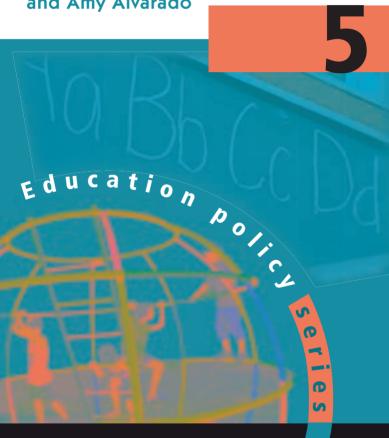


Preparation, recruitment, and retention of teachers

James M. Cooper and Amy Alvarado





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The International Academy of Education and the International Institute for Educational Planning are jointly publishing the Education Policy Series. The purpose of the series is to summarize what is known, based on research, about selected policy issues in the field of education.

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The booklets will appear first in English, and shortly afterwards in French and Spanish. Plans are being made for translations into other languages.

Four booklets will be published each year and made freely available for download from the websites of the International Institute for Educational Planning and the International Academy of Education. A limited printed edition will also be prepared shortly after electronic publication.

This booklet

The purpose of this monograph is to identify issues that summarize research findings and best practices related to the preparation, recruitment, and retention of quality teachers. It was designed to help policymakers make decisions about how best to prepare teachers, recruit outstanding candidates to teaching, and retain them in the teaching profession.

The phrase "quality teachers" has been used in this booklet in place of the more traditional "qualified teachers". Whereas qualified teachers meet various licensure and certification requirements, quality teachers are those who positively influence student learning.

Research in the late 1990s and early 2000s has lent support to the long-held belief that good teachers make a great difference to their students' academic achievement. When students have as few as two inferior teachers in a row, they almost never catch up academically with their peers. Thus, recruiting academically successful university students into teaching, preparing them well for the challenges of teaching, and retaining them in the profession have all become key goals in helping students achieve high academic standards. Attention has turned from concern over having a sufficient number of teachers to a concern about having a sufficient number of quality teachers.

Unlike some of the other monographs in this series where a strong research base exists, research into the preparation, recruitment, and retention of teachers is more limited and sometimes contradictory. In those cases where the research is particularly limited or contradictory, promising practices have been described. In addition, the policy implications of each principle have been discussed.

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Connecting preparation, recruitment, and retention

The preparation, recruitment, and retention of teachers are interrelated, but typically there is no policy framework that links them together in a coherent fashion and that is connected to national and state educational goals and standards.

International context

The preparation, recruitment, and retention of teachers can be viewed as a pipeline that springs leaks over time. In many developing countries, the number of new teachers cannot keep up with population growth. In Western countries, where sufficient numbers of teachers are prepared, many newly prepared teachers either choose not to teach at all or leave teaching within a few years. In the United States, for example, only 60 percent of students that are prepared for teaching actually choose to go into teaching after graduation. Similarly, 40 percent of teachers in the United Kingdom leave the profession within the first three years. However, teacher retention does not seem to be a problem in other countries (for example, Germany, France, Hong Kong, and Portugal).

Research findings

Until the early 2000s in the United States, policy efforts directed toward meeting the need for teachers have focused primarily on supply issues, such as instituting and encouraging alternative licensure routes into teaching, establishing scholarships and loans for prospective teachers, and increasing salaries to make teaching more

attractive. Much less effort has been directed toward improving working conditions in schools, one of the primary causes of teacher attrition. What seems to be lacking is a framework for policy that creates a "coherent infrastructure of recruitment, preparation, and support programmes that connect all aspects of the teacher's career continuum into a teacher development system that is linked to national and local educational goals" (Darling-Hammond, Berry, Haselkorn, and Fideler, 1999)

Congruence and commonality of effort are difficult to achieve in a decentralized system of education. Without a set of common understandings, these education systems will implement teaching policies on an ad hoc basis, with gaps, conflicts, and inefficiencies being inevitable outcomes. Countries with a national system of education find it easier to develop a coherent framework of policies that reinforce and support one another because education policy is under the control of the central government.

Policy implications

Although the challenges of implementing a policy framework that links teacher preparation, teacher recruitment, and teacher retention are great, they must be met. Some of the more important of these challenges have been listed below:

- Align teacher preparation with the needs of diverse learners, content standards, and contemporary classrooms.
- Simplify and streamline hiring processes so teachers are not discouraged from teaching, particularly in "hard-to-staff" schools.
- Ensure that all new teachers participate in quality induction and mentoring programmes.
- Address working conditions so that schools become learning communities for both educators and students.

- Reinvent professional development for teachers so that it supports sustained growth and is organized around standards for accomplished teaching.
- Ensure better pay for teachers who demonstrate knowledge and skills that contribute to improved student achievement.
- Design incentives for increasing the diversity of the teaching force and for teaching in critical shortage areas.

To create and maintain an effective policy framework aimed at teacher quality, governments must develop and use a system for collecting data to inform policymakers of the results of various policy initiatives. Policy coherence is difficult enough when policymakers are dispersed among separate jurisdictions. However, without effective data gathering and analysis, policy coherence is virtually impossible. Many of the issues touched upon in this principle have been elaborated in the five principles that follow.

Sources

Cobb (1999); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Hirsch, Koppich, & Knapp (2001); National Commission on Teaching and America's Future (1996); Stoel & Thant (2002); Villegas-Reimers & Reimers (2000).

Teacher supply and demand

The teacher supply and demand balance is affected by policy considerations, local labour market conditions, institutional practices, and societal attitudes toward teaching.

International context

In some countries (for example, the United Kingdom, Australia, France, and Germany) there are shortages of teachers in general or in specific fields. In these countries, governments proposing special are recruitment incentives, such as extra pay for hard-to-staff subjects and schools (Stoel and Thant, 2002). In other countries (for example, Japan, the Czech Republic, Portugal, and Hong Kong SAR) the supply of teachers is adequate. Teaching is still an attractive career in these countries and draws enough teachers to replace those leaving the system. As stated earlier, each state in the United States bears responsibility for licensing its own teachers and managing the balance between supply and demand, with the result that a variety of different policies exists. Some states have produced more teachers than there are jobs available, while shortages of highly qualified teachers exist in other states.

Research findings

Keeping the supply and demand of quality teachers balanced requires a consideration of several factors. There are three major components of teacher demand: pupil enrolment, pupil-teacher ratios, and turnover. With

respect to pupil-teacher ratio, for example, these ratios have slowly declined over the years in several Western countries, particularly in primary grades. In contrast, the ratio of primary pupils to teachers is three times higher in the least developed countries than in developed ones. As important as enrollment and pupil-teacher ratios are, however, the demand for teachers in any given year is affected most by teacher turnover (see Issue 5).

The supply of teachers also depends on several factors, including the number of students graduating from teacher preparation programmes, the proportion of these students who choose to enter teaching, the number of teachers licensed through alternative programmes, and the number of returnees from the reserve pool of teachers, including retired teachers. Other factors influencing the supply of teachers include salaries and benefits, working conditions, difficulty of licensure standards, presence or absence of incentives to attract teachers, and public perception of teaching as a profession.

In Western countries, the supply of teachers is less an issue of numbers than one of teaching field and distribution. For example, the United States generally produces enough teachers to meet needs each year. However, there is an inadequate supply of teachers in the fields of mathematics, science, special education, and bilingual education. In addition, there are not enough quality teachers willing to teach in schools enrolling large numbers of at-risk students.

In some developing countries, on the other hand, just having enough teachers is a major problem. In an attempt to increase access to schooling, the growth in the number of school-aged children has outpaced the growth in the number of teachers in most of these countries.

In many Western countries, there is a shortage of minority teachers. Although an increasing number of students are members of minority groups, teaching staff tend to come from the majority group. This disparity in the cultural backgrounds of teachers and those of the children they teach often results in low teacher expectations and the use of inappropriate teaching strategies. Recruiting quality minority teachers, therefore, is very important.

When faced with difficulties in finding sufficient numbers of quality teachers, school administrators traditionally do one of three things. They either hire less-qualified teachers, assign teachers trained in one area to teach in the shortage area, or make extensive use of substitute teachers. As a consequence, many students, particularly at-risk students, are being taught by teachers who lack the knowledge and skills necessary to produce desired student learning. The effects of teacher quality are long lasting and cumulative, especially for these at-risk students (Haycock, 1998).

Various strategies are used to deal with the problem caused by the gap between the supply of high quality teachers and the demand for them. They include strengthening teacher preparation programmes by emphasizing standards and accountability, creating alternative pathways into teaching, attracting mid-career professionals, luring retired teachers back into the classroom, establishing scholarships and forgivable loans for prospective teachers in high need areas, raising teacher salaries and benefits, and creating signing bonuses, housing assistance, and other incentives to attract teachers.

In terms of hard-to-staff schools, additional strategies are being implemented. These include bonuses for teachers of mathematics, special education, and other shortage fields, bonuses for teachers who teach in high-poverty schools, financial support for graduate study, and partnerships between local education areas and colleges to help such areas "grow their own" teachers.

Unfortunately, evidence of the effectiveness of these various efforts is scant. Specifically, there is little systematic research on the effects of different kinds of alternative licensure programmes on teachers, teaching, or student learning. What research there is suggests that successful alternative licensure programmes possess many of the same characteristics as successful traditional teacher education programmes. In addition, however, alternative licensure programmes do attract a more

diverse pool of potential teachers, in terms of ethnicity and age, than do traditional programmes.

Policy implications

Governments should continue to experiment with various strategies for attracting high calibre teachers, especially since the research base is not strong enough to rule out particular approaches. Increasing teacher salaries is not likely to attract people into teaching who don't have the "calling." However, adequate salaries to support a family and to save money for children's education are likely to keep teachers who do heed the calling.

All new teachers, whether graduates of traditional or alternative programmes, should be held to high academic and performance standards. It makes no sense to strengthen the requirements for college-based teacher education programmes, while at the same time ignoring standards for those coming through alternative licensure programmes.

Based on the review of teacher recruitment initiatives, the following practices are effective and should be considered by policymakers.

- Collect and analyze data on the supply and demand of teachers at national, state, and local levels to direct recruitment efforts.
- Cast a "wide net" in recruiting, including targeting secondary school students, paraprofessionals already working in schools, and mid-career professionals in other fields.
- Develop multiple pathways to becoming teachers while maintaining high standards for all new teachers.
- Develop a comprehensive, research-based strategy to recruitment, rather than multiple initiatives that may not relate to each other nor fit with other initiatives.
- Evaluate the effectiveness of these initiatives, including the effectiveness of teacher recruits and their retention.

Sources

Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Hallak (2000); Haycock (1998); Hirsch, Koppich, & Knapp (2001); Ingersoll (1997); Liu, Kardos, Kauffman, Peske, & Johnson (2000); National Commission on Teaching and America's Future (2003); Siniscalco (2002); Stoel & Thant (2002); Voke (2002); Wilson, Ferrini-Mundy, & Floden (2001).

Teacher recruitment

A variety of teacher recruitment strategies should be employed to expand the teacher pool and improve the pipeline into teaching.

International context

Internationally, recruiting quality teachers is a problem due primarily to the low status of teaching (as evidenced in some countries by very low salaries) and the lack of appeal found in the profession. In a study of ten Asia-Pacific countries, Japan and Taiwan were exceptions to this generalization, with salaries and teacher status being quite high in these countries (Morris and Williamson, 2000). Germany, Ireland, and Belgium are other countries in which a surplus of qualified teachers has led to a highly competitive entry process serving as the main recruitment strategy.

Recruitment issues internationally typically fall into one of five categories: (a) flexible entry routes; (b) new forms of initial teacher training; (c) courses for candidates from other fields (that is, career switchers); (d) recruiting qualified teachers from other countries; and (e) increasing incentives, such as higher salaries and job sharing. In developing countries these issues tend to be more centralized than in such countries as the United Kingdom, Australia, and the United States, where recruitment is often handled at either the school or local area level.

Research findings

Although sufficient numbers of teachers graduate from teacher preparation programmes each year, teacher shortages exist in part because graduates either do not enter teaching, or a significant number of those who do enter leave within three to five years. To combat this shortage, as well as to address the issue of bringing greater diversity and quality into the teaching profession, a variety of teacher recruitment strategies need to be employed at various points in the education pipeline.

Teacher recruitment can begin at the secondary school level. Secondary school students can participate in Future Teacher or Future Educator clubs, internships, or formal coursework in pedagogy and/or educational foundations. Efforts made at the secondary school level address another important recruitment issue; namely, attracting high quality and diverse students into teaching.

University settings provide another opportunity for teacher recruitment. Examples include forgivable loans and scholarships, paid internships in school systems, and opportunities to work toward an advanced degree through five-year programmes. Partnerships between schools and universities can provide incentives that are helpful in attracting teacher candidates. Such incentives include bonus or salary increments for teachers willing to teach in hard-to-staff schools, earlier job offerings, and streamlined job application processes. Many of these programmes attempt to counteract the reasons that pre-service teachers give for not entering the teaching profession.

Paraprofessionals are another group of potential recruits. These adults, currently working in schools, have the advantage of already knowing the school and the students. They tend to come from diverse backgrounds and are familiar with the social and cultural contexts in which students live. Programmes for paraprofessionals include financial assistance to pursue a degree, academic and social supports including work with a cohort of other paraprofessionals and faculty mentors, and flexible teaching arrangements which allow them to continue

working in their current positions while taking classes and fulfilling practicum requirements.

Mid-career, post-baccalaureate professionals working in other fields (for example, private industry, and the military) provide a fourth arena for teacher recruitment. Programmes geared toward this group often focus on hardto-staff fields such as science and mathematics as well as hard-to-staff schools. Participants in these programmes may be seeking to change careers or have retired from one career and are interested in teaching as a second career. Many enter teaching through alternative licensure programmes. Although some view these programmes as "back door" routes into teaching that are less rigorous than other programmes and that lead to less-than-high quality teachers, these programmes can be quite effective provided that they "provide options to the traditional undergraduate teacher education programme without lowering existing standards" (Darling-Hammond, Berry, Haselkorn, and Fideler, 1999, p. 208).

Policy Implications

There are three policy areas related to teacher recruitment: school-university partnerships, recruiting teachers for hard-to-staff subjects and schools, and using two-year colleges. There are several advantages of school-university partnerships. They can enhance pre-collegiate recruitment efforts by providing secondary students with early opportunities to engage in teaching experiences and take courses aimed at understanding the profession. They can also provide opportunities for paid internships and early employment as well as signing bonuses for agreeing to teach in hard-to-staff areas or schools.

School-university partnerships have been found to be successful in recruiting new teachers into the profession, particularly recruitment into hard-to-staff subjects and schools. These partnerships make it possible to use incentives such as scholarships and forgivable loans. These incentives encourage students to attend college and, specifically, to enter teacher preparation programmes.

Two-year colleges (for example, community colleges, technical colleges) can be important players in the recruitment-preparation sequence. For the sequence to be operative, however, there must be clear articulation agreements between programmes at two-year colleges and teacher preparation programmes at four-year universities. These agreements allow for smoother transitions for students and help the programmes fit together more seamlessly.

Sources

American Council on Education (1999); Bolam (1995); Bristor, Kinzer, Lapp, & Ridener (2002); Darling-Hammond (1997); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Genzuk & Baca (1998); Hirsch, Koppich, & Knapp (2001); Hunter-Boykin (1992); Morris & Williamson (2000); Recruiting New Teachers, Inc. (2002); Yasin & Albert (1999).

Teacher preparation

Effective teacher preparation programmes, both traditional and alternative, must include high standards for entry and require strong content preparation, substantial pedagogical training, and supervised clinical experiences in schools.

International context

There is great diversity in teacher preparation programmes internationally depending in large part on the economic, political, and social contexts that exist within each country. In countries such as China (both mainland and Hong Kong), Indonesia, and Singapore changes in school standards and programmes have influenced the emphasis given to teacher preparation.

In many countries, preparation standards are different for teachers preparing to teach in elementary and in secondary schools. Elementary teachers for primary school are often trained in special institutes or teacher training colleges. Secondary teachers are more often trained at universities, increasingly in "consecutive" programmes in which a degree in a subject area is earned prior to undertaking pedagogical training. These differences in preparation requirements between elementary and secondary teachers do not so much reflect a philosophy that elementary teachers need less schooling as much as a concession to issues of supply, demand, and compensation.

Research findings

There are four components of teacher preparation programmes that contribute to their effectiveness. The first is the existence of high standards for entry. Over the past two decades, there have been increases in the entry-level qualifications of students enrolling in teacher education programmes, both in terms of undergraduate grade point average and standardized test scores.

The second and third components of effective teacher education programmes are strong content (subject matter) preparation and substantial pedagogical training. Heated debates have occurred as to the relative importance of these two areas, but essentially both are keys to effective preparation. In terms of content preparation, most researchers believe in the importance of solid subject matter knowledge. However, the idea that more content is better is not always necessarily true. Rather, there may be a point after which additional content courses produce minimal value. What seems to be needed is not necessarily more content preparation but rather having sufficient knowledge of content to teach it well.

In addition, teachers need to know how to organize and present the content in a way that makes it accessible for increasingly diverse groups of learners. Shulman (1987) calls this knowledge, "pedagogical content knowledge." The link between content and pedagogical knowledge shapes teachers' decisions about materials, instructional approaches, and assessment. In addition to pedagogical content knowledge, teachers must possess general pedagogical knowledge, including competencies in the areas of classroom management and discipline. To ensure that subject matter expertise and pedagogical expertise receive sufficient emphasis, many programmes in the United States as well as several other countries are being redesigned to allow for a degree in a subject matter field to be obtained during a baccalaureate programme followed by education coursework in a graduate degree programme.

The final component of an effective teacher education programme is supervised clinical experiences that are integrated with more formal coursework. Although most pre-service teachers describe their practicum experiences as the most valuable component of their teacher preparation programme, many practicum experiences are narrowly focused and disconnected from students' previous coursework. Clinical experiences are most effective when they are carefully planned, interwoven with coursework, undertaken with highly effective classroom teachers, and carefully supervised.

The importance of well-prepared teachers for student learning is unquestionable. Better prepared teachers are more academically able, are rated as more effective by principals, supervisors, and colleagues, and enter and remain in teaching in greater numbers. In contrast, less well prepared teachers have more classroom difficulties, are rated less effective by evaluators and colleagues, and leave at much higher rates at earlier points in their careers. Whether prepared in traditional or alternative teacher education programmes, well prepared teachers are the foundation for ensuring that high quality teachers are working in all classrooms. As mentioned earlier, the ultimate determiner of whether a teacher is "high quality" is student achievement. If the teacher is consistently successful in helping students to achieve at or above expected levels of academic performance, then he or she can be considered effective and of high quality. Research shows that having a sequence of quality teachers can help students overcome the deficits of their home environments.

Policy implications

High standards of quality for teacher preparation programmes are the key to preparing high quality teachers for our schools. Although teacher shortages require implementation of a variety of recruiting strategies, it is essential that all teacher preparation programmes contain high entry standards, a combination of subject matter preparation and pedagogical training, and a long-term, supervised clinical practicum.

Additionally, more research is needed on efforts to combine subject matter and pedagogical preparation by having teachers in various university departments work together to enhance teacher development. Quality teacher preparation is not the sole responsibility of Colleges of Education; faculty in a variety of departments throughout the university must be involved.

Sources

Allen (2003); American Council on Education (1999); Ben-Peretz (1995); Bristor, Kinzer, Lapp, & Ridener (2002); Cobb (1999); Coleman & DeBey (2000); Darling-Hammond (2000); Darling-Hammond (1997); Galluzzo & Arends (1989); Jarrar (2002); Kolstad, Coker, & Kolstad (1996); Morris & Williamson (2000); Shulman (1987); Wilson, Floden, & Ferrini-Mundy (2001); Hanushek and Rivkin (2004).

Teacher retention

Teachers are primarily attracted to teaching by intrinsic motivation, but extrinsic factors play a major role in retaining them.

International context

With the exception of the United Kingdom and the United States, where from 30 to 50 percent of teachers leave within the first three to five years, overall attrition rates in many other developed countries are low to negligible: Germany (less than 5 percent); France (insignificant); Hong Kong SAR (less than 10 percent); Australia (18 percent for female teachers in the age group 25-29 years of age; only data available); and Portugal (insignificant). Because the student population in some of these countries (Germany, France, and Portugal) has declined in recent years, teaching jobs are at a premium. As a result, little teacher turnover occurs.

Even in those countries in which the attrition rates are quite low, however, there are areas in which teacher turnover is quite high. In Issue 3, schools located in these areas were termed "hard-to-staff schools." Many of these schools enrol large numbers of at-risk students, the very students for whom stability of teachers is perhaps the most important.

Research findings

Most teachers choose to enter teaching because they believe that teaching is important work and contributes significantly to society. An overwhelming majority of new teachers in the United States (80 percent) say that if they were to start over, they would choose teaching again. In spite of these positive reports, the fact remains that somewhere between 30 and 50 percent of new teachers in the United States leave teaching within the first five years. Furthermore, the most academically able new teachers are most likely to leave.

Although salaries can make a difference in terms of teacher recruitment, teachers generally report the importance of good working conditions in making a decision to stay in teaching. A number of school organizational factors play a crucial role in teacher turnover, including inadequate support from school administration, student motivation, and discipline problems, and limited teacher input into and influence over school policies. These factors also affect the motivation and commitment of those teachers who stay at the school.

There are two kinds of teacher turnover: migration and attrition. Migration refers to teachers leaving one school to take a job at another school, which does not result in an overall permanent loss of teachers. Attrition refers to leaving teaching altogether, either to take another job outside of teaching, for personal reasons as child rearing, health problems, family moves, and retirement.

Whether through migration or attrition, teacher turnover is expensive. There is the hidden cost of public investment that goes into tuition and tax support for preparing new teachers, many of whom leave teaching within a few years. In addition, local areas bear the costs of recruiting, inducting, and mentoring new teachers, only to lose many of them through the revolving door of teaching. Also, with so many teachers leaving, there are opportunity costs related to disruption of coherence, continuity, and community that are critical to effective schools, particularly those serving large numbers of atrisk students. The most serious long-term consequences of high teacher turnover are loss of teaching quality and lower levels of student achievement. Research indicates

that teachers who switch schools or school districts tend to move to schools where student achievement is higher.

Policy implications

While policy efforts are often directed to the supply side of the equation, school staffing problems are primarily the result of the demand created by teachers leaving for reasons other than retirement. Since the primary cause of teacher turnover seems to be due to poor or difficult working conditions, changing the culture of schools should be the primary target of policy efforts. This cultural change would involve the creation of learning communities – schools that are learner-centered, assessment-centered, knowledge-centered, and community-centered. Schools should be places that support learning by teachers, as well as students. According to Ingersoll (2001), cultural change would "contribute to lower rates of turnover, thus diminish school staffing problems, and ultimately aid the performance of schools."

Sources

Darling-Hammond & Sclan (1996); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Gold (1996); Ingersoll (2001a, b); McNeil (1988); National Commission on Teaching and America's Future (2003); Stoel & Thant (2002); Hanushek, Kain, & Rivkin (in press).

Induction and mentoring programmes

Induction support, including well-designed mentoring programmes, can improve retention rates for new teachers.

International context

International interest in teacher induction has existed since the 1960s, but only in a relatively few countries. Research conducted since the 1980s has focused on five areas: (a) mentors for novice teachers; (b) release time for both novices and mentors; (c) planned, schoolbased support activities; (d) planned, external support activities; and (e) increased administrative support.

In general, when retention is a greater problem, induction receives greater emphasis. New Zealand, for example, encouraged mentor programmes to offset retention and recruitment problems. In Japan in the late 1990s, the focus was on lifelong professional development of teachers, with mentoring being an important aspect.

Research findings

One approach to stemming the high attrition rates in teaching is to redefine novice teacher needs. Consistent with recent research, the first years of teaching need to be viewed as a phase of learning that follows and builds on the learning that occurred prior to entry into the profession. If teachers receive no support during this time, one of two outcomes typically occurs. First, the teacher may leave the profession (attrition) or transfer to other schools in search of support (migration). Second, the teacher may stay in

the profession but learn poor practices in an attempt to cope with his or her struggles.

Although novice teachers indicate that induction support is important in their development as teachers, there is a great deal of disparity in terms of both the quality and accessibility of induction programmes found in schools. Three reasons can be given for this variability.

- The criteria for participation in mentoring programmes are variable, especially in situations where the programmes are not adequately funded.
- The criteria for the qualifications and support of mentors are also diverse, resulting in a wide variety of expertise.
- The structure of mentoring programmes is varied and is rarely set up in such a way as to be most accessible and convenient for novices or their mentors.

Effective induction programmes must address these areas if they are to meet novice teachers' needs and improve retention rates.

Rather than focus on "fix-it" approaches to specific problems (for example, classroom management), effective induction programmes should focus on the subject-specific pedagogical strategies needed by novice teachers to promote and foster student learning. Improving instruction and student learning often proactively addresses the classroom management issues experienced by many new teachers. To focus on such pedagogical issues with novice teachers, mentoring programmes need to be structured to accommodate professional discourse. Mentors need to be selected based on high quality standards and trained to analyze and evaluate instruction effectively and conduct discussions about their findings with novices. Effective mentor programmes also include common planning time for mentors and novices as well as release time available to both teachers so that each can observe in the other's classroom. Finally, incentives should be provided to mentors in an effort to encourage high quality teachers to participate in the programme. Mentor programmes that provide incentives for attracting mentors and for quality mentor training tend to be more effective.

High quality induction programmes are effective in providing the support needed by novice teachers during their first years of teaching. Novice teachers indicate that where such programmes are supported and financed, the guidance offered them has increased the likelihood that they will remain in teaching.

Policy implications

It takes several years to become an effective teacher. Unfortunately, many novice teachers leave the profession much too early. The following recommendations are intended to change this pattern.

The first is funding research on models of developmentally-staged supervision and induction. Support for teachers that enables them to move along the developmental continuum is also important. The second is funding the development of effective mentor/induction programmes and quality assessments of these programmes. Because student learning is the ultimate goal of classroom instruction, the assessment of mentoring programmes must include the monitoring of student learning.

When funding for induction programmes is on a par with that provided for recruitment of new teachers, both teachers and the educational system benefit. The time, effort, and money necessary to mentor novice teachers are substantial. Fortunately, the rewards in terms of teacher retention are also substantial. Investing in the short term yields long-term payoffs in terms of higher quality teachers who remain in the profession longer.

Sources

Bolam (1995); Darling-Hammond (2003); Darling-Hammond (1997); Darling-Hammond, Berry, Haselkorn, & Fideler (1999); Darling-Hammond & Sclan (1996); Feiman-Nemser (2003); Gold (1996); Hirsch, Koppich, & Knapp (2001); Ingersoll (2001a,b); Ingersoll & Smith (2003); Morris & Williamson (2000).

References and sources of information

- Allen, M. (2003). *Eight questions on teacher preparation: what does* the research say? Denver, Colorado: Education Commission of the States.
- American Council on Education. (1999). To touch the future:

 Transforming the way teachers are taught. Washington, D.C.:

 Author.
- Ben-Peretz, M. (1995). Curriculum of teacher education programmes. In L.W. Anderson (Ed.), *The international encyclopedia of teaching and teacher education*. New York: Elsevier Science.
- Bolam, R. (1995). Teacher recruitment and induction. In L.W. Anderson (Ed.), *The international encyclopedia of teaching and teacher education*. New York: Elsevier Science.
- Bristor, V.J., Kinzer, S., Lapp, S., & Ridener, B. (2002). The teacher education alliance (TEA): A model teacher preparation program for the twenty-first century. *Education*, 122(4), 688-699.
- Cobb, V. L. (1999). An international comparison of teacher education. Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education.
- Coleman, D. & DeBey, M. (2000). Weaving teacher education into the fabric of a liberal arts education. *Kappa Delta Pi Record*, 36 (3), 116-120.
- Darling-Hammond, L. (1997). *Doing what matters most*. New York: National Commission on Teaching and America's Future.
- Darling-Hammond, L. (2000). Reforming teacher preparation and licensing: Debating the evidence. *Teachers College Record*, 102(1), 28-56.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60 (8), 6-13.
- Darling-Hammond, L., Berry, B., Haselkorn, D., & Fideler, E. (1999). Teacher recruitment, selection, and induction. In L. Darling-Hammond & G. Sykes, G., (Eds.), *Teaching as the learning profession: handbook of policy and practice.* San Francisco: Jossey-Bass.

- Darling-Hammond, L. & Sclan, E. (1996). Who teaches and why. In J. Sikula, T. Buttery, & E. Guyton, E. (Eds.), The handbook of research on teacher education. New York: Macmillan.
- Delpit, L. (1995). Other peoples' children: Cultural conflict in the classroom. New York: The New Press.
- Farkas, S., Johnson, J., & Foleno, T. (2000). A sense of calling: Who teaches and why. New York: Public Agenda.
- Feiman-Nemser, S. (2003). What new teachers need to learn. Educational Leadership, 60 (8), 25-29.
- Galluzzo, G. & Arends, R. (1989). The RATE project: A profile of teacher education institutions. *Journal of Teacher Education*, 41, 56-58.
- Genzuk, M. & Baca, R. (1998). The paraeducator-to-teacher pipeline: A 5-year retrospective on an innovative teacher preparation program for Latina(os). Education and Urban Society, 31(1), 73-88.
- Gold, Y. (1996). Beginning teacher support: Attrition, mentoring, and induction. In J. Sikula, T. Buttery, & E. Guyton, E. (Eds.), The handbook of research on teacher education. New York: Macmillan.
- Hallak, J. (2000). Education: Quality counts too. *OECD Observer*. Retrieved March 31, 2005 from http://www.oecdobserver.org/news/fullstory.php/aid/367/Education:quality_counts_too.html
- Hanushek, E.A., Kain, J.F., & Rivkin, S.G. (in press). Why public schools lose teachers. *Journal of Human Resources*.
- Hanushek, E.A. & Rivkin, S.G. (2004). How to improve the supply of high quality teachers. In D. Ravitch (Ed.),
 Brookings Papers on Education Policy 2004 (pp. 7-25). Washington, DC: Brookings Institution Press.
- Haycock, K. (1998). Good teaching matters...A lot. *Thinking K-16*, *3* (2), 3-14.
- Hirsch, E., Koppich, J., & Knapp, M. (2001). Revisiting what states are doing to improve the quality of teaching: An update on patterns and trends. Seattle, Washington: Center for the Study of Teaching and Policy, University of Washington. Retrieved March 31, 2005 from http://depts.washington.edu/ctpmail/PDFs/States-HKK-02-2001.pdf

- Hunter-Boykin, H.S. (1992). Responses to the African-American teacher shortage: "We grow our own" through the teacher preparation program at Coolidge High School. *Journal of Negro Education*, 61 (4), 483-495.
- Ingersoll, R. (1997). Teacher turnover and teacher quality: The recurring myth of teacher shortages. *Teachers College Record*, 99 (1), 41-44.
- Ingersoll, R. (2001a). A different approach to solving the teacher shortage problem. Seattle, Washington: Center for the Study of Teaching and Policy, University of Washington.
- Ingersoll, R. (2001b). *Teacher turnover, teacher shortages, and the organization of schools*. Seattle, Washington: Center for the Study of Teaching and Policy, University of Washington.
- Ingersoll, R. & Smith, T. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60 (8), 30-33.
- Jarrar, S.A. (2002). Teacher education in the Arab world: The key to the 21st century. In R. Sultana (Ed.), *Teacher education in the Euro-Mediterranean region*. New York: Peter Lang.
- Kolstad, R.K., Coker, D.R., & Kolstad, R.A. (1996). Examining the excellence of German schools and their teacher preparation program. *Education*, *117*, 280-284.
- Ladson-Billings, G. (1994). The dreamkeepers: Successful teachers for African American children. San Francisco: Jossey-Bass.
- Liu, E.; Kardos, S.; Kauffman, D.; Peske, H.; & Johnson, S. (2000). Barely breaking even: incentives, rewards, and the high costs of choosing to teach. Retrieved March 31, 2005 from http://www.gse.harvard.edu/~ngt/Barely%20Break ing%20Even%200700.pdf
- McNeil. L. (1988). Contradictions of control: School structure and school knowledge. New York: Routledge. Morris, P., & Williamson, J. (2000). Teacher education in the Asia-Pacific region: A comparative study. New York: Falmer Press.
- National Commission on Teaching and America's Future (1996). What matters most: Teaching for America's future. New York: Author.
- National Commission on Teaching and America's Future (2003). *No dream denied: A pledge to America's children*. Washington, D.C.: Author.

- Nieto, S. (2000). Affirming diversity: The sociopolitical context of multicultural education. New York: Longman.
- Recruiting New Teachers, Inc. (2002). Tapping potential: Community college students and America's teacher recruitment challenge. Belmont, Mass.: Author.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1-22.
- Siniscalco, M. T. (2002). A statistical profile of the teaching profession. Paris: UNESCO/ILO.
- Smith, T., & Ingersoll, R. (2003, April). Reducing teacher turnover: Do induction and mentoring programs help?

 Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Snyder, T., & Hoffman, C. (2001). Digest of Education Statistics 2001. Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- Stoel, C., & Thant, T. (2002). *Teachers' professional lives: A view from nine industrialized countries.* Washington, D.C.: Milken Family Foundation and the Council for Basic Education.
- Villegas-Reimers, E. & Reimers, F. (2000). The professional development of teachers as lifelong learners: Models, practices and factors that influence it. Paper presented at the meeting of the Board on International Comparative Studies in Education (BICSE) of the National Research Council, Washington, DC.
- Voke, H. (2002, May 29). Understanding and responding to the teacher shortage. ASCD Infobrief.
- Wilson, S.; Ferrini-Mundy, J., & Floden, R. (2001). *Teacher preparation research: Current knowledge, gaps, and recommendations*. Seattle, Washington: Center for the Study of Teaching and Policy, University of Washington.
- Yasin, S., & Albert, B. (1999). *Minority teacher recruitment* and retention: A national imperative. Washington, D.C.:
 American Association of Colleges for Teacher Education.

The International Institute for Educational Planning



The International Institute for Educational Planning (IIEP) was established in Paris in 1963 by UNESCO, with initial financial help from the World Bank and the Ford Foundation. The French Government provided resources for the IIEP's building and equipment. In recent years the IIEP has been supported by UNESCO and a wide range of governments and agencies.

The IIEP is an integral part of UNESCO and undertakes research and training activities that address the main priorities within UNESCO's overall education programme. It enjoys intellectual and administrative autonomy, and operates according to its own special statutes. The IIEP has its own Governing Board, which decides the general orientation of the Institute's activities and approves its annual budget.

The IIEP's mission is capacity building in educational planning and management. To this end, the IIEP uses several strategies: training of educational planners and administrators; providing national training research to and encouraging a favourable and supportive environment for educational change; and co-operating with countries in the design of their own educational policies and plans.

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