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ABSTRACT

This paper examines alternative teacher certification in the NCREL region (Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin), reviewing relevant literature, analyzing current Schools and Staffing Survey (SASS) data, reviewing information on alternative certification programs in these states, and offering results from a survey of over 1,000 principals in the region regarding their experiences with alternatively certified teachers. Results suggest that alternative certification has had a fairly substantial impact on the region, even in states where legislation authorizing these programs is relatively new. Induction experiences of alternatively certified teachers are relatively similar to those of other new teachers. While principals rate a large majority of teachers from alternative certification programs as equal to or above other newly hired teachers in terms of quality, they rate the performance of slightly more than one-fourth of alternatively certified teachers below that of other new hires. Results find that alternative certification programs have only a small effect on the diversity of the region's teaching force, and most teachers hired from alternative certification programs have been retained at rates equal to those of other new hires. Recommendations include: accreditation for alternative certification programs, incentives and rewards for quality programs, and increased funding for research and evaluation. (Contains 19 references.) (SM)

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The Impact of Alternative Certification in the Midwest

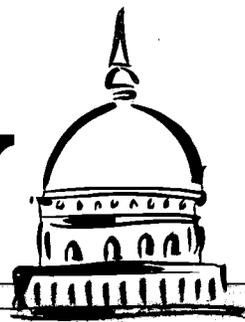
Policy Issues

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NCREL POLICY ISSUES



Issue 12

November 2002

A Research-Based Analysis of Education Issues

About This Issue

This edition of *Policy Issues* focuses on alternative teacher certification in the NCREL region (Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin). A brief literature review is presented, and the results of an analysis of the latest Schools and Staffing Survey (SASS) are discussed. Information on alternative certification programs in the seven states is reviewed, and the results of a survey of over 1,000 principals in the region regarding their experiences with alternatively certified teachers are described.

The results of the analysis of the SASS data suggested that alternative certification has already had a fairly substantial impact on the region, even in states where legislation authorizing these programs is relatively new. This analysis also showed that the induction experiences of alternatively certified teachers are relatively similar to those of other new teachers. The survey of principals in the region revealed that while a large majority of teachers from alternative certification programs were rated as equal to or above other newly hired teachers in terms of quality, the performance of slightly more than one fourth of the alternatively certified teachers was rated below that of other new hires. The survey also found that alternative certification programs have had only a small effect on the diversity of the teaching force in the region, and that most teachers hired from alternative certification programs have been retained at rates equal to those of other new hires.

This report on alternative certification concludes with suggestions regarding future policy decisions. These include accreditation for alternative certification programs, incentives and rewards for quality programs, and increased funding for research and evaluation.

A Message From Gina Burkhardt, NCREL Executive Director

Colleagues: *Welcome*

It has become increasingly clear that learning for all students is greatly enhanced by exposure to highly qualified teachers—those who are skilled in their content area and research-based pedagogical practices.

In this edition of NCREL's Policy Issues, we continue our program of applied research in the area of teacher and administrator quality and quantity by reviewing the current state of alternative teacher certification in the NCREL region.

In response to the need for a larger pool of high-quality teachers, particularly in urban and rural areas and in subjects like math and science, alternative certification programs have been proliferating across the country. In fact, the No Child Left Behind Act specifically highlights the importance of teacher quality and endorses alternative routes to certification as one approach to addressing this issue. However, in order to determine the impact these programs may have on the quality of classroom instruction, more and better data must be collected and analyzed so that sound policy decisions about their use can be made. This report analyzes two sets of data and offers policy recommendations designed to increase the likelihood that alternative certification programs prepare candidates at the highest level.

As always, your comments and feedback related to our work are invited. Please contact Ray.Legler@ncrel.org for additional information on this study or others in this series.

The Impact of Alternative Certification in the Midwest

By Ray Legler, Ph.D.

Introduction

In response to increasing attention to the issues of teacher quality and quantity, alternative approaches to teacher certification have become widespread. Alternative certification allows individuals who typically (but not always) possess an undergraduate degree in a field other than education to participate in a shortened training

See questions
legislators ask on
page 15.

and/or on-the-job learning experience that leads to full certification. Alternative certification programs have grown rapidly across the U.S., in large part due to concerns about teacher quantity (Feistritzer & Chester, 2002). Estimates of the increases in numbers of students and teacher retirements over the next decade have led to the suggestion that we will need over two million new teachers in the next ten years (U.S. Department of Education, 1999). While this number is debatable, it has been one of the primary drivers of the alternative certification movement. In the Midwest, where fully one-fourth of the nation's school-aged children reside, the issue of teacher quantity is particularly relevant. A recent NCREL study of teacher recruitment and retention found that 58 percent of districts in the North Central region reported hiring teachers under temporary licensure (Hare & Heap, 2001). This proxy measure of teacher supply and demand indicates a significant need for teachers in our region.

Since alternative routes to teaching have only begun to proliferate over the last 10-15 years, definitions of what constitutes an alternative certification program vary widely, and research on the effectiveness of these programs as a group is mostly inconclusive so far. An example of the definitional problem is illustrated by Feistritzer and Chester (2002):

The term "alternative certification" historically has been used to refer to every avenue to becoming licensed to teach, from emergency certification to very sophisticated and well-designed programs that address the professional preparation needs of the growing population of individuals who already have at least a bachelor's degree and considerable life experience and want to become teachers. (p. 3)

The fact that alternative certification programs are defined differently and include a variety of components limits the ability of researchers and others to make claims about their effectiveness or ineffectiveness. To further complicate the issue is the fact that research in this area has been plagued by a number of methodological problems, which will be discussed on these pages. At a basic level, it is safe to say that there is more that is not known about these programs than is known.

This edition of *Policy Issues* explores the topic of alternative certification. Rather than attempt to draw specific conclusions about effectiveness, this paper's goals are to review what we do know from the literature and to present some exploratory data on the current state of alternative certification in the Midwest. First, a brief literature review is presented. Following that are three topics: an analysis of the recently released Schools and Staffing Survey, a report on programs in the NCREL region (Iowa, Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin), and a recent study of alternative certification conducted by NCREL. Finally, policy recommendations based on the literature and our research findings are presented.

In order to assess the impact of alternative certification on the region, we sent surveys to 3,400 principals in the seven states in our region, and received 1,110 responses. We asked them several questions about their experiences with alternatively certified teachers, including questions about the number of alternatively certified teachers that they had hired, the quality of those teachers, and (if applicable) the extent to which hiring those teachers had helped address their teacher shortage problems.

Literature Review

Background

Alternative certification has both supporters and critics. Supporters argue that the United States' need for teachers in the coming years exceeds the capacity of traditional teacher education programs. The often-cited need for 2.2 million teachers over the next ten years has spurred educators to seek alternative routes to fill teaching vacancies, which has led supporters of alternative certification programs to suggest that we need to supplement the pool of potential new teachers with an approach that brings in people from other fields. This pool of potential teachers includes those who have decided to change careers, have left the military, have graduated with degrees in areas other than education, or have received teaching certificates or education degrees years ago and now want to teach. Some supporters also contend that, overall, colleges of education have failed to provide the United States with a sufficient number of teachers who are well prepared and able to educate all of our students (Haberman, 1991). As a result, supporters argue that alternative approaches to traditional teacher preparation are acceptable since these programs allow new teachers to learn in the "real world." Further, alternative certification supporters contend that these programs could do no worse than traditional, but inadequate, teacher education programs.

Opponents of alternative certification programs disagree with all of these points. They argue that concerns about massive teacher shortages in the near future are somewhat misplaced. Where shortages do exist, they appear to be specific to particular regions and subjects. (Overall, there is actually a good supply of teachers across the

country, as will be discussed later in this paper.) Opponents of alternative certification programs also argue that, while many traditional teacher education programs could stand to be strengthened, many schools of education have moved (and continue to move) toward more rigorous, standards-based approaches to teacher education. From this perspective, the answer to the problem of inadequate teacher preparation is not to circumvent college-based programs but to continue to strengthen these programs through two methods: first, through adherence to strict standards (e.g., those of the National Council for the Accreditation of Teacher Education) and second, through demonstration of teaching skills prior to the start of a teacher's career. Skeptics of alternative certification programs point out that in no other profession with the potential for inadequately prepared practitioners to do harm (e.g., medicine, law, and psychology) are the requirements for extensive college-based instruction, supervised internship, and testing viewed as optional.

Two additional reasons cited by supporters for the need for alternate routes to teacher certification include the desire to address regional and subject-specific teacher shortages and the desire to diversify the teaching force particularly in urban areas. This is because teacher shortages are more likely to be found in urban and rural schools than in suburban schools (Berry, 2000) and in specific subject areas such as math, science, and special education. Many states and school districts have created alternative programs to address these particular issues. In terms of diversity, Feistritzer and Chester (2000) note that 9 percent of teachers and 26 percent of students in the U.S. are minorities. Alternative certification programs have the potential to

recruit qualified people of color into the teaching profession.

Analysis of these assumptions by skeptics of alternative certification programs cast some doubt on their validity. For one thing, concerns about the overall teacher shortage are somewhat inaccurate. While there is little doubt about certain demographic trends such as the aging of the teaching force, closer examination of the data reveals that the impending dramatic shortage of teachers may be overstated. Many vacant teaching positions will be filled in the future, not only by new graduates of teaching preparation programs but also

The often-cited need for 2.2 million teachers over the next ten years has spurred educators to seek alternative routes to fill teaching vacancies, which has led supporters of alternative certification programs to suggest that we need to supplement the pool of potential new teachers with an approach that brings in people from other fields.

by teachers who have relocated, left positions for other reasons, or returned to the teaching force after an extended absence.

Data from the National Center for Education Statistics showed that less than half of the teaching positions across the U.S. were filled by teachers who had just completed teacher education programs (Feistritzer & Chester, 2000). The rest of the positions were filled by people who had either earned their degrees over one year before or who were returning to teaching after having left for a period of time. Feistritzer and Chester (2000) estimated that colleges of education graduate more than twice as many new teachers each year (over 100,000) as are hired

to teach immediately after graduation, and that about 25 percent of all current teachers hold undergraduate degrees in fields other than education. This means that there are actually plenty of people with education degrees, and if we consider the fact that many teachers hold degrees outside education, the pool of potential teachers is actually quite large. The frequently cited figure of two million teachers needed over the next ten years becomes less daunting when one considers that schools of education will graduate over one million potential teachers in that period, and that many more potential

teachers will come from other fields. The regional and subject-specific shortages described above will certainly continue to be significant problems, but they are really issues of teacher distribution rather than availability.

Some proponents suggest that alternative certification programs offer the chance to circumvent inadequate schools of education and to increase the number of minorities entering the teaching profession. Opponents counter that less preparation is hardly an answer to concerns about teacher quality (Tozer & Miretzky, 1999). In addition, they note that in urban districts with high percentages of students of color, almost 40 percent of the teachers are minorities.

Regardless of the arguments, alternative programs have proliferated substantially over the last 30 years. The number of alternative certification programs (as defined by Feistritzer & Chester, 2000) has grown to at least 85. In 1998-1999, about 24,000 teachers gained certification through alternative programs (Feistritzer & Chester, 2000). More recently, Feistritzer and Chester (2002) stated that alternative certification programs can be found in 45 states and the District of Columbia. The authors estimate that over 175,000 teachers have been licensed through alternative programs.

While the components of alternative certification programs vary widely from state to state and region to region, they typically involve some period of intensive, condensed academic course work or training. In addition, they usually require a period of supervised, on-the-job training in which new teachers are expected to learn their teaching skills in the classroom. Supervision ranges from very little to intensive oversight and mentoring on a constant basis for at least the first year. Typically, new teachers are expected to eventually pass certification tests and become fully certified teachers.

Research and evaluation

As the number of alternative certification programs continued to increase during the 1990s, research on their structure and effectiveness became more intensive and pervasive. Today, there exists a substantial body of literature on alternative certification that includes discussions of research, policy, and practice. Overall, the research to this point has been unable to clearly substantiate the effectiveness of these programs. Several studies have found positive or mixed results, but a significant portion of the research on alternative

certification programs has arrived at negative conclusions.

One recent study that compared alternatively and traditionally prepared teachers began with a review of research and cited a substantial body of research that found either better or similar results for alternatively certified teachers when compared to traditionally prepared teachers (Miller, McKenna, & McKenna, 1998). However, the authors stated that, overall, the research on alternative certification programs is “inconclusive and somewhat contradictory” (p. 166). This is due to the fact that a variety of methodologies has been used to study alternative programs,

a variety of outcome variables has been examined, and a variety of operational definitions has been used to define variables.

Other problems that tend to confound studies of alternative programs include inappropriate comparisons of alternatively certified teachers to nonequivalent groups from different regions or states. Comparisons of the qualifications of alternatively certified teachers to those of traditionally prepared teachers are somewhat disingenuous. For example, teachers in alternative programs may in fact have higher GPAs than traditionally certified teachers, but this is usually due to high screening standards and

What can we learn from the divergent findings reviewed here? Some studies find positive results from alternative certification programs, some find negative results, and others find some positive and some negative.

Positive results reviewed include these:

- Alternative certification programs can increase the number of minority teachers and increase the number of teachers in shortage areas.
- The classroom performance and student outcomes of alternatively certified teachers can be similar to those of traditionally certified teachers in some programs.
- Careful screening of applicants can contribute to intern quality.
- Intensive mentoring and support can contribute to the development of alternatively certified teachers.

Problems with alternative certification programs include the following:

- There is no increase in the retention rate of alternatively certified teachers in comparison to traditional certification.
- Some alternatively certified teachers are unable to learn content knowledge “on the job.”
- Some programs have allowed completely unqualified people to assume total responsibility for the classroom.
- Some alternative certification programs do not give adequate attention to curriculum development, pedagogical knowledge, and classroom management.

high ratios of applicants to openings. Studies that attempt to compare the teaching of alternatively certified teachers to that of regular teachers often employ weak or nonsystematic approaches to the assessment of teacher performance, rely on state or district measures, or have extremely small sample sizes (Hawley, 1990). Reliance on district or state data to assess classroom teaching is inappropriate because these data are typically measures of student, not teacher, performance. In addition, these types of data are typically standardized, aggregated test score data that are difficult to use in assessing individual teacher behavior. Finally, studies that compare alternatively certified teachers to traditionally prepared teachers are problematic because the teachers used for comparison most likely graduated from schools of education before the recent shift toward an emphasis on standards and outcomes. Studies that conclude that alternatively certified teachers differ little from other teachers beg the question of the quality of those other teachers.

In attempting to address some of the methodological weaknesses of the alternative certification research, Miller, McKenna, and McKenna (1998) designed a series of studies, both quantitative and qualitative, to examine the effectiveness of an alternative program. The results showed that after three years of experience and mentoring, the two groups were basically the same. While this study compared the two groups after three years, many critics of alternative certification programs are more concerned about the impact on students of teachers with little training during the first year. The authors suggested that in order to see similar results in other programs, the intensive three-year mentoring and support that were

Characteristics of Effective Programs

Feistritzer and Chester (2000) offer a six-point model for effective alternative certification programs and suggest that quality programs should do the following:

- Be market driven. Programs should be designed specifically to meet the needs of particular regions or subject areas.
- Be tailored to meet the specific needs of the participants (e.g., college graduates).
- Prepare individuals for specific positions in specific schools.
- Provide prospective teachers with mentors.
- Allow candidates to go through their training in cohorts so that they will have sufficient support.
- Work as collaborative efforts between state departments of education, colleges and universities, and local school districts.

central to the program should be a model for other alternative certification programs. This begs questions regarding the costs associated with such thorough mentoring and is an example of a variable of interest in the study of alternative certification programs that requires further research.

Data on the characteristics of alternatively certified teachers and their impact on the diversity of the teaching force are also mixed. An examination of survey data from over 14,000 teachers compared the responses of traditionally and alternatively prepared teachers (Shen, 1998). Results of this study showed that a higher percentage of minorities enter teaching through alternative certification programs than through traditional ones, and teach in urban schools with high percentages of students of color. Results of this study also indicated that alternative programs are effective at recruiting math and science teachers who have degrees in those fields. On the negative side, the researcher found that while alternative certification programs recruit and prepare minority teachers with high education levels, they

also bring in minority teachers without college degrees.

Studies of teacher performance are no more conclusive than the research discussed above. A review of the literature on the performance of alternatively certified teachers in comparison to graduates of teacher-preparation programs found several studies that supported the idea that regularly certified teachers outperformed those from alternative certification programs (Jelmborg, 1996). This review also found studies that provided evidence for the quality of alternatively certified teachers, and still others that had mixed results. In an attempt to sort out the issue, the author analyzed survey data from recently certified teachers and found no differences between alternatively certified and traditionally prepared teachers in terms of academic credentials. Jelmborg did find that after three years of teaching experience, the overall ratings of teacher performance by principals were higher for the graduates of traditional teacher-preparation programs than for the alternatively certified teachers.

Perhaps the most vocal critics of alternative certification have been Linda Darling-Hammond and her colleagues (Darling-Hammond, 1994; Darling-Hammond, 2000; Darling-Hammond, Wise, & Kline, 1999). Darling-Hammond has been a staunch supporter of the need for sound and thorough preparation of teachers that includes rigorous academic coursework at the undergraduate level, highly structured and supervised internships, full licensure before a teacher candidate is given control of a classroom, and ongoing professional development. Many critics of alternative certification programs would contend that assigning students to teachers who have entered through shortened preparation programs is as inconceivable as entrusting them to the care of a doctor who has had six months of intensive course work and a mentor in the next room.

A review of one of the most well-known alternative programs, Teach for America (TFA), was scathing in its criticism (Darling-Hammond, 1994). The author cited several anecdotes about TFA recruits entering classrooms entirely unprepared to teach on their own, with substantial negative consequences for both the teacher and the students. She went on to criticize the costs, training, and quality control of the project, and argued that, far from being equal to teacher education programs, the TFA does not come close to adequately preparing participants to teach.

Quantitative research studies of TFA are not nearly as pessimistic. One study conducted by Kane, Parsons, and Associates examined the ratings of TFA teachers by the principals who supervised them. TFA teachers were rated as “good” or “excellent” on 23 indicators of successful teaching by over 90 percent of the principals surveyed (Kopp, 2000). Another

study, conducted by CREDO (formerly the Center for Research on Education Outcomes), looked at the effects of TFA teachers in the Houston school system on student achievement as compared to other teachers. The results of this research suggested that students of TFA teachers achieved at slightly higher (although not statistically significantly higher) levels than the students of other teachers (Raymond, Fletcher, & Luque, 2001).

Beyond the points highlighted in the sidebars, other suggestions for ensuring the quality of alternative certification programs include rigorous screening and high-quality preservice training in pedagogy, classroom management, and human development. In addition, there needs to be a highly structured, well-supervised induction period that includes close supervision and guidance by an experienced teacher for at least one year, plus ongoing professional development and post-internship training (Duhon-Haynes, Augustus, Duhon-Sells, & Duhon-Ross, 1996; Littleton & Larmer, 1998; McKibbin & Ray, 1994). Some skeptics of alternative programs have suggested that alternatively certified teachers should be expected to pass all certification exams required for standard certification before taking over a classroom of students on their own. However, one of the central components of most alternative programs is that candidates learn in the classroom before gaining full certification.

Limitations of alternative certification research to date

There are several important issues that need to be considered as research on alternative certification programs moves forward. First is the issue of comparison groups. Most studies that attempt to compare the performance of alternatively certified teachers to

the performance of another group naturally compare them to teachers who gained their certification through the traditional route a bachelor’s degree in education. In the last several years, however, colleges of education have been increasingly criticized for not doing a good job of preparing teacher candidates for the classroom. In response, many colleges of education are moving toward a standards-based model of teacher preparation. The bottom line is that the methodology of comparing alternatively certified teachers to traditionally prepared teachers is questionable if there are concerns about the quality of the comparison group. This issue is particularly salient in urban areas where alternative programs are proliferating at the same time that issues of quality and full certification are being raised about urban teachers who graduated from colleges of education.

Other research issues include the difficulty of evaluating alternative certification programs that vary widely in terms of their program components and number of participants, making the comparison of programs and effects difficult. Finally, the typically short length of time involved in studies of alternative programs is problematic. It is difficult to assess the quality of any new teacher. Studies that examine the performance of first- or second-year teachers, over a short time span, are confounded by the fact that most new teachers need a year or two to settle into their roles and “learn the ropes.” In addition, it is impossible to compare attrition rates with research that is short in duration and looks at teachers in their first years on the job.

The second half of this *Policy Issues* focuses on the NCREL region and provides an overview of the state of alternative certification in the Midwest. The section begins broadly

and progressively narrows. First, we review broad data on alternative certification in the NCREL region through an analysis of the Schools and Staffing Survey data set, then we review the specifically legislated programs in each state. Next, we discuss the findings of our survey of principals in the region and present some specific, if qualified, findings regarding teachers from alternative programs. Finally, we offer some policy recommendations based on the findings of our research.

Alternative Certification in the NCREL Region

Impact of alternative certification on the region

The 1999/2000 Schools and Staffing Survey (SASS), conducted by the U.S. Department of Education's National Center for Education Statistics, received responses from over 72,000 teachers across the country. The SASS survey employed a complex, stratified sampling procedure that requires the use of statistical weighting but provides estimates of actual numbers of teachers in each state in various categories. Analysis of the SASS data set allowed us to estimate the number of teachers in each state in

the region who obtained their certification through alternate routes. In addition, we were able to test the extent to which alternatively certified teachers differed from other teachers on several important issues.

Figure 1 presents estimates of the number of teachers in each of our seven states who obtained their initial certification through an alternative route, either before or after they began teaching. Since alternative programs in the region have only recently begun to produce alternatively certified teachers (as described in the next section), most of the teachers who reported receiving their certification through an alternative route must have done so in another state before moving to the NCREL region. These numbers are statistical estimates; the actual numbers may be several hundred more or less. Therefore, the results presented here should be viewed with caution.

Ohio and Illinois have the largest numbers of teachers who received their initial certifications through alternative routes. This is not surprising, given that these are the two most populous states in the region. It is somewhat surprising that Wisconsin has the third-highest number of alternatively certified

teachers—more than Michigan, which has almost twice the population. This may indicate that the estimate for Wisconsin is slightly higher than the actual number, or that the estimate for Michigan is lower than actual. If we assume that these estimates are close to the actual numbers, it appears that alternative certification has had the greatest impact on states such as Ohio and Wisconsin, where alternatively certified teachers account for at least 4.5 percent of all teachers in the state.

These numbers indicate that even in states that have yet to offer alternative routes or that have only recently begun such programs, alternative certification has had an impact. While these initial percentages are relatively small, they remind us of how mobile our society is. These results also reveal the extent to which policy decisions in some states can affect other states that haven't necessarily chosen that particular policy direction.

In addition to using the 1999/2000 SASS data set to look at the number of alternatively certified teachers in each state, we were also able to compare alternatively certified teachers to other teachers on several variables related to their preparation and induction into teaching. While the practice of comparing alternatively certified teachers to traditionally prepared teachers was discouraged in the above critique of research, the comparisons made here are not related to teacher performance. Of particular interest were variables that asked teachers about how well prepared they were to handle a variety of standard classroom activities such as discipline, instruction, and lesson planning during their first year of teaching. We found no statistically significant difference between alternatively certified teachers' reports of their levels of preparation

Figure 1
An Estimate of Alternatively Certified Teachers in the NCREL Region

State	Estimated number of alternatively certified teachers	Approximate percentage of all teachers
Illinois	4,192	3.0 %
Indiana	1,403	2.5 %
Iowa	927	2.8 %
Michigan	1,979	2.6 %
Minnesota	1,116	2.0 %
Ohio	4,807	4.6 %
Wisconsin	2,831	4.5 %

and the levels of preparation reported by other teachers. The implication is this: In general, first-year, alternatively certified teachers *feel* as prepared to teach as other first-year teachers.

We also examined the induction and mentoring experiences that teachers reported. Estimates from the SASS data set revealed that teachers who had not been alternatively certified were more likely to report that they had participated in an induction program during their first year of teaching (62 percent) than alternatively certified teachers (44 percent). However, from a statistical standpoint, these estimates did not differ significantly and, given fairly large amount of variance, we are not able to conclude that alternatively certified teachers are less likely to participate in first-year induction programs than traditionally certified teachers.

Similar results were found regarding three other factors: the types of support

first-year teachers received, whether or not the teachers had mentors during their first years, and the extent to which they felt the mentors were helpful. We found no statistically significant differences between alternatively certified and traditionally certified teachers on these variables. While these estimates must be viewed with caution, they suggest that alternatively certified teachers' experiences during their first year on the job are not dramatically different than those of traditionally prepared teachers.

These findings are good news for supporters of the alternative certification approach. For example, if we had found that alternatively certified teachers were not reporting feeling prepared to teach, participating in induction programs, or receiving support during their first year, we would have to be concerned about the alternative method and focus policy discussions on approaches to

addressing these issues. While these results are tentative and need to be replicated, they suggest that the experiences of first-year, alternatively certified teachers are roughly equivalent to those of other teachers in their first year in the classroom. Even though these comparisons were not about effectiveness, the important caveat here in regard to the issue raised during the above critique of research methods is that using traditionally prepared teachers as the comparison group may be problematic. Just because alternatively certified teachers did not differ significantly from other teachers does not mean that we can be confident in the quality of the alternative certification approach. It may be that the induction and mentoring provided to traditionally prepared teachers is insufficient; if that were true, the fact that alternatively certified teachers' experiences are similar is of no comfort. In the case of the

Figure 2
Alternative-Route Programs in the NCREL Region

State	Number of legislated models	Number of college-based programs	Number of recent alternatively certified teachers
Illinois	2	15	1998/1999-2000/2001: 290
Indiana	1 A "fast-track" program, not called alternative certification. Begins Fall 2002.		
Iowa	1 A "teacher intern" program. Begins Fall 2002. Designed for high school teachers only.		
Michigan	3	5	1999/2000 (first year): 40
Minnesota	1	1	1997/1998-1999/2000: 66
Ohio	4	0 Prospective candidates work with districts to determine individual plans.	2000/2001 (first year): 34
Wisconsin	1	5	1997/1998: 19 (latest data available)

(Feistritzer & Chester, 2002; personal communication with Departments of Education staff in Indiana, Iowa, and Ohio)

SASS data set, there is no comparison group other than teachers prepared through traditional routes.

The SASS data set is a good example of the problems we have in conducting research on alternative approaches. First, the question on the SASS survey that asks teachers about their certification asks if they obtained it through traditional routes or through an “alternative program.” Without a more specific definition, we cannot know if those who chose this response were certified through short, inadequate programs or received more thorough, intensive preparation. Second, the SASS data set allows us to make gross estimates, but caution is advisable in drawing firm conclusions.

Alternative certification programs

All seven states in the NCREL region (Iowa, Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) have some way to help individuals who have bachelor’s degrees become teachers. Not all of these states have programs that are labeled “alternative certification.”

While they may not be labeled as such, they provide paths to becoming a teacher that are shorter than the traditional route.

As Figure 2 shows, most of the states in the region have only recently turned to alternative certification to increase the pool of teachers. Illinois has the largest number of college-based, alternative certification programs and has produced the most teachers through alternative routes, followed by Minnesota and Michigan. Only recently have Indiana and Iowa legislated pathways to teaching that do not require a bachelor’s or master’s degree in education; however, these states do not call their programs “alternative certification.”

Survey of principals in the region

In order to obtain further information about the impact of alternative certification in the region, NCREL sent surveys to a random sample of 2,600 principals across the seven-state region in the spring of 2002. We asked several basic questions about the number of alternatively certified teachers hired, their back-

grounds, and their performance. We received responses from 1,019 principals, a return rate of about 39 percent. However, as with most surveys, not every respondent answered every question, so there are varying numbers of missing data across items.

While the overall return rate was fairly good, there were some problems with the extent to which our sample was representative of the region. The response rate from Wisconsin was extremely small; we discovered after the survey began that the list we had obtained of principals in that state was inaccurate. Also, the return rate for urban schools (13.1 percent) was much smaller than what we know the proportion of those schools to be—roughly 30 percent in the region. Because of these issues, we sent another round of surveys (800)—and a second round a few weeks later to nonrespondents—to a random sample of schools in major cities in the NCREL region (e.g., Chicago, Detroit) and schools in Wisconsin. This second round added another 91 surveys to our previous data set, for

Figure 3
Survey of Principals in the NCREL Region

Proportion of the sample by state			Proportion of the sample by community type		
State	Frequency	Percent	School type	Frequency	Percent
Illinois	186	16.8 %	Urban	170	15.3 %
Indiana	136	12.3 %	Rural	390	35.1 %
Iowa	104	9.4 %	Suburban	321	28.9 %
Michigan	214	19.3 %	Small town	210	18.9 %
Minnesota	128	11.5 %	Missing	19	1.7 %
Ohio	269	24.2 %	Total	1,110	100 %
Wisconsin	69	6.2 %			
Missing	4	0.4 %			
Total	1,110	100 %			

a total of 1,110 (32.6 percent response rate). While the second round served to increase the representativeness of the final sample, Figure 3 shows that schools in Wisconsin and in urban areas were still somewhat underrepresented.

About half of the responses came from elementary school principals, about one-fifth from middle or junior high schools, and slightly less than one-fifth from high schools. Smaller percentages of surveys were returned from "combination" schools such as K-8 or K-12 schools. Out of 1,110 responses, 140 principals (12.6 percent) reported that they had hired alternatively certified teachers in the last five years. Of this group, about one-third (33.6 percent) were high school principals and slightly less than one-third (29.3 percent) were elementary school principals.

We asked principals: "Have you hired any teachers in the last five years who obtained (or will obtain) their certification through an *alternative route* to a traditional college degree in education-alternative certification?" Again, we must mention the caveat that this question is admittedly broad and limits our ability to draw firm conclusions. Of the principals who reported they had hired alternatively certified teachers in the last five years, most were from Ohio (37, or 6.4 percent) and Michigan (29, or 20.7 percent). Given the stated problems with our urban sample, the fact that Illinois, the most populous state in the region, was fourth in the number of alternatively certified hires may be inaccurate. Most principals who reported hiring alternatively certified teachers responded that they had only hired one or two (84, or 60 percent), and about one-fourth (33) reported hiring three or four. Several respondents (17, or 12.1 percent)

indicated that they had hired five or six alternatively certified teachers, and a few (6, or 2.1 percent) responded that they had hired more than six.

We asked several questions about the background of the teachers hired through alternative certification programs. One of the premises behind the alternative certification movement is that it can help increase the diversity of the teaching force in terms of race, gender, age, and real-world experience of new teachers. Overall, the principals we surveyed reported that they hired roughly equal numbers of male and female alternatively certified teachers. This supports the premise that alternative certification programs can increase the number of male

These findings suggest that alternative certification has had little impact on the diversity of the teaching force in the Midwest.

teachers since the majority of teachers are women. Another assertion of alternative proponents is that these programs can bring in older people who have experience, are more stable, and are entering teaching because of a strong commitment to helping children. Our survey found that the vast majority of people hired through alternative programs are either in the 20-30 age bracket (42.6 percent) or the 30-40 age bracket (43.4 percent). Given that new college of education graduates are typically in their early 20s, these data suggest that alternative certification programs are bringing candidates with life experience into teaching.

In terms of racial diversity, the findings are not as promising. Only about 8 percent of the 129 principals who answered this question reported that their hiring of alternatively certified teachers had increased the percentage of African Americans on their staff, and 3 percent reported that alternatively certified hires had increased the percentage of Hispanic teachers in their school. Over three-fourths (76.7 percent) of the respondents reported that hiring alternatively certified teachers had not increased the percentage of teachers of color on their teaching staff. It is possible that in schools with large proportions of teachers of color, African Americans and Hispanics were hired, but that action did not affect the diversity of the teaching staff. However, given the previously stated underrepresentation of urban schools in our sample, we estimate the overall number of schools in the sample where the teaching staff is "majority minority" to be fairly low. These findings suggest that alternative certification has had little impact on the diversity of the teaching force in the Midwest. However, the extent to which alternative programs are able to recruit people of color depends largely on whether or not that goal is a priority for the program and specific objectives are in place regarding diversity. Our survey did not explore this issue in detail, so we are unable to draw firm conclusions. Other concerns, such as the proportion of African Americans and Latinos who hold bachelor's degrees relative to that of the general population, further cloud this.

We also asked the principals about the prior backgrounds of the alternatively certified teachers they had hired. Proponents argue that alternative programs can bring into teaching individuals who have had

years of experience in subject matter such as math and science. A large portion of the principals in our sample (42.7 percent) reported that most of the alternatively certified teachers they had hired were from business and industry. Almost one-third (29.8 percent) reported that the alternatively certified teachers they hired were recent college graduates in fields other than education, and about one-fifth (18.5 percent) reported that their alternative hires were from within the field of education, such as former teachers or former support staff. Finally, 4.8 percent of the principals reported hiring former members of the military, and 4 percent reported hiring alternatively certified teachers that came from other areas. These findings provide some support for the idea that alternative programs can bring people from the business community into teaching.

Another basis for the growth of alternative programs has been their purported ability to address shortages in particular subject areas such as math, science, and special education. We asked the principals in our region about the subjects taught by the alternatively certified teachers they had hired. Of the 126 principals who responded to this item, seven reported that they had hired an alternatively certified teacher to teach math, and nine had hired one for science. Eighteen principals (14.3 percent) had hired alternatively certified teachers to teach special education. Almost half of the principals (61, or 48.4 percent) reported that they had hired alternatively certified teachers for more than one subject area (i.e., high school) or to teach multiple subjects (i.e., elementary school).

In order to obtain information about the quality of alternatively certified teachers while trying to avoid the

previously mentioned problems with comparing them to other teachers, we decided to ask about the performance of alternatively certified teachers compared to other new hires. While this was an admittedly imperfect solution, at least it allowed the possibility that the other new hires had come out of programs that were moving toward or had become standards based.

About three-fourths of the principals (74 percent) rated the performance of their alternatively certified teachers as equal to or above other new hires, and 26 percent rated them as below. While it is encouraging that principals see such a large proportion of alternatively certified teachers as equal to or better than

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other new hires, the performance of a fairly large percentage was rated below that of other new hires. This suggests that alternative programs have yet to reach full parity with traditional teacher-preparation programs.

Just over 90 percent of the principals reported that the alternatively certified teachers they had hired received support or mentoring to facilitate their transitions into the classroom. While this finding is positive to the extent that the vast majority of alternatively certified teachers have received such support, it is somewhat troubling that another 10 percent did not receive such support. In addition, it is safe to assume that not all new alternatively certified teachers who were

supported received similar or sufficient levels of support or mentoring. Given the typically short nature of alternative programs, and the emphasis on a speedy transition into the classroom, mentoring and support for these new teachers is crucial. Failure to provide such support can only exacerbate the problems that new alternatively certified teachers face as they attempt to learn their new occupation on the job.

Finally, we asked principals about the impact of alternative certification on the supply and longevity of teachers in their schools. Half the principals reported that they *have* had problems finding enough qualified teachers, and that alternatively certified teachers have been some-

what or very helpful in addressing the shortage. About one-fifth of the respondents reported that they have experienced a shortage but that alternative certification had not had a significant effect on the problem, and slightly more than one-fourth responded that they had not experienced any problems finding enough teachers. In terms of tenure, 81.5 percent of the principals reported that the alternatively certified teachers they had hired stayed as long or longer than other newly hired teachers. These results imply that alternatively certified teachers can be helpful in addressing shortages and remain on the job at rates roughly similar to those of other newly hired teachers.

Conclusions and Policy Options

Over the past 30 years, alternative certification programs have evolved as a response to real and perceived shortages of qualified teachers. These programs are characterized by the opportunity they offer for individuals to teach without graduating from a traditional teacher-preparation program, fulfilling student teaching obligations, or passing certification exams before starting to teach. Proponents argue that this approach allows qualified individuals from sectors other than education to bring their skills and experience into the classroom expeditiously. Advocates also argue that alternative routes allow potential teachers to bypass ineffective teacher education programs.

Opponents of alternative certification programs wonder how we can discuss improving education by increasing the quality of teachers at the same time that we allow them to teach with less preparation. These critics wonder about the ethics of handing the responsibility of educating our children to someone who has little training and is learning on the job. Those who question the need for alternative certification also challenge the premise that there is an impending, massive teacher shortage.

Much like other policy debates in education, there is unlikely to be a resolution until more and better data on the quality of alternative routes to certification are available. The policy options that follow might be considered as opportunities to ensure ongoing improvements to new and current alternative certification programs, as well as incentives to pursue more high-quality research studies on the effectiveness of alternative certification programs.

Require alternative certification programs to seek and hold state accreditation. We know that the number of alternative programs is growing across the country as schools and districts seek solutions to the problems of finding enough qualified teachers to staff mathematics, science, special education, urban, and rural classrooms. In the Midwest, all of the states in the NCREL region will have some type of alternative route into teaching by Fall 2002. The latest SASS data set indicates that alternative certification programs have already had a modest impact on the region, even in states that have only recently provided alternative routes to the classroom. Similar to the proliferation of K-12 education options, new and varied programs to train teachers are quickly emerging that necessitate a new accountability structure to ensure high-quality outcomes. While little has been written about the effects of competition on traditional teacher-preparation programs, there seems to be anecdotal evidence that institutions of higher education have increased the number of traditional routes to becoming a teacher and have improved their quality. As traditional programs that prepare teachers are being held to a higher standard than ever before through legislation such as Title II of the Higher Education Act, states should now ensure that alternative routes to certification are also required to meet high standards and show evidence of high-quality programs.

Reward alternative programs that demonstrate that they meet the standards of quality identified in the research. For example, common themes that emerged from the research on effective alternative certification programs focused on the following points:

- High standards and proper screening of candidates for entry into alternative certification programs.
- Solid academic instruction in pedagogy, subject matter, classroom management, and child development—preferably before the teacher candidate begins to teach.
- An organized and comprehensive system of support from experienced, trained mentors once the candidate begins working in a school.
- If possible, a period of observation and assistance in the classroom with an experienced teacher before the candidate begins teaching solo.
- Ongoing training, instruction, and reflection once the candidate assumes control of a classroom.
- Continuous monitoring, evaluation, and feedback of individual and group performance to allow for adjustment and improvement in teaching and program management.

The components outlined above were used by NCREL in the creation of a template for the evaluation of alternative certification programs. This Web-based tool allows alternative programs to engage in a process of self-evaluation and reflection, and to assess the extent to which their programs include elements found in the research to contribute to positive teacher outcomes. The template can be found at www.ncrel.org/toolbelt/altcert.htm. For a broader review of the alternative certification literature, see www.ncrel.org/policy/pubs/html/altcert/intro.htm.

Provide incentives to newly developing alternative programs that focus on recruiting and preparing a diverse teaching pool. The experiences of

schools in the NCREL region with alternatively teachers have been mixed. While alternative certification appears to have increased the number of male teachers and succeeded in bringing into the classroom teachers with experience in business and industry, this approach does not appear to have had a dramatic effect on the diversity of teaching staffs. Given the continuing diversification of the states in this region, schools and districts will be teaching an increasing number of minority students over the next decade. However, they will also have an increasingly diverse pool of potential teachers. Concerted efforts by programs, districts, and states may be necessary in order to recruit African-American and Latino teacher candidates. These efforts might include promoting teaching opportunities through the media; approaching African-American, Latino, and other ethnic organizations; promoting alternative certification programs with bilingual materials; and reaching out to com-

munities that may have been previously overlooked.

Promote funding for new research and evaluation of alternative routes to certification that demonstrate teacher effectiveness with students.

Unfortunately, research on alternative programs has only served to further blur the issue. To this point, the findings of research in this area (including those presented here) have been mixed. Attempts to determine the effectiveness of the alternative certification approach have been complicated by a number of factors including the wide variety of alternative certification programs, the use of other teachers in comparison groups, and the use of inadequate research methodologies. Policymakers who make decisions about funding may wish to consider funding research that addresses the problems discussed in the literature review above. This includes the need to fund research that is longitudinal, that avoids comparisons of alternatively certified teachers to other

teachers who were prepared through traditional routes, and explores the costs and benefits of alternative certification relative to other efforts to increase the supply of teachers. Considering the youth of most alternative certification programs, this would seem to be an opportune time to begin studying these programs while taking into account the methodological issues encountered in earlier research.

As with most problems in education, there is no one answer. There needs to be a variety of activities and approaches to the issues of teacher quantity and quality as we struggle to improve schooling in the Midwest and across the country. More and better research on the processes and effects of alternative certification programs is needed, and we must continue to monitor the alternative certification approach to increasing the teacher supply while we work toward implementing the effective practices that research has already revealed.

NCREL POLICY ISSUES

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POLICY Q & A ISSUES

What is alternative teacher certification and why is it needed? Alternative certification allows individuals who typically (but not always) possess an undergraduate degree in a field other than education to participate in a shortened training and/or on-the-job learning experience that leads to full certification. Alternative certification programs have grown rapidly across the United States, in large part due to concerns about teacher shortages in specific subject and geographic areas.

Can alternative certification programs produce highly qualified teachers? Alternative certification has both supporters and critics. Supporters argue that the need for U.S. teachers in the coming years exceeds the capacity of traditional teacher education programs, and colleges of education have failed to provide the United States with a sufficient number of teachers who are well prepared and able to educate all of our students. Supporters also contend that alternative certification programs could do no worse than traditional, but inadequate, teacher education programs.

Opponents argue that concerns about massive teacher shortages in the near future are somewhat misplaced. Where shortages do exist, they appear to be specific to particular regions and subjects. Opponents also argue that, while many traditional teacher education programs could stand to be strengthened, many schools of education have moved toward more rigorous, standards-based approaches to teacher

education. From this perspective, less preparation is hardly an answer to concerns about teacher quality.

What effects have alternative certification programs had on states in the NCREL region? All seven states in the NCREL region currently offer some alternative route to full certification, although not all of those routes are called "alternative certification." Over 15,000 teachers in the region have obtained their certification through alternative routes. Our survey of over 1,000 principals in the region found that about half the principals reported that they have had problems finding enough qualified teachers, and that alternatively certified teachers have been somewhat or very helpful in addressing the shortage. About three quarters of the principals rated the performance of teachers they had hired through alternative certification programs as equal to or above that of other new hires, but one-fourth rated the performance of alternatively certified teachers below that of other new hires.

What are some components of high-quality alternative certification programs? High-quality alternative certification programs set high standards for applicants and screen them carefully; include intensive instruction in pedagogy, curriculum, and classroom management; and include substantial supervision and support for teacher candidates. See www.ncrel.org/toolbelt/altcert.htm for our Alternative Certification Evaluation Template.

Explore Teacher Turnover

More than 50 percent of beginning teachers left the school district that hired them within their first five years of teaching, according to a 2002 NCREL research study on teacher turnover in four Midwestern states conducted by Neil D. Theobald and Robert S. Michael. The research is based on new longitudinal data that contains information on the career histories of 11,787 novice teachers. Unique to the existing research to the topic, Theobald and Michael's study compares three types of novice teachers: teachers who taught continuously in the same district ("stayers"), those who transferred to another school

district or districts within a state but remained in the state all five years ("movers"), and those who left public school teaching in a state and did not return ("leavers").

Visit NCREL's new interactive Web resource on the *Teacher Quality* Web site at www.ncrel.org/quality/mobility/turnover.htm to view the individual state reports generated from the study, and to use the data tool to generate customized graphs and comparisons of new teacher turnover in four states.



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