

LETTER FROM THE DIRECTOR

Welcome to the first edition of *TQ Research & Policy Brief*—an online publication from the National Comprehensive Center for Teacher Quality (NCCTQ) focusing on the key issues affecting the quality of teachers in our nation’s most at-risk schools (high-poverty, low-performing schools). This series is intended to help ensure those key issues are informed by research and move to the forefront of the policy conversations in states.

The National Comprehensive Center for Teacher Quality, launched in October 2005 as part of the U.S. Department of Education’s system of Comprehensive Assistance Centers, has as one of its long-term goals the successful implementation of the No Child Left Behind (NCLB) Act’s teacher quality requirements through the dissemination of critically reviewed research, strategies, practices, and tools. We also intend to galvanize public and policymaker support on the issue. This quarterly publication will serve as a mechanism for building capacity in the Regional Comprehensive Centers to better understand and respond to the challenges states face in meeting NCLB requirements to ensure all students have access to the very best teachers.

The NCLB mandates are clear: All students should have access to teachers who are certified, have bachelor’s degrees, and have majors in their subject area. In addition, the law requires states to ensure there is an equitable distribution of highly qualified teachers so that a disproportionate number of students in high-poverty urban and rural schools are not left with long-term substitutes or teachers who are not highly qualified.

This inaugural issue of NCCTQ’s *TQ Research & Policy Brief* will focus on the specific challenge of ensuring highly qualified teachers for students with special needs—students at risk for poor educational outcomes and students with disabilities. Teacher quality is especially important for students with special needs as many of them spend the vast majority of their time in general education settings. This issue of NCCTQ’s *TQ Research & Policy Brief* will examine the need to make better connections between teacher preparation, classroom practices, and student outcomes and includes a feature on teaching teachers to improve outcomes for students with special needs.

Each issue of NCCTQ’s *TQ Research & Policy Brief* will include the following:

- A review of relevant research and state policy focused on pointing out the gaps in what we know and what is codified in the law.
- Announcements on the availability of new NCCTQ products and services.
- Useful links to other regional and national organizations addressing teacher quality.
- Feature articles on pertinent topics.

We are proud to join the many organizations and voices around the country working to ensure that high-quality teachers are the norm for all students but especially for students with special needs or in at-risk schools. We hope this publication provides you with a clear window to the research base and opens the door to new and better teacher quality policy.

We look forward to your comments and suggestions on how we can do even better next time.

Sincerely,
Sabrina Laine, NCCTQ Director

The National Comprehensive Center for Teacher Quality is funded by the U.S. Department of Education and is a collaborative effort of Education Commission of the States, ETS, Learning Point Associates, and Vanderbilt University.

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Teaching Teachers to Improve Outcomes for Students With Special Needs: How Can We Do Better?

By Daniel J. Reschly, Ph.D.
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Teacher quality is increasingly recognized as a crucial part of improving the achievement, behavior, and career outcomes for all children.

Recent advances in research, policy, and legal requirements with regard to teacher quality establish the basis for improving outcomes for students—a goal that will be elusive if we cannot create effective teachers in general, remedial, and special education.

Teacher quality is especially important for children with special needs—students at risk for poor educational outcomes and students with disabilities. This includes both special education and general education teachers, as students with special needs typically spend the vast majority of their time in general education settings.

To effectively improve the outcomes for all students, and especially students with special needs, preservice teacher programs need to expand and emphasize their focus in three areas: explicit teaching methodology, culture of high student achievement expectations, and content knowledge.

Explicit Teaching Methodology

Explicit teaching methodologies are endorsed for students with special needs based on multiple research studies and syntheses. While many would argue that explicit teaching is highly desirable for all students, this article will focus on students with special needs.

Explicit teaching involves clear specification of intended teaching outcomes, teaching skills related to desired outcomes, multiple learning opportunities, frequent responding, frequent feedback, and moderate to rapid pace of instruction. Most models of explicit teaching involve various forms of teacher modeling, teacher-student response, independent student response with feedback, and practice to automaticity so that the competence is readily accessible across multiple settings and in future learning events. Complex skills in integrating content, explicit teaching methodology, and matching students' needs with instructional practices lead to the best results.

Kavale (2005) makes a critical point that special education is not a unique teaching methodology but rather greater individualization, increased instructional intensity, enhanced explicitness of instruction, more frequent monitoring of progress, more frequent feedback, and more frequent changes in instructional elements based on individual student progress. The same instructional practices that are effective in general education also are effective in remedial and special education with those additional elements.

Little about effective remedial and special education is “special” in the sense of unique teaching methodologies for students with high-incidence disabilities (e.g., specific learning disabilities) or at-risk characteristics. The use of learning styles or other child attributes, other than prior domain knowledge, has little if any documented benefits for students in general, remedial and special education, with or without special needs. Contrary to widespread beliefs among teachers and other educators, matching instruction to learning styles has little

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documented benefit for children, certainly not benefits of the magnitude of frequent progress monitoring with formative evaluation (Fuchs & Fuchs, 2004). Yet, more time in preservice and professional development teacher preparation is devoted to learning styles in various forms than progress monitoring and formative evaluation. How we teach and what is taught make a huge difference for students with special needs.

Culture of High Student Achievement Expectations

Multiple sources of evidence converge toward the conclusions that better outcomes are possible for students with special needs. Larry Gloeckler, executive director of the Special Education Institute at the International Center for Leadership in Education and former deputy commissioner of the New York State Education Department, rejected the pessimistic views of the mid to late 1980s about the achievement capabilities of students with disabilities, who many thought were simply incapable of passing a high-stakes examination.

“Given the population of students in special education today, there appears to be no reason why performance is so low other than the low expectations that prevail in the systems that serve them, the limited opportunities provided to them to be challenged, and the strategies that have been used to meet their educational needs,” said Gloeckler (personal communication, April 20, 2006).

The New York Regents Examination, a high-stakes and challenging test, has been used for several decades. According to Gloeckler (personal communication, April 14, 2006), at the time he became deputy commissioner of the New York State Education Department in 1989, only 6 percent of all students with disabilities were taking the Regents Examination with 4 percent achieving passing scores. Gloeckler set forth to achieve better results for students with disabilities and by the year 2000, 17 percent of students with disabilities were taking the Regents Examination with 15 percent achieving passing levels. To achieve this notable increase in the number of students taking the exam, the education department first established the goal of improving the passing rates of students with disabilities on the Regents Examination, then trained teachers accordingly in general, remedial, and special education, and also provided annual feedback to districts and the state board of education on improvement results.

Low expectations for student achievement by many educators, college professors, school psychologists, school administrators, parents, and others have diminished the outcomes for students with special needs—primarily because low expectations are often translated to diminished instructional intensity and fewer opportunities to acquire advanced competencies in challenging subjects in the general education curriculum.

Where have these low expectations come from? Consider one possible contributor the Individuals with Disabilities Education Act (IDEA), originally enacted in 1975 as the Education of All Handicapped Children Act, because it led directly to greater emphasis on students with disabilities in preservice programs and professional development teacher preparation. States began requiring preservice general education teachers to engage in special education preparation as part of initial licensure, and most colleges of education added an introductory course for general educators to learn about special education and meet the state licensure requirement.

These required introductory courses, then and now, tend to emphasize the characteristics of the children, with extensive coverage of the symptoms related to diagnoses along with academic and behavior deficits. Few of these courses provide state-of-the-art, useful instructional and behavioral intervention techniques. Instead, the study of these techniques is largely restricted to majors in special education or remedial reading, often at the graduate level. Perhaps this focus on what students with special needs cannot do—rather than on what they can do with high-quality explicit instruction—has contributed to the low expectations.

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Can all students with special needs be expected to achieve the same educational outcomes as other students? Perhaps not, but we are far from reaching the levels that can be attained through the delivery of systematic instruction in the context of challenging subject matter. The challenge for teacher preparation institutions is to ensure the availability of teachers who have high expectations for all students and can deliver effective systematic instruction that focuses on student abilities rather than disabilities.

Content Knowledge

Teachers with greater knowledge of the subject they are teaching, whether it is beginning reading or calculus, typically produce higher levels of student achievement. The evidence is especially strong for early reading and mathematics but likely applies to most age levels and diverse subject matters, with rare exceptions.

Most preservice programs prepare prospective teachers in reading methods that emphasize constructivist, whole-language methods to teach literacy—with reading seen as a part of broadly conceived literacy. In other programs, the absurd assertion that learning to read is as natural as learning to talk is taught. These programs are not adequate to prepare teachers to promote high levels of reading achievement for students with special needs.

Significant efforts are under way to implement the National Reading Panel’s recommendations for preservice teacher preparation and in-service professional development (see <http://www.nichd.nih.gov/publications/nrp/smallbook.pdf>). By improving a student’s reading achievement, great promise for overall achievement can be realized, particularly for a student with special needs. Large gaps exist between the panel’s recommendations regarding scientifically based reading instruction and the preservice preparation of teachers (Steiner, 2004). Closing these gaps is part of improving achievement and increasing the availability of highly qualified teachers.

In Brief

Effectively Teaching Teachers to Improve Outcomes for Students With Disabilities

- Expand and emphasize the focus on explicit teaching methodology—a clear specification of intended teaching outcomes, teaching skills related to desired outcomes, multiple learning opportunities, frequent responding, frequent feedback, and moderate to rapid pace of instruction.
- Expect that better outcomes are possible for students with special needs and deliver effective systematic instruction that focuses on student abilities rather than disabilities.
- Provide teachers with the content knowledge they need to teach the subjects they are teaching.

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Teaching Preparation → Classroom Practices → Outcomes for Students With Disabilities: Where Is the Research?

By Laura Goe and Marnie Thompson
 ETS

In Brief

Teacher Preparation → Classroom Practices → Outcomes for Students With Disabilities: Making the Connection

- Research that examines the connection between teacher preparation, classroom practices, and outcomes for students with disabilities is limited but necessary to be able to effectively improve student performance. While this type of research exists to some extent in general education and many applications to special education can be made, differences in preparation and practice—as well as the collaboration among general and special education teachers—make it important to single out the special education connection for research.
- Conducting research that connects teacher preparation, classroom practice, and outcomes for students with disabilities is challenging: a multistage evaluation is needed; the quality of preparation programs needs to be evaluated; there are practical difficulties with conducting research in natural environments; determining how well teachers implement what they learn during preservice preparation is necessary; and only a powerful research design will be able to detect an effect on student learning.
- Researchers interested in how teacher preparation relates to student outcomes need to design and conduct studies that include classroom practices.

What is the relationship between teacher preparation, classroom practice, and outcomes for student with disabilities?

While understanding this relationship is necessary to ensure that students with disabilities have access to high-quality instruction, a very limited amount of research is available—primarily because this research is difficult and time consuming to conduct. This article will do the following:

- Explain why research about teacher preparation, classroom practices, and outcomes for students with disabilities is important.
- Describe some of the challenges associated with conducting such research.
- Present a framework that can connect teacher learning to student outcomes.

Research examining the relationship between teacher preparation, classroom practices, and outcomes for students with disabilities is important.

Little research has been done that tries to make the *teacher preparation* → *classroom practices* → *student outcomes* connection for special education teachers. More has been done in the area of preparing general education teachers, and some of the findings from that body of research may be applicable to special education

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teacher preparation. However, there also are substantial differences that make it important to single out the special education connection for research, including the following:

- **Special education teachers are often trained in separate departments, apart from general preservice teachers.** While this segregated program model has been criticized and more collaboration is now occurring, it is still the reality for many preservice special education teachers that the focus of their program may be entirely different from that of general education preservice programs.
- **Special education teachers are no longer always segregated within schools.** The days of confining all students with disabilities to special classrooms are waning, and both the students and the teachers are moving into general education classrooms. This movement means that special education and general education teachers need to have an additional component to their training—learning to collaborate with each other on how best to meet the needs of students with disabilities as they work with their general education peers.
- **Special education teacher practices go beyond academics.** Concurrent with the movement toward “mainstreaming” special education students, there has been a recent focus on ensuring that academic instruction for special education students is substantively the same as that for general education students. However, special education teachers typically spend more time working with students on individual behavior, socialization skills, and appropriate interactions with teachers and peers—behavioral goals are specified in students’ individualized education programs (IEPs) and thus merit teachers’ time and attention. But these types of non-academic priorities get much less attention in the general education classroom, where it may take the form of classroom management—ensuring that students function at a level that permits academic instruction to occur with relatively few interruptions, and with much less attention to individual behavioral outcomes.

Research examining the relationship between teacher preparation, classroom practices, and outcomes for students with disabilities has been minimal.

Mounting rigorous studies of a complex intervention like teacher preparation (to teach students with special needs, or, for that matter, to teach any subject or group of students) is technically challenging and requires substantial resources in staff time and training. It also requires the development of appropriate instruments to measure how well the goals are actually implemented, and to assess student learning outcomes. Conducting a full evaluation of any intervention designed to help teachers teach better requires substantially more time, resources, and expertise than is usually allocated for such research. The resources to carry out such studies are not always available, making it difficult to conduct this research with the rigor that is needed. There are five primary challenges to conducting this type of research.

Multistage Evaluation

Research on *teacher preparation* → *classroom practices* → *student outcomes* is particularly difficult because of the multi-stage logic underlying investments in teacher preparation. The three stages are as follows:

- Stage 1 focuses on the role of teacher preparation in developing teacher knowledge (and perhaps practice) and includes a theory (which may vary by program) specifically about how such preparation will result in better teaching.

- Stage 2 is focused on the belief that because of excellent preparation, new teachers are more effective in the classroom.
- Stage 3 concludes the theory with the idea that because students are being taught by more effective teachers, they learn better.

Evaluating the effectiveness of teacher preparation, then, must also be conducted as a multi-stage process. It is important to verify the strength of the model at the three strategic points: (1) the quality of the preparation, (2) the degree to which teachers improve their teaching practices, and (3) the degree to which student learning is increased because of better teaching.

It is not enough to show that the preparation as delivered was of high quality in its content; nor is it enough to show that teachers improved their knowledge of teaching; nor is it enough to show that student learning improved in isolation from improvements in teaching. To establish the effectiveness of any teacher preparation program, all three phases of the model must be evaluated. Unfortunately, many evaluations of teacher preparation have been limited to assessing the content and quality of the programs as delivered, often judged only by expert reviews of course requirements, syllabi, and reading materials or satisfaction surveys of participants.

These forms of research are certainly useful, but they can only address the first step of the *teacher preparation* → *classroom practices* → *student outcomes* process, and even then in a fairly limited way. These types of “evaluations” are common simply because they are relatively easy to conduct.

Examining the Quality of Preparation Programs in Themselves

When looking at teacher preparation programs, it is important to look beyond the syllabi and course requirements. While these provide useful information, there are other factors to consider, as follows:

- Researchers should examine admission procedures to assess what knowledge, characteristics, and skills *candidates for admission* to a teacher preparation program should have in order to increase the likelihood of developing them into skilled special education teachers. Programs may have very different requirements, and the initial selection into programs may impact the potential for effective instruction.
- Researchers should also ask what an *effective instructor of teacher candidates in a special education program* knows and is able to do to maximize learning of novice special education teachers. For example, what are the qualifications of these instructors? Have they taught special education in a K–12 setting? Do they have substantial experience supervising novice teachers during their first years in the classroom?
- Researchers should investigate the expectations of the teacher preparation program. For example, do the programs specify what an *effective special education teacher* should know and be able to do in the classroom (by grade level and/or specialization)? Have they made those expectations clear to both instructors and teacher candidates? Have they established mechanisms to measure whether teachers have met those expectations?

Natural Settings

Another set of methodological issues stems from the practical difficulties of conducting rigorous research on complex interventions in natural settings such as classrooms, schools, and districts. It is certainly possible to conduct randomized experimental studies—considered the “gold standard” of “what works” research—of some educational phenomena, particularly interventions that are rather simple in implementation and intent.

Conducting such studies with complex interventions like teacher preparation is daunting. Even “quasi-experimental” designs can prove difficult to mount, due to the practical difficulty of locating an appropriate comparison group—students and teachers not allocated to schools and to each other on a random basis. Another challenge in conducting comparison studies is when programs are implemented systemwide (so there are no comparable teachers who are *not* in the intervention group) or when specific populations of teacher-candidates are different from other new teachers (e.g., they are the only alternative certification teachers).

Preservice to Practice Implementation

Another important methodological issue arises from the challenge of reliably assessing the “fidelity of treatment” (i.e., how well teachers implemented what they learned as part of their preparation programs). We need to find out if practices that were taught in the preparation program have actually been integrated into the new teacher’s practice.

Classroom observation and interviews, which are probably the most valid ways to know what teachers actually do, are time consuming, resource and staff intensive, and very expensive. Other measures that have been used to assess what teachers do in their day-to-day teaching include surveys and activity logs. These have shown some reliability and validity in large-scale studies in reporting certain kinds of instructional data, such as curriculum coverage, duration of specific classroom activities, and formats of instruction. However, even daily logs have been shown to be limited in their ability to assess more fine-grained details of practice accurately and completely, and it is in these details that students, especially those with special needs, experience the day-to-day life of the classroom. More research work needs to be done to develop log and survey tools that can get at these details, particularly tools designed to assess what is going on in special education teachers’ classrooms.

Measuring Impact on Student Learning

A practical challenge in measuring impact on student learning is that it may be difficult to obtain student achievement data that are traceable to specific teachers for large-enough samples of teachers in both the “treated” and “untreated” groups. And the selection of measures of student achievement is a nontrivial matter: Many tests are simply not designed to accurately gauge learning of special education students, and it has not yet been established what a “good enough” gain in scores might be for special education students.

Another challenge is the sheer size of the samples required to support research with adequate statistical power—to have the large numbers of participants needed to reliably *detect* an effect on student learning if it is present. Where teachers are the proper unit of analysis, as is the case in research on the *teacher preparation* → *classroom practices* → *student outcomes* connection, it is often necessary to have 80–100 teachers in the treatment and comparison groups. Given the relatively scant distribution of special education teachers, researchers would probably have to work with teachers in 80–100 different schools. Remember: In studying the impact of teacher

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preparation, the focus is on *new* teachers and in any given school, only one might be both new and willing to participate in such a study.

Finally, there is a further complication stemming from the large numbers of schools needed: each school is likely to have its own curriculum, which adds considerable uncertainty into the conclusions that such a study could support. Limiting the study to schools that use a particular curriculum would solve this problem, but makes it harder to find eligible schools and teachers.

A recommendation for connecting teacher preparation, classroom practices, and outcomes for students with disabilities.

Some research has been done that attempts to make the connection between teacher preparation and student outcomes but very little includes classroom practices. Researchers interested in how teacher preparation relates to student outcomes need to design and conduct studies that include this important component.

There are two implications from this recommendation, as follows:

1. Research focused on the *teacher preparation* → *classroom practices* → *student outcomes* will be complex, and a mixed-methods research design (using data collected from multiple sources such as observations, interviews, surveys, logs, and test scores) may be most appropriate.
2. Mixed-methods research typically costs more, mainly because observations, interviews, and activity log studies are time consuming to conduct and analyze. Thus, obtaining sufficient funds to carry out the research will require the cooperation of funding agencies.

Teaching Students With Special Needs: What Is the Role of State Policy?

By Tricia Coulter, Ph.D.

Education Commission of the States (ECS)

Quality state policy serves two primary functions. The first is to establish parameters of authority and activity. The second is to set requirements that reflect the goals and priorities of the area or issue addressed by the policy. Quality state policy also should be informed by valid, relevant research and proven practice. In this manner, state policy serves to empower the individuals it governs.

State policy related to teacher quality is complex and multifaceted. A state-level policy that overreaches may inadvertently dwarf the ability of other involved agencies and organizations to reach their goals or serve their populations. By providing too little direction, however, a policy may not give a clear indication of priorities. Additionally, state policy needs to be dynamic to reflect advances in knowledge and alterations in context and culture.

Promoting Professional Development Policies for Teaching Students with Special Needs

Given a continually changing context, an example of the type of challenge inherent in the development of new state policy is found in the lack of professional development requirements to support the growing numbers of students with special needs—students at risk for poor educational outcomes and students with disabilities. As circumstance, knowledge, and theory have advanced around how best to serve these students, more children formerly educated in a setting separate from mainstream classrooms are now members of those classrooms. For example, according to a 2005 report from the U.S. Department of Education¹, in the 2003-04 school year, almost half of students with disabilities spent 80 percent or more of the day in regular classrooms. This means a large number of general education teachers teach students with disabilities. The question then becomes: How are states preparing general education teachers to teach all students?

According to a review of state policies found on the Teacher Preparation Policy Database created for the *Teaching Quality (TQ) Source* website (<http://www.tqsource.org>)², 25 states plus the District of Columbia and Puerto Rico have state statutes or regulations requiring teacher education programs for initial elementary or secondary certification to provide instruction on teaching children from special populations. Specificity of these requirements is difficult because states use a number of terms in these policies including special needs, disabilities, handicaps and exceptionalities. Because of the variance in terms and because the amount and content of the instruction varies dramatically between states, it is difficult to determine whether this is adequate preparation without conducting additional analyses.

Regardless of the adequacy of initial preparation, successful teaching also requires a commitment to ongoing training. This training allows teachers to keep up with new knowledge in their content area, advancements in

¹ Wirt, J., Choy, S., Rooney, P., Hussar, W., Provasnik, S., & Hampden-Thompson, G. (2005). *The condition of education* (NCES 2005-094). Washington, DC: National Center for Education Statistics. Retrieved April 18, 2006, from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005094>

² This database is being updated as part of the work of NCCTQ.

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general, and content-specific pedagogy as well as new information on how best to deal with shifting school environments and the changing and increasingly diverse student population. High-quality professional development is one way to meet this need, and state policy is one mechanism by which state policymakers can demonstrate their commitment to this ideal and establish guidelines for it.

In January 2005, ECS created a database on state policies that govern teacher professional development,³ including topic-specific professional development required of all teachers and policies for paraprofessionals and substitute teachers. ECS found just seven states include language on professional development specific to special-needs students, and five of these states include it only for paraprofessionals. Only two states specify in-service training for special-needs students for all teachers.

In Connecticut, the General Assembly (Chapter 170 § 10-220a [<http://www.cga.ct.gov/2005/pub/Chap170.htm#Sec10-220a.htm>]) states:

Each local or regional board of education shall provide an in-service training program for its teachers, administrators and pupil personnel who hold the initial educator, provisional educator or professional educator certificate. Such program shall provide such teachers, administrators and pupil personnel with information on [...] (3) the growth and development of exceptional children, including handicapped and gifted and talented children and children who may require special education, including, but not limited to, children with attention-deficit hyperactivity disorder or learning disabilities, and methods for identifying, planning for and working effectively with special needs children in a regular classroom.

In Massachusetts, the Department of Education (603 CMR 28.03 [<http://www.doe.mass.edu/lawsregs/603cmr28.html?section=03#start>]) states:

Each school district shall provide training to all school district staff, including general and special educators, administrators, and paraprofessionals, on the requirements of special education.

As states address the challenge of how best to mandate the effective use of professional development resources to address the needs of all students, certain aspects of professional development should be kept in mind. NCLB encourages states to ensure teachers have access to professional development that is supported by “scientifically based research.” While there is little research on the connection between teacher preparation, classroom practices, and student outcomes for special education teachers (see the article by Laura Goe and Marnie Thompson in this publication), there is general consensus about several characteristics common to effective professional development. According to a recent study by McREL⁴, effective professional development is as follows:

- Of considerable duration.
- Grounded in the curriculum students study.

³ ECS Professional Development Database: Full State Report is available at <http://mb2.ecs.org/reports/Report.aspx?id=425>

⁴Snow-Renner, R. & Lauer, P. (2005). *McREL Insights—Professional Development Analysis*. Aurora, CO: Mid-continent Research for Education and Learning.

- Embedded within an aligned system and connected to several elements of instruction.
- Characterized by collective participation of educators.
- Consistent with teachers' goals, other activities, materials, and policies.
- Infused with active rather than passive learning.

In terms of the best role for state policy, it is usually appropriate to leave the specifics of design and implementation of any given program to a school or district. However, the challenges associated with the education of special-needs students in general education classrooms affect a greater number of teachers than before. The importance and far-reaching nature of this challenge may merit consideration about how it could best be included in state policy to ensure the best possible education for all students.

Action Steps

Ensuring High-Quality Professional Development Through State Policy Actions

Ensuring broad access to high-quality professional development is an important state responsibility. However, potential barriers to access must be addressed in every school and district. Policymakers and school personnel should consider the following key issues and questions in their efforts:

- Are there adequate opportunities, resources, and support for professional development in your state?
- Does the professional development offered meet the criteria of effectiveness?
- Is professional development in your state aligned with student K–12 standards as well as standards for effective teaching?
- Does the required professional development address the key goals and priorities of the state?
- Are there adequate incentives to encourage teachers to pursue effective professional development?
- How can state policy be used to ensure timely and job-embedded opportunities for professional development?
- How can states ensure the broadest access to high-quality professional development even in poor or isolated districts?

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Highlights

Availability, Recruitment, and Retention Cited As Most Significant Needs

A survey conducted by NCCTQ identified teacher availability, recruitment, and retention as the top three priorities for regional comprehensive centers and states. The survey was administered to regional comprehensive centers in early 2006 and sought to obtain their views on state priorities. This information will be very helpful to NCCTQ as resources are developed, meetings and events are organized, and future work is planned.

Visit NCCTQ Online

National Comprehensive Center for Teacher Quality (<http://www.ncctq.org>)

Teacher Quality in At-Risk Schools—Emerging Strategies

NCCTQ's *TQ Source* website (<http://www.tqsource.org>)—an online, comprehensive national source on teacher quality—now features *TQ Source Tips and Tools: Emerging Strategies to Enhance Teacher Quality* (<http://www.tqsource.org/strategies/>), created to help education practitioners tap into strategies and resources they can use to enhance teacher quality. The inaugural topic is Teacher Quality in At-Risk Schools and explores the following key issues, among others: performance-based pay; teaching as a career with advancement and leadership opportunities; induction, mentoring, and support of new teachers; and recruiting minority teachers.

Webcast: Raising Student Achievement Through the Equitable Distribution of Teachers

NCCTQ hosted a live, interactive webcast that explored the topic of teacher distribution on March 30, 2006. More than 150 participants logged in to hear the expert panel. A recording of the webcast as well as the panelists' PowerPoint slides are available at <http://www.ncctq.org/webcasts/equitable>.

Resources

The following organizations offer information about teacher quality issues for students with disabilities:

- Center on Personnel Studies in Special Education (COPSSE) (<http://www.copsse.org/>). A research center devoted to studying issues affecting teacher quality in special education.
- Center for Improving Teaching Quality ([http://www.ccsso.org/projects/Center for Improving Teacher Quality/](http://www.ccsso.org/projects/Center%20for%20Improving%20Teacher%20Quality/)). A national center, funded by the Office of Special Education Programs at the U.S. Department of Education, that works with states on developing models for improving the preparation, licensing, and professional development of general and special education teachers of students with disabilities.
- IRIS Center for Faculty Enhancement (<http://iris.peabody.vanderbilt.edu/>). A dissemination center providing evidence-based teaching modules to college faculty working in preservice preparation programs.
- National Center for Special Education Personnel and Related Service Providers (<http://www.personnelcenter.org>). A technical assistance center that builds state capacity to recruit, prepare, and retain highly qualified, diverse personnel.

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