State Policies to Improve the Mentoring of Beginning Special Education Teachers

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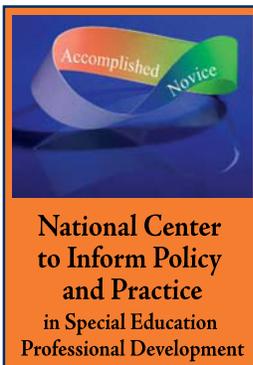University of Utah

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INTRODUCTION

The Individuals with Disabilities Education Act [IDEA] promise of a free, appropriate public education for students with disabilities has been undermined by persistent and seemingly intractable teacher shortages. In a recent analysis of Office of Special Education Programs data, Boe (2006) documented a 16-year increasing trend in the percentage of less-than-fully-certified special education teachers [SETs] for students aged 6 to 21. Since the 1987-1988 school year, teacher shortages have hovered at about 10%, with a high of 13.4% in 2002-2003 (Boe). As a result of their persistence and severity, shortages of fully qualified SETs—along with shortages of math, science, and English as a Second Language teachers—have become a focal point in discussions of accountability and educational equity. Because shortages affect low-achieving, high-poverty schools more than more affluent schools, such disadvantaged schools often have no choice but to hire less qualified personnel. As a result, the quality of teaching in high-poverty schools may be compromised and student achievement may suffer. These inequities have come to the attention of policymakers, who have set out both to increase the supply of new teachers and to promote their retention. To increase supply, federal legislation in particular has fostered the development of streamlined alternatives to traditional teacher preparation designed to attract into teaching capable individuals who otherwise forgo formal preparation. To promote retention, policymakers have focused primarily on beginning teacher induction and mentoring.

Ingersoll (2001a) and others have argued that effective induction would reduce attrition substantially and thereby alleviate teacher shortages. He believes that an adequate supply of fully qualified teachers exists, but that too few qualified teachers are willing to work in the context of contemporary public schools. He contends that high-quality induction can help novice teachers adapt to school context and succeed under even challenging circumstances and hence stem the flow of teachers out of the field. Others have been more circumspect, positing instead that effective induction is an important complement to—but not a substitute for—increasing supply. In any case, induction and mentoring are considered important elements of any plan to address teacher shortages.

Although research on the effectiveness of induction is meager, in some studies it has proven to be associated with increased retention. For example, in a multivariate analysis of preliminary data from the Schools and Staffing [SASS] and Teacher Follow-up Surveys [TFS], Smith and Ingersoll (2004) reported that after the 1st year, participation in induction programs that included mentoring, common planning time, and teacher networking reduced attrition risk from 20% to 9% and relocation from 21% to 9%. Unfortunately, less than 1% of the beginning teachers in the TFS sample had access to full-scale induction of this sort. Boe, Cook, and Sunderland (2008) used the SASS and TFS data to estimate bivariate association between induction variables and attrition for novice public school teachers. They also reported that participation in induction was associated with reduced attrition risk; but, unlike Smith and Ingersoll (2004), this bivariate effect was not statistically significant. In fact, of the six components of induction on SASS, only two— regular communication with administrators and extra classroom assistance—were associated significantly with reduced attrition risk.

More evidence of the effectiveness of induction and mentoring can be found in the program evaluation literature. For example, the National Commission on Teaching and America's Future [NCTAE] (1996) described induction programs that significantly reduced teacher attrition rates in urban districts in New York and Ohio. By providing release time for expert mentors to coach beginners, these programs reduced attrition rates by more than two thirds. In California, Strong

(2006) studied outcomes associated with participation in the Beginning Teacher Support and Assessment [BTSA] program, which includes professional development, mentoring, and other individualized supports. He determined that 87% of BTSA participants were teaching 4 years later compared to 76% of teachers nationally. The Santa Cruz New Teacher Center Project [NTC] was implemented by 25 California school districts and provided a 2-year induction program that focused on improving new teachers' classroom practices and responsiveness to students of diverse backgrounds. Strong also reported that 6 years after completing the NTC program, 94% of the participants remained in education and 88% were still teaching. On the basis of these findings, it seems safe to conclude that strong induction programming can diminish teacher turnover and therefore can help address the problem of teacher shortages.

Induction and mentoring are also thought to promote beginning teachers' professional development, although there is less evidence to support this assertion. For example, Strong (2006) reported that beginning teachers who received 2 years of induction support were more likely than veteran teachers (and as likely as midcareer teachers) to achieve greater than average reading gains with low-achieving students. Fletcher, Strong, and Villar (2008) reviewed achievement data from three California districts whose beginning teachers completed BTSA. In each district, elementary student achievement was related to teachers' participation in mentor-based induction programs.

For states to maximize the benefits of effective mentoring, appropriate policy should be put into place. State policy can help to shape the design and delivery of induction and affect the resources that are made available to support beginning teachers and their mentors. When induction policy is linked to state policy on teacher standards, preparation, certification, and licensure, a comprehensive framework for teacher professional development may be established. Nonetheless, state policy must allow districts flexibility in implementation so that programs fit comfortably within local contexts and support structures and are feasible given existing resources.

In this paper, we review and analyze state policy regarding beginning teacher mentoring with a focus on special education. Mentoring policies guide the selection, assignment, and training of mentors and the process with which novice teachers are matched with veteran mentors. Mentoring is a component of induction; but induction also includes a broader array of supports for new educators, including professional development, orientation, and reduced teaching load, among others. Given the number of supports that induction comprises, we chose to limit the scope of this paper to mentoring policy. However, in this paper, we use *induction* when state policies use that term and *mentoring* interchangeably.

Our purpose is to identify the components of policy that promote high-quality mentoring practice. This paper will complement research syntheses being prepared by other teams of the National Center to Inform Policy and Practice in Special Education Professional Development [NCIPP] on (a) induction and mentoring, (b) school and university partnerships, and (c) classroom context and collaboration. Taken together, these papers will organize what we know about how to provide appropriate supports for beginning SETs as they transition from initial preparation to work in public schools, how such transitions are affected by the school context, and what policies states need to make high-quality mentoring a reality.

CONCEPTUAL FRAMEWORK

To understand more fully the impact of policy on mentoring, a conceptual framework is proposed in **Figure 1**. Although this paper focuses on state policy, our conceptual framework includes policies at the federal and local levels, which also shape the nature and quality of mentoring. Federal policies, such as No Child Left Behind [NCLB], provide resources (Title I, Title II, Part A, etc.) that could be used to enhance induction, and NCLB's Highly Qualified Teacher requirements have helped shape local and state approaches. In fact, a report from the Center for Education Policy (McMurrer, 2007) indicates that states had targeted most of their NCLB Title II funding to mentoring programs and content-driven professional development. The same report noted that 83% of states and 47% of districts reported having trouble complying with the highly qualified provisions for SETs. In addition, the Individuals with Disabilities Education Improvement Act [IDEA] (2004) emphasizes beginning teacher support through state improvement grants and its personnel preparation program. Generally, funds from these programs may be used to support innovative recruitment models, extended mentoring with exemplary SETs, and collaborative initial teacher preparation that may include extended field experience in professional development schools.

Given the role schools and districts play in designing and implementing mentoring programs, district policy may have the greatest impact on the nature and quality of mentoring. Although federal and state governments can provide resources and shape local policies through guidelines and standards, local districts select, train, and provide professional development to mentors, design school schedules that can either facilitate or impede mentor interactions, and work with school leaders to create contexts in which mentoring is a high priority.

State policy is important, and in this paper we focus specifically on state policies, rules, and regulations. Darling-Hammond (2000) observed that states that invested in teaching quality through policies that bolster teacher preparation, licensing, and support had improved scores on the National Assessment of Educational Progress. State policy action also can influence the working lives of teachers and their ability and desire to provide students with high-quality learning opportunities (Hirsch, Koppich, & Knapp, 2001). By requiring mentoring, setting program standards, providing resources, requiring and perhaps providing mentor training and professional development for all teachers, and mandating program evaluation, state policy can significantly shape the form and quality of mentoring.

State policy also can play a significant role in ensuring systematic implementation and equal opportunity. Although some districts make mentoring a priority and create high-quality programs, others struggle due to limited resources or perhaps the lack of effective veteran teachers. Given disparities in the supply of qualified teachers and the varying amount of preparation novice teachers receive, state policy may serve to ensure that all new teachers get the supports they need to succeed in the classroom. State policy also fulfills federal requirements and provides districts guidance in and support for implementation. Ideally, federal, state, and local policies create a comprehensive and coherent policy infrastructure that provides schools with a clear understanding of what high-quality mentoring requires.

Ultimately, many policies will have an impact on mentoring. Although the needs of new teachers will be influenced by the quality of their preservice preparation, the availability of alternative routes, the rigor of licensure requirements, and the resources that an employing district invests in professional development, in this paper we address mentoring policy and focus on beginning

SETs. The other papers in the NCIPP series examine preservice education and university partnerships, school context and professional collaboration, and mentoring and induction programs. Although policy at all levels can influence these factors, in this paper we seek only to examine the state policies that shape the delivery of high-quality mentoring.

ASSUMPTIONS

Three propositions that undergird and shape our analysis. The first proposition, which focuses on differences between general and special education and the implications of such differences for mentoring policy, is a hypothesis on which our analysis will shed light. In this sense, the wisdom, feasibility, and necessity of tailoring policy for special education will remain moot. We accept the remaining two propositions—that good policy allows for variation in local implementation and that not all attrition is bad—as truth. We use these to support our thinking in this analysis.

Special versus General Education Focus

Much research on beginning teacher induction and mentoring has focused on effective methods and programs without differentiating between SETs and general education teachers [GETs]. Policymakers also view beginning teachers without regard for the professional roles they play. As a result, state policy does not differentiate mentoring programs on the basis of beginning teachers' disciplines or roles (Billingsley & McLeskey, 2004; Defining Teacher Quality in Special Education, 2005; Pan, Mutchler, Kelly, Bush, & Glover, 2000). However, we consider factors that differentiate the work of beginning SETs from that of their peers in other disciplines and assume these differences have implications for the development of effective state policy.

Novice teachers need both expert instructional coaching from a mentor engaged in closely related work (Griffin, Winn, Otis-Wilborn, & Kilgore, 2003) as well as a mentor who fosters socialization into the school culture (Pugach, 1992). In general education, a single mentor typically performs both functions; however, for SETs, a single mentor is seldom available to fill both roles. For example, in small or under-resourced schools, a special education teacher [SET] may have no colleagues whatsoever (Ingersoll, 2001b). Even in larger schools, other special educators may work with students who are older, who have different disabilities, or whose disabilities are more (or less) severe (Pan et al., 2000). The absence of colleagues or the diversity of expertise among the special education faculty at a given school may preclude the kind of informal mentoring that beginning teachers appreciate so greatly. In these ways, special education presents a problem for induction program administrators that general education does not: How to provide the full array of supports that beginning teachers need under policies that most likely provide for a single mentor? Thus, even if we accept the proposition that special educators require differentiated mentoring, it is not always possible for schools to provide it.

Local Implementation

Although state policy on induction and mentoring is critical, policy should be designed to support local variation in implementation. Within a state, districts and schools vary greatly on a number of relevant variables; and officials must recognize that one state-mandated induction program may not serve all schools equally well (Bartlett, Johnson, Lopez, Sugarman, & Wilson, 2005). States must allow districts to adapt programs to meet local needs and to encourage innovation and commitment. States that restrain districts from making local modifications risk diminishing commitment to the program and promoting procedural compliance in lieu of more purposeful implementation. As a result, policymakers must guarantee that the requirements and guidelines they establish are based on what we know about effective elements of induction programs. If states include these elements within their policies and guidelines, districts and schools may save time and money (Bartlett et al.). However, as with all state mandates, the levels

of adherence and quality of implementation will differ depending on how clearly these guidelines are expressed in policy.

Districts have different resources available to implement induction. Policymakers must take into account the fact that districts serving high-needs populations may require more funding for induction than wealthier districts. For one thing, teachers working with low-achieving students in high-poverty schools need extensive professional development focused on working with struggling students. In this case, professional development will require more resources; and policymakers must recognize that equal funding for every district will not address differential need (Walsh, 2008). Furthermore, many states leave funding up to districts that must rely on local property taxes and district revenue caps for money. When districts foot the bill, there is significant potential for imbalance in the amount of funding available to high- versus low-poverty schools. It is also important to note that when states do fund induction, the amount given is not always sufficient for effective program implementation (Bartlett et al., 2005). When state funding does fall short, districts that are unable to supplement state funding are at a clear disadvantage vis-à-vis others that can.

Teacher readiness also differs substantially. As the rate of teacher turnover and the need for qualified teachers increase, more and more teachers are being certified through quick alternative-route certification programs. Teachers who complete alternative-route programs, particularly the kind of streamlined routes encouraged by NCLB, may receive less training and may need more extensive mentoring support and feedback than those teachers who come through traditional certification programs (Carver & Feiman-Nemser, 2008). In addition to lacking adequate preparation, alternative-route graduates are also more likely to work in areas of critical teacher shortages with high-needs populations. As a result, alternative-route teachers are likely to need even more ongoing support than fully qualified novices hired in positions for which they are licensed (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007).

Mentoring also may be required for experienced teachers new to a teaching field or new to a school, district, or state. Without a flexible, differentiated policy approach, experienced teachers may be required to complete the same program as novices. New hires must learn the expectations, procedural rules, and policies of their districts as well as the backgrounds and cultures of the students and parents with whom they will work (Delisio, 2003). Yet veteran teachers should not need the same intensive mentoring that novices require, and resources spent on programs for experienced teachers may yield less payoff. Clearly, mentoring policy must be sufficiently flexible to allow districts to differentiate support on the basis of teachers' specific needs (Bartlett et al., 2005; Carver & Feiman-Nemser, 2008).

Good and Bad Attrition

One important factor for policymakers to consider is that not all attrition is bad. In any occupation, some turnover is inevitable. Recent data from the Bureau of National Affairs showed that during 1998-2001 the corporate attrition rate of public and private school teachers (13%) was less than that of the corporate attrition rate of all other occupations (14.1%) (as cited in Boe, Cook, & Sunderland, 2006). Attrition is to be expected, and it can have positive consequences. Teachers may leave the field for a variety of reasons (retirement, maternity leave, sickness, etc.); but, in some cases, these reasons can be beneficial to the field (Boe, Cook, & Sunderland, 2005).

Positive turnover occurs when unqualified or poorly qualified teachers leave the field. In their analyses of SASS and TFS data, Boe et al. (2005) reported that beginning teachers who were not fully certified and did not hold education degrees were more likely to leave teaching than their fully credentialed colleagues. As a result, fully credentialed teachers may be hired to replace less qualified leavers (Alliance for Excellent Education, 2008; Barnes, Crowe, & Schaefer, 2007). Of course, finding a fully qualified teacher to replace an unqualified leaver is not easy to do in shortage areas like special education. Attrition also may be positive when SETs switch to general education positions. Boe et al. found that many SETs who switched to general education were not fully qualified in special education but were often fully qualified for the new positions they assumed. Also, their reassignment adds to the general education workforce teachers with experience in working with students with disabilities.

A final example of positive turnover occurs when teachers leave teaching but remain in education. This turnover may result from teachers moving to administrative positions or entering into other education professions outside of school. Either way, this type of turnover may be considered an asset to the field because the field is gaining high-quality leaders (Boe et al., 2006).

INFLUENCES ON THE PRESENCE OF STATE POLICIES

In our analysis of state policies and how these policies shape mentoring practice, it came as no surprise that each state provides a different policy context. Many factors influence whether mentoring policies are in place within a state, including the presence of key policy actors; knowledge of previous attempts and successes at authorizing, appropriating, and implementing teaching quality policies; and the severity of teacher recruitment and retention problems (e.g., Kingdon, 1984). Although each state is different, there are several general considerations that help to explain why strong mentoring policies may be present at the state level.

Governance

Due to constitutional language, political culture, and resources, states may develop policy or defer to local decision making. However, school equity and adequacy lawsuits have shifted spending and necessitated state-level policymaking. Since the landmark *Rodriguez* case in 1973, all but 7 states have had state courts rule on the equity or adequacy of their school finance system. These decisions have led to states' playing an increased role in ensuring minimal levels of support (National Conference of State Legislatures [NCSL], 2008). Different states and regions have different legal and cultural traditions of local control; in the South, for example, policies are often authorized and implemented at the state level. Furthermore, legislatures in some states promulgate statutes with very specific language about program requirements; others give agencies broad power to shape policies through state board rule or department regulations.

Decisions Guided by Teacher Contracts

According to the National Council on Teaching Quality [NCTQ] (2008), 36 states address collective bargaining in state statutes, and 33 of these grant mandatory collective bargaining rights. Of 15 states with extensive case law, 10 allow collective bargaining and 5 prohibit it through administrative code or court rulings. State law determines the scope of bargaining and whether specific issues that influence new teacher support can be addressed. These issues include evaluation, compensation, and specific aspects of the teacher workday, including class size and load, length of preparation periods, and extracurricular duties, among others. States with stronger, more expansive bargaining provisions may leave decisions about mentoring and induction to districts.

Data Systems and Oversight Capacity

If states cannot measure school-level teacher turnover or compare the attrition rates of new and veteran educators, it may be difficult for policymakers to understand the need for mentoring. Some states report school-level teacher turnover rates; others only aggregate information at the district or state level. To track teacher turnover rates and differentiate attrition by years of experience, schools must collect longitudinal data using teacher identifiers. According to a survey of State Education Agencies [SEAs] by the Data Quality Campaign (2008), 31 states track teacher turnover at the school level, and 15 ask why teachers leave. However, state and local data systems generally are not designed to provide policymakers with the information they need to estimate the cost of teacher turnover and the potential savings of investing in new teacher support. According to a recent study by NCTAF, "the costs of teacher turnover are hidden in mounds of teacher records, school data, and district financial information" (Barnes et al., 2007, p. 5).

These influences all contribute to the likelihood of finding robust mentoring policies at the state level. Of course, the absence of statute, rule, and regulation does not preclude district implementation of high-quality mentoring. After all, resources and requirements could be determined locally. However, it is important to emphasize that state policy enhances the likelihood that all new teachers receive at least a minimal level of support regardless of the district in which they work.

METHODOLOGY

Although interest in improving teacher retention through mentoring has increased dramatically, there is still a dearth of research related to the components of state policy necessary to facilitate high-quality support (Carver & Feiman-Nemser, 2008; Smith & Ingersoll, 2004). To identify state policies that may lead to high-quality mentoring, we first searched 10 databases (Academic ASAP, Academic Search Premier, Academic OneFile, Expanded Academic ASAP, Gale, ERIC, LexisNexis, SilverPlatter, WebSpirs, and WilsonWeb) for policy research related to mentoring. We used *policy* as the primary keyword, then *teacher induction* or *teacher mentoring*, *special education*, and *retention*. Our initial combination keyword search, which included the keywords *policy*, *teacher induction* or *teacher mentoring*, and *retention* yielded 80 papers of which 53 were judged to be relevant to our work. Our search of *special education* in combination with *policy* and *teacher induction* or *teacher mentoring* yielded 20 additional papers, of which 4 were judged to be relevant. We also hand searched tables of contents of two journals, *Education Policy Analysis Archives* [EPAA] and *Educational Evaluation and Policy Analysis* [EEPA] for 1998-2008 and conducted ancestral searches of reference lists in the papers we identified. We judged relevance and utility after reading a paper's abstract and introduction.

After this initial review, we used Billingsley, Griffin, Smith, Kamman, and Israel (2009) to identify the main components of mentoring programs with particular attention to practices that are most effective for special educators. We then determined which of these components could be addressed through state policy and used seven to organize our analysis. These included

1. Who is served?
2. How are mentors selected?
3. How are mentors and novices matched and assigned?
4. What training is required?
5. How is mentoring support delivered?
6. What accountability and evaluation provisions are required?
7. What resources are provided for mentoring initiatives?

Between May and September, 2008, data on state policies were obtained through a systematic search of multiple online sources, including official state government and state department of education Web sites and sites of the NTC, NCSL, and the Center on Personnel Studies in Special Education [COPSSE]. For this analysis, current state laws, rules, and programs on beginning and new teachers, induction, and mentoring were collected and analyzed. Data were categorized as:

- State Law [SL] if the information was obtained from a state statute or legislative code
- Administrative Rules [AR] if the information came from the state annotated codes or state board of education rules
- State-sponsored Programs [P] whether established by state law or administrative code or as stand-alone programs.

For states with no current state laws, policies, or programs found in the initial search, state departments of education were contacted to verify that the absence of information reflected an absence of policy.

Data from states' mentoring and induction laws, policies, administrative rules, and programs were collected and compiled in a table for reference and accessibility, which resulted in 517

pages of text for analysis. Next, information from each state was sorted into the seven categories. Laws, policies, and programs are presented for each state in **Table 1**, along with the policy components addressed. Please note that many states address program components through various combinations of laws, rules, or programs.

STATE MENTORING PROVISIONS

Any analysis of mentoring policies will demonstrate that states have given varied attention to the structure, requirements, and expectations for new teacher mentoring and induction. Although Arizona, Wyoming, and the District of Columbia have no state law, policy, or program in place, all other states have at least some provisions. In our analysis (see **Table 1**), all 48 states address who will be served in their mentoring programs. Thirty-eight states have provisions that describe how mentors are selected, 32 address how mentors will be matched and assigned, and 35 include provisions for mentor training. Twenty-eight states describe how mentoring is to be delivered, and 29 require some form of accountability or evaluation. Policies address funding in 34 states. Some combination of state law, administrative rule, or program in place that addresses all policy elements was found in 14 states. Only 4 states have provisions that address SETs, but none do so in any substantive fashion.

Next, we describe what is known about the policy elements and their impact on mentoring quality. We then discuss between-state variability on each provision before examining the 14 states with all seven provisions in place. We profile California, which in our judgment has pieced together a comprehensive policy approach for mentoring and new teacher support.

Distinctions as to whether policies were created by state statute, rule, or program guidelines can affect the quality of mentoring programs, but districts often view these collectively without regard to origins. We believe that the means of creating mentoring policies speak to the permanence of the approach. Change in state statute, for example, requires support from a majority of the legislature and the governor, whereas regulatory or rule change may be a prerogative of the state board or governing agency.

Educators Served

Although there is general consensus among policymakers and teacher educators about the importance of providing mentoring support for beginning teachers, there is less agreement about who is and who is not a beginning teacher and how long supports must be provided. Whereas mentoring programs and policies apply universally to novice teachers, some also pertain to teachers who are new to a field or new to a district or state. To meet participants' individual needs, programs must differentiate in length and content between novices and experienced teachers who have changed fields or schools.

A study by Carver and Feiman-Nemser (2008) addressed the question of who is supported by induction programs and for how long. They studied three well-known and long-standing induction programs, including California's BTSA program, Cincinnati's Peer Assistant and Evaluation Program, and Connecticut's Beginning Educator Support and Training [BEST] Program (which has since been terminated). As part of their case study data collection, the authors reviewed program standards concerning who was served and for how long. They reported that all three programs provided support for novice teachers during their 1st year in the classroom, but only the BTSA program provided funding for 2 full years.

Research (Arends & Ragazio-DiGilio, 2000; Griffin et al., 2003) has shown that induction experience in the initial years of teaching can improve teaching competence and increase the likelihood that participants remain in the field. As a result, the NTC recommends that policymakers ensure that teachers participate in high-quality induction programs for at least the

first 2 years of their careers. In 2 years, with high-quality professional development and training, novices can become effective practitioners (NTC, 2007c).

Generally, the beginning new or provisional teacher distinction is the threshold for inclusion in mentoring programs. However, program duration ranges from less than a year to as many as 5 years (with a mode of 2). Minnesota's First Five Mentorship Program is the longest, requiring participation of teachers during their first 5 years of teaching (in Minneapolis, Saint Paul, surrounding school districts, and two rural areas of the state).

Some states require mentoring for teachers entering the profession through alternative routes and for others who may need more initial support. For example, Georgia gives priority to teachers in their 1st year, but provides additional mentor support to teachers who are "at risk of leaving the profession, returning to the profession after extended absence, or… from out-of-state" (Georgia State Education Rule Number 160-3-3.07). Kentucky also requires that mentoring be provided for teachers transferring from out-of-state. Georgia and Kentucky, along with 15 other states, require mentoring support for teachers who receive licensure through alternative routes.

In summary, although all state policies stipulate that beginning teachers receive mentoring, there are differences in program duration. There are also state-to-state differences in eligibility for mentoring support. State policymakers should consider not only the duration, but also the type of mentoring necessary over the beginning years. State policies require that mentoring be provided over 1, 2, or even 5 years, but the kind of support that new teachers need is likely to change over time. Whereas a 1st-year teacher may require frequent and intensive mentoring, a 3rd-year teacher might benefit more from participation with a collegial network of teachers. Furthermore, a teacher transferring from one state to another will not require the same kind or amount of support as a novice. Requirements and resources should be differentiated on the basis of need.

Mentor Selection

Authorities (Arends & Ragazio-DiGilio, 2000; NTC, 2006) recommend that mentors be chosen on the basis of a rigorous, high-quality selection process conducted by veteran instructional leaders who know the characteristics of high-quality mentors and the kinds of mentors needed for specific schools. According to the NTC, effective mentors are outstanding teaching practitioners who have strong interpersonal skills, experience with adult learners, and current knowledge of effective classroom practice.

Research in special education has focused on attributes that novices value most in their mentors. Whitaker (2000) reported that communication skills, support and patience, and availability were rated most highly, whereas Gibb and Welch (1998) reported that beginning special educators wanted mentors to be personable, caring, open, friendly, comfortable around others, trustworthy, unobtrusive and nonthreatening, available, and flexible (as cited in Griffin et al., 2003). These findings portray a plausible and potentially useful profile of effective mentors and also make clear the importance of mentor training. Given the diversity of attributes and skills that beginning teachers value most about mentors, schools may have limited pools of high-potential mentor trainees for selection.

State policy can address eligibility and encourage districts to set selection criteria to identify skilled mentors, but it may not fully address the challenge of screening potential mentors for the knowledge, skills, and dispositions that effective mentoring requires. Thirty-eight states have

provisions for the selection and eligibility of mentors. Although few restrict eligibility to K-12 teachers, most encourage (or less frequently require) districts to select mentors from among their most effective teachers. Nineteen states require that mentors have appropriate certification, and 20 stipulate a minimum number of years of experience. Thirteen states enumerate desirable personal characteristics of effective mentors but necessarily leave to districts decisions regarding how to make such assessments.

For example, Louisiana's eligibility requirements are particularly rigorous. Its policy stipulates that mentors must have 10 years experience (and 3 in the employing district), hold a master's degree, and complete a minimum of 3 credit hours in supervision of instruction (Louisiana Revised Statute Sec. 17-3771 et seq.). Several other states have multiple eligibility criteria, including licensure, experience, evidence of successful teaching, training, and the ability to provide mentees with relevant knowledge and skills. Pennsylvania is among those states that defer eligibility decisions to the local level, but its state policy does recommend that districts seek mentors who, in addition to having demonstrated effectiveness, have compatible schedules with their mentees.

State policy in this area is fairly consistent in stipulating threshold criteria to guide mentor selection, leaving the establishment of a formal selection process to district discretion. The threshold criteria tend to focus on successful teaching experience. Judging from the large number of states whose policies require it, training and ongoing support also are required to ensure mentors have the knowledge, skills, and dispositions to succeed.

Mentor Training

Although policy may require that mentors be accomplished teachers, not all accomplished teachers have the potential to become effective mentors. Even for individuals with good potential, the transition from accomplished classroom teacher to effective mentor will not happen automatically. In fact, some authorities (Carver & Feiman-Nemser, 2008; NTC, 2007a) believe that to develop the skills necessary to instruct and support beginning teachers, mentor trainees need intensive training and ongoing support and professional development themselves. Griffin et al. (2003) identified adult development and learning, relationship and communication skills, and supervision and conferencing skills as essential elements of mentor training. Mentors also need ongoing support for the challenges they encounter as well as content-specific professional development opportunities to expand on their understanding of effective teaching (Carver & Feiman-Nemser; NTC, 2006).

As noted, 35 states require some sort of mentor training. Many policies simply mention training or allude to the successful completion of training. A few states prescribe what kind of training is to occur, when, and for whom. Few specify the amount of training that mentors must receive or when the training should occur, but there are examples of state policy prescribing the timing and duration of mentor training. For example, 6 states stipulate that mentor training must focus on classroom practice (e.g., subject matter mastery, scientifically based practices, and classroom management) and 11 states require training in mentoring skills. Pennsylvania, for example, requires training in communication, listening, coaching, problem solving, and adult learning. Six states specify the length of training, which ranges from 10 hours in Rhode Island to 20 days (or 90 hours) in New Jersey.

Most states that require training leave decisions regarding content and delivery to the discretion of local districts. Although such flexibility seems advisable, one unavoidable byproduct of local discretion is variability in the quality with which policy is implemented. By assisting in the area of mentor training, states can mitigate the potential for inequities among districts (e.g., by developing and making available mentor training materials).

Mentor Matching and Assignment

Matching novice teachers and mentors on the basis of similar characteristics and experience is thought to be an important element of effective induction. Research has suggested that when teachers are matched with a mentor from the same field, mentor effectiveness and mentee retention increase (Darling-Hammond & Sykes, 2003; Smith & Ingersoll, 2004). The same effect has been observed in research with special educators. SETs' ratings of positive mentoring relationships and likelihood of remaining in the field increased when their mentors were special educators who had experience with similar students and who worked at the same school and at the same grade level as that of their mentees (Griffin et al., 2003; Nickson & Kritsonis, 2006; Whitaker, 2000; White & Mason, 2006). Moreover, White and Mason reported that novice special educators were more likely to seek assistance when mentors possessed knowledge about students with the same disability or level of functioning as their own students.

With regard to mentor-mentee matching, special education presents a particular challenge to policymakers and administrators. Some schools have only one SET or only one SET working with students with a particular disability, degree of severity, or age level (Ingersoll, 2001b; Pan et al., 2000). In these circumstances, matching can be difficult if not impossible. Thus, in developing policy and designing programs, it is important for policymakers and administrators to recognize and accommodate the various contexts in which special educators work.

In state policy, mentor matching and assignment are expressed either as criteria for matching or as mentor-mentee ratios. Ratios vary depending on a number of factors including, most importantly, whether mentors serve full- or part-time. For example, in Hawaii the ratio cannot exceed 15 mentees for each full-time mentor. Louisiana also permits a ratio of 1 full-time mentor to 15 mentees. In Maine, each mentor is assigned 1 mentee. Virginia does not permit more than 4 novice teachers per mentor unless the mentor is full-time; Illinois does not permit more than 5 teachers per mentor but draws no distinction between full- and part-time service.

Many state policies that require or encourage matching recommend the use of various criteria. For example, mentors and new teachers may be required to teach at the same grade level, in the same content area, or in the same building. Nebraska is an instructive case in point; its policy recommends that mentors and mentees work in the same building and be matched on endorsement and grade-level preparation. Maine recommends that mentors and mentees be matched on compatibility of personal style.

Some states stipulate that mentors have proven records of classroom effectiveness, are prepared to work with adults, and have content and pedagogical expertise. This component of state policy may be of particular importance in our analysis, given special education's specialized knowledge base and specific planning and teaching requirements. Furthermore, there is tremendous variation in the requirements and rigor of state policy; and in most states local districts are given discretion in assigning mentors. Although some degree of autonomy is necessary for programs to

address local needs, district autonomy may lead to substantial variation in the appropriateness of mentor assignments.

Delivery

Teachers need time to share ideas and discuss their work. Policymakers and school administrators must ensure that teachers have adequate planning time and opportunities for such collaboration. Collaboration allows teachers to share ideas and discuss their own and their colleagues' beliefs and assumptions. For teachers to meet with departmental or grade-level colleagues, administrators must schedule planning time carefully.

As part of the North Carolina Teacher Working Conditions Survey, teachers rated noninstructional time as the most critical working condition for improving student achievement and learning (Hirsch & Emerick, 2007). Unfortunately, noninstructional time is seldom required by policy, especially in elementary schools (Reeves, Emerick, & Hirsch, 2007). Thus, in the North Carolina survey, 60% of secondary educators, but only 37% of elementary educators, judged their noninstructional time to be sufficient. Nearly two thirds of elementary educators reported having no more than 3 hours in an average week to plan and collaborate. Among new teachers with assigned mentors, 31% reported never planning with their mentor during the school day, and 34% never collaborated on instructional planning (Hirsch & Emerick).

Most scholars and practitioners believe that collaboration and communication are vital elements of successful induction for which time must be set aside. Some research indicates that teachers who participated in induction programs that included peer collaboration reported improved job satisfaction, less emotional exhaustion, and stronger organizational commitment (Griffin et al., 2003). Peer collaboration may engage special educators with other SETs, with general education colleagues, or both. When special and general educators interact, collaboration may promote "understanding from general education colleagues about special education challenges" (Futernick, 2007). Incorporating peer collaboration training into induction can enhance professional development for all teachers (Winn & Blanton, 2005). Furthermore, peer collaboration can provide what beginning special educators need most: emotional support (Whitaker, 2000).

Most state policies acknowledge the importance of contact time for mentors and new teachers, even when these include no specific provisions for making time available. For example, Louisiana stipulates that mentors and beginning teachers should be able to "consult with each other as freely as possible" (Louisiana Revised Statute Sec. 17-3771 et seq.). Several states do set guidelines or require release time for mentors or beginning teachers. Most commonly, release time is given for mentors and beginning teachers to engage with one another, and the amount of release time varies, e.g., Florida, 12 working days; Oregon, 90 contact hours; and Delaware, 60 hours. Other policies allude to regularly scheduled time without specifics or to the need for common time for new teachers and mentors to plan and collaborate.

In state policy, recommended release-time activities include observations, co-teaching, and collaborative lesson planning and implementation. Although few states fund substitutes for mentors and mentees, several encourage districts to do so. Twenty-two states mandate observations to ensure that mentors have a means for identifying the issues with which their mentees are struggling.

Although time is an essential element of high-quality mentoring, it is one that few states have attended to in policy. There are many ways mentoring programs can address time constraints through design—e.g., full-time mentors, common scheduling, release time—but most states do little more than require that local districts must find time. Thus, the high costs of staffing and release time typically are borne at the local level.

Accountability

Twenty-nine states have evaluation and accountability provisions associated with their mentoring programs. These provisions take various forms, including contact, document, monitoring, assessment, reporting, and feedback requirements. Although most states prohibit the use of mentoring reports or the mentors themselves in new teacher evaluations, many states do require verification of program completion. Accountability provisions may focus on program evaluation as well as teacher evaluation and be formative or summative in nature. Although more than half the states mention the necessity for evaluations, there is little specific information in policy regarding who is responsible for evaluation, what criteria are to be used, how the process should be conducted, or how the findings should be used.

Formative and summative new teacher evaluation. Proponents contend that mentoring should focus more on assisting and supporting new teachers in the process of developing professionally than on evaluation. Although individual accountability remains an important component of mentoring, programs must be cautious about the manner in which they conduct teacher assessments (Griffin et al., 2003). Formative assessments can be used to document teachers' growth, and information gathered in this way can inform conversations about strengths and weaknesses vis-à-vis professional teaching standards (Bartlett et al., 2005; Burstein & Kennedy, 2002; NTC, 2007a, 2007c). For instance, California districts must ensure that teachers' induction plans are individualized on the basis of objective assessments. These formative evaluations may not be used as either a condition of employment or as justification for terminating employment.

A few states require summative evaluation of individuals served in induction and mentoring programs. In Iowa, for example, individual evaluation is used to assess teaching competence and to determine eligibility for full professional licensure. Teachers not yet eligible at the end of their 2nd year are required to develop and undertake a mentoring and induction plan that addresses areas of weakness. They are subject to further evaluation at the end of their 3rd year. In contrast, Indiana, Washington, and Oregon expressly forbid mentors from serving as an evaluator of the new teachers they mentor. Furthermore, none of their reports may be used for evaluation purposes. Confidentiality provisions of this sort are included fairly commonly in other state policies as well. Colorado requires new teachers to evaluate their own skills, needs, and interests, whereas other states (e.g., Connecticut and Delaware) require the development of portfolios as part of the evaluation process.

Program accreditation and evaluation. Many states require evaluation of their induction and mentoring programs. Most program evaluation provisions are focused on formative feedback for program improvement, but details regarding the expected contents of these evaluations are uncommon in policy. For instance, New Mexico reviews and approves district mentorship programs and provides technical assistance in areas where the mentorship program is judged to be unsatisfactory. New Mexico also requires annual reporting of teacher retention rates. Oregon is one of the few states that require use of student performance on state assessments in program

evaluation Oregon's comprehensive process also includes measurement of the quality of the mentoring relationship, effectiveness of workshops and training, and new teacher retention, leading to decisions regarding program expansion. New York stipulates that program evaluation must address criteria for assessing mentor and intern performance in instructional planning and management, classroom management, presentation of subject matter, and communication skills.

State policies have generally kept the evaluation and support of new teachers separate. Although some states require documentation of successful program completion as part of moving from a provisional to a professional license, in most cases, mentors do not evaluate new teacher performance.

Funding and Resources

Policymakers must ensure that adequate financial support and resources are available for implementation (Bartlett et al., 2005). Thus, legislators must identify essential elements of effective induction practice and provide sufficient funding to ensure successful implementation (Darling-Hammond et al., 2003). Of course, states and districts have different resources available to fund induction. Policymakers must be aware of the discrepancies among districts within states and schools within districts and distribute funds to guarantee equitable opportunity for all new teachers (Walsh, 2008).

Thirty-four states provide at least some support for their mentoring programs, and 14 do not. Supports come in many forms, including program funding, training and professional development, substitutes, release time, incentives, additional pay or stipends, and tuition waivers. States differ greatly in levels of funding, how resources are secured and allocated, and how expenditures are monitored. Some states base allocations on a per capita basis for mentors or new teachers. For instance, Indiana provides stipends to mentors who work for at least 120 days with beginning teachers who then meet minimum criteria. In Iowa, districts receive approximately $1,300 for each mentee, and districts are required to allocate an additional $500 per mentor per semester. West Virginia offers $600 to mentors, and mentor stipends in Alabama, Kansas, Mississippi, and South Dakota are in an amount not to exceed $1,000. Kansas differentiates between the funding levels for mentors of 1st-year and 2nd-year teachers. Louisiana compensates its mentors up to 10 hours a week beyond the regular workday based on a prorated hourly rate.

A few states provide significantly more support for new teacher mentoring. California, for example, provides a base funding for mentors in the Peer Assistance and Review Program and caps costs associated with program administration at 5%. In addition, the state also allocates funding to districts based on the number of teachers who participate in the BTSA program (with a minimum of $3,900 per teacher in 2006-2007). Oregon's 2007 legislation provides qualifying districts an annual allocation of up to $5,000 per participant.

In a recent cost-benefit analysis by researchers at the NTC, Villar and Strong (2007) estimated that a $1.00 investment in mentoring yielded a $1.66 return in increased teacher retention and reduced recruitment, hiring, and professional development costs. Although this is an important and dramatic finding, the district studied by Villar and Strong invested roughly $6,000 per participant, substantially more than most districts and states can provide. As a result, the impact of more typical investments in mentoring has not been assessed. State policymakers know that costs will vary with the number of new teachers and with district demographics; these are only

two of the variables to consider when assessing the adequacy of resources vis-à-vis program-mandated requirements.

PUTTING IT TOGETHER: COMPREHENSIVE APPROACHES TO MENTORING

Overview

Fourteen states have laws, administrative rules, or programs that individually or collectively address all seven policy components. Nonetheless, these states vary in the degree to which comprehensive beginning teacher mentoring is supported.

Several states provide detailed guidance on the implementation of state-sponsored programs, some in statute and others in program description. For example, California state statute provides detailed guidance on the implementation of interrelated state-wide programs, including the California Peer Assistance and Review Program for Teachers and the Certificated Staff Mentoring Program. California state statute also defines the Standards of Quality and Effectiveness for BTSA Programs and the California Standards for the Teaching Profession. Together, these state policies commit funding, provide guidance on implementation and evaluation, and set expectations for coordination and capacity building throughout the state. Substantial resources are provided for implementation.

In contrast, Rhode Island state statute includes little information about implementation. Instead, comprehensive guidance on the state-wide mentoring program is provided in the Rhode Island Mentor Program Standards, which cover program design, implementation, development, and evaluation.

It seems clear to us that rigorous policy includes clear standards and sets threshold expectations for new teachers, mentors, and those designing and delivering mentoring programs locally. Rigorous policy requires evaluations that incorporate data on retention and professional development to guide districts in program design and meeting state standards. In addition, ongoing, dedicated funding and policies that establish spending priorities are essential. For example, in California, additional incentives are awarded to increase the number of mentors in priority schools. In Massachusetts, programs are expected to develop "outreach plans to attract under-represented populations to the teaching profession" (Massachusetts General Law Sec 15A et seq.). Finally, successful policy must articulate criteria for selecting mentors and matching mentors with beginning teachers. California and Maine both have policies that use mentor-mentee compatibility and demonstrated ability as criteria for selection. Criteria of this sort strike us as being more relevant and useful than other criteria that do not correspond with outcomes, such as years of experience.

In summary, many of the 14 states whose policies address all seven components provide examples of strong policy infrastructure that supports comprehensive systems of mentoring and induction. These frameworks provide standards and funding, guide implementation, and call for accountability, evaluation, mechanisms for program improvement, and ongoing capacity building at the state, regional, and local levels. On the other hand, addressing all seven components in policy does not guarantee successful state-wide implementation.

California: A Brief Look at a Comprehensive Approach

We have characterized California as an exemplar of good policy and successful program implementation. Its BTSA program provides approximately $3,900 per year for 2 years for each

beginning teacher to pay for individual mentoring support and formative assessments. The program is based on 20 standards that guide design and local implementation. BTSA implementation is overseen by two agencies: the Commission on Teacher Credentialing and the Department of Education. The state is divided into six regions, and two Cluster Regional Directors oversee BTSA in their regions. School districts (or consortia of districts) are required to apply to the state and in their application describe how their program will meet each standard. Once an application is approved, the program becomes a credentialing agency and may award Level 2 credentials to beginning teachers who complete BTSA and demonstrate application of the prerequisite knowledge, skills, and abilities.

In BTSA beginning teachers receive ongoing feedback about their work and their progress toward mastering competencies identified in standards. To document skill development, teachers develop portfolios, or "demonstrations of application" that the program is responsible to review. Although the competency standards are defined by the state, districts and consortia have flexibility in defining the evidence teachers may provide in their portfolios. Many districts participate in the Formative Assessment System designed and coordinated by the NTC, which draws on artifacts of practice from mentoring interactions.

BTSA programs are required annually to demonstrate that they have met program standards. Programs are reviewed by other BTSA program coordinators. On the basis of these reviews programs develop and submit annual improvement plans. Every 5th year a more formal program review is conducted. If a program fails to meet program standards, the state task force may intervene and put on an improvement plan. The implementing districts must improve to maintain their credentialing status. Credentialing status is essential for districts to attract new teachers who intend to move toward professional licensure.

DISCUSSION

With regard to developing and implementing mentoring programs, how essential is good policy? It is clear that good policy does not guarantee faithful program implementation, much less increased retention and improved teacher quality. Furthermore, the absence of good policy does not preclude effective mentoring. Clearly, some good programs operate in states with poor policy infrastructure. To assess the value of mentoring policy, a better question to pose is how essential is good policy to uniform state-wide implementation? Clearly, given high district-to-district variability in needs and resources, reaching all beginning teachers with a successful program of support necessitates a comprehensive policy approach. California provides an example of what good policy can accomplish. A well-designed program, rigorous standards for beginning teachers, adequate fiscal support, and an ethic of collaboration have made California an exemplar of effective practice.

By stipulating the program elements that must be in place, good policy defines for districts what is important about mentoring support. We identified and used in our analysis seven such delimiters that define what we believe to be important about mentoring. These included specification of who is served, who is eligible to mentor, how mentors are assigned to mentees, and how mentors are trained. Policy also may stipulate how often mentoring occurs, for how long, in what format, and how the participants or the program itself will be evaluated. Finally, good policy must address the issue of funding. Although policy that includes all seven components may not guarantee effective programming, good policy does increase the likelihood that programming will be implemented widely and well. We may know little about which elements are most important or how best to fit these together into a coherent program, but states that put all seven in place are off to a good start.

Our analysis also makes clear that state policy must work in concert with federal and local policy if new teachers' needs are to be met. State policy in and of itself is a blunt instrument for ensuring that the needs of all new teachers are addressed. State policy sets standards or guidelines and provides resources to help programs meet those standards. In most cases, it is up to districts to decide whether certain teachers need more intensive support and to ensure that those teachers get it.

Given what can be accomplished through state policy, it should not be surprising that in our analysis we found no meaningful differentiation between beginning SETs and GETs. Although every state policy stipulates who is eligible for service, new teachers are considered an undifferentiated group with common needs. Yet schools that employ only one SET cannot make a disciplinary match within the school. Many more schools have two or more SETs, but often no two of them work at the same grade level or with students having the same disability or functioning at the same level of severity. Clearly, precise matching cannot be achieved at every school, so the desire to work with a school-based mentor with a similar caseload often represents a logistical impossibility. SETs at middle and high schools present policymakers with another challenge. Many teach more than one subject, and more than one instructional mentor may be necessary.

One need not look far for mentoring policies with the potential to address the logistical problems that special education poses. Given the importance of socializing beginning SETs into the school culture (Pugach, 1992; Rockoff, 2008), it follows that a school-based mentor is necessary even when no instructional mentor is available at the school. The structure of Minnesota's mentoring

policy offers a potentially fruitful approach to addressing this issue. Beginning teachers are assigned two mentors—one school based and a second whose responsibility is instructional coaching. The responsibility of the school-based mentor is socialization; the instructional coach provides assistance with curriculum, instruction, and assessment. Instructional coaches work full time and conduct as much business as possible through distance technology. Although online instructional coaching may be criticized because so little is known about its efficacy, it is an emerging focus in the mentoring literature because of its considerable potential. A more significant criticism of an approach like Minnesota's is the potentially high cost of providing two mentors.

For the problem of secondary SETs being assigned to teach different subjects at different grade levels, we are less sanguine about the potential for a mentoring policy solution. We understand the pressures within a school—particularly a small school—for SETs to be Jacks and Jills of all trades. However, it seems unrealistic to expect SETs to master content and pedagogy for many different subjects. In the context of NCLB, it seems unlikely that SETs can be highly qualified to teach all subjects they are assigned to teach. Clearly, mentoring policy cannot be expected to overcome poor school practice. We believe that the solution to this problem lies elsewhere.

We also believe a more pressing goal than differentiating mentoring policy for SETs is creating the capacity to serve all beginning teachers well and establishing that good policy and practice can make a difference. A coherent and comprehensive policy framework for teacher development will have substantial impact on the retention of SETs and their development as professionals regardless of whether or not programs for them are differentiated.

However, differentiation may be achieved more readily through other policy approaches. For example, states may ensure that program standards for mentoring are specific about meeting the needs of new SETs (as well as the ability of all teachers to differentiate instruction for special education students); hold district programs accountable for demonstrating evidence that novice special educators are served; and differentiate mentor funding by discipline. If novice SETs do indeed require additional support due to the specific nature of their work, states could provide additional funding. States may specify a lower mentor-to-new-teacher ratio for new special educators to ensure that mentors have enough time to meet their specialized needs or provide additional training and networking opportunities for special education mentors. State departments of education could provide or contract for this training to ensure it aligns with state standards and meets expectations for quality.

FUTURE RESEARCH

Given the widespread implementation of mentoring and the state-to-state variability in policy and practice, generating answers to important questions about program effects would seem to be a simple matter of getting organized. However, few states can reliably track teacher turnover at the school level, and few can reliably assess teacher quality by linking teachers to student outcomes. In fact, according to Data Quality Campaign (2008), only 21 state data systems include teacher identifiers that allow teacher-student matching. As a result, until better data systems are in place, many states will be unable to answer such fundamental questions as whether their induction program helps students learn, to know whether it helps sustain teachers, or to say with any authority whether their induction policies are working.

Regrettably, relatively few states require summative evaluation of their induction programs. Even when evaluation is required by policy, decisions regarding methods and measures are most commonly left to districts. Furthermore, measures specified in state policy tend to focus on consumer satisfaction or implementation variables like the number of beginning teachers served, the number of mentors, or hours of mentor-novice interaction. As a result, only 3 states use evaluation data for serious, programmatic decision making.

Although induction should be evaluated in terms of the return it yields on investment, cost-benefit analysis requires more careful and systematic data collection than takes place under current policy. This is another unfortunate consequence of inadequate data systems—the findings of such research can be compelling. We have seen in Villar and Strong's (2007) cost-benefit analysis of the NTC program in California, a $1.00 investment in induction and mentoring yielded a $1.66 return. Clearly, more research is required to identify the essential program elements that increase retention, improve teacher quality, and increase cost effectiveness. Although Villar and Strong's work provides a starting point and cause for optimism, we have much to learn about the essential elements of effective induction and mentoring, and more research clearly is warranted.

Good policy helps to define who receives and who provides induction support. In a sense, it can situate a trained mentor across the table from a novice teacher with time to interact. Policies also may shape the content of that interaction and its length but cannot guarantee high quality. What happens during interactions between mentors and novice teachers ultimately determines whether beginners get what they need to succeed. Future research on what constitutes high-quality mentoring will be informed by the literature on professional coaching to be sure, but studies of effective mentors may also be instructive. Districts can readily identify skilled mentors on the basis of mentees' classroom practice or student achievement test scores, and those mentors may be studied for commonalities in manner or method.

REFERENCES

Alliance for Excellent Education. (2008). *What keeps good teachers in the classroom? Understanding and reducing teacher turnover.* Washington, DC: Alliance for Education.

Arends, R. I., & Ragazio-DiGilio, A. J. (2000, July). *Beginning teacher induction: Research and examples of contemporary practice.* Paper presented to the Japan-United States Teacher Education Consortium [JUSTEC], Tokyo, Japan.

Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study.* Washington, DC: National Commission on Teaching and America's Future. Retrieved January 29, 2008, from http://www.nctaf.org

Bartlett, L., Johnson, L., Lopez, D., Sugarman, E., & Wilson, M. (2005). *Teacher induction in the Midwest: Illinois, Wisconsin, and Ohio.* Santa Cruz: New Teacher Center at the University of California, Santa Cruz.

Billingsley, B., & McLeskey, A. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *Journal of Special Education, 38*(1), 39-55.

Billingsley, B. S., Griffin, C. C., Smith, S. J., Kamman, M., & Israel, M. (2009). *A review of teacher induction in special education: Research, practice, and technology solutions.* Gainesville, FL: (NCIPP Doc. No. RS-1). Retrieved September 1, 2009, from University of Florida, National Center to Inform Policy and Practice in Special Education Professional Development Web site: http://www.ncipp.org/reports/rs_1.pdf

Boe, E. E. (2006). Long-term trends in the national demand, supply, and shortage of special education teachers. *Journal of Special Education, 40*(3), 138-150.

Boe, E., Cook, L. H., & Sunderland, R. J. (2005, July). *Turnover of special education teachers: New research on the extent and impact of exit attrition, transfer to general education, and school transfer.* Paper presented at the 2005 OSEP Project Directors Conference, Washington, DC.

Boe, E. E., Cook, L. H., & Sunderland, R. J. (2006). *Attrition of beginning teachers: Does teacher preparation matter?* (Report No. 2006-TSDQ2). Philadelphia: University of Pennsylvania, Graduate School of Education, Center for Research and Evaluation in Social Policy.

Boe, E. E., Cook, L. H., & Sunderland, R. J. (2008). *Teacher qualifications and turnover: Bivariate associations with various aspects of teacher preparation, induction, mentoring, extra support, professional development, and workload factors for early career teachers in special and general education* (Data Analysis Report No. 2008-DAR1). Philadelphia: University of Pennsylvania, Center for Research and Evaluation in Social Policy. Available at http://www.gse.upenn.edu/cresp/pdfs/DAR1-mss1.pdf

Burstein, N., & Kennedy, V. (2002, February). *Improving teacher retention of special educators in urban schools: Promising practices through state, school district and university collaboration.* Presentation at the 2002 Office of Special Education Programs Joint Personnel Preparation/State Improvement/Comprehensive System of Personnel Development Conference, Arlington, VA.

Carver, C. L., & Feiman-Nemser, S. (2008). Using policy to improve teacher induction: Critical elements and missing pieces. *Educational Policy Online.* Retrieved March 12, 2008, from http://epx.sagepub.com/cgi/rapidpdf/0895904807310036v1

Center on Personnel Studies in Special Education [COPSSE]. (2005). *Defining teacher quality in special education: A look at classroom practices, content knowledge, and beliefs of beginning teachers.* Gainesville: University of Florida, Center on Personnel Studies in

Special Education. Retrieved May 21, 2008 from http://www.coe.ufl.edu/copsse/docs/RP07_Defining_Quality_in_SP/1/RP07_Defining_Quality_in_SP.pdf

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives, 8*(1), 1-50.

Darling-Hammond, L., Hightower, A. M., Husbands, J. L., LaFors, J. R., Young, N., & Christopher, C. (2003). *Building instructional quality and coherences in San Diego schools: System struggle, professional change.* Seattle, WA: Center for the Study of Teaching and Policy.

Darling-Hammond, L., & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge. *Education Policy Analysis Archives, 11*(33). Retrieved December 8, 2008, from http://epaa.asu.edu/epaa/v11n33/

Data Quality Campaign (2008). *Data quality campaign survey responses*. Retrieved December 8, 2008, from http://www.dataqualitycampaign.org/files/element5_survey_responses.pdf

Delisio, E. R. (2003, August 21). *Induction programs help keep better teachers.* Retrieved May 21, 2008, from http://www.educationworld.com/a_issues/chat/chat071.shtml

Fletcher, S., Strong, M., & Villar, A. (2008). An investigation of the effects of variations in mentor-based induction on the performance of students in California. *Teachers College Record, 10*(10), 2271-2289.

Futernick, K. (2007). *A possible dream: Retaining California's teachers so all students learn.* Sacramento: California State University.

Georgia State Education Rule Number 160-3-3.07.

Gibb, G., & Welch, M. (1998). The Utah mentor teacher academy: Evaluation of a statewide mentor program. *Teacher Education and Special Education, 21*(1), 22-33.

Griffin, C., Winn, J., Otis-Wilborn, A., & Kilgore, K. (2003). *New teacher induction in special education: Review of the literature.* Retrieved May 20, 2008, from the University of Florida, Center on Personnel Studies in Special Education Web site: http://www.coe.ufl.edu/copsse/docs/RS-5/1/RS-5.pdf

Hirsch, E., & Emerick, S. (with Church, K., & Fuller, E.). (2007). *Teaching working conditions are student learning conditions: A report on the 2006 North Carolina teaching working conditions survey.* Hillsborough, NC: Center for Teaching Quality. Retrieved June 22, 2007, from http://www.teachingquality.org/pdfs/twcnc2006.pdf

Hirsch, E., Koppich, J. E., & Knapp, M. S. (2001). *Revisiting what states are doing to improve the quality of teaching: An update on patterns and trends.* Seattle, WA: Center for the Study of Teaching and Policy.

Ingersoll, R. M. (2001a). *A different approach to solving the teacher shortage problem.* Seattle, WA: Center for the Study of Teaching and Policy.

Ingersoll, R. M. (2001b). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal, 38*, 499-534.

Ingersoll, R. M. (2002). *The organization of schools as an overlooked source of underqualified teaching.* Seattle, WA: Center for the Study of Teaching and Policy.

Kingdon, R. (1984). *Agendas, alternatives, and public policies.* New York: Harper Collins.

Louisiana Revised Statute Sec. 17-3771 et seq. Chapter 33 Acts 1986, No. 713 §1.

Massachusetts General Law Sec. 15A et seq.

McMurrer, J. (August 2007). *Implementing the No Child Left Behind teacher requirements.* Washington, DC: Center on Education Policy.

National Commission on Teaching & America's Future. (1996). *What matters most: Teaching for America's future.* New York: Author.

National Conference of State Legislatures [NCSL]. (2008). *The state role in education finances.* Retrieved December 8, 2008, from http://www.ncsl.org/programs/educ/NCSLEducation Finance.html

New Teacher Center at the University of California Santa Cruz [NTC]. (2006). *Understanding New York City's groundbreaking induction initiative: Policy implications for local, state, and national education leaders.* Santa Cruz, CA: Author.

Nickson, L. M., & Kritsonis, W. A. (2006). A national perspective: An analysis of factors that influence special educators to remain in the field of education. *National Journal of Publishing and Mentoring Doctoral Student Research, 1*(1), 1-5.

No Child Left Behind Act of 2001. Pub. L. No. 107-110 (2001).

Pan, D. T., Mutchler, K. S., Kelly, S. S., Bush, J., & Glover. R. W. (2000). *Mentoring beginning teachers: Lessons from the experience in Texas.* Austin, TX: Southwest Educational Development Laboratory.

Pugach, M. C. (1992). Uncharted territory: Research on the socialization of special education teachers. *Teacher Education and Special Education, 15*, 133-147.

Reeves, C., Emerick, S., & Hirsch, E. (2007). *Creating an atmosphere of trust: Lessons from exemplary schools.* Hillsborough, NC: Center for Teaching Quality.

Rochkind, J., Ott, A., Immerwahr, J., Doble, J., & Johnson, J. (2007). *Lessons learned: New teachers talk about their jobs, challenges and long-range plans.* Washington, DC: National Comprehensive Center for Teacher Quality.

Rockoff, J. (2008). *Does mentoring reduce turnover and improve skills of new employers?* Evidence from teachers in New York City. Retrieved May 22, 2008, from http://www.nber.org/papers/w13868

Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal, 41,* 681-714.

Strong, M. (2006). *Does new teacher support affect student achievement: Some early research findings.* (Issue #06-01). University of California, Santa Cruz: New Teacher Center.

Villar, A., & Strong, M. (2007). Is mentoring worth the money? A benefit-cost analysis and five-year rate of return of a comprehensive mentoring program for beginning teachers. *Educational Research Service Spectrum, 25*(3), 1-17.

Walsh, K. (2008). *Closing the comparability loophole: Potential and pitfalls.* Washington, DC: National Center for American Progress. Retrieved December 8, 2008, from http://www.americanprogress.org/issues/2008/06/equal_funding.html

Whitaker, S. (2000). What do first year special education teachers need? *Teaching Exceptional Children, 33*(1), 28-36.

Whitaker, S. D. (2003). Needs of beginning special education teachers: Implications for teacher education. *Teacher Education and Special Education, 26*, 106-107.

White, M., & Mason, C. (2006). Components of a successful mentoring program for beginning special education teachers: Perspectives from new teachers and mentors. *Teacher Education and Special Education, 29*, 191-201.

Winn, J., & Blanton, L. (2005). The call for collaboration in teacher education. *Focus on Exceptional Children, 38*(2), 1-10.
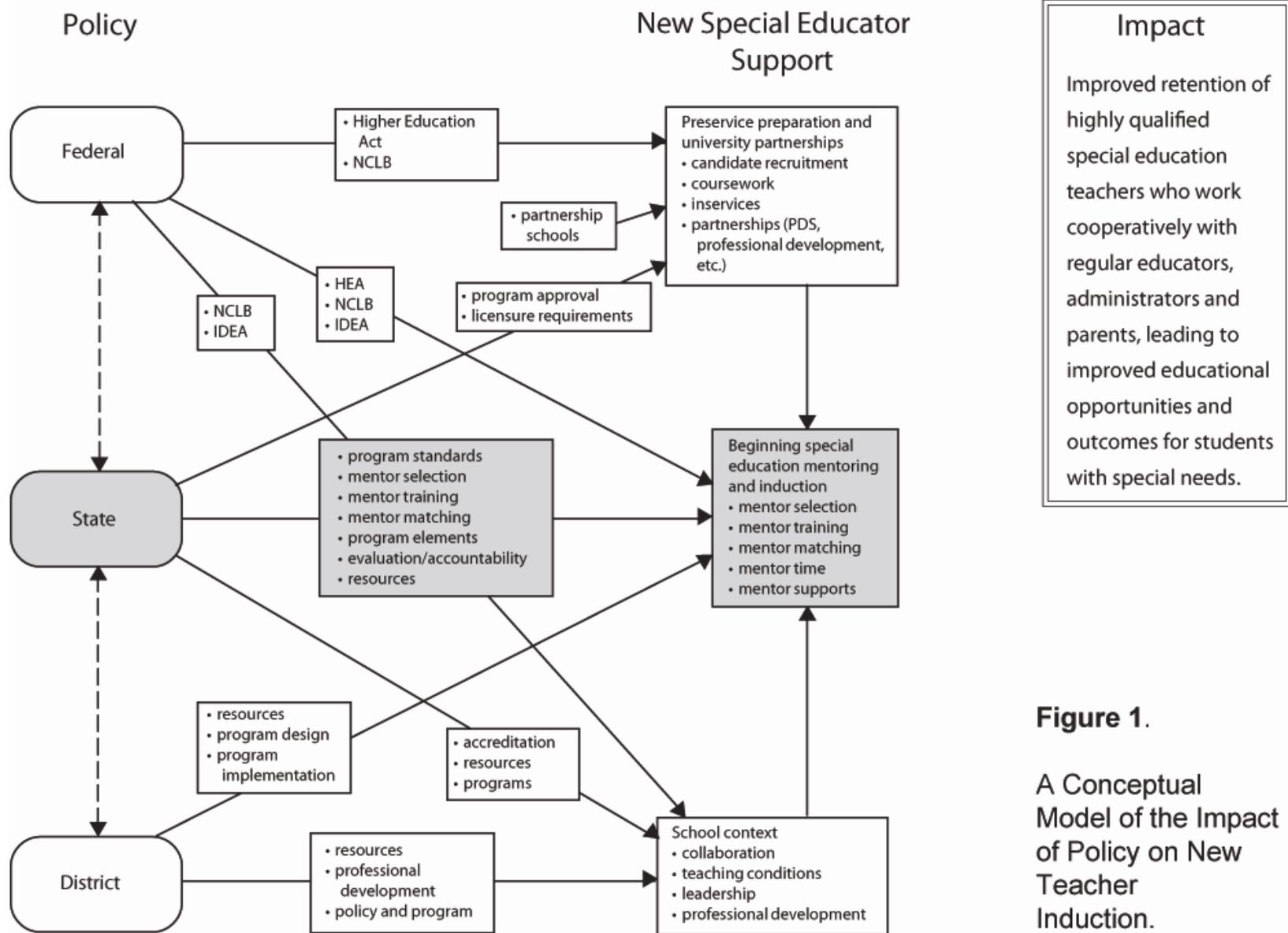
Policy

Federal

- Higher Education Act
- NCLB

- NCLB
- IDEA

- HEA
- NCLB
- IDEA

State

- program standards
- mentor selection
- mentor training
- mentor matching
- program elements
- evaluation/accountability
- resources

- resources
- program design
- program implementation

- accreditation
- resources
- programs

District

- resources
- professional development
- policy and program

New Special Educator Support

- partnership schools

- program approval
- licensure requirements

Preservice preparation and university partnerships
- candidate recruitment
- coursework
- inservices
- partnerships (PDS, professional development, etc.)

Beginning special education mentoring and induction
- mentor selection
- mentor training
- mentor matching
- mentor time
- mentor supports

School context
- collaboration
- teaching conditions
- leadership
- professional development

Impact

Improved retention of highly qualified special education teachers who work cooperatively with regular educators, administrators and parents, leading to improved educational opportunities and outcomes for students with special needs.

Figure 1.

A Conceptual Model of the Impact of Policy on New Teacher Induction.

Table 1. State Policies to Encourage High-Quality Induction

State	Who Is Served	Mentor Selection	Matching & Assignment	Training	Delivery	Accountability & Evaluation	Resources
Alabama	2, 3 *	2, 3 *	2 *, 3 *	2, 3 *	2 *, 3 *	2 *, 3 *	2, 3
Alaska	2	2	2	2 *	2 *	2 *	2 *
Arizona	none	none	none	none	none	none	none
Arkansas	2, 3	2, 3	2, 3 *	2 *, 3	2 *, 3 *	2 *, 3	2, 3 *
California	1	1	1	1	1	1	1
Colorado	2	2	2	2 *	2 *	2, * 3	2
Connecticut	1, 3	1 *, 3	1 *, 3	1 *, 3	1 *, 3	1 *, 3	1, 3
Delaware	1, 2, 3	1, 2, 3 *	1, 2, 3	1 *, 2, 3 *	1, 2, 3 *	1, 2, 3 *	1 *, 2 *, 3 *
Florida	1	1	1	1 *	1	1 *	1
Georgia	1, 2	1, *, 2	1, *, 2	1 *, 2 *	1 *, 2 *	1 *, 2 *	1, *, 2
Hawaii	1	1	1 *	1	1 *	1 *	1 *
Idaho	1	1 *	1 *	1 *	1 *	1 *	1 *
Illinois	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3 *
Indiana	1, 2, 3	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3 *	1 *, 2, 3
Iowa	2	2	2	2	2	2	2
Kansas	1 *, 2 *, 3	1 *, 2, 3	1 *, 2, 3 *	1 *, 2, 3 *	1 *, 2 *, 3 *	1 *, 2, 3 *	1, 2, 3
Kentucky	1, 2	1, 2	1**, 2 *	1, 2	1, 2	1 *, 2	1, 2
Louisana	1, 2, 3	1, 2, 3 *	1 *, 2, 3 *	1, 2, 3 *	1, 2, 3 *	1, 2 *, 3 *	1, 2, 3 *
Maine	1, 2, 3	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3 *	1 *, 2 *, 3	1 *, 2 *, 3
Maryland	1, 3 *	1, 3	1 *, 3 *	1, 3 *	1 *, 3 *	1, 3 *	1 *, 3 *
Massachusetts	1, 2, 3 *	1, 2, 3	1 *, 2 *, 3	1, 2, 3	1, 2 *, 3	1, 2, 3	1, 2, 3 *
Michigan	1, 3	1, 3 *	1 *, 3	1 *, 3 *	1 *, 3	1 *, 3	1 *, 3 *
Minnesota	1, 3	1 *, 3 *	1 *, 3	1 *, 3	1 *, 3 *	1 *, 3	1, 3
Mississippi	1, 2, 3	1, 2, 3 *	1, 2 *, 3 *	1, 2, 3 *	1, 2 *, 3 *	1, 2 *, 3 *	1, 2, 3 *
Missouri	1, 2 *, 3 *	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3	1 *, 2, 3 *	1 *, 2, 3	1 *, 2, 3 *
Montana	2	2 *	2 *	2 *	2 *	2 *	2 *
Nebraska	1, 2	1, 2	1 *, 2	1 *, 2	1 *, 2	1 *, 2	1 *, 2
Nevada	1, 2	1 *, 2 *	1 *, 2 *	1 *, 2 *	1 *, 2 *	1, 2 *	1 *, 2 *
New Hampshire	2, 3	2,3	2, 3	2 *, 3	2, 3	2 *, 3 *	2 *, 3 *

State Law [SL] = 1   Administration Rule [AR] = 2   Program [P] = 3

State	Who Is Served	Mentor Selection	Matching & Assignment	Training	Delivery	Accountability & Evaluation	Resources
New Jersey	2, 3	2, 3	2, 3	2, 3	2 *, 3	2, 3	2, 3 *
New Mexico	1, 2, 3	1 *, 2 *, 3 *	1 *, 2 *, 3 *	1, 2 *, 3	1, 2, 3 *	1, 2, 3 *	1 *, 2, 3 *
New York	1, 2, 3	1, 2, 3	1, 2, 3	1 *, 2, 3	1 *, 2, 3	1, 2, 3	1, 2, 3 *
North Carolina	1, 2	1, 2	1 *, 2 *	1, 2 *	1 *, 2 *	1 *, 2 *	1, 2 *
North Dakota	2	2 *	2 *	2 *	2 *	2 *	2 *
Ohio	1, 2	1 *, 2 *	1 *, 2 *	1 *, 2 *	1 *, 2 *	1 *, 2	1, 2 *
Oklahoma	1	1	1	1 *	1 *	1 *	1 *
Oregon	1, 2	1, 2	1, 2 *	1, 2	1, 2 *	1 , 2 *	1, 2 *
Pennsylvania	1, 2, 3	1, 2, 3	1 *, 2, 3 *	1 *, 2, 3	1 *, 2, 3	1 *, 2 *, 3 *	1 *, 2, 3 *
Rhode Island	1, 3	1 *, 3	1 *, 3	1 *, 3	1 *, 3	1 *, 3	1 *, 3
South Carolina	1, 2	1, 2 *	1 *, 2 *	1, 2 *	1 *, 2 *	1 *, 2 *	1 *, 2
South Dakota	3	3	3 *	3 *	3	3 *	3
Tennessee	2	2 *	2 *	2 *	2	2	2 *
Texas	1, 2	1, 2 *	1 *, 2	1, 2,	1, 2	1 *, 2 *	1, 2
Utah	1, 2	1, 2	1, 2 *	1, 2	1 *, 2	1 *, 2	1 *, 2 *
Vermont	2	2 *	2	2	2 *	2 *	2
Virginia	1	1	1	1	1	1 *	1
Washington	1, 2	1, 2	1 *, 2 *	1, 2	1 *, 2	1, 2 *	1, 2 *
West Virginia	1	1	1 *	1	1	1 *	1 *
Wisconsin	1, 2 *	1 *, 2 *	1, 2 *	1, 2	1 *, 2 *	1 *, 2 *	1, 2 *
Wyoming	none	none	none	none	none	none	none

State Law [SL] = 1   Administration Rule [AR] = 2   Program [P] = 3