program. Public Law 221 also required each school to have an improvement plan that includes a professional development program for teachers. Coupled with licensing requirements that mandate professional development for all future teachers, a structure for the continuous improvement of curriculum knowledge and teaching skills has been defined. School corporations, teachers and school boards have begun to collectively bargain salary schedules that recognize and reward teachers for strengthening their teaching abilities through both experience and professional development.

Yet salary bonuses to attract the “best” teachers to the “worst” schools in order to “fix” such schools have no basis in research or reality. The most effective ways to improve the learning of students who are not progressing along with other students is to provide more individual attention in smaller classes for a longer time. The drastic achievement gaps that reflect the inadequate learning opportunities provided for students placed at-risk of failing can only be addressed through more time and attention.

For all students, learning in the 21st century requires teaching of the highest caliber, a responsibility shared mutually by teachers, teacher associations, teacher preparation programs, local school boards and legislators.
Across the country, recruiting and retaining highly qualified teachers is becoming increasingly competitive, especially for urban school districts where teachers face high student mobility and demanding working conditions. We certainly experience this phenomenon in Indianapolis Public Schools, which has the second highest poverty rate in Indiana.

**Challenges**

For the past few years, the most difficult curricular areas to staff have proven to be science, math, social studies, and foreign language. One reason is that universities simply aren’t producing as many potential teachers in these areas as in the past.

To lure the limited number of candidates in the hiring pool to these critical shortage areas, many states authorize school districts to offer hiring bonuses and other incentives. Some teachers receive thousands of dollars in bonuses before ever setting foot in the classroom.

School districts in other states have started merit pay systems, which allow teachers to earn thousands of additional dollars by meeting goals set at the beginning of each annual contract.

Anyone considering a future career in education would be wise to look into speech pathology or special education. These areas are in such high demand that staffers have their pick of the job market. A consequence of this for IPS is that we annually lose approximately 30% of our special education teachers to other districts.

One reason for this kind of turnover is the high rate of student mobility in urban centers. It’s difficult to connect with students and parents when they are in the classroom for only a few weeks or months at a time. When I was the principal of an IPS elementary, it was not unusual to see a shift in the student body at the beginning of each month, as rents and bills came due.

Another challenge facing many urban districts like IPS is the sheer number of nearby school districts competing for the same teachers. A teacher living in the Indianapolis metro area is within easy driving distance of at least 20 school districts, including many rapidly growing suburban districts.

Finally, IPS recently experienced one of the worst pitfalls to befall any district: budget cuts. While first- and second-year teachers are often the first casualties of budget cuts because they lack seniority, all teachers are affected as class sizes increase. Larger class sizes can cause more stress, which may lead to teachers looking for jobs in a new district. It’s a vicious cycle.

**Successes**

While we definitely face challenges, IPS is making strides in both recruitment and retention.

One of the most positive events IPS hosts each year is Teacher Interview Night. The district recruits candidates from across the country via Web sites such as Monster.com and teachers-teachers.com. Last year, 30% of the teachers hired in the district had resumes posted to teachers-teachers.com. We also post job opportunities on university Web sites, our own web site, and take the tried-and-true path of attending teacher recruitment activities on campuses across the country.

Over the past few years, IPS has reduced the number of teachers with emergency permits from 150 to less than 50, and we continue to make strides in lessening the number daily. We were able to do this through a $350,000 Indiana Department of Education Transition to Teaching grant that paid the tuition for staff members in need of coursework to complete their licensing requirements.

IPS also offers the TEACH magnet on the Emmerich Manual campus. This effort to grow our own teachers provides students with hands-on lessons in curriculum planning and child development. IPS is partnering with Butler University to transition students from the high school program into higher education.

Starting this year, IPS also began a partnership with the New Teacher Project, a not-for-profit organization that works with schools and state departments of education to place teachers in hard-to-fill slots.

Through this three-year project, IPS is guaranteed 50 highly qualified teachers per year from among a candidate pool of mid-level professionals transitioning into teaching careers.

**Needs**

The Indiana Legislature has provided some relief by adopting changes in the law regarding teacher retirement. Today, IPS can recruit and rehire retirees full-time without having to pay twice into the state’s Teacher Retirement Fund. But more needs to be done by the legislature and the state department of education if urban districts such as IPS are to thrive in the competitive recruitment/retention arena.

For example, the legislature could establish and fund a program that would allow school districts to offer tuition reimbursement, sign-on bonuses and other incentives to attract and retain highly qualified teachers in critical shortage areas.

While Indianapolis’ low cost-of-living is attractive, it pales in comparison to mountain vistas and ocean views. Even within Indiana, urban school districts face challenges in competing with suburban school districts that often have newer facilities and less-challenging student populations.

Another incredibly helpful tool would be 100% reciprocity for teacher licensing. Currently, talented teachers with years of experience may have to take coursework or tests to prove their ability. Many opt for alternative careers or relocate to states that grant 100% reciprocity.

Finally, urban school districts need stable and adequate funding in order to attract and retain high quality teachers. The “dollars-follow-the-child” formula adopted in the last school funding formula unfairly penalizes IPS and a handful of other large urban school districts where most of the state’s charter schools are located. The explosive growth of charter schools within these districts has resulted in sudden and unpredictable drops in enrollment, which translates to sudden and unpredictable funding cuts. A school district that is forced each spring to pink slip teachers because of uncertain funding will have increasing difficulty attracting and retaining the best and the brightest. If Indiana is serious about ensuring that no child is left behind in our large urban districts, it needs to provide districts like IPS with stable funding and other necessary tools to help ensure students start the school year with certified teachers in the classroom.
Teacher recruitment and retention is a challenge for schools of every size and from every sector of the state. Each sector has its pluses and minuses for prospective teachers to consider in terms of employment. Hiring and retaining quality teachers are always at a premium at any level. However, the pool of available teachers is historically less at the secondary level. Therefore, that is where I will focus my comments.

Some issues that all schools face are such things as the greater demand on teachers with the expanded number of classes available as well as the greater number of required courses for students to take. The sophistication and complexity of many of our high school programs has grown exponentially in the last 10 years and continue to grow. Rural schools have a bigger challenge in this respect in that a teacher usually only teaches one or two sections of an upper level class. In recent years a teacher's license has been so narrowed in scope that it is almost impossible to find a teacher that can teach more than one subject area. Therefore, to be a teacher in this subject area the teacher must also have a license to teach a variety of classes; often a different curriculum area. In our school we have one teacher on staff that can teach physics. We have only one section of physics. Fortunately for us this teacher can also teach math classes, so we do have a full class schedule for him. If we could not offer him a full teaching position there is no way we could hire him, much less retain him. His license allows him to teach in both the area of science (physics) and math. This example holds true for almost all of the upper level classes. So in this scenario, the issues are shortages of teachers due to restrictions on the license, and the sophistication of the class.

The nature and make up up of the students in the classroom, regardless of size of school, has also changed in recent years. Through the concept of “Least Restrictive Environment,” more special education students are receiving their instruction in the regular classroom. This is an appropriate consideration. However, this places additional responsibility and challenges on the regular classroom teacher who now has a wide range of student abilities, interests, and emotional makeup to deal with. This at the same time that schools (teachers) are being held to the highest standards of student achievement and accountability in our history (NCLB). Consider a very qualified teacher doing a great job of providing the proper inputs of instruction. This teacher may not get student success at the state-determined level due to many extenuating factors and may be labeled as an ineffective teacher.

In a similar vein, student discipline (safety) has become a greater concern. Students have more rights and are far bolder than in years past. Most teachers enter the profession to teach students, not be a disciplinarian who has to worry about the safety of the other students or herself/himself in addition to providing instruction in a very rigorous curriculum. The academic and social demands have definitely increased in the past 10 years.

Perhaps the real determining factor in considering teacher recruitment and retention is the available pool of prospective teachers willing to locate and teach in a given sector. One of the big differences between schools in recruitment and retention of teachers is the unique climate and lifestyle of a given locale. In a metropolitan or suburban setting a teacher has choices where to live, can reside in nearby cities or subdivisions, or with a little travel, in the country. Large city areas have a variety of housing to offer plus all the cultural opportunities, social services, recreational options, and the potential for a full social life. Additionally, bigger populated areas often have a college near by which provides easy access to furthering one's education, plus the cultural advantages of a college setting. In a rural area, teachers are not required, but encouraged to live within the school district - housing can be an issue. A rural setting is closer in terms of fellowship, taking care of one other. Advantages also include a more quiet and peaceful setting, safer parks, streets, and typically schools. Often the air is cleaner, and the pace slower.

Computer screens are now a necessity. A child can type better than I can print! I wonder if any of the teachers have ever taken a course in typing. Many of our teachers are not familiar with the computer and how to use it. Perhaps this is the only reason why they are not acquiring a computer.
Other Retention Strategies

A study by Hare and Heap (2001) examined what school districts in the Midwest (including those in Indiana) were doing to improve retention and which strategies they found to be successful, as reported by superintendents. Among the strategies that superintendents rated to be the most successful were those designed to improve teacher working conditions. Restructuring schools to make them smaller was rated as ‘very successful’ by 54.6% of superintendents whose districts had implemented this strategy. Involving teachers in decision making, recruiting from and training in the community (i.e., grow-your-own programs), and implementing common planning time were all rated as ‘very successful’ strategies by about 51% of those districts using them.

A review of the research focusing on rural teacher recruitment and retention practices (Hammer, Hughes, McClure, Reeves, & Salgado, 2005) identified five major strategies that show promise for rural school districts. These strategies include grow-your-own initiatives, targeted incentives, improved recruitment and hiring practices, improved building-level support for teachers, and use of interactive technologies to address the challenges rural schools face (such as geographic isolation and fulfilling NCLB highly qualified teacher requirements).

The College Board’s Center for Innovative Thought (2006) proposed a six-part plan called the ‘Teacher Trust’ designed to increase the retention of qualified teachers and make teaching a more attractive profession to ease the tasks associated with teacher recruitment. The plan includes increasing the salaries of all teachers immediately by as much as 20%, and by up to 50% in the future, as well as a diversified compensation plan that would differentiate teacher pay based on school and subject assignment, professional development participation, and student achievement. The recruitment of minority teachers would be targeted by offering special incentives such as financial aid and loan forgiveness. The plan also calls for an 11-month teacher contract, improved working conditions, a three-tier career ladder to provide opportunity for advancement, and a requirement to mentor beginning teachers for those at the highest tier. The ‘Teacher Trust’ would be funded by matching public grants, as well as with corporate windfall profits and direct private contributions.

CURRENT STATUS OF HIGHLY QUALIFIED TEACHERS IN INDIANA

In the ongoing effort to meet the goal of having 100% highly qualified teachers in core subjects by the end of the 2006-07 school year and beyond, Indiana’s public schools were required to submit the highly qualified status of all employees to the IDOE by October 31, 2006. This data collection will allow the IDOE to accurately determine how many teachers of core subjects are highly qualified at each school, and thus identify schools, districts, and subject areas with shortages of highly qualified teachers. Requirement Six of the highly qualified teacher revised plan, which was approved by the U.S. ED and specifically deals with recruitment and retention strategies, details Indiana’s existing strategies as well as new plans to address teacher turnover (IDOE, 2006d).

Through improved data collection processes, the IDOE will analyze the distribution of teacher experience and teacher turnover to ascertain whether there are inequities in high-poverty and high-minority schools and districts and address such inequities by asking these districts to demonstrate in their non-highly qualified action plans how they will remedy them. Improved data collection processes will also allow the IDOE to analyze why teachers leave certain schools and improve working conditions in schools where poor conditions contribute to teacher turnover. This will be accomplished by collecting comparative data from year to year on teacher departures and cross-referencing these data with average school salary and other information from the schools regarding reasons for teacher departures.

As mentioned in the discussion of Indiana’s mentoring and induction program, the IDOE plans to make the full restoration of mentor stipends part of its budget proposal before the 2007 General Assembly. Additionally, the IDOE plans to: (1) ask the State Board of Education, the Indiana General Assembly, and/or the Professional Standards Advisory Board to make highly qualified teachers a requirement for accreditation; (2) consider performance-based, career-ladder teacher compensation models; and (3) focus on preparing highly skilled, highly qualified science, technology, engineering, and math (STEM) teachers by introducing high school reform legislation in the 2007 budget session of the Indiana General Assembly (IDOE, 2006d).

CONCLUSIONS AND RECOMMENDATIONS

Indiana, like most states in the nation, has an aging teacher workforce with a high percentage of teachers nearing retirement age. The pre-service teacher preparation programs of the colleges and universities in Indiana have historically produced an adequate supply of new teachers to replenish the teacher workforce. However, a growing percentage of newly licensed teachers are choosing not to enter the profession or are leaving the classroom within five years. A combination of these factors is contributing to a growing number of emergency permits being issued in the shortage areas of special education, science, world languages, and mathematics, especially in hard-to-staff schools. As a result, an increasing demand is being placed on Indiana’s higher education and K-12 education systems to identify new strategies to address these trends while meeting the highly qualified teacher requirements of NCLB.

Indiana has implemented a handful of strategies such as the Transition to Teaching program and the Minority Teacher/Special Education Scholarship, but generally lags behind most other states in the scope of the strategies implemented to...
address teacher recruitment and retention trends. In part, this is justified by the fact that Indiana’s teacher shortages are not as profound as many other states, but also can be attributed to an inertia at the state level to address these emerging trends in a systemic fashion.

To its credit, the Indiana Department of Education identified a number of strategies in its revised highly qualified teacher plan submitted to the U.S. ED on November 15, 2006. The plan to collect more comprehensive data on teacher turnover is necessary and full funding of the teacher mentor stipends will restore a highly regarded program. Additionally, the proposals to make the highly qualified teacher requirement a basis for school accreditation and to implement a performance-based, career-ladder teacher compensation system in Indiana are aggressive strategies that merit full consideration by the Indiana State Board of Education and the Indiana General Assembly. The authors of this report would also recommend the following strategies as policy options for Indiana policymakers and education officials to consider:

1. Require school corporations to post teacher vacancies on a regular basis on the Professional Education Employee Referral (PEER) System found on the IDOE website. Such a requirement would provide teachers with complete and timely information about job vacancies. Anecdotal information suggests that school corporations are not keeping postings current or simply do not post information at all on this site.

2. Encourage school corporations with hard-to-staff schools to use Title II Part A funds for grow-your-own teacher scholarship programs and other locally developed initiatives (such as sign-on bonuses or differentiated career paths and compensation) to assist with teacher recruitment and retention practices. The outcomes of these programs should be documented and reported broadly and successful programs should be replicated in other school corporations. IDOE should disseminate best practice strategies for recruitment and retention information to administrators of school corporations to encourage innovative or progressive program implementation.

3. Provide a greater incentive for retired teachers who are not at an age of normal Social Security retirement to return to the classroom to fill vacancies in shortage areas. Once a shortage area has been documented by the Indiana State Board of Education, allow retired teachers to fill these shortage area vacancies with compensation at the state average for all teachers ($47,255 in 2005-06) without losing their pension benefits. Present law allows for compensation of such teachers of up to $35,000. Provisions of the current law should be maintained that rehired teachers cannot earn retirement service credit, contribute to the retirement system, or gain additional retirement system benefits while re-employed.

4. Increase the appropriation of the Minority Teacher/Special Education Scholarship to finance a more attractive loan forgiveness program for scholarship recipients who complete their teacher degree and accept a placement in a hard-to-staff school. Additionally, the appropriation should be increased to expand the scholarship opportunities beyond the average annual number of scholarship recipients (approximately 260) to recruit more minority teachers and increase the number of special education teachers fully qualified to teach in this area. The State Student Assistance Commission of Indiana and schools of education at Indiana’s postsecondary institutions should increase their efforts to promote the scholarship program to encourage more minority students to pursue a teaching career as well as encourage more teacher candidates to pursue a special education teacher license.

END NOTES

1. Estimates were not made with official service credits and did not take into account extra service credits teachers can earn through retirement. See Sexton and Reichardt (2006) for an explanation of how estimates were calculated.

2. Percentages do not add up to 100 because teachers were allowed to cite multiple reasons for their departure.

3. For a definition of a high-need school corporation, refer to Improving Teacher Quality State Grants, ESEA Title II Part A: Non-regulatory guidance, which can be found at the following Web site: http://www.ed.gov/programs/teacherqual/guidance.pdf


5. S. Sriver, personal communication, October 2006.

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