
Project on the Next Generation of Teachers
Harvard Graduate School of Education

A Difficult Balance: *Incentives and Quality Control in Alternative Certification Programs*

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September 2005

Acknowledgements

We are indebted to the William and Flora Hewlett Foundation and Mike Smith for funding this study, although they bear no responsibility for the findings. We are also grateful to The Dean's Dissemination Fund at the Harvard Graduate School of Education for supporting the distribution of this report through a gift from Albert and Katherine Merck.

Many individuals have contributed to this research both directly and indirectly. We greatly appreciate the cooperation, interest and time of the state officials, directors, faculty, and participants who generously met and discussed their programs with us. We have received ongoing support throughout the study from our colleagues at the Project on the Next Generation of Teachers. In addition, Betsy Baglio, Megin Charner-Laird, and Lilly Siu assisted with data analysis and follow-up interviews. Morgaen Donaldson, Sarah Fiarman, Emily Qazilbash, and Stacy Szczesiul reviewed the final draft. We are especially grateful to Mindy Munger for her insight, judgment, and care in helping us prepare this report for distribution.

About the Project on the Next Generation of Teachers

The Project on the Next Generation of Teachers, established in 1999 at the Harvard Graduate School of Education, is a research project addressing critical questions about the future of the nation's teaching force. Through qualitative and quantitative studies, Project researchers examine issues related to preparing, attracting, supporting, and retaining teachers in the U.S. public schools. Recently, the Project published *Finders and Keepers: Helping New teachers Survive and Thrive in Our Schools* (Johnson and the Project on the Next Generation of Teachers. San Francisco: Jossey-Bass, 2004). The Project, which is directed by Susan Moore Johnson, the Pforzheimer Professor of Teaching and Learning, has received research funding from the Spencer Foundation, the Russell-Sage Foundation, the William and Flora Hewlett Foundation, and the NRTA: AARP's Education Community. Articles and research papers can be found on the Project's web site: www.gse.harvard.edu/~ngt.

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Executive Summary

Much of the current debate about teacher quality centers on the effectiveness of alternative teacher certification programs. In an effort to attract strong candidates who otherwise might not enter teaching, these programs are shorter, less expensive, more convenient, and more practically oriented than traditional university-based programs. Those concerned about the quality of instruction in schools today question whether these fast-track alternative certification programs adequately prepare candidates for the challenging work of classroom teaching.

This study, which was conducted in 2002, focuses on a sample of 13 alternative certification program sites in four states (California, Connecticut, Louisiana, Massachusetts). The states were selected for the varying degree of involvement and control that each exercised in the design and operation of their programs, ranging from a highly centralized approach in which the state operated its own alternative certification program (Connecticut) to a highly decentralized approach in which the state approved all programs that satisfied basic requirements and then allowed them to operate on their own (Louisiana). Falling between these extremes were two states (Massachusetts and California) where some elements of alternative certification were centralized and others were decentralized. These differences in state involvement and policy led to a wide variety of programs ranging from a small district-run program preparing six special education teachers in Louisiana to a large distance learning program in California, licensing teachers who were already employed full-time on emergency credentials.

The study was designed to examine how this diverse group of programs were intended to work and how they actually did work. We interviewed program directors, faculty, and school-based partners about the programs. What types of candidates did they attract and select? Did they provide the kind of training and support they promised? If so, what made that possible? If not, what explained their shortcomings? In order to understand how the new teachers assessed the adequacy of their training, we interviewed participants during the program and again after they had been teaching for 6 to 8 months. Given the incredible variety of alternative certification programs and the small size of the sample, the findings of this research cannot be generalized to all such programs. However the study does provide useful insight into a set of programs as they were operating in 2002, and it offers practical recommendations for those who would authorize, fund, direct, and participate in similar ventures.

Fulfilling the promise of alternative certification proved an elusive goal for many programs. Despite their variety, they faced a common challenge: the very incentives that were attractive to candidates in turn restricted the resources that were available and, thus, limited the extent to which quality control was possible. Program directors, faculty, partners and participants described inconsistent and often unsuccessful attempts to arrange workable field placements during the summer; to provide concentrated, inexpensive coursework in subject-specific teaching methods; to prepare candidates to teach across the boundaries of race and class; to assist candidates in job placements;

to assess their performance; and to support them in the classroom. Ultimately, the programs left responsibility for on-the-job training and quality control to the hiring schools or to the state. These alternative certification programs may have opened the profession to new candidates, but they struggled to provide sufficient preparation and to serve as gatekeepers of quality in the process.

Major Findings

Acknowledging the variety among the programs in this sample, the following major findings emerged from this study:

Programs Were Either *Statewide* or *Locally-grounded* in Their Orientation

- Statewide programs offered a broad introduction to teaching, usually focusing on generic teaching skills that were meant to be widely applicable across an array of districts and schools. They could produce large numbers of prospective teachers in a range of shortage areas. By contrast, locally-grounded programs focused on a particular district's policies, curriculum, and students. They trained participants to fill local shortages in particular subjects.
- Given their broad orientation and abbreviated training, statewide programs tended to convey general information about teaching, which might not be adequate or applicable to a new teacher's job. They did little to assist teachers in finding a job. In contrast, locally-grounded programs could prepare teachers to fill local shortages, direct them to jobs, and help them adapt to local priorities and practices. However these programs had the limitation of providing training that was relevant only to one district.

The Incentives Worked

- Candidates—particularly those entering teaching at mid-career—were attracted to alternative certification programs by the intended incentives: brief, inexpensive, convenient, and practical training. Candidates reported that they wanted to move quickly to classroom teaching positions, thus avoiding the tuition and opportunity costs of longer pre-service training in traditional preparation programs.
- As a group, the programs succeeded in attracting candidates who otherwise might not enter teaching (men, minorities, experienced professionals from other fields, and prospective teachers in math, science, and special education). Overall, however, there were fewer candidates in shortage fields than in non-shortage fields. Various sub-groups of candidates tended to be concentrated in particular programs.

The Incentives Introduced Limits on Capacity

- Often the very incentives that attracted candidates (brief, inexpensive, convenient and practical training) reduced the resources available to provide training and support for new teachers. Thus, it was difficult for program administrators to deliver the quality of preparation they had promised. Constraints on available time and personnel led most programs to offer very abbreviated versions of traditional training. In the process, they

often provided candidates with less than state standards called for. Programs offered licenses in as many as ten fields, but very few had an expert on the faculty for each subject.

- Most candidates were grateful for the opportunity to participate in a fast-track program and recognized that they were receiving only an introduction to teaching. However, they also pointed to serious shortcomings in their training, both during the program and after they had begun teaching. They cited the lack of training in how to teach their subject; mismatched student teaching placements with untrained mentors; inattention to the challenges of teaching students of a different race or background; the lack of assistance in finding a job; and inadequate follow-up support once they began teaching.

Programs Used Different Approaches to Ensure Quality

- In order for these alternative certification programs to simultaneously increase the supply of teachers and maintain the quality of graduates, they had to strategically balance the incentives they offered with the means they had to control quality. Programs could ensure quality in four ways: by recruiting and selecting strong candidates; by meeting or exceeding state standards for required content, experience, or competencies; by providing well-designed programs that made creative use of resources, especially time and personnel; and by assessing candidates' performance and allowing only those who were judged to be competent to complete the program and gain licensure. Most programs relied primarily on recruitment and selection to ensure the quality of their future teachers; they rarely used formal assessment as a means of quality control.
- Alternative preparation is a deceptively simple idea. In fact, this approach introduces large, often unexpected, demands for organizational capacity. For example, statewide programs often had difficulty convincing schools to help train teachers they would not likely hire, while non-profit sponsors had difficulty forging the necessary professional and personal relationships to coordinate student teaching during the summer.
- Faced with the reality of limited resources, many programs simply made the best of what they had, often adjusting their goals as it became clear that they could not meet them. Some programs expanded their capacity to provide better preparation by developing partnerships with school districts, non-profit organizations, and universities.

Programs Were But One Factor in a Teacher's Success

- In the end, these new teachers' readiness for teaching depended not only on what their program offered, but also on the skills and experience they brought to the training and the support they received in their schools. Thus, three elements—the person, the program, and the school—contribute to the teacher's sense of preparedness during the first year.

Recommendations for State Policymakers

If alternative certification programs are to succeed, the states must have realistic expectations and provide sufficient resources and support so that directors and faculty can offer the training that candidates need. The following recommendations for policymakers emerged from this study:

Consider the tradeoffs between centralized and decentralized approaches by the state to program implementation.

- Centralized approaches to program implementation offer the promise of greater capacity to be realized from economies of scale. Officials can recruit candidates widely and admit them selectively. They can consolidate resources and provide training for candidates in a range of subjects. However, statewide programs are difficult to develop and maintain because of their size, the wide range of candidates they are intended to serve, and the many subjects and teaching contexts for which they prepare teachers. Because they tend to rely on generic approaches to training, centralized programs may not meet the needs of candidates working in many different settings. Because hiring is controlled locally, centralized programs rarely can offer candidates assurance of job placement.
- Decentralized approaches have the advantage of allowing adaptation to local needs and practices. District-sponsored programs can recruit candidates who will become licensed in areas of local shortage and who are knowledgeable about and committed to local schools. Candidates are more likely to find assistance in job placement under decentralized arrangements. However, these programs may have access to fewer resources than statewide programs, since they usually draw upon only local expertise. The pool of candidates may be smaller and weaker than a statewide pool would be. Because training focuses on local curriculum and practices, it may become narrow and provincial.

Align the goals and design of programs.

- Alternative certification programs often have different purposes, and it is important that goals and program design be aligned. For example, if the goal is to place new recruits in areas of local shortage, a model where selection and training occur close to the district may be most successful. If the problem to be addressed is a lack of talented or knowledgeable people in the profession statewide, centralized recruitment can yield a strong and deep pool of applicants. If state policymakers are concerned about having many unlicensed teachers in the classroom, a job-embedded model for training may be most effective.

Recognize that reducing the resources available to programs while increasing expectations of what they must do will likely compromise the quality of preparation that can be offered.

- Programs cannot reasonably be expected to offer training in multiple fields unless they are funded to employ at least one specialist in each. Offering licenses in only one subject

per site may ensure better preparation, even though this arrangement is less convenient for candidates.

- Limiting the length of summer programs in order to make them more attractive to candidates may unwisely reduce the training and experience that can be offered.
- Candidates who complete an alternative certification program will need ongoing support in their classroom. If the state does not sponsor induction for all new teachers, alternative certification programs should be funded to provide at least one year of follow-up support.

Create incentives for partners to collaborate in providing programs that offer high-quality preparation.

- Various individuals and organizations can offer specialized services that the main program provider may not have the capacity to deliver. These include assistance in recruitment and selection, job placement, technology use, training, or follow-up support. The state can improve the quality of training by offering incentives that encourage collaboration and joint sponsorship of programs.
- District-based programs can efficiently focus training on a single district's students, preparing candidates to teach in that context and specializing training for particular shortage areas. However, effectively preparing new teachers requires more than assigning them to work alongside experienced colleagues, and there are very real limits to what local districts can provide, particularly those that are already short on resources. With a university as a partner, a district-based program can offer greater depth of preparation, for example, by offering modules in important topics such as literacy or assessment. A non-profit organization can expand the capacity of the program by taking on particular tasks, such as recruiting candidates or training mentors.

Recognize the state's ongoing responsibility to regulate entry into teaching.

- With little time, few resources, and a mandate focused on expanding the supply of teachers, alternative certification programs are unlikely to focus their efforts on rigorously assessing candidates.
- The school districts that are most likely to hire alternatively certified teachers are typically those that experience ongoing shortages and are stretched for resources. They may not be well equipped to closely assess these new teachers' performance once they are hired.
- State-sponsored assessment programs, which review the performance of all new teachers before they are granted permanent status, play an important part in regulating entry into teaching.

Recommendations for Program Directors

Programs, too, must have sound strategies for balancing incentives with quality control if they are to deliver the program they promise. The following suggestions for program directors emerged from this study:

Structure program components to match the skills, knowledge and experience teachers will need for the specific conditions in which they will teach.

- A program that proposes to train candidates for hard-to-staff urban and rural schools will fall short of its goal unless it provides pre-service training and in-service support for working effectively in these environments.
- If a statewide program is created with the goal of ameliorating shortages in hard-to-staff subjects and schools, it must assist candidates with job placement. Without assistance in navigating the hiring procedures of large urban districts, many candidates will be inclined to accept jobs in suburban schools that offer more streamlined hiring.
- Programs designed to certify existing classroom teachers through job-embedded training must accommodate the demands of candidates having a full-time job. Self-paced distance learning programs can allow candidates to complete their requirements in ways that are compatible with their ongoing teaching responsibilities.

Utilize targeted recruitment and rigorous selection to identify the most promising candidates.

- Given the brevity of most alternative certification programs, it is important to seek and select candidates who have the content knowledge, prior experience, skills, and attitudes that would make the expectation of quick entry and on-the-job learning realistic. Programs should use multiple criteria in selecting candidates. A single indicator, such as undergraduate GPA or prior work experience, is inadequate.
- The costs of running alternative certification programs coupled with the low tuition they typically charge put pressure on program directors to accept a certain number of candidates in order to break even. However, admitting under-qualified applicants in order to fill a quota is not cost-effective. Nor is this a viable approach to stemming the shortage of qualified teachers in the nation's classrooms.

Offer licenses only in subjects for which there are faculty experts.

- Preparation in generic teaching skills, such as classroom management or lesson planning, is essential for a successful start to teaching. However, candidates must also acquire the specialized skills for teaching their particular subject, even if they know that subject well. It is much less demanding for a program to prepare six teachers in one subject area than to prepare six teachers, each in a different subject.

- Faculty who are experts in a particular subject, such as history, cannot offer adequate training for candidates who are preparing to teach a different subject, such as business. It is also unwise to combine sessions in instructional methods for teachers of different subjects, such as math and science or English and social studies.

Devise the best possible clinical experience, given the timing and duration of the program.

- Satisfactory student teaching experiences in summer school are very difficult to arrange, particularly when the program has no history working with a local district. Limited course offerings and very small classes seldom provide well-matched teaching assignments or realistic work environments. Good mentors are typically in short supply.
- Although observations are no substitute for practice teaching, they may be a better use of time than poorly organized student teaching. If these observations focus on the subject in which candidates seek licensure, the new teacher can develop greater understanding of what it means to teach in a content area.

Build productive partnerships to increase program capacity.

- Developing partnerships with school districts, universities, and non-profit organizations can increase a program's capacity to provide good training. If the partnership is structured so that participation is clearly in each partner's interest, the endeavor is more likely to succeed.

Structure the program and follow-up support to recognize the continuum of new teachers' learning.

- Encouraging all candidates to spend time as a substitute or volunteer in a public school before beginning the program can enhance their learning during training.
- Recommending that candidates apply for jobs early can increase the chance that they will participate in pre-service training with a particular position in mind.
- The pre-service training offered in condensed summer programs is meant to provide essential, just-in-time preparation, not deep knowledge about teaching. Programs can help candidates develop a realistic understanding of the importance of ongoing learning and equip them with strategies for seeking out resources and support once they are in the classroom.
- Distance learning can be used to train teachers who are employed full-time or who live in remote areas.

Recognize the program's role in assessing and counseling out candidates who are unlikely to succeed.

- Given the demands of rapid entry to teaching, programs should counsel out or dismiss participants who appear unprepared for the accelerated training model or unfit for teaching.

- Given the difficulty of using summative portfolios effectively to assess candidates, programs should also consider more immediate and performance-oriented assessment mechanisms.
- It is unrealistic to expect that the local schools will conduct rigorous assessments of the teachers they hire. District officials are likely to assume that any candidate who completes a state-approved program is a qualified classroom teacher.

Ensure on-the-job support for candidates once they begin teaching.

- Some candidates will teach in schools that provide ongoing induction and support. However, many will find themselves isolated in a sink-or-swim environment that offers little encouragement or professional development. Programs continue to have responsibility for candidates once they enter the classroom, and should ensure that they have access to resources and regular feedback about their teaching, particularly if the state or district offers no such program.
- Program budgets should include funds for follow-up support through at least the first year of teaching.
- Technology can be used for follow-up support once teachers have their own classroom.

Recommendations for Participants

Prospective teachers are attracted to fast-track alternative certification programs by the incentives they offer. However, it is important for candidates to carefully choose the program that is right for them and prepare for the condensed training.

Consider carefully whether a fast-track program is right for you.

- Short, intensive programs are not right for all prospective teachers. Completing the training and having a license does not make one ready to teach. Candidates should candidly assess whether they have solid knowledge in their subject and adequate practice using it; whether they have sufficient experience working with youth; and whether they are familiar with, and comfortable working in, schools today. Only those who are confident in all these areas should enter a fast-track alternative certification program.

Choose a program that fits your career plans and training needs.

- Individuals who are committed to remaining in a local district may find that a locally-grounded program is right for them. Those who do not plan to teach in a single district may have more flexibility in a statewide program or a longer, more comprehensive program.
- In consider program options, candidates should pay particular attention to whether they will have access to expert training in how to teach their subject and experience

working with teachers and students in the kind of setting they plan to enter. They should investigate whether they will have practice teaching their subject under the supervision of a skilled mentor.

Prepare for continuous learning in a teaching career.

- In choosing a program, candidates should also search for a job in a school where continuous learning is the norm. To make most efficient use of the training, candidates should try to secure a job before the program begins.
- Recognize that the training provided in a fast-track program is designed to offer an adequate start to teaching, not to sustain candidates over the long-term. No applicant should assume that any program—traditional or alternative—can provide all that is needed to succeed as a teacher. Therefore, it is important to identify various strategies for finding resources, securing support, and learning new skills over the course of a career.

Introduction

Teacher quality is the topic of the day in public education, with policymakers, school officials, teachers, and the public intensely debating who should be allowed to teach and what preparation they should have. Recognizing the role that teacher quality plays in student achievement, the U.S. Congress passed *The No Child Left Behind Act of 2001* (NCLB), requiring public schools to employ only “highly qualified” teachers in core subjects by the school year 2005-2006. However, the states, not the federal government, ultimately will decide what it means to be highly qualified under the law, since NCLB regulations equate “highly qualified” with “licensed,” and it is the states that issue teaching licenses.

State legislatures and their departments of education long have set the standards for new teachers’ preparation, granting licenses to individuals who complete approved coursework or programs. For many decades, approved programs were sponsored almost exclusively by colleges and universities. A typical candidate would complete at least one academic year of coursework and student teaching before receiving a state license, which entitled her to assume full responsibility for a class of students. Today such programs generally are called “traditional” certification programs. Beginning in the mid-1980’s, states started to introduce “alternative” certification programs, a trend that accelerated in the late 1990s. These programs offer a path to licensure that typically requires far less pre-service preparation than traditional programs and can be sponsored by organizations other than colleges and universities.

The Current Context of Alternative Certification Programs

The states initiated alternative certification programs for three often related reasons. First, they were responding to a projected teacher shortage that would require an estimated 2.2 million new teachers between 2000 and 2010 (Hussar, 1999), far more individuals than were preparing to teach in traditional teacher education programs. Certain regions of the country, such as the Southwest, already were contending with shortfalls in available teachers due to growing student enrollments. In California, this regional shortage was exacerbated by a 1996 class-size reduction policy that immediately required nearly twice the number of teachers in grades k-3 throughout the state. For some years, school districts across the country also had experienced shortages in particular teaching fields—math, science, special education, foreign languages, and bilingual education. Of particular concern were the persistent vacancies in districts and schools serving low-income communities. Proponents of alternative certification programs believed that shorter, more direct routes to teaching might better provide good teachers for all the nation’s classrooms.

By 2005 47 states and the District of Columbia had instituted or approved at least one alternative certification program (Feistritzer and Chester, 2003; Feistritzer, 2005).

Second, there was growing concern that traditional routes to teaching were no longer attracting an academically strong and sufficiently diverse teaching force. Troubling evidence suggested that the SAT scores of entering teachers were declining (Hawley, 1990). Demographically, the teaching force increasingly was composed of white women, with diminishing percentages of women of color and men (Darling-Hammond, 1996). Given many educators' strong beliefs that a diverse teaching force is essential for achieving success with a racially diverse student body, this trend was cause for considerable concern (Stoddart and Floden, 1995). Advocates of alternative certification programs contended that they might be more successful in attracting large numbers of the very candidates public schools sought, including men (Zumwalt, 1996), teachers of color (Shen, 1998), teachers willing to work in hard-to-staff settings (Haberman, 1999), and experienced professionals from other fields who wanted to teach but were discouraged by the extensive requirements of a traditional program (Ballou and Podgursky, 1998).

Third, in some quarters, there was growing dissatisfaction and impatience with traditional, university-based teacher education. Since the mid-1980s, many programs had increased their coursework and student teaching requirements in response to an expanding knowledge base about child development, cognition, and pedagogy. As programs' requirements for licensure grew, so did their tuition costs and time demands. Yet, research had not proved that these expanded programs were more effective in preparing successful teachers, and reviews of the programs, themselves, often revealed that many were very weak (Cochran-Smith and Zeichner, 2005).

Some who observed the state of traditional teacher preparation called for tougher standards and more in-depth training (Holmes Group, 1995; Darling-Hammond, 1996). Other critics of traditional teacher preparation objected to higher education's apparent monopoly of teacher training and denounced traditional programs as being too long and theoretical (Ruenzel, 2002). They argued that teachers and the public could be better served by different individuals or organizations who might offer streamlined, practical, inexpensive training to prospective teachers (Natriello and Zumwalt, 1992; Dill, 1996). Asserting that subject matter knowledge is paramount for effective teaching and pedagogical skills are best learned on the job, these critics endorsed little, if any, pre-service training in how to teach (Stoddart and Floden, 1995).

State policies establishing alternative certification programs proved to be very popular, and by 2005 47 states and the District of Columbia had instituted or approved at least one such program (Feistritzer and Chester, 2003; Feistritzer, 2005). Today, many states have authorized a variety of program sponsors—local school districts, consortia of school districts, non-profit organizations, for-profit organizations, and universities—to provide the coursework and field-based experiences that lead to certification through an alternate route. Alternative certification programs, once seen as a “last resort” to fill gaps in the teaching force and to replace emergency certification, have evolved into a widely used model to recruit, train, and certify new teachers (Feistritzer and Chester, 2003).

It is important to note that, although debate proceeds as if alternative certification programs provide a distinctive and uniform approach to training, there is tremendous variety among them. They are operated by a range of sponsors, take place in many types of settings, and have diverse goals, requirements, schedules, and resources. What these programs have in common, however, is that each condenses or eliminates pre-service preparation and moves prospective teachers into full-time, paid teaching positions before

they have completed the requirements for professional licensure (Hawley, 1990). Many alternative certification programs, which are often called “fast-track” programs, include minimal, just-in-time pre-service training (4 to 8 weeks).

The Purpose of This Study

After having been in the classroom 6 to 8 months, how did the new teachers assess their preparation?

This study was designed to examine a diverse sample of fast-track alternative certification programs in order to learn how they were intended to work and how they actually did work. We wanted to understand both whom these programs attracted and whom they selected as participants. We were interested in why candidates chose particular programs and how they assessed their training while they were participating, and more importantly, after they had begun teaching. In short, what did these programs look like on the ground, and what can be learned from those who authorized, directed, and participated in them?

From the start, we recognized the incredible variety that exists among alternative certification programs and we knew that studying a small set of them, however carefully chosen, would not permit us to generalize to all such programs. However, given the dearth of information about how alternative certification programs function and how participants experience and assess them, we thought it valuable to review a small set of programs on their own terms, considering whether they provided the kind of training and support the policy promises. By looking closely at a subset of programs, we also could investigate the resource demands of different program designs, learning how program providers coped with limited resources and tried to build capacity.

We could also consider the participants’ perspective on the quality of the preparation provided. What did they expect from their program and what did they get? After having been in the classroom 6 to 8 months, how did they assess their preparation? Did the program that attracted them with incentives of fast, inexpensive, convenient, and practical training give them sufficient pre-service preparation so that they thought they could teach well?

Additionally, we chose to investigate the roles that state departments of education adopted in authorizing and overseeing these programs. Some states took centralized approaches, closely controlling and, in one case, standardizing their content and operations. Other states used a decentralized approach, approving programs that met basic criteria and then taking a hands-off stance during their implementation. By focusing on states that differed in their approaches to authorizing, sponsoring and monitoring alternative certification programs, we could explore whether their different policies and practices were related to observable differences among the programs. What role did the states actually play in the programs’ design and delivery and what levers of quality control did they rely on to ensure that graduates deserved a license?

Thus, we chose four states that exhibited varying degrees of centralization in implementing their programs, and we conducted site visits to 13 programs while the training was underway. We interviewed program directors and faculty about how they designed and delivered the content of the programs. We interviewed participants as they took part in the pre-service preparation and then again 6-8 months later, while they were teaching. By analyzing data from various sources, we came to understand in some detail how these policies and programs played out for state officials, program directors, faculty, and candidates.

How Incentives Limited Programs' Capacity and the Quality of Preparation

Understanding these programs required careful attention to three inter-related factors: the incentives they offered to candidates, the quality of program they could provide given limited time and money, and the organizational capacity they needed to offer the program they promised.

Incentives

Alternative certification programs usually are designed to attract candidates who are not likely to enroll in traditional programs, but who might become excellent teachers. Target groups include recent liberal arts graduates with strong preparation in their subjects, but no coursework or practice in teaching; retirees from the military or business who would like to spend the capstone of their career in public education; employees in other fields (engineering, banking, law, technology) who want to switch careers in search of more meaningful work; and individuals committed to a local community who lack teaching credentials, but are knowledgeable about the schools (e.g., school volunteers and instructional aides).

These groups of individuals differ in many ways, but they were all attracted to alternative certification programs by similar incentives. Most such programs are shorter than traditional programs and carry lower costs (both out-of-pocket costs and opportunity costs). Some states subsidize programs, even eliminating tuition altogether. Individuals who must forego a salary from another job in order to attend training find the convenient timing of fast-track pre-service training attractive (4 to 8 weeks in the summer or successive weekends during the year). This arrangement also serves as a strong incentive for experienced professionals who believe that they have found their calling and want to get on with it, rather than spending a year in training. Some programs are designed to make preparation convenient for prospective teachers, either by locating training sites near their homes or using technology to provide coursework online. Also, candidates are attracted by the practical orientation of these programs, believing that what they need most are no-nonsense tools, such as strategies for classroom management, rather than theories and research about teaching and learning. Finally, some candidates enroll in alternative certification programs believing that they will provide them with quick access to jobs, even though many programs do not advertise this or support candidates in their job search.

Program Quality

Although there is evidence that these incentives attract the very types of individuals for whom they are intended, they can also force programs to compromise the depth and quality of training they can provide. For example, charging little or no tuition means that programs may not have sufficient funds to hire a specialist in each subject for which they offer a license; to train or modestly compensate the mentors who supervise student teaching; or to offer meaningful follow-up support once candidates have begun their new teaching assignments. Providing 2 rather than 10 months of pre-service training arguably limits the extent and depth of what the candidates might learn before entering the classroom. Scheduling the training during July and August, as many programs do, means that candidates must complete their student teaching in a summer school offering only a limited set of courses. Thus, candidates may have no practice teaching the subject

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or grade level for which they will be licensed; they may be assigned a supervising teacher who is not licensed in that field; or they may have no chance to experience what it means to work in a typical school environment. The practical focus of these programs, which is driven as much by limited time and money as by candidates' preferences, may mean that new teachers enter the classroom with little depth of understanding about important topics such as child development, testing and accountability, or literacy.

Researchers have conducted many studies in an effort to understand the relationship between different approaches to preparation (traditional vs. alternative) and teacher quality. However, because of conflicting or inconclusive findings, their studies provide little guidance about what, if anything, pre-service training contributes to the quality of a new teacher's work. Therefore, there are no clear and widely accepted standards of program quality by which to assess the various alternative certification programs. It is possible, however, to consider whether these programs can deliver the training they promise or are forced to make compromises in coursework and clinical experiences that candidates believe are unwarranted and even program directors and faculty find difficult to defend.

Responding to Limited Capacity

Advocates of alternative certification programs often characterize them as nimble entities compared with the slow-moving behemoths of traditional, university-sponsored teacher education programs (Ballou and Podgursky, 1998). From the outside, these programs may seem simple and straightforward, yet surprising depth of organizational capacity is required to train teachers both quickly and well. Given limited resources (a consequence of the incentives that make the programs attractive to candidates), how do those involved in offering the training gather what they need to provide a solid program?

Many alternative certification programs today are run by newly formed organizations, often assembled quickly. Directors have a wide range of responsibilities. They are expected to find sites for coursework, arrange settings for student teaching, recruit and train mentors, and assist candidates in job placement. Usually, they cannot count on a cadre of faculty assembled over many years or rely on established relationships with local school districts. If program administrators decide or are required to license teachers in several fields, they may need to hire specialists in each, even if enrollments are small. Unlike schools of education, these programs cannot count on faculty from the university's departments of arts and sciences to work with prospective teachers of mathematics, history, or chemistry. Therefore, as alternative certification programs seek to ensure quality while offering the incentives that applicants seek, they must devise ways to operate efficiently and to create greater capacity.

In many cases, building necessary capacity for alternative certification programs to function effectively depends on collaborating with local schools. Since many of these programs operate in the summer, they need schools to help coordinate summer student teaching, job placements, and on-the-job mentoring once participants begin work as full-time teachers. Creating such partnerships poses a challenge, for in order to work, schools must see collaboration as being in their interest; they must be able to do their part, and they must accommodate the compressed time frame to which most programs adhere. Exploring the complicated relationships among incentives, program quality, and program capacity proved to be central to understanding how the alternative certification programs we studied worked.

What We Found

Those who have an interest in alternative certification programs usually ask whether these programs adequately prepare candidates for teaching. There should be a simple answer to this straightforward question, but there is not. We identified different strengths and weaknesses in the programs we studied and, thus, could not generalize, even about the quality of this small sample of programs.

More importantly, however, we concluded that the program is only one element that determines whether new teachers feel prepared for teaching. How candidates fare in their teaching also depends on the knowledge and experience they bring to their training. Further, their success in teaching is greatly influenced by whether the school where they begin to teach provides support for continued learning or adopts a sink-or-swim attitude to induction. A knowledgeable engineer, who has spent years digesting and explaining complicated information about mathematics, may find success in teaching, even though her training program is weak and her school offers little support. A businessperson who barely remembers the history he once studied, yet benefits from working with a first-rate mentor in student teaching, may feel confident in the classroom if he receives ongoing advice and feedback from colleagues. A chemist with a PhD can fail miserably in the classroom if he is unprepared to relate to adolescents and his school ignores him and his needs. Thus, the person, the program, and the school all combine to determine whether new teachers feel prepared for their responsibilities.

We found that the incentives offered by alternative certification programs—brief, inexpensive, convenient, and practical training—were very attractive to candidates, especially those entering teaching at mid-career. Candidates wanted to move quickly to classroom teaching positions, thus avoiding the tuition and the opportunity costs of longer pre-service training in traditional preparation programs. However, because these incentives usually meant that the programs had less time and money to work with, the quality of the training was often jeopardized. Many programs relied on their recruitment and selection process, rather than the content and design of their program experiences, to ensure that individuals who completed training were likely to succeed in the classroom. Although all programs required candidates to complete assignments, tests, or portfolios, there was little attention to assessment as a means of quality control.

We observed that the programs in our sample were either *statewide* in their orientation or *locally-grounded*. Statewide programs were intended to prepare candidates for jobs in many settings throughout the state. They provided a broad introduction to teaching and focused on skills meant to be applicable in a wide array of districts and communities, working with all types of students. By contrast, locally-grounded programs, which were intended to prepare candidates for work in a particular district and community, focused mainly on that district's policies, curriculum, and students. Each approach had its advantages and disadvantages.

Overall, the training these programs provided tended to be very practical and generic, particularly in the statewide programs. Few programs offered coursework in how to teach each of the subjects for which it offered a license. When they were interviewed after having had 6 to 8 months of classroom experience, new teachers identified this lack of knowledge about how to teach their subject as the greatest shortcoming in their training. Also, statewide programs could not prepare these prospective teachers for the many local contexts in which they would work, a particular problem for white, middle-class candidates hoping to teach students of color in low-income communities. Student teaching placements were difficult to arrange and often candidates were mismatched

The incentives offered by alternative certification programs—brief, inexpensive, convenient, and practical training—were very attractive to candidates, especially those entering teaching at mid-career.

with courses and with supervising teachers—a math candidate worked with a literacy specialist; a future physics teacher was assigned to teach general science. Programs could offer little assistance to candidates in their job search process, unless the programs were closely affiliated with the local school districts that did the hiring. Even then, however, promised assistance sometimes evaporated as jobs were eliminated with cuts in the school budget. Although some programs included a series of follow-up seminars to support teachers once they had begun their new assignments, participants generally said such sessions were of marginal use. When these teachers received on-the-job support, it usually came from colleagues at their school, rather than from program staff.

All but one of the programs we studied offered pre-service training during the summer. The exception, a distance learning program in California, provided no pre-service training, since it enrolled current elementary and middle school teachers of self-contained classes who were working without a license. In addition to submitting their assignments by email and participating in threaded discussions with others in their cohort, the teachers in this California program were periodically observed by visiting supervisors. Compared to others in our sample, this program was much longer (18 months) and had substantially better funding; students paid more tuition than their peers in traditional programs. The curriculum included lessons in how to teach particular subjects and the candidate's current classroom served as a laboratory for understanding and experimenting with new instructional approaches. The candidates, however, had assumed full responsibility for a class of students with no prior training and no assurance to parents and the public that they were qualified to do so. With inconsistent access to school-based mentors, these teachers were largely on their own to integrate lessons from their program coursework with their daily teaching experiences.

Alternative preparation proved to be a deceptively simple idea. In fact, it introduced large, often unexpected, demands for organizational capacity, which many of these programs simply did not have. Faced with these limits, some programs adjusted their expectations and offered less than the directors had promised or believed they should. In other cases, programs successfully expanded their capacity by developing partnerships with school districts, non-profit organizations, and universities.

Audiences for this Report

This report is meant to inform various audiences. Policymakers can learn about the advantages of decentralized and centralized approaches to alternative certification, the inherent tensions and tradeoffs between incentives and quality, and the demands for capacity that such training programs require. Ultimately, policymakers can use this report along with other research to decide whether and how to endorse, fund, and support similar alternative certification programs.

Those who read this report with an interest in offering similar programs can come to understand the importance of providing candidates with both general teaching strategies and specialized approaches for teaching a particular subject or working in a particular setting. They can anticipate the difficulties of setting up student teaching placements and helping candidates find jobs. They can identify strategies for increasing capacity when financial and personnel resources are limited.

Program directors and faculty can find information in this report about the promise and pitfalls of different program models. In light of this information, they might examine their reasons for operating a program, identify the components most likely to align with their program goals, and recognize the kinds of capacity needed to make a

program run successfully. Program directors will also gain insight into how participants in alternative certification programs describe their experiences during their training and, subsequently, in the classroom.

Those who hope to participate in alternative certification programs can understand from reading this report the importance of having realistic expectations about what fast-track training can provide, and they can candidly assess what strengths and needs they bring to their training. They might consider what to do in advance of the training that would support their learning, such as spending time in schools as a substitute or volunteer, or launching an early job search.

Organization of the Report

Following a review of the literature on alternative certification, we describe the methods of our research and discuss the role of the states in sponsoring and monitoring these programs. We then introduce the reader to the participants and programs included in the study. In subsequent sections, we report on the components of the programs we examined: recruitment and selection, coursework, clinical experiences, job placement, follow-up support, and assessment. We then explain, with case examples, how candidates' sense of preparedness as teachers depended on what they brought to the program, what the program offered, and what their schools ultimately provided. We address issues of capacity and partnership throughout the report as we analyze program components. The report concludes with a review of findings and discussion of implications for policymakers, program providers, and program participants.

A Review of the Literature

The intense debate about the pros and cons of alternative certification programs often obscures the variety among them, treating them as though they are uniform, without considering the particular purpose, context, and program elements of each.

Alternative certification programs have attracted considerable attention and commentary about their quality, both because of their short duration and because of the range of providers operating them, from state departments of education to non-profit institutions, single districts, regional collaboratives, and universities. Ironically, however, the intense debate about the pros and cons of alternative certification programs often obscures the variety among them, treating them as though they are uniform, without considering the particular purpose, context, and program elements of each (Dill, 1996). Emily Feistritzer (1994) observes that the term “alternative certification” has been used to describe everything from emergency certification to “very sophisticated and well-designed programs” (p. 132). The variation in what gets counted as an alternative certification program spans various dimensions including, but not limited to, the sponsoring agent, size of the program, types of participants recruited and selected, and the duration and character of the training offered.

Some states, such as Massachusetts, Missouri, and Texas, authorize programs that recruit applicants who are willing to work in high-poverty or low-achieving schools (Blair, 2003), while others have no such specific recruitment goals. Connecticut has operated its state-run program since 1986, each year certifying approximately 200 teachers in various subjects ranging from music to math. In contrast, an alternative certification program sponsored by one Louisiana school district trains 6 to 10 candidates in special education every year. Any review of the extant literature about alternative certification should come with a caveat: these potentially important differences among the programs themselves are largely ignored in studies of the policy’s prospects, successes, and failures.

Much of the research that has been conducted on alternative certification programs addresses their success in either expanding the teaching pool or ensuring the quality of graduates. The research generally indicates that such programs do attract people who might not otherwise enter teaching. The research on programs’ success at ensuring graduates’ quality is mixed and ultimately inconclusive. A few studies examine particular program designs, what it takes to make them run, and their outcomes. Questions remain, however, about how programs seek to balance the goals of increasing supply while also maintaining teacher quality, the trade-offs they make, and the relative successes or challenges of different approaches. The study we report on here addresses some of those questions.

Can Alternative Certification Programs Increase Teacher Supply?

Recent research provides evidence that, for prospective teachers, the opportunity to skip traditional coursework in education serves as a powerful recruitment incentive. In a survey of young graduates in careers other than teaching, Public Agenda (2000) found

that half of these graduates believed they would change careers at some point. Eighteen percent said they would “very seriously consider” teaching if the opportunity presented itself, and of those, 55% said they would be much more likely to consider teaching if they did not have to go back to school in order to enter the profession (p. 28). Similarly, Liu, Johnson and Peske (2004) found that the “quick route” to teaching that was offered by the fast-track program in Massachusetts was by far the most powerful attractor to participants, even taking into account a \$20,000 signing bonus. More recently, Feistritzer (2005) reported results of a national survey indicating that nearly half (47%) of those entering teaching through alternate routes say they would not have become a teacher had an alternate route to certification not been available.

Evidence from Large-scale Studies

Several large-scale quantitative analyses examine alternative certification programs’ promise for enhancing the teacher supply, looking specifically at their effectiveness in recruiting minorities, men, mid-career entrants and those who want to teach in the subjects and areas where the shortage is most acute.

Recruitment of under-represented subgroups. There is evidence that alternative certification programs attract more teachers from traditionally under-represented subgroups than do traditional preparation programs. Shulman (1989) and Hawley (1990) each found that higher proportions of males, people over 25, minorities, and people who majored in math, science, or foreign language participate in alternative certification programs than in traditional programs. Data from the California Commission on Teacher Credentialing (CCTC) indicate that alternative certification programs in the state recruit both men and minorities at three times the rate of traditional programs (Ruenzel, 2002). Feistritzer (2005) reported that the tendency for such programs to recruit more men and minorities than traditional programs holds true across the nation.

There is some evidence that alternative routes to certification attract those who want to teach in hard-to-staff schools. Natriello and Zumwalt (1993) reported that alternatively certified teachers in New Jersey were more likely to speak a language other than English, more likely to have lived in an urban area, and more likely to say they wanted to work with disadvantaged students than were traditionally certified teachers. In analyzing a national data set, the School and Staffing Survey, Shen found that alternatively certified teachers were more ethnically diverse (1998), more likely to hold degrees in science and math (1997), and more likely to accept jobs in high-minority schools (1997) than traditionally prepared teachers.

Recruiting mid-career entrants to the profession. Advocates of alternative certification policy often argue that opening teaching to mid-career entrants from other professions will boost the quality of the teaching force. They contend that these alternative certification programs will attract mature candidates who bring both a broad worldview and experience with children, which candidates who enter teaching immediately after college may not have (Ballou and Podursky, 1998; Haberman, 1996). There is considerable evidence that alternative certification programs succeed in drawing mid-career entrants to the profession. Shen (1997), in analyzing a national sample of new teachers, and Ruenzel (2002), reporting state-level data from California, both found that candidates in alternative certification programs were more likely to be entering teaching at mid-career than their counterparts in traditional programs. Chin, Young, and Floyd (2004) found graduates of one type of alternative certification program in California to have an average age of 35, well above what one would expect of recent college graduates. Random sample surveys conducted in 2001-2002 at the Project on the Next Generation of Teachers showed an unexpectedly high proportion of mid-career entrants

to teaching: 47% in California, 46% in Massachusetts, 32% in Florida, and 28% in Michigan (Johnson et al., 2004). Whether these high proportions of mid-career entrants are the result of alternative certification policy is unclear. However, findings from previously cited research would suggest that many of those mid-career entrants came to the profession through alternate routes.

Case Studies of Individual Programs' Success in Expanding Supply

Several scholars have studied individual programs' success in recruiting high achievers, minority candidates, and people who might otherwise not consider teaching. The results are mixed. Three studies declared the programs studied to be successful, while one found its target program lacking.

Analyzing Connecticut's Alternative Route to Certification, Bliss (1990) concluded that the program met its primary goal of recruiting highly qualified individuals into teaching (defined by Bliss as those with strong subject matter knowledge), and that an increasing number of mid-career individuals were entering the profession through the alternate route. Bliss heralded the program's "3-year record of accomplishment" (p. 51) and its popularity among program participants and school officials. In an early case study of the Los Angeles Unified School District's Intern Program, Stoddart (1990) concluded that the program was meeting its goal of attracting and retaining academically competent individuals to teach in urban schools, therefore reducing the number of emergency-credentialed teachers in the district. In a third program study, Clewell and Villegas (2001) examined the Pathways to Teaching Careers program for success in both recruitment and quality assurance. They declared the program successful on several indicators: enrollment exceeded administrators' expectations; retention was high; and principals rated graduates' competence as high.

Fowler (2003) analyzed data from the Massachusetts Institute for New Teachers (MINT) in light of the state's goals of increasing qualified candidates, attracting individuals who might not have considered teaching previously, and stemming the shortage. He reported that 22% of MINT participants in 2000 had participated in prior teacher training, indicating that they might have pursued traditional certification even if MINT had not been an option. Further, Fowler's data indicate that the program failed to meet the goal of placing signing bonus recipients – a subset of the MINT participants—in the 13 high-need districts in the state; less than half of the 2000 cohort of signing bonus recipients accepted jobs in those districts. Finally, he found high attrition rates among the program's graduates; 20% of the first cohort of bonus recipients left teaching after one year. Fowler concluded that the Massachusetts program failed to produce the positive gains that policymakers envisioned—recruitment and retention of high quality candidates for high-need districts.

The mixed results of these four studies indicate that individual programs experience varying degrees of success in meeting their supply-related goals. They leave unanswered questions about what program characteristics or capacity lead to greater success.

Do Alternatively Certified Teachers Stay in Teaching?

Bringing new teachers into the profession is only the first step in increasing teacher supply; if these teachers are to remain, effective induction must follow. Although, overall, alternative certification programs do appear to attract a large pool of candidates who might not have entered teaching through traditional routes, it is less clear whether or not

Although, overall, alternative certification programs do appear to attract a large pool of candidates who might not have entered teaching through traditional routes, it is less clear whether or not those teachers stay in teaching.

those teachers stay in teaching. Clewell and Villegas (2001) found 3-year retention rates (78-81%) for teachers prepared in the Pathways to Teaching Careers program, to be higher than the national average for all new teachers. Stoddart (1990) found a similarly high 3-year retention rate in the profession (82%), though not necessarily in the new teacher's original school, for teachers prepared through the Los Angeles Unified School District Intern Program.

A few studies have examined differences among the predictions made by alternatively and traditionally prepared teachers about their career paths, with mixed results. Houston, Marshall, and McDavid (1993) found no difference between the short-term commitments to teaching expressed by alternatively and traditionally certified teachers. However, Shen (1997) reported that alternatively certified teachers predicted that they would have life-long careers in teaching with significantly less frequency than their traditionally prepared counterparts. Similarly, Lutz and Hutton (1989) found that traditionally prepared teachers expressed much stronger intentions to remain in the profession for 10 or more years.

There is little scholarly agreement on the definition of teacher quality or how to measure it.

Can Alternative Certification Programs Maintain or Improve Teacher Quality?

A substantial body of research has focused on the quality of those teachers who complete alternative certification programs. These findings have been used selectively to advance one side or the other of a combative debate about the policy's value. Because there is little scholarly agreement on the definition of teacher quality or how to measure it, research on the effects of these programs rests on a range of assumptions about the causes and indicators of effective teaching.

Many scholars have sought to assess and compare the effectiveness of teachers who completed either alternative or traditional programs (e.g., Miller, McKenna et al., 1998; Goldhaber and Brewer, 1999; Laczko-Kerr and Berliner, 2002). In addition to studying different programs, these researchers use various indicators of teacher quality, some of which include student test scores, ratings by principals, and assessments of subject matter knowledge. They also reach mixed conclusions.

Researchers at SRI International identified several approaches that researchers have used to assess the quality of alternatively certified teachers (Humphrey, Wechsler, et al., 2002). These include ratings by observers, student test scores, teachers' self-reported sense of efficacy, and measures of subject matter knowledge. We examine the available evidence in each of these categories.

Ratings by Observers

The current body of research on principals' ratings of alternatively and traditionally certified teachers includes small studies of local programs and yields mixed results. For example, Ovando and Trube (2000) and Jelmberg (1996) conducted small-scale reviews of principals' ratings and concluded that alternatively certified teachers are less effective in the classroom than their traditionally certified counterparts. Two other small studies, however, led researchers to conclude that there were no appreciable differences between principals' ratings of alternatively certified and traditionally certified teachers (Guyton, Fox, et al., 1991; Miller, McKenna, et al., 1998).

In studying outside observers' ratings of the performance of alternatively certified teachers, Dickar (2003) compared two types of participants within the New York City

Teaching Fellows program—the career changers and the recent college graduates—to determine if there was variation in their responses to the program and their success in the classroom. Dickar’s sample of 56 candidates included 26 career changers and 30 recent college graduates. She found that career changers tended to either exceed expectations or perform well below them, whereas recent college graduates tended to perform across the spectrum of expectations. Dickar described the career changers who performed below expectations as inflexible and detached, and those who exceeded expectations as highly committed and skillful at drawing on various sources of support. Like Bliss’ work a decade earlier, these findings suggest that it is important for program designers to take into account the participants’ characteristics, particularly their career stage and the experiences they bring to the program, which may assist or hinder them in learning to teach.

Student Test Scores

The research about how teacher certification relates to student achievement draws on larger, quantitative data sets, and the findings again are conflicting. Analyzing a national data set (NELS), Goldhaber and Brewer (2000) found that students whose teachers held a standard, probationary, or emergency license in math performed better than students whose teachers were not certified or held private school certification. However, the authors stress that there was no significant difference in the performance of students whose teachers held standard versus emergency credentials. They assert that these results “strongly contrast with the conventional wisdom . . . that good teachers only come through conventional routes” (p. 139). Darling-Hammond, Berry, and Thoreson (2001) criticize Goldhaber and Brewer’s methodology, and thus their inference, by pointing out that they rest this claim on data from a very small sub-sample of teachers. They also argue that studies should examine the actual training that teachers receive, rather than their certification status.

In a study comparing the math and science test scores of students taught by certified and uncertified private school teachers, Sharkey and Goldhaber (2001) found little difference between the groups. Laczko-Kerr and Berliner (2002), on the other hand, concluded that teacher certification status does matter. The authors found that the students of certified teachers outperformed the students of “undercertified” teachers by about 2 months on the grade-level equivalence scale in reading, math, and language arts. Their group of undercertified teachers included emergency, temporary, and provisionally certified teachers, including participants in Teach for America (TFA), a national organization that places recent liberal arts graduates without a teaching license in hard-to-staff schools. TFA teachers participate in a summer institute that includes coursework and teaching. However, a study by Raymond, Fletcher, and Luque (2001) indicates that TFA teachers are as competent as their non-TFA counterparts. In a comparison of TFA teachers and other teachers in the Houston Independent School District, the authors found few differences in student achievement. It is important to note that in comparing TFA teachers to non-TFA teachers, the authors did not distinguish between those non-TFA teachers who were traditionally certified and those who were not. Therefore, it is not possible to draw conclusions about the relative value of certification—whether traditional or alternative—from this study.

More recent studies have yielded mixed findings about the effectiveness of Teach for America teachers, further fueling the debate about the value of teacher education and certification. An experimental study by Decker, Mayer, and Glazerman (2004) found positive effects of TFA teachers on student math scores when compared to their

certified, experienced counterparts. However, Darling Hammond, Holtzman, Gatlin and Heilig (2005) found that TFA teachers generated smaller student achievement gains than teachers with traditional certification.

Teachers' Reports of Self-Efficacy

Research documenting alternatively certified teachers' reports of self-efficacy also has yielded mixed results. Jelmborg (1996) and Lutz and Hutton (1989) found alternatively certified teachers to be less confident than their traditionally certified counterparts. Similarly, Darling Hammond, Chung and Frelow (2002) found that teachers in New York who had completed traditional preparation felt better prepared in almost all aspects of teaching than those who had not. However, Guyton et al. (1991) and Miller et al. (1998) found the groups to be similar.

Subject Matter Knowledge

Some studies have demonstrated no significant difference in the degree of subject matter knowledge between traditionally and alternatively certified teachers, although individuals' facility in using that knowledge in their instruction may differ. Hawk and Schmidt (1989), in a sample of 18 alternatively prepared (fast-track) and 18 traditionally prepared teachers in North Carolina, found no differences between the two groups in their scores on tests of content knowledge; they also found no differences in scores between those who majored in the disciplines tested and those who did not. However, there was some indication that the traditionally prepared teachers had greater knowledge of how to teach their subjects: when they were rated by outside observers, the traditionally prepared teachers consistently received higher ratings in classroom teaching skill than did the alternatively prepared teachers.

In studying the mathematical knowledge of 55 alternate route teachers who had math degrees, McDiarmid and Wilson (1991) found that these teachers commonly understood mathematical algorithms, but not the underlying mathematical theory or concepts. Furthermore, a longitudinal study of these teachers indicated that not all improved their ability to explain mathematical concepts on the job, leading the authors to question whether or not one can expect new teachers to learn by teaching. In a quantitative analysis, Darling-Hammond found that, when coupled with training in their subject matter, teachers' exposure to subject-specific pedagogical training was a powerful predictor of student achievement (2000).

The Limitations of Research about the Quality of Alternatively Certified Teachers

It is not surprising that the research on the quality of alternatively certified teachers has yielded mixed findings, since it rarely makes distinctions among different types of alternative or traditional certification programs. After completing a review of the research, Walsh (2001) criticized as "astonishingly deficient" this line of research that attempts to establish a relationship between teacher certification and student achievement (p.1). For a variety of methodological reasons, including teachers' self-selection into programs and a lack of clarity about what constitutes an appropriate comparison group, this body of research has been inconclusive (Seftor and Mayer, 2003).

Wilson, Floden and Ferrini-Mundy (2001) identify three factors that limit the conclusiveness of research about alternative certification's effect on teacher quality. First, it is not possible to determine to what extent such programs' effects are the result of their recruitment and selection policies. Some programs rigorously screen applicants for high-achieving, talented individuals, while others accept anyone who meets minimum

standards. Second, “we know nothing about what teacher candidates actually learn in these routes, which seriously limits our understanding of the merits and limitations of such programs” (p. 22). Third, there is such variety among programs that it is impossible to make generalizations about them.

In the recent book *Studying Teacher Education*, Cochran-Smith and Zeichner (2005) report that there is no conclusive evidence that alternative or traditional programs better prepare teachers; rather, each has some effective components and other less effective components.

Most alternative certification programs seek to both increase the supply of teachers and ensure their quality. Little previous research focuses on how programs are organized to do both.

How Do Programs Seek to Increase Teacher Supply While Ensuring Quality?

Most alternative certification programs seek to both increase the supply of teachers and ensure their quality. Little previous research focuses on how programs are organized to do both. Some previous research documents the structures common to alternative certification programs. For example, Stafford and Barrow (1994) identified four “essential” components of such programs: screening, training, supervision and support. Other research documents the ways in which such components are implemented. Zeichner and Schulte (2001), in a review of peer-reviewed studies on alternative certification, found that all programs in the studies offered participants support in the form of mentoring, but that the documented quality of the mentoring varied enormously. Similarly, Darling-Hammond et al. (1989) documented great variation among the field experiences and coursework offered by nine alternative certification programs. Stoddart and Floden (1995) also noted variation in coursework requirements among alternative certification programs, yet noted that, generally, they focus on practical rather than theoretical aspects of teaching.

SRI researchers Humphrey et al. (2002) remark, “Little has been done to fully describe program components and tease out their significance for the quality of the program’s graduates or assess the components across programs.” The study reported here begins to examine that unexplored territory by analyzing each component of several programs in light of the program providers’ goals and the participants’ experiences.

Data Sources and Methods

We chose to study 13 different program sites in four states: Connecticut, Massachusetts, California, and Louisiana.

In seeking to understand alternative certification programs operating in a variety of policy contexts, we chose sites in four states that exercised different levels of control and regulation in the design, approval, and delivery of alternative certification programs. These states—Connecticut, Massachusetts, California, and Louisiana—fall along a continuum ranging from more to less state involvement in the programs.

We found the most centralized approach in Connecticut, where the Department of Higher Education had, for over a decade, retained control of recruiting and selecting participants in its Alternative Route to Certification program (ARC), developing and delivering the training, and conducting final licensing assessments. In 2002, when the state expanded beyond its original site and opened new programs to serve two urban districts, Connecticut officials used a franchise model of expansion, closely controlling the new programs to ensure that they would replicate the strengths of the original.

Massachusetts officials decentralized only selected aspects of their MINT program in 2002. They retained control over recruitment, selection, and final assessment, while delegating many aspects of program design and delivery to satellite sites and independent vendors.

California authorized universities and districts to provide alternative certification programs on their own, but the state set stringent minimum standards for the programs and maintained oversight of their content and delivery. California's program providers were responsible for all aspects of their program: recruiting and selecting candidates, designing and conducting training, and initially assessing those who completed the training.

Louisiana, at the far end of the continuum, took a fully decentralized approach to its fast-track programs, setting modest minimum standards and accepting all vendors whose proposals met the regulations. Programs then assumed responsibility for recruiting and selecting candidates, providing the training, and assessing candidates.

So that we could consider a range of alternative certification programs, we chose to study 13 different program sites in those four states. All program sites in this study have been given pseudonyms. The programs varied widely in size, serving from 6 to 168 candidates. Three sites were located in Connecticut, including the original site of the state's Alternative Route to Certification (ARC) and two expansion sites opened in 2002. We studied three sites in Louisiana that were part of Louisiana's Practitioner Teacher Program—one run by a university (Ogletree University), one by a local district (Plumville), and one by a partnership between a local district and a non-profit organization (Green River). We also included five sites from the Massachusetts Institute for New Teachers (MINT); two were university-run and three were managed by a non-profit sponsor, which we here call Teachers First. Finally, we included two sites from one of California's many intern programs; this program, which we call the California Teacher Corps (CTC), was run by a university and operated at several sites located in different parts of the state. (See Table 1.)

All but two of the sites we studied (CTC North and South) offered the bulk of their training during a short, pre-service summer program. They provided coursework, a clinical component (either student teaching or classroom observations) and some follow-up support during the school year. Several were designed to prepare candidates for a wide range of jobs and communities throughout the state. Others were locally-grounded, preparing teachers to work in a particular district. CTC North and South, which prepared candidates throughout the state, were the only sites that offered job-embedded preparation designed for teachers who already had a job, but needed a license.

Table 1: Alternative Certification Program Sites in the Sample

State and Program Name	Sites (names are pseudonyms)	# of Participants	Areas of Certification Offered	Sponsor
Connecticut's Alternate Route to Certification (ARC)	Hansbury	168	English (MS/HS); Math (MS/HS); Social Studies (MS/HS); Science (MS); Biology (HS); Chemistry (HS); Physics (HS); Art; Music; K-12 Language	State Dept. of Higher Education
	Blainesville	72	English (MS/HS); Math (MS); Science (HS); Art (K-12)	
	Northborough	55	K-12 Language; K-12 Bilingual Ed.; Biology (HS); Math (HS)	
Massachusetts' Institute for New Teachers (MINT)	Bay City	70	English; Biology; Chemistry; Math; Physics; Earth Science; Social Studies; Business; Foreign Language; ESL; (all certification in grades 5-12)	National Non-Profit Organization
	Huntsville	15		
	Westview	26	*Special education in addition to content certification	
	Lyceum	20	Biology; Chemistry; Physics; Earth Science; Math; Social Studies (grades 5-12)	State University
	Greyson	29	English; Math; Biology; Physics; Chemistry; Earth Science; Social Studies; Foreign Language (grades 5-12)	Private College
California's Intern Teacher Program	California Teachers Corps North	250	Multiple subject credentials (ES/MS)	State University
	California Teachers Corps South	227		
Louisiana's Practitioner Teacher Program ¹	Ogletree University	8	Math (HS); Biology (HS); Earth Science (HS); Physics (HS); Chemistry (HS); Special Ed.	Private University
	Green River	38	Elem. (4-8); Elem. Special Ed.; English (HS); Math (HS); Biology (HS); Earth Science (HS); Physics (HS); Foreign Lang. (HS); Social Studies (HS)	National Non-Profit Organization
	Plumville	6	Special Education	Rural School District

Candidates studied the content of these programs online and were observed teaching in their schools by visiting CTC supervisors.

Data Collection

Respondent Sample and Interviews

During the first stage of data collection (April through November 2002), we conducted semi-structured, in-person interviews ranging from 1 to 2 hours with administrators, faculty, and selected participants at each program site. In some cases, where programs were small, we interviewed all of the teaching candidates. In other cases, program directors solicited respondents from among their candidates or we selected them from a list of volunteers. Where possible, we sought variation in respondents' field of license, gender, race, ethnicity, and career experience at entry. In addition to directors and faculty, we interviewed relevant program partners, such as school district officials or independent vendors. We assured participants anonymity and assigned pseudonyms to all program sites and individuals. We further offered the assurance of confidentiality, explaining that we would not discuss the comments of any respondent with anyone outside our research team. Although we used semi-structured interview protocols to gather comparable data across sites, we tailored the protocols to each particular program.

Across the 13 program sites, we conducted interviews with 14 program administrators (many of whom served as primary faculty members), 16 additional faculty members, and 80 participants. We also interviewed seven representatives of agencies that worked in partnership with individual programs. We sought to understand the design and implementation of the programs, with particular attention to the directors' efforts to maintain quality within the constraints of limited resources. We inquired about the participants' expectations and assessments of their program while pre-service training was still in progress.

We conducted the second stage of the research March-July 2003, by interviewing 65 (of the original sample of 80 candidates) whom we were able to locate. We conducted these follow-up interviews, which lasted 30 to 40 minutes, in person or by telephone. Questions focused on the candidates' views of their program from their perspective as a newly practicing teacher. How did they assess the programs some months after completing it? In what ways did they feel most and least prepared to teach? All interviews were tape-recorded and transcribed.

Document Review

For each of the sites in the sample, we reviewed the relevant state legislation to learn about the program's origins, the state's goals, and the regulations for program design. We studied other documents such as program descriptions, selection criteria and processes, and grant applications in order to further understand how each program worked. We read course syllabi and state teaching standards in order to understand the programs' overall design and particular components (coursework, clinical experiences, and follow-up support), within the context of the state requirements. Where available, we reviewed program evaluation documents.

We sought to understand the design and implementation of the programs, with particular attention to the directors' efforts to maintain quality within the constraints of limited resources.

Data Analysis

After each interview, we completed a narrative summary, including information on key topics under examination (e.g., clinical experience, coursework, program successes and challenges) and from those, we identified themes and patterns of response across individuals, sites, and states. We then conducted a rigorous analysis of the interview transcripts, coding and sub-coding them using categories that we had identified in the research questions, topics that were prominent in the research literature, as well as those that had emerged in the analysis of the narrative summaries and from the transcripts. We used an iterative process of data analysis, moving among the categories, topics, and themes we had identified, the details of individual transcripts, and the emerging findings from cross-case analysis. We created matrices (Miles and Huberman, 1994) to summarize data and facilitate cross-case comparisons. For example, a matrix of the timing and character of participants' job placement experiences illuminated the limited role the state could play in job placement. We completed case analyses to describe each site's program elements in design and implementation. In some instances, we engaged in detailed sorting and numbering. For example, we documented participants' teaching assignments to determine how many taught in urban, rural, or suburban districts. We wrote analytic memos throughout the phases of data collection and analysis in order to compare emerging findings from one program site to another, to illuminate overarching findings across programs, and to document that which was surprising or puzzling (Miles and Huberman, 1994).

Throughout data analysis, we tested the consistency and validity of our findings with research colleagues. Given that the data included responses of directors, faculty, and participants, we were able to compare different perspectives on the same topic and, thus, triangulate findings (Maxwell, 1996).

The Role of the State in Alternative Certification Programs

Overseeing the preparation of new teachers in alternative certification programs presents several challenges for state education officials who seek to increase the supply of teachers while maintaining, or even enhancing, the quality of the teaching force. First, they must decide how much responsibility to maintain at the state level and how much to delegate to program providers. Second, they must develop a means to ensure that these programs admit strong candidates. Third, state officials must set minimum standards for clinical and coursework experiences, and a means for ensuring that those provided by programs are adequate. Fourth, they must ensure that candidates are properly assessed before licenses are granted. There is little agreement among scholars or policymakers about what array of experiences and assessments constitute adequate training for new teachers, and little experience or research for states to draw on in overseeing alternative certification programs.

The States' Means of Controlling Quality

Given this lack of clear research findings, what options for quality control are available to state officials who authorize alternative certification programs? First, they can ensure that the training provided by the program meets an *accepted set of standards*, so that candidates in all programs—traditional and alternative—encounter the same topics, have comparable experiences, and develop basic competencies.

Second, states can set criteria for *recruitment and selection* to ensure that programs are prepared to attract and choose strong candidates. By establishing challenging standards for entrance (test scores, undergraduate grade point averages, majors in subjects) and endorsing a vigorous recruitment and competitive selection process, states can offer assurances that new entrants will be capable teachers. In response to state standards, programs can set a higher bar for quality by establishing more rigorous criteria and selecting the strongest candidates in their pool.

Third, states and programs can promote innovative approaches to *program design and delivery*. Traditional preparation programs, linked as they are to university requirements, tend to have a common format (required academic courses followed by student teaching), with all preparation completed before teachers enter the classroom. Alternative routes to certification open new options. Content can be offered online or in short modules. Topics for on-the-job seminars can be timed to coincide with new teachers' responsibilities as they emerge during the school year, for example, how to establish expectations for classroom behavior before school starts, or how to relate with parents before meeting them at back-to-school night. When training occurs at the same time as teaching, participants can reflect on theory and findings from research, using data from the classes they currently are teaching.

Fourth, state officials who approve programs can require or conduct formative and summative *assessments* to guarantee that individuals who complete alternative certification programs are fit to assume responsibility for a classroom. Such assessments might include papers and exams completed during coursework, observations and critiques of student teaching, evaluations of teaching on the job, or review of a portfolio (including assignments, student work, and written reflection) submitted by a teaching candidate for independent review.

All four of these approaches may be used to provide the public with assurances of quality. Given limited resources, however, states may find it more efficient to rely on one or two. For example, when many separate programs operate in one state, it is difficult to ensure that all programs actually incorporate the state's standards and competencies into training experiences; therefore policy makers may rely instead on a final assessment, which all candidates must pass before entering the classroom. Or a state may set high entry standards and then pay less attention to how training is organized in the programs it approves.

In deciding how best to ensure quality, state and program officials are likely to be influenced by different assumptions about the factors that contribute to teacher quality. For example, those who believe that individual qualities are what matter—that teachers are born, not made, or that the most promising teachers have strong undergraduate records—will likely invest in rigorous selection, while those who hold that good training is essential for good teaching are likely to focus on program design and delivery.

As states initiate alternative routes to certification, each also must decide whether to take a centralized or decentralized approach to program operation.

To Centralize or Decentralize

As states initiate alternate routes to certification, each also must decide whether to take a centralized or decentralized approach to program operation. That is, should state officials assume responsibility for selecting, training, and assessing candidates, or should they instead set standards by which other organizations may run programs? Since creating its Alternate Route to Certification in 1986, Connecticut's Department of Higher Education has relied upon a centralized approach. In the year of this study (2002), department officials oversaw the entire program, from the recruitment campaigns to the summative assessment of candidates' portfolios. Louisiana, on the other hand, adopted a decentralized approach to overseeing its Practitioner Teacher Program, inviting school districts, universities and non-profit organizations to develop and operate programs that met minimum standards.

In general, organizations may choose to centralize operations in order to maintain consistent standards, achieve predictable outcomes, and benefit from economies of scale. Organizations may decentralize operations in order to respond to local needs and priorities; to move authority close to the work to be done, thus facilitating efficient adjustments; and to encourage grass-roots initiative. Alternatively, an organization can choose a strategy that Mintzberg (1979) termed "selective decentralization," maintaining tight control over some aspects of operation and delegating others. For example, in 2002, Massachusetts state officials controlled the recruitment and selection process but authorized vendors to provide training experiences for candidates.

Centralized and decentralized approaches have benefits and drawbacks for the states and for the providers who run programs. For example, centralized recruitment processes can yield large pools of candidates and consistent standards for selection; however, state-operated recruitment is unlikely to yield candidates in fields and geographic areas that match those of local teacher shortages. Decentralized approaches to recruitment may

ameliorate local shortages more efficiently, but also may draw fewer candidates or lead to uneven selection standards as local program officials try to enroll the full complement of candidates in a cohort. Centralized approaches to delivering coursework may take advantage of economies of scale, allowing states to hire experts in subject specialties. However, state-sponsored coursework is unlikely to focus on local instructional initiatives or specific districts' curricula. On the other hand, in decentralized arrangements, vendors can tailor coursework to local circumstances, but may have the resources to offer courses on only a small number of topics.

Two state-level factors—the approach to quality control and the balance of centralized and decentralized management—influenced the capacity of program sites to serve candidates well and to ensure that they would be prepared to begin teaching in September. The following analysis explores how the state's role interacted with other important factors to shape the training that these alternative certification programs could provide candidates.

Two state-level factors—the approach to quality control and the balance of centralized and decentralized management—influenced the capacity of program sites to serve candidates well.

The Participants and the Programs

Most of the candidates in programs studied were mid-career entrants who were dissatisfied with their previous jobs.

Traditional teacher preparation programs generally are designed for a relatively homogenous group of first-career entrants who bring similar academic coursework and life experience to their training. By contrast, most fast-track alternative certification programs are designed to attract candidates who have a range of academic, professional, and life experiences. Indeed, the participants in the alternative certification programs we studied came from many different backgrounds. Some had deep knowledge of the subject they were preparing to teach, and some did not. Some came with extensive life experience, while others had just graduated from college. These candidates each brought a unique combination of past experiences, talents, and expectations.

The participants differed most notably in whether they were entering teaching at mid-career or as a first career out of college, and whether or not they had prior teaching experience before enrolling in the program. This section begins by exploring and illustrating those differences. It then describes the common set of incentives that attracted these participants to their alternative certification program and suggests how those incentives often introduced constraints on the quality of preparation.

Mid-Career Entrants and First-Career Entrants

The candidates in the programs studied were *mid-career entrants* who were dissatisfied with their previous jobs. Many had decided to become teachers in the belief that this work would be more meaningful than what they were doing. For example, Daryl worked in a petrochemical plant, where his work had been “steady, well paid, and very unfulfilling.” After completing his alternative certification program and entering the classroom, Daryl said that he was “bouncing” to be doing meaningful work that he enjoyed. Nancy, a research biologist, changed careers because she found that “working on the microscope by myself, seeing new things, and explaining what it meant wasn’t exciting to me anymore.” Francis, who had “made a lot of money” as a software consultant, chose to teach because she wanted to “do something with [her] life.”

Other mid-career entrants had been laid off from jobs in business or technology, prompting them to reassess their lives and professional options. Rhoda, an energy economist for 20 years, believed that a capstone career in teaching would enable her to help public education while working close to home. Andy, an MBA who worked in technology “until it crashed,” said he no longer thought business “glamorous,” as he once had, and chose to teach, an option that had “always been in the back of [his] mind.”

Critics sometimes suggest that such mid-career entrants to teaching are uncommitted, but most of those we interviewed before they started to teach expressed confidence about their decision and said that they would continue to teach until retirement. For example,

Karen said she had “found a good thing” and was “going to stick with it.” Antonio said, “I can’t see myself doing anything else,” and Andy predicted that teaching would be his “last stop.”

Also, the mid-career entrants often brought a perspective on schools and the work of teachers that was informed by their life experience. Some had raised their own children. Often they had supervised colleagues and functioned as members of collaborative work groups, and many had changed roles and responsibilities, often advancing within their organizations in rank and pay. When they moved to teaching, they often brought with them considerable knowledge about the practical application of their subject, how to relate well with young people, and how to work in complex organizations.

Because many programs deliberately recruited mid-career entrants, there were far fewer *first-career entrants* among the participants we interviewed. However, a few of the programs, such as the California Teacher Corps, did include a substantial number of individuals who were teaching as a first career. (Six of the nine CTC candidates we interviewed were first-career entrants to teaching.) Across all programs, the first-career entrants we interviewed differed from their mid-career counterparts in that they were sometimes tentative about their commitment to teaching, saying from the start that they were only exploring it as a career. Unlike first-career entrants in traditional preparation programs, they were not ready to commit substantial money or time to more extensive training, both because they did not think such an investment would prove worthwhile and because they were not certain they wanted to teach long term. Although many had worked with youth in various settings, most lacked full-time work experience in non-school organizations and, thus, brought to their new workplaces expectations shaped primarily by their own experience as students. For example, Chad, a recent college graduate who took a job teaching in the same high school he had attended, chose his alternative certification program because it was tuition-free and promised to be more “application-based” than the few education courses he had taken as an undergraduate.

Prospective and Current Teachers

In addition to these differences between mid-career and first-career teachers, the respondents differed in whether they had prior experience teaching. Most were preparing for their first job in the classroom, although some were already teaching, uncertified, and had enrolled in their alternative certification program to become licensed.

Many of the participants in the alternative certification programs we studied were *first-time teachers*. For them, the program provided a transition from another career into teaching or a bridge from their undergraduate studies to the classroom. These first-time teachers had a range of experience with children and brought to their training varied expectations about what teaching would be like. In the pre-service preparation of their program, they looked for basic information such as what to do the first day, how to manage students in the classroom, how to teach their subjects, and how to understand, as one said, the “lingo” of teaching.

Other participants in the study were *current teachers*, already employed full-time as instructional aides or teachers when they enrolled. As a group, they included both first-career and mid-career entrants and they brought a distinctively different set of qualifications, backgrounds, interests, and needs to their program. Several had been rehired for many years on annual emergency permits. Some were committed to long-

term teaching. Others, however, were simply intent on keeping their current job under the pressure of NCLB's requirements for a standard teaching license. Candidates who participated in these alternative certification programs only to have their "ticket punched," as one said, expressed little interest in the content of the training and regarded their program's requirements as bureaucratic hoops and hurdles. Other current teachers, however, welcomed the opportunity to refine their skills, reflect on their early years of practice, and expand their repertoire of instructional strategies.

When the training is compressed, participants may avoid the opportunity costs of lost income associated with a year or more of full-time training.

Similar Incentives Attracted Candidates

There is a widespread assumption, held by program directors and policymakers alike, that in order to recruit people who might not otherwise become certified, alternative certification programs must be attractive in ways that traditional certification programs are not. The incentives that alternative programs offer in contrast to traditional programs are faster, less expensive, more practical and more convenient training, sometimes with the promise of job placement. These incentives often are built into the state regulations that authorize the programs and into the design of the programs, themselves.

Fast

The first incentive for candidates is the prospect of rapid training—usually in the summer—and entry to a paid teaching position before earning full certification. The candidates attending fast-track programs confirmed that this is attractive for two reasons. First, when the training is compressed, participants may avoid the opportunity costs of lost income associated with a year or more of full-time training. Many people, particularly the mid-career entrants to teaching who are recruited by programs like the Massachusetts MINT and Connecticut ARC, cannot afford a year of full-time coursework and a semester of unpaid student teaching. Also, the prospect of earning certification without sitting through hundreds of hours of education coursework attracts candidates who hold schools of education in low esteem, or believe they already have what it takes to be a good teacher (Johnson, forthcoming 2005; Liu, 2004).

Inexpensive

Although legislation authorizing alternative certification programs does not require that the training be inexpensive, such programs also draw candidates by charging tuition substantially lower than that of traditional programs. There is some research evidence to support this approach: a number of studies show that availability of financial aid is a key determinant of which preparation program a teacher enters (Darling-Hammond and Ball, 1998). The alternative certification programs we studied were very inexpensive relative to traditional programs. For example, in Louisiana, 2002 tuition for a year of courses cost approximately \$3,500 for a public or \$30,600 for private university, while the cost of a fast-track alternative certification program was as low as \$500.² Tuition for the Massachusetts MINT program was \$2,500, although in 2002 almost every candidate received a full scholarship from the state, regardless of financial need. The only alternative program in this sample that was more expensive than nearby traditional certification programs was the California Teacher Corps (CTC). At just over \$4,000 total tuition, CTC cost nearly double the expense of the on-campus traditional certification

program run by the same university. However, CTC offered other important incentives to its participants, who did not have to give up a year of salary since they were teaching full-time while earning certification.

Practical

Candidates sought to acquire hands-on skills rather than learning about the research and theory they believed traditional teacher preparation programs offered. Alternative certification programs catered to this interest. These programs provided instruction in classroom management, lesson planning, and presentation techniques, and did little, if anything, to acquaint these future teachers with the theory or research on which these skills were based. Participants praised the practical aspects of their programs and many criticized even the small amount of time dedicated to educational theory. Many candidates cited the practical bent of these programs as a strong incentive for choosing an alternative program over traditional options.

Convenient

Convenience is the fourth major draw that alternative certification programs offer to potential participants. Although convenience was not required by states, the regulations and guidelines authorizing such programs clearly promoted it. For example, the state of Massachusetts authorized program providers to offer MINT coursework and student teaching at locations across the state in order to attract and accommodate a group of candidates that was geographically dispersed. Each program site offered licenses in at least 6, and as many as 10, fields. Louisiana's Practitioner Teacher Program allowed sites to develop wherever there was a need, in areas where participants lived and worked, with seminars available in local school buildings or university classrooms. Also, in these fast-track alternative certification programs, the coursework was determined largely by program directors and faculty members—no time spent choosing courses of study or registering for classes—and student teaching placements were arranged by the program. Candidates just showed up on the first day and followed instructions.

Job Placement

Many candidates are attracted to alternative certification programs by the expectation of job placement. Sometimes this is an explicit offer, as with the Plumville program in Louisiana, which guaranteed jobs for candidates who successfully completed their training. Louisiana's Green River program also promised to place all candidates in jobs. Similarly, two urban sites in the Connecticut ARC program offered candidates reduced tuition in exchange for a multi-year teaching commitment to the district, and thus job placement was an implicit incentive. Even when the programs did not promise job placement, many candidates believed that they would easily find positions, since one rationale for creating fast-track alternative programs was to relieve a shortage of licensed teachers. Avoiding the stress and uncertainty of a job search was an attractive incentive, particularly for candidates who were making a rapid transition from another career. However, as we will see, few programs found it easy to meet this expectation.

The Tension Between Incentives and Quality

The programs that offer these incentives of quick, inexpensive, practical and convenient training also are expected to prepare candidates who are qualified to assume responsibility as classroom teachers. The demands for quality in US public education are

The programs in this study were variously intended to stem shortages; to get more of the “right” people into teaching; to certify those who were currently teaching without a license; or to simplify the requirements for entering teaching.

great and growing, while at the same time training is expected to be ever more efficient and cost-effective. Programs are required to respond to state regulations for what graduates need to know and be able to do as well as being true to the program’s purpose and mission. Ultimately, programs must also meet the public’s expectation that their graduates will be effective in the classroom.

The incentives offered by fast-track alternative certification programs introduce constraints that traditional programs usually do not contend with, including scant time and scarce financial and human resources. For example, a fast-track program operating in the summer is expected to provide rich and educative student teaching experiences for candidates in a summer school. However, summer school schedules tend to offer only a few subjects, taught by faculty who may not be licensed to teach them. Thus, directors face major challenges in trying to create worthwhile clinical experiences for program participants. In addition, a small program that provides convenient, local training may not have the funding to hire a specialist who can provide subject-specific instruction in each subject and grade level for which it offers a license. This means that candidates for some licenses do not receive instruction from a master teacher in their field. Instead they learn general teaching techniques from a teacher experienced in another discipline. Finally, a free-standing program having few established relationships with schools and districts may have little to offer as candidates seek jobs. In the programs we studied, the incentives of fast, inexpensive, practical, and convenient training constrained program providers’ capacity to ensure that their teachers would have a productive pre-service experience, be sufficiently prepared to be responsible for classrooms in September, and have ready access to job opportunities. Program directors often were forced to compromise what they ideally would have offered in a longer, better-funded program, although several effectively increased their capacity by partnering with other organizations.

The Programs Studied

In policy debates and much of the research literature, alternative certification programs are discussed as if they are all alike. In fact, they vary greatly because these programs develop in different contexts to serve a range of purposes. Although all programs prepare candidates to quickly assume full-time teaching responsibilities, they are designed to meet varied public policy goals. The programs in this study were variously intended to stem shortages in specific subjects or locations; to get more of the “right” people into teaching; to certify those who were currently teaching without a license; or to reduce and simplify the requirements for entering teaching. In part due to the variation in their goals, these programs differed in how they oriented their recruitment and training. Here we describe the policy context for each of the programs, as well as their purpose and design. After describing the programs in our sample, we consider how program directors coped with the resource constraints presented by the incentives of fast, inexpensive, convenient, and practical training. We examine the demands on organizational capacity that program directors and faculty encountered, and the opportunities these programs had for ensuring quality in light of those demands. In subsequent sections of this report, we examine in detail the components of these programs, comparing their approaches to recruitment and selection, coursework, clinical experiences, job placement, follow-up support, and assessment.

Some programs were intended to prepare teachers for teaching assignments in many different types of districts and communities. Candidates who completed their

training in these *statewide programs* could begin their teaching careers in any locale they chose—urban, small town, suburban or rural. Statewide programs often were sponsored by states seeking to fill general shortages or bring new types of teachers into public education. In contrast, there were *locally-grounded programs*, which tailored training for work in specific districts and sites. They concentrated all their candidates' preparation on a single district's curriculum, policies, community, and students.

Statewide Programs Prepare Teachers to Meet Broad Needs

“The programs are intended for persons from diverse fields . . . who wish to change careers or those who want to re-enter the work force.”

Connecticut Department of Higher Education, 2001

Ten of the 13 program sites in this study promised, either explicitly or implicitly, to prepare candidates for the full range of settings they might enter. Connecticut's ARC and Massachusetts' MINT, both statewide initiatives, were designed to prepare candidates for positions at any school throughout the state. Although Connecticut's two satellite sites in Blainesville and Northborough were meant to produce new teachers for those two urban districts, the training model did not include specialized attention to those settings. Core faculty members were, in fact, the same at all three ARC sites. Candidates, directors, and program faculty believed that, when candidates eventually fanned out across Connecticut in search of jobs, it was to their advantage not to have been trained with reference to a specific community or district. The preparation provided by the two California sites, CTC North and CTC South, also was intended to apply to a range of settings, since participants already held full-time positions in widespread locations. Although the programs offered by Massachusetts MINT, Connecticut ARC, and California's CTC were very different, none was closely linked to the practices or curricula of any particular setting or school district, and faculty were drawn from various university campuses and school districts. With this generic orientation, a program potentially could address shortages throughout a state.

Connecticut's Alternate Route to Certification

Connecticut's Alternate Route to Certification (ARC), a state-run program established in 1986, is one of the oldest in the nation. The legislation that created ARC called for an “institute of effective teaching” to be run by the state Department of Higher Education with the following purpose:

[T]o attract mid-career professionals into teaching. The programs are intended for persons from diverse fields . . . who wish to change careers or those who want to re-enter the work force. Individuals who have worked as substitutes, or who have experience as independent school teachers, are also encouraged to apply. (Connecticut Department of Higher Education, 2001)

Although the original purpose of the program was to attract a new brand of teacher to the profession, in recent years the director had steered the program towards preparing candidates to meet specific shortages in the state and diversifying the teaching force.

Connecticut ran two concurrent programs in 2002, ARC I and ARC II. The newer and smaller program, ARC II, catered to people interested in earning certification on weekends while working full time. ARC I, a summer program, certified individuals to teach middle grades (4-8), English, mathematics, science, and social studies; high school English, mathematics, biology, chemistry, physics, and social studies; and K-12 languages, art, and music. The program included an 8-week, full-time summer institute.

Candidates participated in supervised student teaching in the morning and attended classes in both general and subject-specific pedagogy in the afternoon. The sample for this study includes the flagship ARC I site, established in 1986, and its two urban expansion sites, opened in 2002. The program design at these new sites replicated that of the original site and key faculty, who delivered lectures on topics covered by the curriculum, traveled from site to site to do so. In 2002, ARC I served approximately 320 candidates across the three sites. Upon completion of the training, each candidate received an initial license.

“This is an effort to level the playing field a little bit so teaching will not be the profession of last resort. . . . We are trying to attract the best and the brightest to the teaching corps.”

*Massachusetts
Senate President
Thomas Birmingham
speaking about the
Massachusetts
signing bonus
program.*

The Massachusetts Intern Program

Offering an alternative certification program has been an option in Massachusetts since 1982 under the state’s intern program (Feistritzer and Chester, 2002). A few schools and districts in Massachusetts took early advantage of the opportunity to adopt “higher education partners” and create state-sanctioned pathways to certification. Until 1998, however, alternative routes to teacher certification were not widely used in the state.

In response to growing public concern about teacher quality, the Massachusetts legislature created the Massachusetts Signing Bonus Program (MSBP) in 1998, offering \$20,000 awards to talented professionals from other careers who chose to teach in the state. Senate President Thomas Birmingham explained, “This is an effort to level the playing field a little bit so teaching will not be the profession of last resort. . . . We are trying to attract the best and the brightest to the teaching corps” (Ferdinand, 1998). The legislation creating the MSBP authorized the state Board of Education to promulgate regulations for the program’s implementation.

In order to train the signing bonus recipients, the Department of Education created a fast-track alternative certification program, subsequently called the Massachusetts Institute for New Teachers (MINT). By 2002, the program included both signing bonus recipients and applicants who had not received a bonus. MINT’s 7-week summer training program consisted of coursework, discussion seminars for the cohort, and practice teaching in summer school. By participating in the institute and successfully completing a teaching portfolio during their first year on the job, bonus recipients received a Provisional License with Advanced Standing, the same license granted to graduates of conventional, university-based teacher preparation programs. In 2002, the MINT program enrolled 215 participants at seven sites across the state, each offering licenses in at least six fields. Five of those sites are included in our study sample, two operated by local universities, and three by a national non-profit vendor we are calling Teachers First.³

The California Intern Teacher Program

In creating its Intern Teacher Program in 1986, California was one of the first states to pass legislation that authorized alternative routes to teacher certification. The number of teachers earning state certification through alternative routes has grown annually, along with the number of programs. Once they were approved by the California Commission on Teacher Credentialing, internship programs were allowed to operate independently. In 2002-2003, 79 intern programs were operated in the state by colleges, universities and school districts (California Commission on Teacher Credentialing, 2005).

We studied one of the many intern programs in California, a program we call the California Teacher Corps (CTC), which had five sites across the state and served nearly 850 candidates in 2002. CTC was developed in 1998, when analysts estimated that

30,000 of California's elementary and middle school teachers held emergency permits, in part because the Class Size Reduction Act of 1996 immediately created the demand for thousands of new teachers. The program was designed to certify those teachers who were unlicensed, but already teaching in elementary and middle school classrooms. CTC was operated by a university system and used a program of distance learning. Current teachers who enrolled completed their work independently, participating in online threaded discussions with others in their cohort, and delivering assignments to instructors via the Internet. They were periodically observed and supervised in their classes by traveling faculty members. Although CTC was designed for full-time teachers, in 2002 enrollments were low, and the program also accepted classroom aides. In contrast to the other programs in our sample, which were short, CTC lasted 18 months and led to full certification. We studied two of CTC's five program sites, CTC North and CTC South.

A statewide program implicitly promised to provide candidates with a broad introduction to teaching, acquainting participants with different curricula, varied pedagogies, and the opportunities and challenges of working in different local contexts.

The Advantages and Disadvantages of Statewide Programs

A statewide program implicitly promised to provide candidates with a broad introduction to teaching, acquainting participants with different curricula, varied pedagogies, and the opportunities and challenges of working in different local contexts. Participants who enrolled in these programs generally appreciated that their newly acquired teaching skills would be portable across districts in the state. However, when the training was brief, as with Connecticut's ARC and Massachusetts' MINT, the statewide programs risked becoming superficial as faculty sought to acquaint candidates with what it would be like to teach in an enormous range of settings. Also, once a candidate had completed the training and taken a job, there was still much to learn about teaching in that specific context. The responsibility for this second level of training virtually always rested with the districts and schools where the teachers had just been hired, whether or not they could provide it. Often, it was the very districts most in need of new teachers who hired graduates of fast-track programs, yet recent evidence suggests that these districts typically have the least capacity to support those new teachers on the job (Johnson, Kardos et al., 2004). Because the CTC participants held jobs as a condition of participating in the program, this transition from the generic program to the local setting was not so abrupt or difficult to make. Teachers could interpret their assignments and readings in the context where they currently were working.

Locally-grounded Programs Prepare Teachers to Fill a Local Need

Locally-grounded programs explicitly prepared candidates to teach in a particular district or school, usually where their training occurred. Thus, coursework could focus on the local site's reform initiatives or curriculum and be taught by local faculty who understood what candidates needed to learn in order to succeed in their schools.

The Louisiana Practitioner Teacher Program

Louisiana's alternative route to certification, called the Practitioner Teacher Program, was the newest in our sample. The State Board of Elementary and Secondary Education (BESE) approved the plan for implementation beginning in June 2001, based on the

*“Without context,
people don’t learn
things.”*

*Green River program
administrator*

1999 recommendation of a Blue Ribbon Commission on Teacher Quality. The state’s program was meant to serve two purposes: to provide a streamlined certification structure for people who want to avoid traditional certification, and to provide a means for holding all teacher preparation programs accountable for the quality of their training (Board of Elementary and Secondary Education, 1999).

Louisiana, like California, was less involved in creating and managing its alternative certification programs than Massachusetts or Connecticut. Under the terms of the legislation, institutions of higher education, school districts, and private vendors could apply to BESE for approval to run programs. As long as the providers pledged to meet the minimum standards that BESE had set, they were free to tailor their programs to the local context. In 2002 the state required that alternative certification programs provide nine credit hours of both pre-service coursework and follow-up support, as well as a structured field experience for candidates. Louisiana’s programs could offer a wide range of certifications [grades 1-6; grades 7-12 English, French, biology, chemistry, physical science, physics, mathematics, Spanish, and social studies; and special education (mild/moderate)]. Practitioners earned full licensure after successfully completing the program and 3 years of teaching.

The sample for this study includes three Louisiana Practitioner Teacher Programs—one run by a university, another by a district on its own, and a third by a district in partnership with a non-profit vendor. All were designed to be locally-grounded and, as the Plumville director said, to “grow [their] own” teachers.

Plumville

The district of Plumville created a program to recruit and train a small number of carefully selected individuals as special education teachers. Officials hoped to increase the district’s supply and retention of certified teachers in this hard-to-staff field. The program director explained that the district consistently lost its certified teachers to nearby districts that paid more, “and my feeling was, if we could offer some type of peer connections as well as other supports, that the salary . . . would be outweighed compared to the support systems available to them.” She hoped this approach would allow district administrators to “take things into our own hands . . . to navigate our course.” In 2001, the director created a 7-week training experience, involving structured classroom observations and coursework in special education, operated by the district’s Office of Special Education. In 2002, the Plumville program certified and placed six candidates.

Green River

Green River created its fast-track alternative certification program in hopes of finding local candidates who would be committed to the city and personally invested in the district’s reform initiatives. Although officials in Green River were looking for teachers to address shortages, the superintendent also had a clear idea that the “right” people for the job would be high achievers who agreed with his vision of school reform. In this locally-grounded program, he said, faculty could “create more real-world learning environments” and directly link candidates’ experiences to the district’s community, its schools, and the urban students it served. A Green River administrator emphasized the pedagogical benefits of this model: “Without context, people don’t learn things.” The 7-week program included student teaching and afternoon coursework created and delivered by Teachers First, the same national non-profit organization that offered coursework at several Massachusetts MINT program sites. In 2002, Green River trained 38 candidates and placed them in local jobs.

Ogletree

In 2001, the education faculty at Ogletree University, a historically Black institution, decided to open a fast-track teacher certification program, geared to preparing African-American teachers for a nearby local urban district. Faculty and directors explained that other alternative certification programs did operate in the area, but—in the words of one professor—the attitude of those programs toward black students was “not a positive one.” Therefore, the Ogletree faculty members created a 7-week summer certification program, including university coursework and structured classroom observations. The eight program participants in 2002 earned provisional licensure after completing the program.

Locally-grounded programs can prepare candidates for the specific curricula, student populations, and special initiatives of a district.

The Advantages and Disadvantages of Locally-grounded Programs

Locally-grounded programs can prepare candidates for the specific curricula, student populations, and special initiatives of a district. Also, candidates who complete training in a local district can reasonably expect to find jobs there without conducting a time-consuming job search. For individuals already teaching on emergency licenses, as some candidates in the Ogletree program were, locally-grounded training can seem ideal because completing it allows them to keep their jobs. However, locally-grounded programs also have potential disadvantages for candidates, which might not be initially apparent. Although they prepare teachers to work in a specific district or school, the highly specialized training may leave them with limited knowledge of curricular options and teaching strategies. Without additional coursework or professional development, they are not likely to expand their repertoire of instructional approaches beyond what the district currently offers. Also, locally-grounded preparation may limit the new teachers’ options for employment elsewhere in the state. Moreover, new teachers who do leave one district for another may discover that the change requires unexpected adjustment and retraining. The responsibility for additional professional development will fall to the local district and schools, which may not even recognize the need, let alone have the capacity to respond.

The Challenge of Ensuring Quality

As a result of the attractive incentives these programs offered their participants—fast, inexpensive, convenient, and practical training—most were constrained by having insufficient time, funding, and personnel. Thus, directors who were concerned about maintaining the quality of their program and the qualifications of their graduates often had to make hard choices about how best to use the resources they had.

There were four levers of quality control that program directors could use as they made these choices. First, they could ensure that their training met the state’s established set of *standards* for preparation programs, by incorporating required topics—such as special education or the state’s curriculum frameworks—and experiences—such as lesson planning or student teaching. In adopting this approach, program directors relied on the soundness of the state standards as a way to ensure the quality of the teachers they trained.

Second, the programs could rely on *recruitment and selection* to ensure that they had strong candidates, who were likely to succeed in the accelerated training that

With limited time, they could not provide all the content and experience that traditional programs could. Most simply pared down and compressed the topics, presenting whatever faculty deemed most essential.

was offered. A program's standards for entry might vary from objective measures (standardized test scores, undergraduate majors, or grade point averages) to subjective measures (interviews, evidence of relevant employment, or demonstrations of teaching expertise). The state officials who established the Massachusetts MINT program believed good teaching rests on a combination of personal qualities. With the assistance of an independent vendor, they systematically screened for seven traits during the day-long interview process. The California Teacher Corps included the Haberman Urban Teacher Interview⁴ in its selection process and Connecticut's ARC program faculty, who made all admissions decisions, looked for evidence of past personal and professional achievement in selecting candidates. These programs recruited vigorously, established rigorous criteria and selected the strongest candidates in their pool, thus addressing issues of quality from the start.

Third, programs could develop innovative approaches to *program design and delivery*. Most of the programs we studied modeled their offerings on traditional preparation programs, with a set of academic courses and student teaching to be completed before entering the classroom. However, with limited time, they could not provide all the content and experience that traditional programs could. Most simply pared down and compressed the topics, presenting whatever faculty deemed most essential. However, CTC developed an extensive distance learning program delivered over the course of 18 months to current teachers.

Fourth, program directors could conduct formative and summative *assessments* to guarantee that individuals who completed alternative certification programs would be fit to assume responsibility for a classroom. These might include conventional tests or papers demonstrating a candidate's command of content, evaluations of teaching practice, or review of a candidate's teaching portfolio, including lesson plans, student work over time, and written reflections on successes and failures. Through these assessments, program directors and faculty had an opportunity to determine who did and did not meet adequate performance standards and cull out those who seemed unprepared to teach.

The Need for Organizational Capacity in Meeting Demands for Quality

Living up to the state's mandate of offering attractive incentives while assuring that candidates would be qualified to teach meant that programs had to develop substantial organizational capacity, including sufficient funding and appropriate personnel to carry out an array of program activities. For example, having sufficient capacity to provide a program of quality would require funds to launch a recruitment campaign and trained individuals to select strong candidates; faculty to design and teach a curriculum; established systems for assessment; and the trust and cooperation of school district personnel who could provide first-rate student teaching placements and easy access to information about job openings.

After reviewing the literature, (e.g., Mackay et al., 2002; Cohen and Ball, 1996) and examining the data from our study, we identified five dimensions of organizational capacity that were essential for ensuring quality in alternative certification programs. In order to operate successfully, program directors and faculty drew upon fiscal resources, human resources, administrative process, support from external players, and time (Birkeland, 2005).

Fiscal capacity, the funding available for directors and faculty as they designed and implemented their training, varied across the programs in this sample. For example, despite reduced tuition, administrators in Connecticut ARC reported that their program was well-funded, with enough money to hire the faculty they needed. In contrast, MINT site directors said they could not afford to hire faculty who were experts in each of the subjects for which they licensed candidates, while the program at Oglethorpe University in Louisiana reported operating at a loss. Programs' fiscal capacity typically derived from a combination of state grants and tuition revenue.

Another dimension of capacity relates to *human resources*: having the staff and faculty with sufficient expertise to do the program's work. Sometimes, financial resources can buy greater human resource capacity; however, if there is not a pool of qualified applicants for faculty positions, having money does not help. In the case of California Teacher Corps, for example, program directors could not find enough faculty with sufficient technological expertise to implement the distance-learning curriculum. Instead, they had to hire the people who were available and then invest in training them.

Administrative process capacity, which includes systems for communication, coordination, and control, is a resource created by people within the organization. Programs with shallow administrative process capacity carry out their work on an *ad hoc* basis, with individuals randomly taking responsibility for tasks as they emerge. By contrast, programs with deep administrative process capacity have well-defined systems for getting things done, clear distribution of responsibility, and easy ways for faculty and staff to find and share the information they need. For example, the Massachusetts Department of Education sub-contracted the selection process for the MINT program to the national non-profit organization Teachers First. As a result of working in many states, Teachers First brought administrative process capacity in the form of established protocols for selecting candidates.

Fourth, programs differ in their *support-generating capacity*, that is, their ability to get cooperation and resources from people and organizations in the community. It may be a function of whom the director and faculty members know, their roles in the community, or the reputation of the program. For example, by 2002, the flagship ARC site in Hansbury, Connecticut, had been building its reputation and connections in the state for over a decade. Therefore, it had better support-generating capacity than the brand new Blainesville ARC site. The Hansbury site director reported that local schools volunteered to participate as summer school training sites for ARC's Hansbury candidates, while the Blainesville site director struggled to find any schools that would host his candidates during summer school. California Teacher Corps, with the support of the chancellor and the university system's statewide faculty senate, had the advantage of strong support-generating capacity. This was not so at the Bay City MINT site in Massachusetts where enthusiasm for the program was lukewarm, at best.

A fifth resource that contributes to the organizational capacity of alternative certification programs is *time*. Even programs with access to a wealth of other resources cannot adequately meet their program goals if they do not have enough time. Developing effective systems to coordinate work takes time. Recruiting and screening applicants for desired qualities and qualifications takes time. Teaching the participants necessary skills and allowing them to practice those skills take time. This resource, which for most programs was only 5-8 weeks, was raised consistently in program directors' and faculty members' accounts of what they lacked. Only in CTC, which lasted 18 months, did faculty, directors and participants not cite the lack of time as a concern.

These elements of organizational capacity combined to determine what the programs could do in preparing teachers. For example, the California Teacher Corps

Even program administrators who put great forethought into gathering necessary resources often discovered that implementing the program took more time, money, expertise or influence than they had.

program chose to deliver much of its coursework online, utilizing threaded discussions and instructional CD-ROMs. The use of this approach arose when a team of university staff members with skills in technology had access to funding from an outside grant. They were eager to help CTC designers find innovative ways to deliver their curriculum to individuals across the state who might not have access to campus-based programs. Thus, fiscal, human resource, and support-generating capacity combined to enable this program to meet its goals.

Insufficient organizational capacity led to less effective approaches. For example, in its first year, the alternative certification program at Ogletree University accepted all qualified applicants, including mid-career entrants with no teaching experience who were in transition from other professions. However, after the summer training, there was no funding for Ogletree faculty members to provide these teachers with adequate on-the-job support in their classrooms. Because the local district provided no formal induction and little in the way of help for new teachers, participants turned to the program director for help in finding textbooks and supplies as well as advice about how to teach. The program probably could have found a new faculty member qualified to conduct classroom visits, but no funds were available. Instead the director volunteered her time, putting in extra hours on weekends and evenings. The following year, Ogletree's director chose to accept only candidates who were already teaching in the district, rather than taking responsibility for bringing new people into the profession. The program's available capacity better met the demands of this revised program goal.

It was not always obvious in advance to program directors what it would take to make a given program work. However, anticipating the necessary resources and expertise *before* the program opened its doors was crucial; building institutional capacity on the fly proved difficult, and often it was the teachers-in-training who felt the pinch. Even program administrators who put great forethought into gathering necessary resources often discovered that implementing the program took more time, money, expertise or influence than they had. In those cases, directors either made do with what they had, revised program goals and activities to fit available institutional capacity, or compromised their expectations about quality. Alternatively, they set out to build capacity through investing in technology, training staff, or partnering with other organizations. As we examine the programs in greater detail, it will become clear how program purpose, capacity, and available partners combine to shape the experiences available to participants.

Summary of Findings: The Participants and the Programs

Most candidates were attracted to these fast-track programs by the incentives of faster, less expensive, more practical, and more convenient training. These same incentives, however, introduced limits on the training the programs could provide. Specifically, limited time and resources made it difficult for programs to offer ideal clinical experiences, subject-specific training, and assistance finding a job. While candidates were attracted by similar incentives, there were some notable differences among those who enrolled. Namely, participants differed in whether they were mid-career or first-career entrants to teaching, and whether they had prior teaching experience.

The programs in our study had various policy goals. Some were intended to alleviate shortages in specific subjects or locations, while others sought to get more of the

“right” people into teaching. Yet others were created to certify those currently teaching without licenses, or to reduce and simplify the licensing requirements for teachers. We found that the programs in our study were either *statewide* or *locally-grounded* in their orientation. Statewide programs in Massachusetts, Connecticut and California aimed to prepare teachers for many different types of districts and communities. In contrast, locally-grounded programs in Louisiana tailored training to prepare teachers for specific districts. Each of these approaches has distinct advantages and disadvantages.

The need for these programs to be quick, inexpensive, practical, and convenient meant state officials and directors had to be strategic in their use of limited resources. Four levers of quality control were available to them as they sought to offer high-quality training. They could ensure they met the state’s standards for the programs; engage in a rigorous process of recruitment and selection; develop innovative approaches to program design and delivery; or conduct formative and summative assessments of candidates. Ultimately, alternative certification involves a complex web of incentives, capacity, and quality control. The remainder of the report describes in detail how a set of alternative certification candidates and program directors experienced these factors.

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Recruitment and Selection

Proponents of fast-track alternative certification programs contend that they yield a stronger pool of prospective teachers than traditional teacher education programs because they attract individuals with extensive subject matter knowledge and professional experience, who are reluctant or unable to complete lengthy pre-service programs (Ballou and Podgursky, 1994). Some critics of alternative certification programs contend that, although brief and inexpensive preparation may attract a traditionally untapped supply of candidates, because of its brevity, it may also be less effective in preparing those teachers than traditional pre-service programs. As a result, they are said to compromise rather than enhance the quality of the teaching force (Darling-Hammond and Ball 1998; Darling-Hammond and Bransford, 2005). One often cited response to this critique is that candidates who are especially able or experienced can succeed in teaching with abbreviated preparation.

Therefore, one way that alternative certification programs can ensure the quality of the teachers they train is by investing in targeted recruitment and rigorous selection. Recruiting candidates deliberately and widely can generate a deep pool of applicants. A careful selection process then enables the program to screen candidates based on criteria that meet or exceed the state standards and to choose those applicants who appear most likely to succeed in the fast-track settings. Simultaneously, a program can identify promising candidates who express a desire to teach in fields of shortage or hard-to-staff schools.

Centralized and Decentralized Approaches to Recruitment and Selection

Most of the programs in the sample relied to some degree on recruitment and selection as a strategy for ensuring the quality of participants. The role that the state played in this process differed substantially across our sample. In centralized arrangements, the state took responsibility for recruitment and selection, and in decentralized arrangements this component of the program was left entirely to site directors and faculty. When programs lacked the capacity to do this work on their own, they sometimes hired an independent vendor to assist them.

In our study, Connecticut's Department of Higher Education took the most centralized approach, recruiting and selecting participants for all three ARC program sites from one office. The Massachusetts Department of Education also controlled recruitment and selection for all of the MINT sites. However, the state had limited capacity to conduct this process on its own and thus hired Teachers First to assess candidates. California and Louisiana left recruitment and selection to individual programs, requiring only that candidates meet the state's minimum entry standards. The university-run California Teacher Corps managed recruitment and initial screening

for all five campus sites from one central office; however, the individual site directors supplemented the statewide campaign with local recruitment and ultimately chose the candidates admitted to their sites. In Louisiana, each of our three sites was entirely on its own for recruitment and selection. One of them, Green River, hired Teachers First to help recruit candidates and manage the selection process.

Recruitment

Programs relied on recruitment strategies both to ensure that candidates with strong qualifications would apply and to attract particular types of candidates to teach in the state or the community sponsoring the training. Each program's purpose was reflected in its approach to recruitment. For example, although every program sought candidates who seemed likely to succeed with abbreviated training, MINT specifically recruited high-achieving mid-career candidates; CTC targeted unlicensed teachers who were already working in public schools; and Plumville sought members of the local community who were likely to stay in the area. Each program's capacity also influenced the extent of its efforts. Some could afford to advertise widely and pursue promising candidates, while others could not. Centralized arrangements that provided pooled resources were one way to boost capacity for vigorous recruitment and rigorous selection. Partnerships were another.

Connecticut and Massachusetts relied on statewide recruiting, with little regard for particular local needs or priorities.

Centralized Recruitment: Casting a Statewide Net

In creating fast-track alternative certification programs, Connecticut and Massachusetts sought to improve the caliber of their teaching force and to address a general shortage of teachers. They relied on statewide recruiting, with little regard for particular local needs or priorities, and their efforts resulted in deep pools of candidates.

Connecticut's recruitment strategies for ARC had become increasingly structured over time. According to the assistant director, in the late 1980s state officials relied on "word of mouth" to recruit new candidates. A growing teacher shortage in specific subjects like math and science and a perceived need for more teachers of color led program officials to adopt a deliberate approach to recruitment by hiring a director of recruitment and advertising the program on local radio stations. Despite those efforts, the assistant director reported that their pool of candidates in high-need subjects had remained shallow: "We get a number of applications for social studies and English, but we don't get as many qualified applicants for some of the shortage areas." However, the program also actively sought to attract high-achieving adults who wanted to change careers: "Our priorities are just to get people who really want to do this [non-traditional route] . . . people who have this natural ability to work with youth and other adults."

In 2002, the Massachusetts Department of Education was intent on attracting a very strong applicant pool and, thus, carried out recruitment in partnership with Teachers First. The MINT program had little trouble attracting applicants because it was coupled with the Massachusetts Signing Bonus, the state-funded \$20,000 incentive to attract applicants from other careers into teaching. Teachers First's recruitment coordinator said their aggressive advertising campaign was designed to "tap into people's sense of social justice and altruism." It yielded nearly a thousand applications from individuals inside and outside the state for approximately 350 positions. By all accounts, MINT met its goal of attracting applicants with a history of impressive academic and professional achievement. However, the site director in Bay City said she wished that the program had more aggressively recruited people of color: "I really would love to see a change in

In Louisiana, program sponsors and directors did their own recruiting, which meant that they could efficiently address local staffing needs.

how recruitment of people of color is done. Because [at this site] we do not have enough of a mix of folks.” She also thought that the program should have recruited people who lived in the urban communities where qualified teachers are often scarce. It is important to note, however, that MINT’s primary goal was to improve the quality of teachers across the state, not to address local shortages or to change the demographic profile of the teaching force.

In the California Teacher Corps, recruitment for the entire program was directed by a central staff housed on one campus. A marketing director conducted a statewide recruitment campaign focused on candidates currently teaching with emergency licenses. In an effort to meet the university chancellor’s ambitious goal of preparing 1,000 participants in 2002, the recruitment director tried various strategies, including movie trailer ads—“Need a credential?”—mail marketing, press releases, and display units at job fairs. Although recruitment was designed to be a statewide effort, site directors reported that the greatest success came from personal relationships with district administrators, who referred their teachers working with emergency licenses. One site director said, “If you look at the districts we’ve grown in, it’s where we’ve developed personal relationships.” The CTC state director said that word of mouth was the source of many referrals: “I think we get a lot of [participants] from [their] being at a school and talking to their colleagues.” In 2002, CTC administrators suggested that individual site directors soon would begin taking more responsibility for their site’s recruitment.

Decentralized Recruitment: “Growing Our Own” To Serve Local Needs

In Louisiana, where programs were authorized to operate independently, program sponsors and directors did their own recruiting. Although this took more work than relying on the state, it meant that they could efficiently address local staffing needs. For example, Plumville’s director, Dr. Mary Anne Carter, had created the program in order to fill persistent vacancies in special education, and she sought only candidates interested in teaching in that field. Recruiting participants independently also allowed programs to target local applicants who might remain in the district for some years. However, for a few programs, small-scale recruitment also yielded shallow or weak pools of applicants.

Both of the district-run programs in our sample, Louisiana’s Plumville and Green River, recruited candidates who lived nearby, but these programs used different approaches. The Plumville director placed an ad in the local newspaper: “We had binoculars on [the advertisement]. It said, ‘Looking for special education teachers.’”. She and the other administrators also capitalized on their personal relationships in the community. One participant, Damon, said that he had considered applying to the program before, and when he saw the advertisement in the newspaper, he “went straight to [the director’s] house.” He said, “I just asked her about [the program]. And she gave me some papers and what things I have to do to get my transcripts to get in the program. And so I did it.” Sylvia, also a Plumville participant, reported that while she and her husband were living in Montana, “Dr. Carter had tracked me down and called my mom to ask me . . . if I was interested in teaching [students labeled] severe [and] profound.” Carter hired her in the middle of the year to fill an open position, even though she was uncertified. Carter then urged Sylvia to apply to the practitioner program to achieve licensure. She recruited others for the program in a similarly personal manner, seeking applicants from those currently teaching in the district on emergency permits and individuals expressing an interest in committing to teach special education in Plumville.

Green River sub-contracted its recruitment process to staff from Teachers First, who focused explicitly on finding candidates for subject areas in which Green River needed teachers. Caroline Matthews, a manager with Teachers First in Green River,

said she had a “three-pronged approach” to recruitment, relying on general visibility and publicity; personal contacts “through informational events or . . . word of mouth”; and “gatekeepers” who would “identify people in the community that will then match us to larger groups of people we’re targeting.” Teachers First advertised in the local media, sponsored career fairs, made presentations to local community groups, and distributed flyers and brochures. Matthews explained:

[This approach] either directly hits your target audience and gets them inspired, and hopefully, gets them to apply to this program, or it just creates a general buzz and then . . . our target people then actually hear about us just through word of mouth and this leads them to our organization.

Matthews said that Green River had a “huge need” for math, science, and special education teachers. Thus, the program “need[ed] to target people with those backgrounds rather than the history and social studies people and the elementary school person.” However, their emphasis on broad recruitment for talented applicants did not attract many interested in those shortage fields. “[B]asically, when we look at our results, we have a huge . . . number of elementary teachers and quite a few social studies teachers this year.”

The Louisiana program run by Ogletree University, an historically Black institution, purposefully recruited minority candidates, including their own alumni holding bachelor’s degrees, as well as local teachers lacking a license. Their mission was to find prospective minority teachers, particularly in shortage areas of math, science, and special education, for the local district, which served large numbers of minority students. However, Ogletree was constrained in their recruitment because the state required that programs only accept candidates who had passed the standardized PRAXIS exam, which measures skills in math, reading, and writing. Yet, the state did not approve the programs for operation until late spring, after the registration deadline for the exam had passed. Just days before the program began in early June, state officials agreed to allow candidates to enter the program contingent on their eventually passing the test. The Ogletree program director said she and members of her faculty called potential applicants “at the last minute,” urging them to try to get on a waiting list for the PRAXIS exam, in case there were openings on testing day. In the end, however, Ogletree’s efforts at recruitment yielded fewer applicants than there were slots in their program.

Selection

All of the states in our sample set minimum standards of entry, focusing on undergraduate coursework and minimum passing scores on standardized assessments. Programs had to comply with those standards in selecting candidates. Green River, California Teachers Corps, and MINT set entry standards that exceeded the minimum qualifications set by the state.

Connecticut required prospective teachers to demonstrate content knowledge in their intended teaching field and to pass the PRAXIS I and II exams. PRAXIS II assesses candidates’ knowledge of subject matter and pedagogy.⁵ The program further required that candidates have an academic major in their intended teaching field, or sufficient course credit, letters of recommendation, or relevant life experience that might contribute to their readiness to teach. In creating the MINT program, the Massachusetts

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legislature specified that the program should “select the best and brightest teaching prospects” and recommended that in setting entry criteria, the Department of Education use “objective measures such as test scores, grade point average or class rank, and such other criteria” (Massachusetts State Legislature, 1998). Subsequently, the Department of Education developed criteria for entry to the MINT program, including a minimum undergraduate grade point average and a passing mark on the Massachusetts Tests for Educator Licensure (MTEL), required of all new teachers. This test included communication skills and assessed the candidate’s content knowledge in the subject(s) he or she intended to teach. Louisiana mandated that program applicants hold an

Table 2: State Minimum Entry Standards 2002 and Additional Program Standards

Program	State Minimum Entry Standards for Alternatively Certified Candidates	Additional Program Entry Standards
California Teachers Corps North & South	<ul style="list-style-type: none"> • BA • Demonstrated subject matter competence • Passing score on the California Basic Educational Skills Test • Knowledge of the US Constitution 	<ul style="list-style-type: none"> • Employment (in public or private school) in a multiple subject assignment • 2.67 undergraduate GPA overall or 2.75 in the last 60 semester or 90 quarter units • Two Letters of Recommendation • Writing proficiency as shown in an autobiographical statement • Passage of Haberman Urban Teacher interview
ARC program in Connecticut	<ul style="list-style-type: none"> • BA with 3.0 GPA in undergraduate studies or 3.0 GPA in 24 hours of graduate study • Passing score on PRAXIS I or comparable exam • Passing score on PRAXIS II, ACTEL, or other subject matter exam • Experience with children/adolescents • 2 letters of recommendation • 2 year commitment to teach in Blainville of Northborough (for admission to those sites) 	
Green River, Louisiana	<ul style="list-style-type: none"> • BA • 2.5 undergraduate grade point average or “appropriate, successful work experience” and 2.2 GPA or above 	<ul style="list-style-type: none"> • Demonstration of seven identified competencies (Teachers First criteria) • Commitment to teaching in the district
Plumville, Louisiana	<ul style="list-style-type: none"> • Passage of the Pre-Professional Skills Test • Passage of content-specific PRAXIS exam 	<ul style="list-style-type: none"> • 2 letters of recommendation • Written assessment • 2 year commitment to teach in Plumville Public School District
Ogletree University, Louisiana		<ul style="list-style-type: none"> • Minimum score of 30 on Miller’s Analogy Test • 2 letters of recommendation • Preference given to those already teaching
MINT program in Massachusetts	<ul style="list-style-type: none"> • BA • Passing scores on both the Massachusetts Tests for Educator Licensure and the Communication Literacy Skills • Passing score on the state subject test in the area in which seeking certification 	<ul style="list-style-type: none"> • Demonstration of seven identified competencies (Teachers First criteria) • For recent graduates, one of the below: <ul style="list-style-type: none"> - Rank in the top 10% of the candidate’s graduating class - minimum 3.5 GPA in the major - minimum 3.5 GPA overall - rank in top 10th percentile on a nationally recognized exam (e.g., GRE) - nomination by dean of a candidate’s institution of higher education • Mid-career professionals exempt from academic history criteria above and evaluated on work experience

undergraduate grade point average of 2.5 and pass PRAXIS I and II. Although the state set the minimum entry standards, programs could adopt more stringent requirements. Green River did so, but Plumville and Ogletree did not.

California’s program was designed to recruit candidates who were already teaching with emergency credentials and who met the state’s entry requirements for all teacher education programs, including having a minimum undergraduate grade point average and passing the California Basic Educational Skills Test (CBEST), which assessed competence in reading and writing.

When programs adopted admissions requirements beyond those mandated by the state—for example, MINT required higher grade point averages or standardized test scores and CTC required candidates to pass the Haberman Urban Teacher Interview—these standards were enforced to varying degrees, depending on the size and quality of the applicant pool and the perceived urgency of the shortage. Selection proved to be more demanding and discriminating when recruitment was broad and aggressive and the primary purpose of the program was to improve the quality of the teaching pool. However, if programs were recruiting locally or were designed to address a particular shortage, they tended to rely primarily on recruitment, eventually accepting all candidates who met the state’s entry standards. In these instances, the intended rigor of the program’s selection process sometimes was compromised.

Some programs counted on selection as the key opportunity to ensure that their program’s participants would become strong teachers. In Green River, Louisiana, where an extensive selection process was used to screen candidates for a range of skills and qualities, Caroline Matthews said: “We really build the certification on knowing that the people we select are high quality.” Harvey Fiat, an administrator for CTC in California, reasoned that if the standards for screening and selection were “high enough,” any program experience, “no matter how bad,” would not “damage” these prospective teachers. The strengths of participants, in his view, would prevail, even over inadequate training.

Often directors said that they were looking as much for personal attributes and dispositions as they were screening for formal qualifications. A CTC faculty member, Betty Rogers, said that their program “worked best for the teacher who has good time-management skills and can write, and can understand what they’re reading. It’s not meant for the person that wants to . . . have somebody beating them over their head saying, ‘This essay is due.’ . . . It’s really a self-starter [program].” CTC faculty interviewed all applicants and sought letters of recommendation to screen for attributes that might not be apparent in undergraduate transcripts and standardized test scores.

Selecting Teachers to Boost the Quality of the Teaching Force

In the Massachusetts MINT program, Connecticut’s ARC program, and the Green River program in Louisiana, most applicants had strong academic training and extensive professional experience, leading program administrators to predict that they would succeed in the classroom, despite their limited pre-service preparation. Still, admission was by no means automatic. MINT accepted slightly more than one third of its applicants (350 of 960), contingent on their passing the MTEL. In the end, 215 successful applicants chose to enroll. One program administrator said that the program was looking for “an all-around person” and another said he was “very happy” with the caliber of participants they had recruited. For example, Nancy, a MINT candidate, had extensive research training in biology (an undergraduate degree, a PhD, and a post-doctoral fellowship). Jane, another MINT participant, who was described by her program director as a “natural teacher,” was an engineer with work experience in

“We really build the certification on knowing that the people we select are high quality.”

*Harvey Fiat,
California Teacher
Corp program
administrator*

various companies, primarily doing research and development. On the job, she had used math extensively, worked regularly on teams, and gravitated to roles where she served as a trainer or mentor. Darryl, a participant in Green River, had been employed in a chemical plant for 18 years while also working with adolescents in his church's youth group. Alex, a participant in Connecticut's ARC program at the Hansbury site, had studied chemistry and completed graduate work in physics. He worked as a fiscal analyst for 25 years before deciding to go into teaching.

These programs recruited and selected candidates based on their demonstrated talent, with little regard for their intended field of certification. This meant that selected candidates were not necessarily seeking jobs in the states' areas of shortage. As Caroline Matthews from Teachers First said,

“They were these really qualified, outstanding people, according to the selection model, but they weren’t necessarily fitting in the high needs areas.”

*Carolyn Matthews,
Green River program
administrator*

You're generating a pool, and then you're applying this very consistent, neutral set of criteria, selection criteria, against all of [the applicants]. So we're then yielding a pool of people who have met the selection criteria, but they're not necessarily . . . selected based on the [certification] area.

In the end, the selection process yielded more social studies and elementary teachers, because, as Matthews said, “they were these really qualified, outstanding people, according to the selection model, but they weren't necessarily fitting in the high needs areas.” Thus, the goal of supplying certified teachers for shortage areas remained in tension with efforts to select the most highly qualified participants.

Selecting Teachers to Fill a Shortage

Because the California program was designed to certify current teachers and was expanding in size, virtually all applicants who met the state and program entrance standards were admitted. One program administrator said that, without having the “privilege” of recruiting prospective teachers from outside education, the program's selection standards were lower than they might otherwise have been. The CTC North site director, Chuck Sabin, estimated that they accepted “80-85%” of applicants. In 2002, when the university chancellor mandated a 40% growth target for the program, Sabin said that he would have to begin accepting applicants who met the program's academic criteria but did not yet have jobs, thus departing from the original purpose of training and certifying teachers who were already in the classroom. It was not clear how this new directive might affect the selection process or the quality of the program's participants.

In Louisiana's Plumville program, there were 15 applicants for 10 available places; the selection committee interviewed seven and invited six to participate. In the end, the program director explained that a candidate's readiness to stay in the district carried considerable weight:

We are really looking for a commitment, their conversation about how they commit to things, and with the interest in children to help them succeed. So we asked them things like, ‘What's the most difficult challenge you faced in your lifetime and how do you think that will contribute to you teaching [in] this type of position?’ So it's really more looking at commitment issues, the willingness to learn, [and] how motivated [candidates] are.

In Louisiana's Ogletree program, administrators sought African-American candidates who would commit to teaching students in the local, urban district. Eight individuals applied for 20 available spaces in 2002 and all were accepted. Program administrator

Ella Perkins explained that of those who applied, about one third were already teaching in the local district. She explained that by enabling them to attain permanent certification, the program “gave them an opportunity not to be fired.” Another third were graduates from Ogletree who had majored in biology and chemistry. The others were what Perkins called “career changers.” According to Perkins, the selection process was the same as that used for applicants to Ogletree’s graduate program in education.

The Impact of Capacity on Recruitment and Selection

Although the director of the MINT program characterized recruitment as a “cattle call,” he viewed selection differently, emphasizing that it “absolutely has to be the foundation” of a statewide alternative certification system.

It is no simple matter for a state or local district to conduct a comprehensive recruitment and selection effort. In Connecticut, the State Department of Higher Education had run ARC selection centrally for 15 years. In 2002 when they expanded the program by opening district-based programs in Blainesville and Northborough, administrators continued to conduct the recruitment process centrally, but moved selection to the new sites, where one administrator selected participants for both. The flagship site, Hansbury, screened and selected applicants as it had always done, attracting 700 total applicants for 300 openings, while the newer sites had much smaller applicant pools—125 applicants for 85 slots in Northborough and 97 applicants for 76 places in Blainesville. Several program administrators said that, as a result of the different sized pools, selection criteria were unevenly applied across the three sites. As Northborough’s director explained, they were considering returning to centralized selection in the following year: “The ARC program would like to maintain a high standard of admittance qualifications. I think that’s the main reason that it’s going to go [centralized next year].” He favored using the same process at all sites: “I’m not sure that is has to be done centralized, but I think the process should be the same . . . [The current decentralized approach] makes me wonder about the consistency and maintaining the quality of the program.”

One state program (Massachusetts MINT) and one local program (Louisiana’s Green River) relied on Teachers First to conduct selection. The Teachers First coordinator in Massachusetts explained that the state “just wanted to just make sure that the selection was as rigorous as it could be in order to make sure that participants would be as successful as they could be.” Teachers First staff screened candidates’ paper applications, then engaged finalists in a day-long review process, including a teaching demonstration, a group discussion about articles on education, and an interview. Trained selectors judged candidates based on a set of competencies, including candidates’ demonstrated academic and personal achievement and evidence of their commitment to working in high-need areas. Although the director of the MINT program characterized recruitment as a “cattle call,” he viewed selection differently, emphasizing that it “absolutely has to be the foundation” of a statewide alternative certification system:

For now, at least going forward for next year, selection will still be somewhat centralized . . . [B]ecause of how important selection is and trying to maintain the quality of the selection process, I’m not ready to turn that over to whoever yet.

Ultimately, he made the final decisions about selection for all seven MINT sites in the state.

Plumville and Ogletree in Louisiana, both much smaller programs than the others in our sample, conducted selection entirely on their own. In Plumville, a committee

composed of district administrators chose candidates to be interviewed. Then, the committee used a rubric to compare participants' written responses to various questions, their letters of recommendation, and their performance in the interview. Ogletree directors and faculty also carried out selection for themselves.

The Advantages and Disadvantages of Centralized and Decentralized Approaches

Local programs are likely to attract mostly local candidates, and a limited pool of applicants may not have within it the range of experience and ability that the schools require.

There were advantages and disadvantages to both a highly centralized system and a highly decentralized system of recruitment and selection. A centralized approach allowed the state to capitalize on economies of scale and apply consistent admissions standards for all program sites. Centralized recruitment might provide greater capacity to cast a wide net by using media advertising and job fairs. Thus they could bring in more highly-qualified candidates, particularly in shortage areas. This approach enabled states to develop systems for tracking applicant data, which individual programs generally had not developed. Massachusetts and Connecticut both attracted large numbers of applicants who met their admissions standards, and because they had many fewer slots, directors of both programs expressed confidence that they had chosen high-quality candidates. From the state's perspective, such quality control is harder to ensure when selection is decentralized.

However, it is difficult to tailor a statewide approach to address local shortages. Having consistent criteria and a standardized selection process may mean that the candidates admitted to the program may not have what a local district needs. Further, given that district shortages can change quickly and be difficult to predict, the state's efforts may ultimately be misaligned with district needs. For example, consider that ARC officials sought to recruit and select strong candidates in art education for the two urban sites, Blainesville and Northborough, only to find that district budget cuts eliminated the positions before hiring began.

Decentralized approaches also have advantages and disadvantages. They can match new teachers to specific local vacancies. For example, the decentralized, district-run program in Plumville, Louisiana, selected prospective teachers for special education, an area of great need. Administrators interviewed local candidates and chose those whom they thought would best succeed in, and remain in, Plumville's classrooms. Thus, decentralized selection might, indeed, enable program providers to predict prospective participants' fit with a specific program, and thus improve candidates' chances of success and ultimate retention. Localized selection processes, like Plumville's, in which the same people who interview applicants also teach them and provide on-the-job support, might better facilitate a coordinated investment in candidates' training than a less integrated system. However, local programs are likely to attract mostly local candidates, and a limited pool of applicants may not have within it the range of experience and ability that the schools require. In contrast to the hundreds of applicants for entry to the centralized programs, these decentralized programs tended to have fewer applicants and higher acceptance rates.

Pressure from the state or a centralized agency to increase the number of participants in a program or to fill all program slots with candidates can compromise the directors' attempts to control the quality of their participants. Further, a number of programs relied on state funding, which was allocated per participant. If program directors fear losing state funds or lack the fiscal capacity to run the program without a minimum number of participants, they may admit candidates who do not satisfy reasonable

standards. In the end, recruitment and selection can substantially influence the quality of the graduates, although a program's capacity shapes the extent of the recruitment efforts and may influence the rigor with which selection is ultimately carried out.

Summary of Findings: Recruitment and Selection

Given the abbreviated nature and limited resources of fast-track preparation programs, recruitment and selection are two major ways by which states and programs seek to ensure the quality of the teachers they produce. All states had minimum selection criteria for participants, based on some combination of undergraduate GPA, standardized test scores, and life experience. Many programs used even more selective criteria, although adherence to these criteria varied based on the urgency of the shortage and the demands for revenue. Through centralized recruitment efforts, two programs in this study addressed general shortages in the state and selected well-qualified candidates from deep pools. Centralized recruitment did not, however, succeed in attracting sufficient numbers of teachers in shortage areas. Using decentralized recruitment, several programs specifically addressed local needs and shortages in specific subjects, although finding candidates in hard-to-staff fields remained a challenge even with focused, localized recruitment strategies. Overall, centralized recruitment and selection allowed states to be confident about the quality of candidates, but local needs were not necessarily met. Decentralized programs proved to be better at meeting local needs, but were less selective with higher acceptance rates.

Program Coursework

The states in our sample set minimum requirements or guidelines for fast-track coursework, although these were not tightly enforced.

Much of the debate about alternative certification programs centers on the number and kind of courses required of prospective teachers. In the last 20 years, professional organizations such as the National Commission on Teaching and America's Future have recommended more rigorous standards for teacher preparation, and many states have expanded the number of pre-service courses required for a teaching license (Darling-Hammond, Wise, et al., 1999). Nationwide, university-based undergraduate teacher preparation programs require approximately 120 credit hours of coursework, and post-baccalaureate programs require approximately 112 (Feistritzer, 2003). As alternative routes to certification have opened, critics of traditional teacher education have questioned the need, not only for expanded pedagogical training, but also for specialized teacher training of any kind (Hess, 2001). Given this controversy, state officials who authorize or sponsor alternative certification programs must decide how much, if any, coursework to require and, if required, what its content should be. Program directors must then decide how best to use the time and financial resources they have to address the selected topics.

State Requirements

The states in our sample set minimum requirements or guidelines for fast-track coursework, although these were not tightly enforced. Louisiana called for nine credit hours (equivalent to 150 contact hours) for the pre-service summer component, covering topics such as child psychology, classroom management, and instructional strategies. State officials in Connecticut specified both the substance of the coursework and the time to be committed to particular topics. They called for training in general topics, such as classroom management, inter-group relations, and special education, as well as instruction in methods for teaching particular subjects. The assistant director of Connecticut's ARC program explained that the "requirements are not as concrete in regards to duration as those you would find with traditional preparation programs." For example, given the compressed time frame, the program director explained that he was able to offer less than half of the 36 hours of training in special education that the state required: "to just do 36 hours of presentation in special ed, we wouldn't do anything else." Massachusetts's program guidelines for MINT were embedded in the "Request for Responses" issued to prospective program sponsors. The Request for Responses did not specify how time should be allocated among the topics. The curriculum proposed in applications had to address the state's professional standards for teachers, although the director acknowledged that in accepting or rejecting proposals, "no one goes through those curricula with a fine-toothed comb."

In California, the university faculty who collaborated to write the curriculum for CTC were expected to comply with requirements for the state's Teacher Intern

Programs, the alternative certification programs serving teachers who work under emergency licenses. However, CTC program administrators proudly asserted that their curriculum went far beyond the state's minimum requirement of 84 credit hours of coursework in topics ranging from methods of teaching reading to child development.

With the possible exception of California, these states authorized fast-track alternative certification programs that were much shorter in length than traditional programs. Although they generally were expected to address the same set of topics required of traditional programs, these programs differed in how deeply and closely they examined the topics.

“There’s a lot of theory, which I find to be for me useless, because what I need to know is how to run a classroom—what to do when.”

Manuel, a participant in the Massachusetts MINT program

A Preference for the Practical

The participants, most of whom were entering teaching at mid-career, were attracted to an alternative certification program by the promise of no-nonsense training that would ease their immediate entry into the classroom. This focus on the practical proved to be a reason candidates often offered in explaining why they chose an alternative program over a traditional one. They frequently expressed impatience with anything that seemed too theoretical. For example, Manuel, a participant in the Massachusetts MINT program complained:

There’s a lot of theory, which I find to be for me useless, because what I need to know is how to run a classroom—what to do when. You know, such and such does this, what to do when such and such does that . . . how do I make a better curriculum? How do I improve on exams? How do I improve on homework? How do I handle, you know, parents? How do I handle administrators? Very practical matters, as opposed to Bloom’s taxonomy, and metacognition, and all that stuff, which to me was like mumbo-jumbo, and wasn’t worth [it].

Repeatedly, program directors explained that they responded to the candidates’ preferences by focusing their limited time for coursework on topics that would have immediate payoff in the classroom. One administrator in MINT Bay City said that participants there wanted to know “What kinds of methods will I use? What strategies will I use? How will I teach this, and how do I have my students engage in this learning? That was a big concern.” This view was echoed by directors and faculty throughout our interviews. With few exceptions, they offered only training that was practical, focusing on such things as classroom management skills, lesson plans, discussion techniques, or how to present materials in ways that would accommodate a range of learning styles.

Except for Connecticut’s ARC program, which sponsored several lectures for all participants in topics such as the sociological foundations of education, the program directors skipped over the theory and research which usually constitute a substantial part of the coursework in traditional programs. Dr. Mary Anne Carter, director in Plumville, Louisiana, explained: “My . . . focus was on how do you effectively implement this in your classroom? So it wasn’t left at the level of theory; it was brought down to a practical application for those individuals.” Her colleague, Barbara Kane, said she designed her curriculum to focus more on “the practical application and how to take those theories and apply them in your classroom, not necessarily on all the research that led up to that theory being developed.”

Similarly, at the MINT Lyceum site in Massachusetts, director Kurt Miller, a former principal, initially had required readings about what he called education’s “big ideas”

CTC participants in California, who were training on the job, said they appreciated when their coursework assignments were aligned with what they were doing in their classrooms.

by experts such as TheodoreSizer or E.D. Hirsch. However, when he realized that participants sought knowledge of more immediate use, Miller dropped those readings and relied primarily on *The Skillful Teacher* (1997), a complex but very practical analysis of instructional skills. Miller saw this as a “nuts and bolts” approach that would equip participants with “a toolbox” that they could carry into the classroom in September. Participants appreciated this focus. Calvin, for example, said it was “terrific” to have attained “a practical understanding, as opposed to a theoretical understanding” of his new responsibilities.

Christian Encoat, the director of the Massachusetts MINT program at Greyson University, contrasted the task of preparing teachers in the fast-track program with that of teaching in his university’s traditional program: “With undergraduates, I am contributing to a 4-year liberal arts education. With these people, I am preparing them to be teachers. There is a different mindset there.” Like their counterparts at other sites, Greyson participants welcomed this practical approach.

Directors at the Massachusetts MINT sites where Teachers First sponsored the training (Bay View, Westview, and Huntsville) also focused on providing far more practical than theoretical knowledge. In Huntsville, Danielle Jones said program evaluations from the previous year indicated that participants thought there were too many “heady research articles and not enough application.” In response, they redesigned the program. Jones explained the difference: “So instead of reading all these articles, we’re more likely to say, ‘Okay. Now, we’re learning how to lesson plan. You’re going to write a lesson. So I want you to sit right now and write a lesson or demonstrate a lesson.’” Jones concluded that exercises with practical consequences are “more valuable to a new teacher than reading all the research about everything.” Even so, some participants said that the curriculum was not practical enough.

CTC participants in California, who were training on the job, said they appreciated when their coursework assignments were aligned with what they were doing in their classrooms. Stella, a participant in CTC North found that she was “putting everything to use, what you learned, right away.” She valued the concrete, immediate nature of the training: “You really could practice it. . . . And you can see the changes in the classroom. . . . And so it just makes teaching come alive.” Deirdre, another participant in CTC North, said that since the books assigned as part of the curriculum were “so geared toward what [she was] already doing in [her] classroom,” she was “actually using” each book, “not just reading it and putting it on a shelf to sit there.” She thought these readings were “the best tool for learning how to teach.”

Therefore, throughout the programs we studied, directors and faculty found ways to have participants examine the required topics so that they would yield practical lessons and techniques, which could readily be applied during their the early months in teaching. Candidates rarely encountered the theoretical or research-based knowledge on which these practical skills are based.

Generic and Specific Preparation

Even though all programs centered their training on practical skills, the content of their coursework differed along two dimensions. First, as discussed earlier, the programs differed in whether they were preparing teachers for work in many settings or just one. We have called the programs geared to prepare candidates for work in an array of schools and districts *statewide* and those that concentrated on one district *locally-grounded*.

Programs also differed in whether they primarily provided training in general teaching strategies to be used for any subject—*all-purpose pedagogy*—or offered both general techniques and *subject-based pedagogy*—techniques relevant to the particular subject in which a candidate was being licensed. For example, a prospective math teacher would learn how to use graphing calculators with students, or a prospective biology teacher would consider alternative approaches for conducting labs in dissection. The extent to which programs provided participants with both all-purpose and subject-based teaching strategies proved to be critical in whether they felt prepared and confident once they were in the classroom. Table 3 shows how the programs in our study differed across these two dimensions.

Table 3: Program Coursework - Generic vs. Specific Training

	Statewide Programs	Locally-grounded Programs
All-purpose pedagogy	Massachusetts' MINT	Louisiana's Red River
All-purpose and subject-based pedagogy	California's CTC North and South Connecticut's ARC	Louisiana's Ogletree Louisiana's Plumville

Coursework Preparing Candidates for Many Settings or for One (Statewide vs. Locally-grounded Programs)

Of the 13 programs we studied, 10 were statewide and intended to prepare candidates for any setting. These included the two CTC sites in California, the five MINT sites in Massachusetts, and the three ARC sites in Connecticut. Although two of the ARC sites (Blanesville and Northborough) were established to enlist teachers for jobs in those districts, training was not guided by the local curriculum or the needs of students in these communities. By contrast, the three Louisiana programs (Green River, Plumville, and Ogletree) were locally-grounded. That is, they were designed to focus on the policies, curriculum, and students of only one district. Programs in Green River and Plumville were sponsored by those districts, while Ogletree's program was sponsored by the university to serve schools in a nearby district.

Statewide programs. Coursework in the statewide programs was meant to prepare candidates to deal with the full range of local conditions that they might encounter in their teaching assignments. However, given tight constraints on time, the sessions did little to acquaint candidates with what it would be like to teach in different settings. Connecticut and Massachusetts have many types of districts where candidates might teach—large and small cities, small towns, suburbs, and rural communities—and, after completing their training, graduates took jobs in a wide range of schools. However, candidates reported that the role of local context was generally disregarded or treated lightly in their training. For example, Massachusetts MINT sites sponsored by Teachers First offered an “issue seminar” on urban teaching, but candidates said that it provided insufficient preparation for teaching in a low-income school. Also, because MINT candidates frequently did not have jobs before beginning their training, they could not participate in their pre-service coursework with a particular setting in mind. In fact, many candidates were still pursuing job possibilities in both urban and suburban settings during August.

Most candidates in the MINT and ARC programs were white, and many ultimately took jobs in small town or suburban districts near where they lived. These were familiar

“I did not feel like I was prepared for the cultural aspects of it enough. They did not really prepare me for what it would mean to teach [students] in a low-income school. . . .”

Ruth, Green River program participant

settings and, thus, these candidates expressed little concern about feeling unprepared for the context in which they were teaching. However, those who took jobs in urban districts serving low-income students of color sometimes expressed dissatisfaction that their program did not prepare them for the reality of working with students with many needs in schools with few resources.

Locally-grounded programs. By contrast, coursework in a locally-grounded program centered on one district’s students, policies, and curriculum. Since candidates expected to be employed in these districts, they were motivated to understand what teaching there would entail. Meanwhile, their instructors—who often also were district employees—had a strong incentive for seeing that these prospective teachers were well acquainted with local curricula, practices, and the needs of their students.

Louisiana’s Plumville program included coursework on its technology initiative and the local literacy program. Barbara Kane, a district administrator and Plumville program faculty member, said that she sought to convey to candidates “not just general, practical” knowledge, but also specific knowledge about “how to walk into their classroom with their students and be successful from day one.” In Green River, Louisiana, Teachers First administrator Carolyn Matthews said that the superintendent had wanted a certification program that was “district based . . . hands-on . . . reality based, rather than [that offered by] the typical university.” The Louisiana program at Oglethorpe was intended to prepare teachers for the local district where the university was located. However, we saw little indication that the courses taught by faculty members were specifically oriented to the curricula or practices of that district.

The Green River curriculum, which was used by Teachers First at various sites across the country, was said to be “customize[d] for the particular site,” which primarily served low-income, minority students. However, some participants were not satisfied that the curriculum was truly geared to the reality of teaching in Green River. At the end of her first year of teaching there, Ruth said that she wished there had been more preparation in how to teach students living in diverse economic conditions and having different racial and ethnic backgrounds: “I did not feel like I was prepared for the cultural aspects of it enough. They did not really prepare me for what it would mean to teach [students] in a low-income school. . . . I just don’t believe that the Green River Program takes on the whole racial issues, which are huge in the school I’m teaching in. And they just didn’t go into that enough. I wasn’t prepared for that.” Ruth said that she was given “textbook” strategies for teaching all students, rather than preparation adapted to “this area, these students.” Julie, another Green River candidate said, “[W]e were trained for an ideal situation, even though we were warned it was going to be difficult. There was no training like, ‘Well, what do you do if you don’t have any materials in the classroom? Or what do you do if your kids can’t afford to bring supplies to school?’” Therefore, even in this locally-grounded program, some candidates thought their summer preparation should have been more fully situated in the realities of the district and school where they would eventually teach.

All-purpose and Subject-based Teaching Strategies

In addition to preparing candidates either for a range of settings or for work in a specific place, programs could offer coursework in instructional strategies that would be useful in teaching any subject (*all-purpose pedagogy*) or specific to a particular subject (*subject-based pedagogy*). Although all of the programs we studied spent time on generic topics, very few focused closely on the subjects these candidates would teach. Of the various shortcomings participants raised once they had their own classrooms, this lack of assistance in how to teach their subject received the most criticism.

Programs could offer coursework in instructional strategies that would be useful in teaching any subject (all-purpose pedagogy) or specific to a particular subject (subject-based pedagogy).

All-purpose pedagogy. In most programs, candidates spent four to five afternoons each week dealing with a range of pedagogical issues, such as how to manage students' behavior in the classroom, how to develop and use assessments, how to write lesson plans, or how to facilitate discussions. In every program except the CTC, cohorts of participants ranging from 6 to 168 listened to lectures or participated in large-group or small-group discussions about these topics. These sessions were designed to meet the needs of teachers in all certification areas and grade levels. Participants generally praised these sessions when they were led by knowledgeable and experienced faculty.

To provide its all-purpose pedagogical training, Connecticut sponsored a lecture series for all ARC participants on widely relevant topics, such as brain research and how students think, cooperative learning, and lesson and unit design. Some Connecticut participants said that this training gave them a good understanding of what they would encounter and need to know as teachers. ARC Northborough participant Lawrence said: "From somebody who has not experienced any of this before and is seeing this for the first time, I think it's been very beneficial." Lisa, a Hansbury participant, said that she thought the lectures were "really hitting on the very important points." Taryn, from ARC Northborough, found the lecture series on generic pedagogy to be the most useful aspect of the program and described the speakers as "amazing." She praised these experienced teachers who spoke to the participants: "They're not people with theories; they're people who've done them." Nonetheless, several ARC participants dismissed these lectures as unhelpful. Alex, who had taught for 6 months prior to entering the program, said, "There are many things that I'm sure the program had a statutory requirement to provide us that I felt were largely a waste of time. I think a good bit of the time could be better used."

While the generic lectures in ARC were delivered by the same faculty at all Connecticut sites, classes about generic teaching strategies differed from site to site in Massachusetts and Louisiana, often in response to the expertise and views of program administrators and faculty members. Three of the five Massachusetts sites that we studied were sponsored by Teachers First. These sites used the same curriculum, which served as the basis for discussions facilitated by a faculty member from the program. This "Guidebook," grounded in a framework called "Teaching for Student Achievement," included four course units: instructional design and delivery; classroom management; classroom culture; and the issues seminar on urban teaching.

The approach to generic pedagogical training was much different at Massachusetts MINT's Greyson site, which was not sponsored by Teachers First. The director, an expert in special education, focused his classes on how to teach students with different learning styles. Candidates expressed great appreciation for what they learned there. For example, Leah called the director her "educational hero" because he had so much knowledge about how to teach. She appreciated learning the "meat and potatoes of what goes on," including such topics as learning disabilities, the state's curriculum frameworks, and the structures of high schools.

In Louisiana, the approaches to generic topics of pedagogy also varied from site to site. For example, Plumville faculty taught their candidates about students' learning styles, and the Ogletree faculty offered training in how to manage classroom behavior and assess students' learning. The Ogletree faculty members, like those at other programs and sites, expressed doubt that they could adequately cover such topics in so little time. One Ogletree administrator said that the program was "so rushed" that it "left a bad taste in our mouths. That's just the bottom line. But can you do it in 18 [credit] hours, with 9 of those hours in concentrated, intense coursework? I say no, I don't believe you can. And then expect the teacher to be effective and efficient? No, you can't do that." Directors and participants in all programs hoped that coursework

“Candidates are tested on subject matter, but that doesn’t mean that they are going to know how to apply it and teach it. The skills are different. . . .”

Program director

in all-purpose pedagogy would give candidates broadly applicable insight and skills, which they knew they would need in any classroom. However, these topics were vast and complicated, leaving both faculty and students doubtful that they could do them justice in the few course sessions they had.

Subject-based pedagogy. Since Lee Shulman (1987) first made the case for the importance of “pedagogical content knowledge,” there has been growing recognition among educators that, in order to succeed, a teacher must not only know a subject—such as mathematics—but also understand how to effectively teach topics in that subject—such as ratios or place value. Scholarship about pedagogical content knowledge has advanced considerably since Shulman published his essay [for example, see Lampert (2001) and Ball, Lubienski et al. (2001)], although some critics dismiss the need for any such training, contending that prospective teachers need only have a solid knowledge of a content area that is gained either through an undergraduate major or professional experience (Thomas B. Fordham Foundation, 1999). Continuing the debate, a recent study of teacher preparation reaffirmed the importance of training prospective teachers in how to teach their subjects (Grossman, et al., 2005).

Most fast-track alternative certification program candidates we interviewed said that, in addition to learning general teaching skills, they needed to know how to teach in their content areas, and ideally, how to teach their subjects at different levels of schooling (primary, upper elementary, middle, high school). Many of the respondents had majored in the subject they planned to teach, and often they had used the content regularly in their previous career (e.g., mathematics majors in the software industry or research biologists in the pharmaceutical industry). However, knowing a great deal about cell biology did not lead automatically to understanding how to organize and teach a lab for students. Experience as a journalist did not translate neatly into a writing program for middle school students. Although all but two of the program sites in our study (CTC North and South) were preparing candidates for secondary school licenses in specific subjects, the programs as a group offered very little preparation in how to teach those subjects. Interviews with program directors and faculty revealed that it was an immense challenge for fast-track programs to offer subject-specific pedagogical training, given the limitations of time and, in many programs, the expectation that program administrators would prepare candidates across a wide range of certification areas.

Program directors generally acknowledged that it was important to prepare candidates to teach their subject. One director explained: “They come from all walks, all different careers. . . . [On the state teacher exam] they are tested on subject matter, but that doesn’t mean that they are going to know how to apply it and teach it. The skills are different. . . .” Many directors of these fast-track programs found that they did not have the time, financial resources, or personnel to provide subject-specific methods training. Overall, they devoted far less time and attention to this aspect of the coursework than to generic teaching strategies. However, there were notable differences from state to state and program to program.

The two preservice programs that offered significant subject-specific coursework for all candidates were Louisiana’s Plumville site and Connecticut’s ARC program, which were structured very differently from one another. Plumville, with its six candidates, was very small and offered licensure only in special education. ARC, by contrast, was large and, as a result of its size, had sufficient resources to arrange methods courses for each of its 10 fields of licensure. Although candidates from other programs sometimes praised the training they received in subject-based pedagogy, that praise was uneven and resulted more from the contribution of a single faculty member than from a program’s course

Often, MINT directors combined two or more content areas in a single session, such as the sciences or the humanities.

offerings. Programs serving a relatively small number of candidates in 6 to 10 fields encountered great difficulty finding the financial and personnel resources to provide all candidates with coursework in how to teach their subject.

Connecticut's ARC program was unique among those we studied in that it provided separate, subject-based instruction in each subject for which it offered a license. Because the program had substantial financial resources and was large (168 participants in Hansbury, 72 in Blainesville, and 55 in Northborough), the directors could divide participants into subject-specific methods groups for daily classes, each taught by a master teacher in the field. The Hansbury site offered daily sessions for separate groups of participants in how to teach English, mathematics, social studies, middle school science, biology, chemistry, physics, art, music, and K-12 language. The Blainesville site, which offered licensure in somewhat fewer content areas—middle and high school English, middle school math, high school science, and K-12 art—also held daily classes dedicated to teaching in each of these subjects.

The state program director called the instructors of these methods classes the “backbone” of the ARC program, and candidates offered high praise for their expertise. Alex, who considered the all-purpose lectures a “waste of time,” said that he found classes in subject-based pedagogy to be very useful:

The gentleman in charge of my section of methods was a 40-year physics teacher, different from me in many regards, but at the same time, someone who clearly knew what he was about, and why he was doing it, and how to do it. And there was a lot of good information that came out of that . . . It's always interesting to sit at the feet of a master, and watch them do their thing.

Although Percy found the core lectures in generic pedagogy offered at the Hansbury site useful, he most valued the methods classes in English:

I thought that both of the methods instructors we had were excellent. They were very knowledgeable, very skillful people. . . . That was what seemed like the real preparation to me. While useful, much of the stuff in the general course, in the core courses, was ratified common sense. There wasn't a whole lot there that was surprising, to me anyway. The methods classes were an opportunity to really examine in detail what it is you're going to be teaching. It was really starting to be about teaching English, rather than teaching. And as useful as pedagogy might be, it was that much more useful to really start dealing with it as English.

These favorable assessments contrasted starkly with those of many candidates at the Massachusetts MINT sites, which offered, at most, one class in subject-based pedagogy per week. Often, due to small student numbers and limited capacity, MINT directors combined two or more content areas in a single session, such as the sciences (including biology, chemistry, and physics) or the humanities (including history and English). In the extreme, participants at the MINT sites operated by Teachers First attended only one full day of subject-specific workshops during the entire program. Many respondents judged this to be inadequate and minimally useful. One said that this lack of subject matter preparation was the main deficiency in the summer program:

I think that [methods training in content areas] might be what is lacking for this program. There wasn't like, ‘You are going to be an eighth-grade science

teacher.’ . . . [T]his was very general. This is what all teachers should know. . . .
[B]ut I wanted to know how I could be the best eighth-grade science teacher, and I don’t think that this program specifically helped me be that.

*[B]ut I wanted
to know how I
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specifically helped
me be that.*

*MINT program
participant*

Candidates at the MINT program’s Lyceum University site fared somewhat better in content-specific training than those at the Teachers First sites. The program offered weekly sessions in subject-based pedagogy, led by specialists—two university faculty and one a National Board-certified teacher. These sessions focused on the state curriculum frameworks and on teaching strategies in particular subjects. With three instructors and six certification areas (math, social studies, biology, physics, and chemistry), the program grouped all the science candidates together. The science specialist taught each session as if it were an actual science class, which the participants appreciated. However, they did not have opportunities to learn about teaching their particular subject. Lucy, a social studies teacher who was grouped with English teachers for subject specific pedagogical training, said that, for her, what was “missing” from the program was “teaching specific strategies for the subject matter.”

Because every Massachusetts MINT site offered licenses in several subjects, each to a relatively small number of candidates, directors had trouble offering subject-based training in each. They could not capitalize on economies of scale as Connecticut’s ARC did. For example, the MINT Westview site had 26 candidates and was staffed only by two veteran English teachers, although the program offered certification in math, chemistry, biology, physics, foreign language, English, and social studies. There were too few candidates to warrant hiring more faculty members, so instead of allocating time to subject-based teaching strategies, the faculty spent more time on all-purpose teaching strategies.

The three sites we studied in Louisiana each had distinct offerings in subject-based methods. Plumville, which focused exclusively on preparing special education teachers, was organized entirely around the needs of prospective teachers in that field. However, Plumville candidates were certified to teach special education in grades K-12, and they had little opportunity to learn how to teach particular subjects to students with disabilities at various grade levels. Green River offered no separate training in how to teach subjects; all the candidates completed their coursework (which addressed all-purpose topics) in mixed groups. Ogletree University offered subject-based training to its candidates in special education, but combined the training for the one candidate preparing to teach science with that of five prospective math teachers. Ogletree participants generally reported satisfaction with their coursework, and almost all of the participants we interviewed said that they felt prepared to teach. However, when they reported how the program might have better served them, those who were pursuing math and science licenses expressed the need for more subject-specific training. Janine, who planned to return to her job teaching ninth-grade algebra, said she had gained little from the coursework: “I still didn’t get better methods for teaching my particular course, my particular area. I learned . . . some rules and regulations, and what it is to be a teacher, but what it was to be a math teacher . . . I felt I fell short of that.”

Public opinion differs about whether such training in subject-based pedagogy is necessary, or even worthwhile, particularly if effective teaching is seen to depend more on innate ability than learned and practiced skills. Although many programs selected their candidates because of their prior knowledge of a content area, candidates reported that knowing their subject did not mean that they knew how to teach it. They consistently said that they wanted more ideas about how to teach their subject, and

program providers generally thought they should provide more such preparation. After they had been teaching for 6-8 months, participants across the sites said that they wished they had more such training. However, the programs faced limited resources in several areas—finances, human resources, and time.

Limited Capacity Leads to Little Subject-based Training

We found that most of the programs we studied had insufficient capacity to prepare their group of candidates in a range of subjects. Not only did they lack the resources to hire specialists in all subjects and levels of schooling, but also instructional time in the fast-track programs was very limited. Green River in Louisiana, which offered licenses in nine subjects, grouped candidates in large, heterogeneous batches and assigned them to faculty members who might—or might not—teach in their certification area or at their grade level. Massachusetts MINT sites were smaller, having been strategically placed at seven locations throughout the state for the convenience of candidates. With 15 to 70 candidates preparing to teach in 6 to 11 fields, directors could not afford to offer classes dedicated to each subject. Only Connecticut’s ARC program, with 168 participants at the flagship site and 72 and 55 at the two satellite sites, managed to provide a methods class for each field of license at every site.

One way to manage competing demands for scarce time and resources was to offer fewer fields of preparation. In Louisiana, Plumville’s locally-grounded program, which focused exclusively on preparing teachers for jobs in special education, illustrated the benefits of specialization. However, this kind of focus was not always permitted. In one case, a Massachusetts MINT site director proposed to restrict his program to only two fields of licensure, but state officials rejected his proposal because it would have reduced the number of candidates who could be served there.

It must be emphasized that, overall, respondents reported great satisfaction with the coursework they received, often saying that they had recognized before they began their fast-track training that the compressed schedule necessarily limited what might be offered. Repeatedly, both before and after they began teaching, respondents explained that they had come to the program with realistic expectations, never anticipating that every activity would directly relate to their particular needs or that all their questions would be answered. One Massachusetts MINT participant, Dennis, said that he had been “looking to hit 60%” in terms of his expectations, and was satisfied with what he experienced. Another MINT participant, Jane, explained, “I don’t know that you can provide a perfect situation in the summer, but I would rather have had this than nothing. . . . At least I’ll get the accelerated, condensed version.” Mark, a Green River participant, said that the program gave him a “. . . skeleton to build on. There wasn’t enough meat on what I got, but the bones were there. You had the foundation to work with. You had to find some of this along the way as you go.” Lawrence, an ARC participant, had expected the fast-track program to provide only an introduction, “and the real teaching would come when I started teaching come September.” These individuals, like the large majority of respondents in this study, were entering teaching at mid-career, bringing with them work and life experience that they expected would compensate for whatever gaps there might be in their pre-service training.

Directors and faculty acknowledged that support for these new teachers would require ongoing training by their schools and districts. The fast-track alternative certification programs shift much of the burden of preparation from pre-service programs to in-service professional development. However, given that the demands on schools and districts are already great, there was no guarantee that they would have the capacity to provide such training.

Only Connecticut’s ARC program managed to provide a methods class for each field of license at every site.

California Teacher Corps: Easing Constraints on the Coursework

The California Teacher Corps took a fundamentally different approach to preparation than the other programs we studied. In contrast to the other fast-track programs, CTC had the advantage of working with candidates who already held teaching positions before their training began and, thus, who could complete their course assignments (including subject-specific lessons) with reference to their local setting, its priorities, programs and students.

All candidates in the CTC programs were earning licensure to teach multiple subjects at the elementary or middle school level. By offering a distance learning program to teachers who already held jobs on emergency certificates, the program expanded its opportunities for coursework. A statewide committee of university faculty created a self-paced curriculum, designed to engage the participants in a guided analysis of their current teaching experiences. By extending the length of the program over the course of 18 months, program developers provided participants enough time to complete extensive coursework in child development, education theory, and the methods of teaching core academic subjects.

The two CTC sites used technology to allow faculty and participants to exchange coursework assignments online, reaching participants in many local contexts. In this asynchronous learning environment, candidates could read and complete assignments according to their own schedule. The online component was supplemented with five day-long face-to-face seminars per year. Although the CTC director emphasized the importance of “relationships” between program participants and local support faculty, candidates reported experiencing the program primarily online—engaging in email with their program supervisors, participating in “threaded discussions” about topics related to their teaching, completing program assignments independently and then submitting their completed work electronically. CTC participants liked the convenience of this arrangement and appreciated the opportunity to learn while doing, which the technology facilitated. Although CTC had its limitations—the most notable being that candidates began teaching with no preparation—the experience suggests that those designing alternative certification programs might do well to explore creative approaches to providing coursework and to rely on incentives that target what matters most to candidates.

*“There wasn’t
enough meat on
what I got, but the
bones were there.”*

*Mark, Green River
program participant*

Summary of Findings: Program Coursework

All programs in our study aimed to provide candidates with practical training that that would have immediate payoff in the classroom, such as classroom management skills, lesson planning, and discussion techniques. Despite this similarity, we found that the content of coursework differed along two dimensions. First, the programs we studied were either locally-grounded or statewide in their orientation. Locally-grounded programs concentrated preparation on the curriculum and practices of one district, while statewide programs prepared candidates for work in an array of districts. Second, the programs in our sample varied in whether or not they provided candidates training relevant to the particular subject in which a candidate was being licensed. All programs provided training in all-purpose pedagogy, relevant to many content areas. However, only some programs also offered coursework in subject-based pedagogy, relevant to the particular subject in which a candidate was being licensed. Many candidates reported wishing they had learned more about how to succeed within their district and how

to teach their subject prior to assuming the role of full-time classroom teacher. A few programs succeeded more than others in offering focused training, either by limiting the number of subject areas in which they offered certification, or by concentrating participants and resources at single sites. In addition, using distance learning, the CTC program managed to offer candidates more of the immediately relevant skills and knowledge they most sought.

Creating Clinical Experiences for Candidates

Arranging clinical placements within the constraints of an abbreviated summer program presented an almost insurmountable challenge for these fast-track alternative certification programs.

The clinical component of traditional teacher education is often viewed as an essential, culminating experience in the candidate's preparation, providing an opportunity for prospective teachers to apply the knowledge and skills gained from coursework to the reality of the school setting. The National Council for Accreditation of Teacher Education (NCATE) established the provision of field experiences and clinical practice as a standard to be used in accrediting teacher education programs.⁶ In fact, all states in the U.S. require some kind of clinical experience for teacher certification (Feistritz, 2003).

The most common type of clinical practice is student teaching,⁷ which teacher educator and researcher Sharon Feiman-Nemser (1983) observes "is generally viewed as a necessary and useful part of teacher preparation" (p. 155). On average, undergraduate teacher preparation programs require 14.5 weeks of student teaching, and traditional post-baccalaureate programs require 15.6 weeks (Feistritz, 2003). At its best, student teaching provides an opportunity for candidates to work in their area of certification under the supervision of an expert teacher, crafting lesson plans, experimenting with pedagogical strategies, and experiencing what it is like to be in charge of a classroom. However, arranging such placements within the constraints of an abbreviated summer program presented an almost insurmountable challenge for these fast-track alternative certification programs.

State Regulations and Guidelines

Each of the states in our sample required some form of field-based experience for their alternative certification programs—student teaching in Connecticut and Massachusetts, and student teaching or classroom observations in Louisiana. (Because the California programs we studied required candidates to have teaching positions before applying for the training, there was no student teaching. The candidate's regular teaching assignment served as the clinical component of preparation.) All who were involved in summer programs—state officials, program directors, faculty, and participants—saw value in having practice teaching take place in conditions typical of a regular school year, offering courses in the subjects and at the grade levels that the candidates would soon be teaching. The clinical experience potentially served as an opportunity for quality control as candidates could be observed practice teaching.

In its Request for Responses, the Massachusetts Department of Education called for candidates to have "significant responsibility" in the classroom that replicates the teaching responsibilities the program participants will have in September.⁸ Similarly, in Connecticut, ARC participants had to successfully complete 4 weeks of student teaching, 4 hours per day, with a "cooperating teacher" at a Connecticut public summer school program.⁹ Louisiana specified only that "all teachers will participate in field-based

experiences in school settings while completing the summer courses (or equivalent contact hours)” (Louisiana Department of Education, 2002). The three Louisiana sites (Green River, Plumville and Ogletree) differed in how they implemented the clinical requirement. Green River participants completed 5 weeks of student teaching, 4 hours per day, much like their counterparts in Connecticut and Massachusetts. Plumville participants completed structured observations of teachers selected by the program director in the schools where candidates would teach in the fall. Ogletree participants were asked to independently conduct 20 hours of observations in whatever summer school classrooms they could arrange to visit.

Some districts were deeply invested in helping to train participants in alternative certification programs, while others were tacitly opposed.

Expectations Unmet

Like teaching candidates in traditional programs, the participants at our 11 summer program sites generally anticipated that student teaching would be the most useful aspect of their pre-service preparation. They wanted placements that were well-matched to their field of certification and grade level, and they hoped to work in a classroom context that simulated what they would encounter as a full-time teacher. They sought to work with cooperating teachers who knew how to teach their subject well, would allow them to teach on their own, and would provide useful and supportive feedback.

Throughout our study, program directors and faculty struggled—and usually failed—to provide participants with well-matched clinical experiences under the supervision of strong teachers who were prepared to mentor them. Several problems plagued their efforts. First, the level of buy-in from cooperating districts varied greatly; some were deeply invested in helping to train participants in alternative certification programs, while others were tacitly opposed. Second, the cooperating teachers who served as summer mentors were rarely selected with care or trained for their responsibilities. They varied greatly in quality within and across programs. Third, in many instances, it was impossible to match candidates’ certification field and grade level with summer teaching assignments. For example, several high school math candidates were assigned to teach middle school science. In one of the most extreme mismatches, a candidate for certification in French taught “wellness.”

Very few of the candidates we interviewed had a clinical placement that met their expectations. Notably, aspects of student teaching that might have been helpful to them in learning to teach, such as working with specialists in the school or developing skills in teaching a specific subject at the relevant grade level, were usually missing altogether. Nonetheless, candidates repeatedly said that they found value in these experiences, largely because they afforded them the chance to interact with students.

The Role of Partnerships

Why was it so difficult for programs to provide the student teaching placements that participants expected and that states and program administrators recognized as important? Ironically, the features of the alternative certification programs that served as incentives for participants—fast, relatively inexpensive training conducted in the months immediately preceding the school year—made it difficult to provide the kind of experiences that teacher educators would consider ideal, or even adequate. The programs, most of which lacked the capacity to create the conditions for student teaching placements on their own, strained to establish partnerships with school districts,

For the programs, collaborating with districts and schools was difficult for three reasons. First, it was not clear to local administrators and teachers that helping to train candidates in a statewide program would ultimately serve the interests of their district or schools. Second, the operational timelines of the two types of organizations—fast-track programs and local districts—were incompatible. Third, the partnering schools did not always have the capacity to do their part in training candidates. In general, the district-based alternative certification programs had less difficulty with the clinical component than did the university or state run programs because they did not have to rely on an outside partner to make it work.

Summer school student teaching could allow principals to observe prospective teachers in action.

The Importance of Aligning Interests in Partnerships

Scholars who study cooperation between organizations agree that partnerships between organizations work best when the efforts of their collaboration move each organization towards its individual goals (Hord, 1986). The depth and strength of the partnership also depend on whether the organizations have a shared vision and compatible organizational structures (DeFrancesco et al., 2002). However, sometimes the motivation for collaboration is one-sided, driven by one organization's quest for survival or need for resources (Holtzman and Schneider, 2002).

When alternative teacher certification programs partner with local schools or districts, there is potential for a mutual exchange that will move each organization towards its goals. While programs seek such partnerships to provide the field experiences that are required by the state and that participants want, schools and districts might have their own reasons to partner with alternative certification programs. Hosting student teaching in summer school could help them fill shortages in particular subject areas or grades by bringing potential hires directly into their schools. Summer school student teaching could allow principals to observe prospective teachers in action. Also, through their student teaching, the candidates would likely provide additional help to students in summer school at no additional cost to the district.

Theoretically, then, partnering to provide clinical experiences could serve the interests of both programs and schools. However, the structure of the program greatly affects the degree to which those interests are relevant.

Statewide programs may not align with schools' interests. In a statewide program like MINT each site prepares teachers in many subjects to teach anywhere in the state. However, the schools near these program sites—potential partners in the clinical experience—may not need teachers in the subjects MINT offers, such as business, foreign language, or social studies. The administrators of those schools may also know that candidates are not necessarily intending to teach locally. Therefore, school officials may be less motivated to go out of their way to train the candidates of statewide programs than they might be if they thought those teachers would eventually work for them.

Because statewide programs' admission processes were not tied to shortages, they sometimes produced teachers when districts did not need them. For example, although hosting summer student teaching allowed school administrators to preview potential job candidates, in the summer of 2002 few Massachusetts districts were interested in that opportunity since many districts were laying off teachers, not hiring them. As a Teachers First administrator explained,

Basically [the schools who host summer school] get first access to these candidates who are – a lot of them are math, science, and special ed, which are the hardest

positions to fill . . . This year was a little tricky, with all the budget issues in Massachusetts, all the layoffs. And I know that's impacted the buy-in on some level, because they don't have the need for people.

Because district administrators were unlikely to hire MINT candidates, they had little incentive to welcome them into their summer schools or to go out of their way to be supportive.

As an outside vendor, Teachers First lacked long-term, professional relationships with district administrators, and ultimately had to rely on principals' goodwill to host student teaching. When student teaching placements went smoothly, it was a pleasant surprise. When things did not go well, as often was the case, Teachers First administrators had very little leverage to improve them. As one site director explained, "We are viewed as guests, [as if] they are doing us a big favor, which they are." With little to offer the districts or their teachers in the way of incentives to partner, they had to take what they could get.

Locally-grounded programs align better with schools' interests. When alternative certification programs prepare teachers to fill openings in particular districts, a mutual sense of investment happens more readily. For example, the ARC Blainesville site in Connecticut recruited candidates in subject areas in which the Blainesville school district had experienced shortages, and offered the training at reduced tuition if candidates would commit to teaching in the district for 2 years. Sam Brown, the program's site director, saw a great incentive for the district to collaborate with the program in training those teachers:

The people that we chose for the program were people who wanted to be certified in the shortage areas for our district, which is math, science, English, art, music are shortage areas for people. You have a large number of staff in the district that are older, that are going to be retiring in the next year or two, and in where it's almost impossible to get math or science teachers, and bilingual teachers in Spanish.

Brown's colleague, Darren Smith, explained that the program gave the district's principals a "pool of teachers to pick from" when hiring. "[T]hey're scrambling trying to find applicants . . . and all of the sudden, now they have everybody. They have a pool to choose from . . . [T]hey can come to us and say, okay, I need three math teachers." Smith further highlighted the schools' opportunity to "prescreen applicants" by observing their summer school student teaching, so that when a job opens "they can always say, 'I already made that decision . . . I want Mr. Davis. I want Mr. Clark.'" In such locally-grounded programs, the incentives for school administrators to collaborate in training teachers were both apparent and mutual.

Mismatched Timelines and Structures Pose a Challenge to Partnerships

The mismatched timelines of alternative certification programs and schools also made partnering difficult. In the case of Oglethorpe University, program providers required candidates to make arrangements with schools to complete classroom observations early in the summer, before beginning 7 weeks of coursework. However, finding available summer school classrooms posed a problem in 2002. Oglethorpe's Dr. Perkins lamented:

What schools are open for them to do their field experience hours before they start the program? We didn't have any. Especially for the people that were in math and

science. . . . And so, you know, there was no way to place these people before they came to Ogletree for the academic coursework. There was no way.

Director Candace Doyle explained that summer placements might have been possible if she had been able to get special permission from a nearby district. However, lacking connections there, she submitted a formal request through the Board of Education, but it was not reviewed in time to meet the program's need. A friend placed the special education candidates in local classrooms, but several math and science candidates reported that the program directors ultimately waived their requirement for clinical experience.

“We had a foreign language teacher teaching math, and we had two other foreign language teachers teaching English . . . science teachers, we placed in math classrooms, and history teachers, we placed in English classrooms.”

*Jennifer Solomon,
MINT Westview
site director*

In other cases, placements were made in summer school courses that did not match the fields of license offered by the alternative certification programs. Several of the program sites relied on placements in districts offering only remedial classes during summer school. Those programs had to either place candidates out of their subject area or create field experiences outside of regular schools. For example, in the Massachusetts MINT site of Westview, local public schools offered only math and English in summer school, while the MINT Westview program offered certification in math, English, social studies, biology, physics, chemistry, foreign language, and English as a Second Language. As a result, few Westview participants had student teaching placements in their field. The site director, Jennifer Solomon, explained, “We had a foreign language teacher teaching math, and we had two other foreign language teachers teaching English . . . science teachers, we placed in math classrooms, and history teachers, we placed in English classrooms.”

At the MINT Huntsville site, program participants could student teach in one of several content areas. However, actual course offerings depended on the summer school students' preferences at registration, and so the courses were not finalized until the day before summer school started. Since there were no foreign language offerings, two participants preparing to be French teachers learned the day before student teaching began that they would teach physical education and English. Kirstin, who sought certification in English and was placed in a ninth-grade English class for the summer called herself “one of the lucky ones” for having a well matched placement.

At the Connecticut ARC Blainesville site, where the state had placed all of the participants seeking art certification, the district's budget could not support summer school courses in art. Therefore ARC program administrators hastily arranged to sponsor their own art enrichment program for a handful of interested students, so that the prospective teachers could work in their field. Other programs lacked the fiscal capacity to make such arrangements and could not create their own student teaching sites when subject-area matches were not available.

Often candidates were assigned not only to a different subject area than the one they were planning to teach, but also to a different level of schooling. For example, Doreen, who knew when MINT started that she would teach seventh-grade biology in the fall, was assigned a student teaching placement in high school math. She was disappointed: “There's a big difference between teaching math and teaching science . . . and [teaching math] doesn't really translate into science.” One year later, after having taught seventh-grade biology, Doreen observed that the student teaching experience had not been useful in preparing her to teach middle school science, although she had learned some classroom management strategies and “some small tips,” such as how to organize cooperative groups. She explained that her real learning about how to teach had come with the support she subsequently received on the job from mentors and her department head. “I would have really liked—preferred to have [student] taught in my subject area,

and my grade level over the summer . . . And letting me teach in high school [instead of middle school], and not my subject area, really didn't help me much." Participants discovered that summer school is not like "real" school. Most were making a quick transition to the classroom from work in another field outside of education, and often many years had passed since they had spent time in schools and classrooms. Some said that they might have benefited from the semester or full year of student teaching that traditional teacher education programs require, although few suggested they could have spared the time to do so. After they had taught for some months, they often observed that their student teaching experience was far removed from what they encountered in their own classroom.

Nancy said that even though her summer student teaching assignment did not match the subject or conditions of the ninth-grade science courses she would teach in the fall, she found it valuable to spend time with adolescents.

Participants often said that in summer school more adults were present and resources were more plentiful than what they found in their first teaching jobs. In several of the program sites (MINT Bay City, MINT Huntsville, MINT Westview, and Louisiana's Green River), candidates shared their student teaching assignments with other program participants, often collaborating on the lesson planning and offering each other feedback on their teaching. This may have promoted good learning, but it also meant that candidates had even less time to actually practice teaching. In at least two of the programs, students were paid to attend summer school classes, an arrangement that differed markedly from students' mandatory attendance during the regular school year and the related challenges of motivating a captive audience.

Some of the many participants who were assigned to mismatched student teaching placements rationalized that they nonetheless were gaining skills and valuable experience. Lucy, a MINT participant, said, "So, while at first I thought, 'Why am I teaching reading when I want to be a social studies teacher? . . . [I]t worked out because these are the skills I will be teaching. And it just got me up there actually teaching something, which is more than what I had when I walked in the door [of the program].'" Another MINT participant, Nancy, said that even though her summer student teaching assignment did not match the subject or conditions of the ninth-grade science courses she would teach in the fall, she found it valuable to spend time with adolescents. Such assessments, voiced often in the interviews, suggest that candidates had modest expectations about what a fast-track, summer program could provide and that they were willing to make the best of available opportunities, perhaps because they had not paid much for training or lost much time in completing it.

In other cases, participants found little they could apply to their regular teaching experience. For example, Chad, who did student teaching in middle school mathematics while he sought certification in high school biology and chemistry, roundly criticized his student teaching experience, calling it "nuts" and "not helpful at all." He compared his summer assignment to the job he had accepted for the fall: "I taught 6 to 10 eighth-grade girls math in summer school, where the environment is totally different, a huge difference from [my chemistry] class of 34 sophomores." Chad concluded that the summer school teaching he experienced was not sufficient to prepare him for his own classroom: "[It is] absolutely critical to have student teaching, but it needs to be a semester during the regular school year." Notably, Chad's recommendation for a longer student teaching experience conflicted with the incentive that first attracted him to alternative certification—the opportunity to enter teaching quickly and inexpensively.

Cooperating teachers varied in quality. Across programs, participants reported that many of the cooperating teachers were unprepared for, and unenthusiastic about, mentoring them. Although alternative certification program directors were eager to set up summer school student teaching placements ahead of time, many schools did not hire

Nathan's cooperating teacher, who was responsible for the world geography course, was actually a certified English teacher who had been working as a substitute.

their summer school teachers until late spring or early summer, and program directors ultimately had little say in the selection or preparation of mentors.

Sam Brown, director of Connecticut's ARC Blainesville site, explained that it was difficult to set up summer school arrangements in advance "because the staff [in the district] didn't start really working on it until the summer." He explained that, "even though [mentors] were given a stipend by the state, not everybody was amenable to [taking on the mentoring responsibility], especially on such short notice." Being "under the gun" frustrated Brown, who had to rely on the goodwill of summer school teachers. "[W]e needed their help in helping us train these candidates." In the end, many Blainesville ARC participants complained that their student teaching experiences were unproductive.

At a small number of sites, cooperating teachers were formally oriented to their work with the program participants, and cooperating teachers received small honoraria, but the cooperating teachers were not employed by or accountable to the programs. Rather, they had been hired by the districts to teach summer school, and only subsequently learned that they would be asked simultaneously to mentor prospective teachers. In some instances, cooperating teachers were not even aware that they would be expected to mentor a program participant until the first day of summer school when the prospective teacher appeared in the classroom.

Participants said that the quality of cooperating teachers ranged from terrific to terrible. Some were skilled at sharing classroom responsibilities so that participants could "get their feet wet," as Heidi in MINT's Huntsville site explained. Nancy, who did student teaching for MINT in an enrichment program, said that she appreciated her cooperating teacher's approach, which allowed her to "tread water" and gave her the security of feeling like he would "save [her]" if needed. In a few cases, however, cooperating teachers left the classroom as soon as they learned that program participants would cover the class. Victoria, a participant in ARC's Hanbury site, said that she was "thrown into the class and left to fend for [herself]."

Occasionally even cooperating teachers were assigned to summer school courses outside of *their* area of expertise. For example, Nathan, another ARC Hansbury participant, taught world geography as he sought certification in middle school social studies. However, Nathan's cooperating teacher, who was responsible for the world geography course, was actually a certified English teacher who had been working as a substitute. Nathan did not find her helpful and described the relationship as "difficult." By contrast, Alex, a participant at the same site, had a distinctly positive experience. As a candidate for a license in chemistry, he was perfectly matched with a veteran chemistry teacher. He said the two of them "took off like a . . . house on fire," working closely in their summer school teaching, "able to do a Tweedle Dee, Tweedle Dum kind of routine."

Productive summer school student teaching experiences depend on having skilled, accessible, communicative cooperating teachers. However, since summer school teachers are hired by the district, the alternative certification program often had no control over who the cooperating teachers would be or whether they would be willing to supervise student teachers. Often expectations were unclear and there was little or no incentive for mentors to do a good job, beyond a general sense of professional responsibility and, occasionally, a small stipend.

Success in Matching Student Teaching Placements: Louisiana's Green River and Plumville, and ARC Hansbury

In order to better understand the value of having well-matched student teaching positions and helpful mentors, it is useful to consider not only the isolated, seemingly

accidental, instances of synergy between candidates and their cooperating teachers, but also the sites that managed to arrange productive student teaching experiences for most candidates. Overall Green River and Plumville, both district-based programs in Louisiana, achieved more success than others in assigning participants to work with exemplary cooperating teachers in content areas and grade levels that would mirror their fall teaching assignments. This success stemmed, in part, from the fact that district officials knew the teachers would be working for them in the fall, and thus that it was in their interest to provide quality student teaching placements. Also, program directors knew exactly whom to talk to about aligning the program's structures with the realities of summer school.

The Green River participants variously described their cooperating teacher as “inspiring,” “excellent,” and “instrumental to making [student teaching] a good experience.”

The Green River participants we interviewed all said that their cooperating teachers helped them learn how to teach. They variously described them as “inspiring,” “excellent,” and “instrumental to making it a good experience.” Julie said that being paired with her cooperating teacher was the “biggest boon” of the program. Ruth taught fourth-grade English and math in the summer and planned to teach fifth grade in the fall. She said that, as a white woman, she found her experienced cooperating teacher, who was African-American, crucial in helping her begin to understand the cultural differences between herself and the students of color she was teaching. Theresa, who taught second grade in summer school and had accepted a job teaching a second-grade class in Green River, said that the 22-year veteran with whom she worked provided very specific and instructive feedback.

These cooperating teachers for Green River seemed to exemplify what participants across the programs had hoped and expected. This was possible because the administrators of Green River's schools were invested in the program, and because preparations were made to support student teachers. Before summer school started, Green River sponsored several orientation and training sessions for cooperating teachers. The fact that this training took place prior to the summer program indicates that the program administrators knew ahead of time who the summer school teachers would be. Thus placements of candidates could be informed and deliberate, rather than last-minute and haphazard, as they were in other programs.

Only in Plumville—the small, district-run program with six participants seeking certification in special education—did participants describe the settings of their clinical experience as being much like those where they would teach in the fall. The program director, who was also a special education administrator for the district, placed teachers in the schools where they would eventually teach and matched them to other teachers whom she knew to be strong. The fact that she already worked within the Plumville schools, and therefore did not have to form a partnership with a district, facilitated this process.

Plumville was one of the two sites (the other was Oglethorpe University) where participants engaged in classroom observations rather than formal student teaching. As the director explained, placements in Plumville were carefully made: “We were trying to, at that point, look at a match between the type of class and students that [the candidates] would probably teach [in the fall], but also give them some variety.” In addition to observing veteran special education teachers at work, each candidate conducted a focused observation of one student who had failed the state's standardized exam. After a week of observing, candidates tutored their student and wrote a case study capturing what they had learned.

Participants said these observations were useful because they occurred in the schools where they would teach in the fall, and if they were lucky, with the teachers who would

be their teammates. Jack, who had been hired to work along with a team of veteran teachers in a sixth-grade inclusion classroom, felt fortunate to have worked with those same teachers during the clinical part of the training:

Unlike some teachers that maybe just get a key at the beginning of the year and get thrown into a class, I had a lot of practical experience this summer dealing with [teachers and students]. [I] actually got to do some summer school teaching [observations] in this school, so I knew all the teachers I was going to work with before the first day.

Plumville participants reported learning the routines and procedures of the classrooms, school, and district (e.g., how to conduct assessments or what format the district required for lesson plans). They praised the teachers they observed as “unbelievable” and “inspiring” and were reassured that they were learning from veterans who knew the challenges of the classroom. Damon, who had accepted a full-time assignment teaching students with disabilities in a pull-out classroom, spent time during the summer working with students in an inclusion class. He appreciated observing techniques that he could later apply to his own teaching:

I had a chance to see veteran teachers in action, to see how they handled different situations, and to . . . observe students at the same time. See how they’re catching on, how different looks came on [students’] faces when they didn’t grasp the information. So then [when I began to teach in the fall] I could look at my students to see if they had those same looks on their faces, and see if I have to re-teach . . .

Brenda, who had 4 years of experience as a teacher of “homebound” students, said that she had learned a great deal observing a veteran teacher work with autistic students. She regarded observing skilled teachers as “vital,” and was relieved to watch well-tested strategies and teaching models. “Someone else has the ticket. Why rewrite the book when the pages are already there and figured out for you?”

Christian Encoat, the director of the Greyson College MINT site in Massachusetts, also had little difficulty arranging student teaching placements, despite impending layoffs in the nearby district. He explained that the traditional teacher education program at Greyson, of which he was also director, had a solid relationship with the local school district: “In the [University’s] Education Department, the students will often student teach and do work in [Barnesville’s] schools, so it was a natural fit to go to them. . . . They have been working with us for probably 15 to 20 years.” Encoat worked with the Barnesville schools’ human resource office to identify three summer school programs in the district that included the subjects for which Greyson licensed teachers. He said that, although there were some candidates teaching in summer school outside their licensure area, most were matched by subject. A few candidates in English did their student teaching in courses on test-preparation for math and English, a situation Encoat said resulted “because of the selection of mentor teachers. [Barnesville] didn’t just want to just say, ‘Anybody who wants a MINT participant can have one.’ They needed to make sure that they were putting them up with someone who was experienced and had a good reputation for being able to mentor people.” Greyson’s history of collaborating with Barnesville and providing new teachers for their schools resulted in student teaching placements that participants and faculty generally rated as positive experiences.

Directors Turn to Personal Connections

When schools did not find it in their interest to partner with programs or realized that their schedules were not aligned, the programs' capacity to generate support became important. Program directors and faculty relied on personal connections to make the student teaching placements work and gain access to resources. A MINT site director employed by Teachers First described a process of gradually connecting with the right district employees: "[Y]ou usually start at the Superintendent level, and you move down to the summer school director level . . . and then it goes to the cooperating teachers." He saw the process of building relationships as a critical first step in arranging appropriate supports for his candidates. Director Dolye's experience arranging field experiences for the Ogletree University candidates underscores the importance of personal relationships. Although other program faculty members were very familiar with the Curtis district and its schools, Dr. Doyle had never worked there and did not know its personnel and procedures. She said, "I personally am just starting to get to know people there, because I'm just new." Despite several visits and phone calls to the district's central office, she was unable to find the right people to talk to in order to secure the district's permission for participants to observe summer school classrooms before the program's coursework began. Subsequently, she submitted a formal request to the Curtis School Board and waited for approval while they, as she put it, "dragged their feet." By the time the School Board voted on the issue, it was too late in the summer for participants to complete the required observations.

In the meantime, Dr. Doyle contacted one of her students who worked in the district's Office of Special Education. Through that connection, she did secure field placements for her two candidates in special education, but still could not place the math and science candidates. At the end of the summer, she applied to the state for, and received, a waiver for these practitioners' field experience requirement, allowing them to graduate with no practice in the field. In discussing the district's collaboration with local fast-track programs, a central office administrator said, "The people at the universities tell me they find it very difficult to establish a partnership with the school board, with the school system. They just don't know the right people to talk to, I guess."

Finding the right people to talk to often depends on time, proximity, and familiarity. Established programs have developed reputations and personal connections on which to draw. For example, after more than a decade of operation, ARC's Hansbury program in Connecticut was well known throughout the state. The program director, a former district superintendent, knew his way around, having made friends with district administrators over years of attending the same meetings and conferences. The program also had a good reputation. One of the ARC administrators said that district administrators were open to collaborating with ARC because "they've hired quite a few of our graduates, and they've seen how successful they are, and they've been very pleased with them." The program's good standing and Director Jim Campbell's extensive network meant that many local schools were willing to host summer school student teaching for candidates from the Hansbury site. Campbell chose from available schools and mentors, and was able to match most of the 174 Hansbury program participants with summer student teaching placements in their areas of certification.

Less Than Ideal Clinical Experiences

The quality of the clinical experiences for candidates varied according to the program's purpose and capacity, but overall, they left much to be desired. Locally-

Locally-grounded programs found partnering with schools easier than did the large, statewide programs.

grounded programs found partnering with schools easier than did the large, statewide programs, although when the partnering school district had an unresponsive central office (as with Ogletree University's partnering district) solid placements seldom emerged. The older ARC Hansbury site in Connecticut and the established MINT Greyson site in Massachusetts, while not always able to match candidates with appropriate student teaching placements, did achieve greater success than the newer ARC or MINT sites. This suggests that for all their seeming nimbleness and flexibility, alternative certification programs take time to establish, and may provide more effective clinical experiences when tied to local needs or anchored by personal or professional relationships.

Summary of Findings: Clinical Experiences

Student teaching is considered an essential component of training effective teachers, but most alternative certification programs found arranging high-quality summer experiences a daunting and insurmountable challenge. All states required a clinical experience as part of the program, and participants hoped for well-matched mentors who were experts in their field. However, given the nature of summer school, programs struggled to provide clinical experiences that met these expectations. Summer school clinical placements often meant participants had unprepared mentors who were not teaching in the field in which they sought licenses, and some mentors were teaching out of their own area of expertise. Some programs selected mentors because of their skill in guiding prospective teachers; others did not. Thus, the quality and extent of support that candidates received from mentors varied greatly within and across programs. Locally-grounded programs had more success (and fewer hurdles to overcome) than statewide programs in crafting reasonable and effective clinical placements. In part, the needs of locally-grounded programs were more likely to be well aligned with those of the summer school. When schools anticipated needing the very candidates fast-track programs were training, school administrators and faculty were more likely to arrange strong clinical experiences. Ultimately, the participants and program directors of these alternative certification programs underscored the importance, and yet the difficulty, of arranging high-quality, relevant, clinical experiences under the guidance of master teachers.

Job Placement

Only Plumville, a small, district-run site with six candidates preparing to teach special education, succeeded in placing all its candidates in jobs before the summer coursework started.

Most of the participants in our study were surprised when they encountered difficult finding a full-time teaching job. Largely because hiring decisions rested with school district officials, most programs could not influence the hiring process, and despite some assurances of help, most programs did little to assist participants in their job search. This was especially true of statewide programs. Many candidates found their positions just a few weeks—and for some, just a few days—before students started school. Some were even hired after school started. Therefore, although timely job placement is an attractive incentive that can also enhance the value of summer training for candidates, only one of the fast-track programs managed to provide it.

Candidates still unemployed by early August—and there were many—described the stress of simultaneous coursework and job-hunting, and they reported becoming increasingly willing to take any job offered. According to many respondents, late hiring by districts seriously compromised the value of the other components of the program.

Late Job Placement Was the Norm

Although early job placement would have been in the interest of both the programs and participants—and arguably the schools where they would teach—candidates rarely knew what they would be teaching before they started their training in July. Those with jobs lined up usually had found them on their own or had entered the program with experience teaching in a school or district where they planned to return. Ten of the 13 programs studied had promised to provide candidates with jobs or assistance in finding them, but for the most part they struggled to deliver on such promises; of those 10 programs, 4 (Plumville, Green River, Northborough, and Blainesville) required participants to commit to 2 years of teaching in the local district in return for job placement. However, only Plumville, a small, district-run site with six candidates preparing to teach special education, succeeded in placing all its candidates before the summer coursework started. In CTC, where participants were required to have jobs in order to enter the program, job placement was never a responsibility of program directors.

In Connecticut, 11 of the 19 participants we interviewed at the three ARC sites were not hired until August or later; only four had jobs before the summer training started.¹⁰ Of those, three had secured their jobs in the spring at the school or district where they were working. Similarly, in Massachusetts, only 14 of 34 participants in our interview sample had received job offers before the program started. Half of those (7) had previous experience as a teacher, substitute, or volunteer, working in the district that offered them a job.¹¹ In Louisiana, where the Ogletree and Green River programs promised different levels of support in job placement, most of the participants we interviewed eventually found jobs, but only shortly before the school year began.

Approaches to Job Placement and Their Implications

Programs had different approaches to job placement, and their varying levels of success can be explained by the extent of formal or informal partnerships they maintained with local schools and districts.

Programs Partnered With Districts to Try to Place Candidates

At two of the three program sites in Connecticut, participants signed a commitment to teach for 2 years in one of two urban districts, Blainesville or Northborough. In exchange, the district agreed to pay \$1,000 to \$3,000 of the candidate's tuition. However, placing candidates was not easy or routine, even though site directors in Northborough and Blainesville used personal contacts with district principals to try to leapfrog the human resources office and place candidates in open positions. Budget cuts forced layoffs in both districts, and very late in the summer the state released these candidates from their commitment, making them "free agents" to search elsewhere for positions.

Participants at Oglethorpe University in Louisiana described a similar situation. The university-sponsored program maintained a nominal partnership with a local district that guaranteed participants jobs. However, the district had little real collaboration with the program, and candidates were left on their own to navigate the human resource offices and find jobs. As one participant, Anastasia, put it, there's "the way it's supposed to work versus the way it actually is." When she realized that the program was not going to help her find a job, she took it upon herself to look for one. "I basically went every day and I flooded the principals with my resumé. And I interviewed at a couple of different schools. . . . And I was hired for biology, but [the principal] actually needed a social studies teacher, so that's how I ended up teaching biology and social studies." Anastasia was certified in science and had not wanted to teach two subjects, but by the time she was hired in late August, she felt lucky to have found any job. She recognized what was lost in not securing a position earlier: "I wish that the program would have placed me in a place that I could have learned in the beginning."

Programs Promised and Did Little; Participants Fended for Themselves

Other programs never promised much in the way of job placement, requiring candidates to take the initiative and see the process through. This was the case in Massachusetts and at Hansbury, the original Connecticut ARC site. Both were preparing candidates to assume jobs throughout the state, and it was up to the candidates to find their own positions.

Massachusetts offered participants little more than encouragement in the job search process. In 1998, the first year of the MINT program, state officials had assured all participants that they would have jobs, but in the end, they could not guarantee positions (although some districts offered courtesy interviews) and candidates were on their own. This caused considerable dissatisfaction among participants in the program (Liu, Johnson, et al., 2004), and by 2002, Massachusetts was making no offers of formal assistance. The state director of the MINT program said that, from the state's perspective, the "biggest problem" with the program was the difficulty candidates had finding jobs. He reported that entering participants assumed that they would be needed to fill shortages and, thus, would have quick access to teaching positions. When help failed to materialize, participants concluded that the state administrators had not

Anastasia was certified in science and had not wanted to teach two subjects, but by the time she was hired in late August, she felt lucky to have found any job.

been, as the director put it, “up front” with them about the hurdles involved in finding teaching jobs. Thus, although many were attracted by the incentive of quick entry to a paid teaching position, a surprising number arrived at September with no classroom to enter.

District-embedded Programs Yielded Local Jobs

Although state-sponsored programs did not assume responsibility for placing participants, local district administrators occasionally cooperated with site directors. For example, program administrators at Huntsville, a MINT site, managed to connect 2 of 15 participants to available jobs in the district where the program’s coursework and summer student teaching took place. The principal of the high school expressed enthusiasm for using the summer program as a proving ground for prospective teachers, and over the summer the school’s department heads could observe candidates as they taught. According to the Huntsville program director:

[I]t seems like all the department heads know about [our program]. And they come in and we play ‘Go Fish.’ They say, ‘Do you have any history people?’ and we say, ‘Yeah.’ And so—we already had two people hired here . . . to teach in [this district] . . . [The program provides] a prime opportunity for them to see a teacher in action, which you can’t do in most interviews. If they just pop by, they can see how the kids relate to the teacher. And it’s a great opportunity to hire someone.

Thus, although this site was managed by Teachers First, which had no formal affiliation with the district, two candidates received job offers as a result of the ongoing relationship between the program director and school-based administrators. Finding jobs for 2 out of 15 is hardly a remarkable placement record, but this spirit of cooperation between the site director and local principal was unusual among the program sites in Massachusetts.

Dr. MaryAnne Carter created the alternative certification program in Plumville to address a shortage of special education teachers, and therefore she guaranteed jobs to the six admitted candidates. She carefully vetted district schools before choosing two that she thought would provide supportive environments for participants. These schools had many uncertified teachers and their principals were eager to hire the program participants. Carter reassured principals that her practitioners, though new to teaching, would not be an added burden: “It [was] important that the principal know that we’re supporting those teachers. And these teachers were receiving a higher level of support than other teachers.” The program also guaranteed that the participants could hold the same position for 2 years and, in return, the candidates made a 2-year commitment to their schools.

At Green River, a locally-grounded program managed in partnership with Teachers First, jobs were arranged for all 38 candidates. However, this did not occur until the end of the summer, and only after lengthy negotiations with local district administrators and principals. The program director had hoped to cluster candidates within schools where there was high need, but this was successful only at the elementary level. As a result, the process of placement was, according to the director, “pretty random.” She explained that placing candidates in math and science jobs happened quickly, but that the district had very few openings in English or social studies. To work well, the job placement process required not only having good working relationships among program administrators, principals, and district administrators, but also an efficient human

resource department, which the district did not have. The process of job placement was, according to the director, “not scientific,” and the inefficiencies resulted in “sort of a struggle” to place candidates.

CTC Programs Required Candidates to Have Jobs Before Entering

The California Teacher Corps required candidates to hold teaching jobs in order to enter the program, reflecting the program’s mission of training and certifying unlicensed teachers. This requirement also relieved site directors of the challenge of placing candidates in jobs throughout the state. However, it meant that each site’s enrollment depended on the number of new, unlicensed teachers in the region. In 2002, program administrators were surprised to learn that districts usually reporting a shortage of teachers were not hiring; as a result, the program noted a decline in applicants. The director observed: “This year was pretty much of a shock when we had anticipated many more people coming into the program. And all of a sudden the districts were not hiring. I mean, even some of our districts that normally have a shortage of teachers were not hiring.” Thus, unlike other programs, where the districts’ hiring patterns affected participants who were already enrolled and looking for jobs, in these two California sites, the number of teacher vacancies had an impact on the program’s enrollment.

Whatever assurances program directors might want to make, hiring is ultimately a local matter.

Hiring: A Local Matter

The experiences of candidates in these programs made it clear that, whatever assurances program directors might want to make, hiring is ultimately a local matter. Programs—particularly state-run programs—were rarely able to help participants find jobs, because hiring happens at the district level and is controlled by district human resource administrators and principals. While some programs promised candidates jobs and four (Plumville, Blainesville, Northborough, and Green River) even required candidates to make a 2-year commitment to teach in the partnering district, these commitments were moot if the districts were not hiring.

Late hiring proved to carry steep costs for participants, the programs, districts, and schools.¹² It led to less focused training during the summer and eventual mismatches between the jobs that participants sought and the initial assignments they found. Also, late hiring appeared to have compromised one of the original purposes of these programs—to fill shortages in specific subjects and geographic regions.

Unfocused Training

The programs’ inability to match candidates with jobs before the start of summer training meant that some training was unfocused and inefficient. In Massachusetts, for example, many candidates took and passed licensing tests in two fields so that they might eventually accept a job in either. If they had no job by July and did not know what they were preparing to teach, the candidates had to participate in their courses and field placements in a far more general manner than they might have otherwise. Would they eventually find a position in an urban, suburban, or rural district? a high school or junior high school? teaching math or science? Consider, for example, Beau, a MINT participant who was preparing to be certified in French, but realized, given the job market, that he had to keep his options open: “So I passed the test for French, but I may end up—I’m also looking at possibly business, accounting. And I could also teach math, or some sciences.” As he participated in the summer training, he was thinking about the preparation he might need for four separate subjects.

“There’s a little bit of stigma or a little bit of a hurdle that you have to overcome as an alternative route person.”

Nathan, an ARC program participant

Poor Matches Between Schools and Participants

Research cautions that hasty hiring can lead to a poor fit between a participant’s interests and experiences and a school’s needs and character (Johnson et al., 2004). Arguably, new teachers should begin their career in an assignment offering a good chance of success. However, with the start of school rapidly approaching, candidates who were scrambling to find jobs rarely could hold out for an offer in a subject area, community, and school level for which they were prepared and felt comfortable. Late hiring is rushed and typically “information-poor,” leaving candidates and schools knowing little about each other before the school year is underway (Liu and Johnson, forthcoming 2006).

One MINT site director expressed concern about the haste with which participants accepted job offers: “I definitely have concerns for them . . . I know that many of them accepted the first job offer that came their way.” For example, Harold, a MINT participant, was a mid-career entrant to teaching with a PhD in physics. Having passed the state’s teacher exam in math and physics, he hoped to teach high school math in an urban school. He applied for jobs widely in urban and suburban settings, but the math position he sought never materialized. Just four days before school started, he was offered a position teaching high school science in a small city not far from his home. He explained the process: “I really wanted math. And they really—and in fact, there was a math position at that school, but they were more desperate for a science position. And since it was the week before school started, I was sort of desperate . . . I felt insecure and took the position.”

Experiencing Stigma in the Job Market

There was some evidence that candidates in alternative certification programs were at a disadvantage in the job market.¹³ For example, Nathan, a former computer consultant and participant at Connecticut’s ARC Hansbury site, applied to 20 districts, but the only job he could find was a long-term substitute’s position in a self-contained classroom, teaching students with disabilities. Because he was not licensed for this job, he had to teach on an emergency certificate. He explained, “There’s a little bit of a stigma or a little bit of a hurdle that you have to overcome as an alternate route person.” Ogletree faculty in Louisiana said that they had difficulty convincing principals to consider their candidates for jobs, even though the partnering district had guaranteed jobs to program graduates.

Urban Settings Lose Qualified Candidates to the Suburbs

Several of the programs were intended to prepare candidates to fill vacancies in urban districts (MINT, ARC, Ogletree), and yet those districts were the least prepared to make early job offers because of late budgets, the seniority transfer requirements of union contracts, and slow bureaucratic procedures.

Candidates in the ARC Blainesville Program, who were released from their two-year commitment when budget cuts eliminated their positions, had difficult finding jobs that year. Some never did. Oscar, who had expected to work 2 years in Blainesville, was frustrated that the district could not place him. “So here I am. I’ve got all this [experience]. Use me. . . . There’s got to be a school out there that needs people. . . . They say, ‘We need you. There’s a shortage.’ Well, here I am.” Although he felt committed to urban teaching, he knew he might have to compromise: “If something comes up nearby, I’ll just—I’ll go for that, and tell [the district], this has come up. If you don’t have anything, I need to take this, because I do have to make a living. I can be as altruistic as I want, as idealistic, but I do have to make an income doing this.”

Many candidates in MINT and the other ARC sites who would have preferred urban placements and were willing to wait for job offers through July eventually gave up and sought positions in the suburbs. MINT's Huntsville site director described the problem:

And one of the problems [in hiring] is the real needy schools have budget problems. . . . And that's probably the biggest problem we're having is the fact that people want to teach in diverse schools that have high needs for teachers. But the reality is a lot of [those districts] don't have their budget in order in time to hire, so that someone feels comfortable they have a job.

Urban districts lost licensed teachers to suburban schools, and a central purpose of several programs—to staff shortage subjects in high-need districts and schools—was subverted.

Frequently, mid-career entrants, who, as one faculty member explained, “have to worry about putting food on the table along with taking jobs,” accepted positions wherever they were offered. Craig, a MINT candidate seeking certification in mathematics, started to search in April for an urban teaching job. He sent out approximately 100 resumé and completed 14 or 15 interviews. For back-up, he applied in suburban districts near his home. When the summer was nearly over and he still had not heard from the urban district where he most wanted to teach, he took a suburban job:

I wasn't about to say, “Thanks anyway, [suburban district]. This is a perfect opportunity for me, but probably I'll be able to get something from [the urban district] in a month, so thanks anyway.” I wasn't ready to do that. . . . And the major problem for [the urban district] is that they basically don't get the ball rolling until [August] . . . I mean, if [the urban district] had offered me a job in June, I probably would have taken it.

Jessica, a Massachusetts MINT candidate, reported receiving mixed messages from the Department of Education about what kind of job she should be looking for. Although she knew the program was, in part, intended to fill shortages in urban schools, she wanted to apply for a job posted in a relatively affluent community, and called a program official to consult.

I said, “What do I do? There's a job posting, I want to apply for it, but it's not in [an urban district].” And they basically said, “We can't guarantee you a position. Your job is to go get a job. And, if [the urban district] hasn't posted their job postings yet, but another school has, and you want to apply for a job, we can't stop you from doing that. It's a public school. We're very concerned that you stay with a public school. We would prefer that you work for [the urban district], but the job postings aren't there so, do what you've got to do.”

The program official's response reveals the kind of ambiguous expectations that candidates encountered. Although many program administrators hoped that participants would take jobs in urban districts where teacher shortages were most acute, statewide programs had little or no influence in the district hiring process and understood candidates' sense of urgency to secure assignments.

As a result, urban districts lost licensed teachers to suburban schools, and a central purpose of several programs—to staff shortage subjects (math, science, special education) in high-need districts and schools—was subverted. In the state-run programs of Massachusetts and Connecticut, approximately one fourth of the participants interviewed found jobs in urban districts, although officials from both programs

Many candidates were attracted to fast-track programs by the promise of quick entry into teaching, but most experienced delays and difficulty in securing positions for September.

expressed a commitment to preparing teachers for such placements and many more participants sought than found them. (See Fowler's 2003 account of Massachusetts hiring.) This occurred for two reasons. First, these programs prepared candidates in all subject areas, not just areas of shortage. Second, there were no established partnerships between the state and districts to ensure that candidates would have certain and timely access to positions. Even in situations where there was an established partnership (e.g., ARC's Blainesville and Northborough sites in Connecticut) the state could not compensate for district-specific conditions, such as budget crises and program cuts. By contrast, the district-run sites and programs, such as Louisiana's Green River and Plumville, were more successful in placing candidates in high need schools, although not necessarily in a timely way.

Summary of Findings: Job Placement

Many candidates were attracted to fast-track programs by the promise of quick entry into teaching, but most experienced delays and difficulty in securing positions for September. While 10 out of 13 programs promised some level of support with job placement, only one succeeded in placing all of its candidates in a timely manner. Too often, participants found jobs just a few weeks before or even after school began in September. In addition, many settled for positions different from those they originally sought. Many participants hoping to teach in urban districts accepted suburban positions when large, city school systems were slow to post job openings and make offers. Others eventually accepted positions in fields other than those they had trained for.

A program's capacity to support candidates in the job search process seemed to depend on whether programs had well-established partnerships with districts and whether it was statewide or locally-grounded. Programs with strong partnerships succeeded in placing at least some candidates. Statewide programs were unlikely to have relationships with local districts, and therefore program directors were often unable to help their graduates secure suitable jobs. Locally-grounded programs had more success. Finally, late hiring meant that most candidates were unable to focus their summer training on the type of position they would ultimately have. Someone expecting to teach math in an urban middle school could participate in coursework throughout the program with an eye toward that particular setting. Someone with no idea where or what he might teach had to approach his training in a generic way. Late hiring diminished the extent to which programs and participants were able to meet their original goals of boosting teacher quality or filling shortages in the neediest schools.

Follow-up Support

When local assistance was scarce or absent, which was often the case, [new teachers] sometimes reached for their programs' follow-up support as a lifeline.

No matter how well prepared a new teacher might be after completing the preservice component of an alternative certification program, the first year of school is certain to be challenging. There is wide agreement that new teachers need continuing support to develop and refine their pedagogy, and that those who begin teaching after abbreviated and condensed preparation programs may have an even greater need for follow-up support.

Sometimes new teachers are lucky enough to work in a classroom near an expert teacher who offers help and encouragement, and increasingly districts and schools are providing new teachers with mentors. Schools also may sponsor induction programs to orient new teachers to local practices and priorities, teach them how to use the curricula, offer feedback about their teaching, and encourage them to observe others at work. However, there is evidence that high-quality support is rare and more likely to be provided in high-income schools than low-income schools (Johnson, Kardos et al., 2003).

It is within this unpredictable and uneven context of state, local, and school-based assistance that the alternative certification programs we studied offered follow-up support for candidates once they entered the classroom. The new teachers were focused intently on the demands of teaching their classes day by day, and they were grateful for additional help, whatever its source. When they found what they needed locally from helpful colleagues at their school site or a formal induction program sponsored by their district or state, they had little time or use for follow-up support from their program. However, when local assistance was scarce or absent, which was often the case, they sometimes reached for their program's follow-up support as a lifeline.

What the States Required and Provided

Those who completed Connecticut's ARC program automatically were included in the state's Beginning Educator Support and Training (BEST), a 2-year comprehensive development and assessment program required of all first- and second-year teachers in Connecticut. Teachers participating in BEST attended monthly seminars, worked with an assigned school-based mentor, and completed a subject-specific portfolio assessed by an external panel of experts. ARC participants also were required to complete an additional 30 hours of professional development.

Massachusetts, which called for districts to provide each new teacher with a mentor, also required MINT candidates to complete 18 contact hours of follow-up professional development in order to be licensed. With state funds, each of the MINT program directors sponsored a support seminar that met five or six times during the school year. Although state officials recognized that these new teachers had many needs, funds were limited and the program directors said these financial constraints restricted what they could provide.

California teachers participating in CTC North and South received ongoing support as a result of the job-embedded design of their preparation program.

All new teachers in Louisiana participated in the state-run Louisiana Teacher Assistance and Assessment Program (LATAAP), which called for each novice to have a school-based mentor. In addition, alternative certification programs were required to offer 135 follow-up contact hours (equivalent to 12 credit hours of coursework) for graduates. This included structured classroom observations and feedback from program faculty, as well as support in the form of a course or seminar.

California teachers participating in CTC North and South received ongoing support as a result of the job-embedded design of their preparation program. During their training, they could expect to be observed and advised by traveling adjunct faculty and school-based mentors. In addition, once a new teacher had completed the CTC training, he or she was eligible for the Beginning Teacher Support and Assistance (BTSA), a state-sponsored induction program, which included one-to-one mentoring and seminars.

Given these differences in state policy, the programs we studied varied in the extent of follow-up support that they provided. For example, Massachusetts' MINT program offered 18 contact hours of support, with no classroom observations, and Louisiana's Plumville program offered nearly 8 times as many contact hours, which included time for feedback on candidates' classroom teaching.

Statewide and Locally-grounded Follow-up Support

There were notable differences between statewide and locally-grounded programs in the type of follow-up support they provided. Statewide programs, such as MINT and ARC, typically provided seminars at convenient locations and addressed broad issues of instructional practice. Locally-grounded programs, such as Plumville and Green River, convened their candidates in or close to their schools and focused on topics relevant to their district—curriculum, student services, or local policies.

Statewide Follow-up Support

Generic, statewide follow-up support allowed the Massachusetts MINT program to serve all of its participants at various locations, without regard to the context of individuals' jobs. As with the summer coursework, the program determined the content of such sessions, often more in response to the professional resources of directors and faculty than the professional requests or needs of the candidates. Connecticut teachers also could choose from state-sponsored seminars held at various locations; some of these offered generic advice about teaching, and others helped the candidates learn how to teach in their subject area.

The participants in these statewide programs who reported receiving subject-specific guidance were grateful. For example, Daniel, from the MINT Bay City site, heard from other colleagues that the follow-up seminars they attended were “mainly gripe session[s].” However, he described his seminar, which included only English teachers, as “outstanding,” because instructors focused on content and provided suggestions he could quickly apply in his classroom. He said, “There was always a very clear agenda to them. And they gave many, many, many, many really helpful tricks of the trade, and advice, and guidance, and references, and resources. And it was great, content-specific coursework.”

Most participants who attended follow-up sessions with their cohort enjoyed comparing notes about their experience, but very few said extended discussions about others' teaching experience were informative. Those who were isolated and struggling

sought consolation from their program colleagues, while those who were feeling successful or enjoyed support at their school sites often criticized these sessions for lacking substance.

Locally-grounded Support

The three Louisiana programs in our sample were intended to prepare teachers for specific local districts. Only Green River and Plumville, however, showed evidence of having programs specifically tailored to familiarize candidates with the curricula and practices of their local district. District-based programs in Green River and Plumville provided follow-up training that addressed the teachers' early experiences within the context of the district's policies and practices. In Green River, Teachers First sponsored twice-monthly seminars called "learning teams" for their participants, who were grouped by content area and grade level. Expert teachers, who had been carefully selected by district administrators, facilitated discussions and brought to the seminars advice about how to succeed in the classrooms of *that* district. Ruth, a fifth-grade teacher, said her seminar was "like a lifeline. I look forward to that every 2 weeks." Only one teacher, who was frustrated that the sessions failed to focus on the curriculum at her school, said that they were not helpful.

Plumville's 160-180 contact hours of follow-up professional development exceeded the state's 135-hour requirement and was explicitly designed for the teachers in the alternative certification program. The director offered seminar meetings every 9 weeks on topics such as classroom management in special education classes. In her role as special education director for the district, she also visited participants' classrooms frequently and corresponded with them through email. The director said that the promise of follow-up support offered by Plumville initially attracted some participants who might otherwise have chosen a different program.

The Ogletree program in Louisiana provided a year-long follow-up course for their eight candidates. Ogletree's program director, a full-time university faculty member, explained that the course was meant to respond to candidates' needs: ". . . [I]t's a three [credit] course. They'll meet with their instructor every 2 weeks to talk about practical things that are happening. And it's not a course that is going to be prescribed from the beginning. . . . It's going to be dictated by student needs." Although the small size of the cohort permitted Ogletree faculty to respond to individual concerns, instructors still had to address the needs of math, science and special education teachers from more than one district. As noted earlier in this report, the Ogletree program did not show evidence of having a robust partnership with the local district, and not every teacher was able to secure a job there. Therefore it is not surprising that the program did not offer district-specific training as the other two locally-grounded Louisiana programs did.

Voluntary Support

Several program instructors volunteered to supervise the new teachers in their classrooms. For example, Ogletree's director occasionally observed participants teaching in the local district, sometimes advocating on their behalf when they encountered problems. Similarly, the program director and faculty member at MINT Westview visited the classrooms of participants in the Westview schools. The program director of Louisiana's Green River program, who was also an employee of the district, observed participants in that program twice a year. She said these observations provided opportunities to assess candidates' needs: "I think it is more of a peer review rather than a peer assessment. But I think it's supposed to help me figure out what they need, in terms of support." Overall, participants reported finding these visits useful and they

In Green River, Teachers First sponsored twice-monthly seminars called "learning teams" for their participants, who were grouped by content area and grade level.

appreciated the director's accessibility. One Green River participant, Darryl, said, "She's outstanding . . . I can pick up the phone and call her any time, day or night. She's wonderful." In the MINT program, directors and faculty who were not employees of the district but nonetheless provided on-the-job support did so out of generosity or a sense of professional responsibility rather than as part of the formal program. There were simply insufficient program resources to regularly assist candidates in their classrooms.

Given their limited resources, program directors found it exceedingly difficult to provide meaningful follow-up support for teachers in an array of subjects, grade levels, and district contexts. These programs' low tuition, which attracted candidates, also meant that funds for training usually were depleted by the end of the summer. Thus, follow-up support was often brief and reached into the candidates' classrooms only when staff volunteered their time. Among the sample of programs included in this study, only the California CTC program and Louisiana's Plumville provided candidates with funded supervision in their classrooms. Otherwise, candidates relied on whatever their districts and states provided for all new teachers, which often fell short of these individuals' needs.

These programs' low tuition, which attracted candidates, also meant that funds for training usually were depleted by the end of the summer.

Summary of Findings: Follow-up Support

In general, the programs in this study struggled to provide ongoing support to program participants during their first year in the classroom. States had different requirements for follow-up support once teachers began teaching. One simply included teachers from these programs in their induction and support programs for all new teachers in the state. Others required additional professional development and support for those who had completed alternative programs. We found that states and programs used two distinct types of follow-up support. Statewide programs offered seminars at central or regional locations and addressed broad topics applicable to a wide range of settings and subjects. Locally-grounded programs convened candidates close to their schools and focused on district-based curriculum, policy, and practice. Candidates across programs gave mixed reviews of these experiences. Those without strong collegial networks in their new schools described these sessions as helpful, while those lucky enough to have consistent local support found them less useful. Like the summer coursework, the follow-up support for most programs provided little instruction in subject-specific pedagogy, leaving many participants unsatisfied. Despite the importance of providing all candidates with ongoing support, the programs in this study generally had limited capacity to do so.

Assessment

Alternative certification programs, like traditional certification programs, may include periodic assessments to inform directors and faculty about the participants' competence and progress and to suggest to the prospective teachers appropriate next steps for improvement. A summative assessment at the conclusion of the program can serve as a final gate to certification, ensuring the public that teachers who are licensed are qualified to teach.

Each program we studied had some assessments in place, although directors and faculty members rarely relied on them to judge candidates. A positive evaluation typically hinged on attending the program sessions regularly and completing all tasks, rather than meeting a set of standards. In the end, the assessments carried little or no weight in determining a participant's future in teaching. Rather than serving as a means to decide who would and would not become certified, assessments were interpreted by program providers as an opportunity to support, not judge, participants. This was not surprising, given that the programs were, in part, designed to address shortages, and eliminating candidates would undermine that goal. For their part, participants usually regarded assessments as barriers to be surmounted, sometimes with ease, sometimes with difficulty. In short, programmatic assessments were largely symbolic and offered little in the way of quality control.

Formative Assessments During Coursework

The formative assessments built into the coursework of these alternative certification programs ranged from little to none. Afternoon classes at the five Massachusetts MINT sites in our study involved no formal assessments. One faculty member explained that he relied on participants to set high standards for themselves: "We don't collect assignments and we don't grade them." Another faculty member whose seminar group included many mid-career entrants explained her rationale for not collecting their course assignments: "I don't think it would be appropriate. . . . I treat them like adults." A third MINT faculty member simply stated, "This is not a course that they fail. . . . As far as I know, they're going to be teachers next year if they want to be. This is just a way to give them some help." The key to passing summer coursework in the MINT program was showing up and doing what was asked. One site director, who had 3 years experience with the program, recalled having asked only one participant to leave the program, "strictly on lack of attendance." Across the sites, directors and faculty members explained that the selection process was sufficiently rigorous to ensure that candidates were serious and able.

Similarly, directors and faculty from Connecticut's ARC and Louisiana's Green River programs prided themselves on having a rigorous selection process, but pointed to little in the way of ongoing assessment. ARC required participants to attend all lectures

and methods courses and to complete two short papers, one on the philosophy of John Dewey and another on special education. These papers were graded and candidates had the opportunity to re-write them until they were judged to be acceptable. Green River required candidates to attend and participate in summer courses, but did not administer tests or assign grades. In ARC and Green River, as in MINT, we saw virtually no evidence of academic assessments similar to those that traditional university-based programs use to judge the learning and performance of teaching candidates.

Directors and faculty in Louisiana’s Plumville and Ogletree programs administered periodic tests of participants’ mastery of content during the summer coursework. Theoretically, a student could fail the tests and thus not pass the summer courses. However, an explicit purpose for both programs was to certify teachers for shortage areas in local districts, and faculty did all they could legitimately do to make sure that participants passed those courses. The Plumville director said that she and her staff worked diligently to review material with candidates before administering tests. In Ogletree, candidates were also given a great deal of support for these assessments, and one Ogletree faculty member even reported that his supervisor overturned his decision to fail one student: “And this was despite the fact that she frequently missed class, that she frequently spent class on her cell phone. . . . She did a very poor job of everything that I asked of her.” In fact, every participant in both programs passed the summer coursework.

Only the California Teacher Corps assigned and assessed weekly written work. Each participant was paired with a faculty member who read and judged those assignments—often tracking them via email—and eventually graded that participant’s portfolio. In that way, faculty members could monitor participants’ progress and help them get back on course if they strayed. Faculty members could, and sometimes did, ask participants to re-write assignments that were unsuitable for the portfolio. Again, however, the purpose was to ensure progress rather than to eliminate those who performed poorly. As one faculty member explained, “It’s the job of the [faculty member] to get the intern finished and through the program with a credential.” Thus, as with other programs, assessment in CTC provided the occasion for support rather than summative judgment.

“It’s the job of the [faculty member] to get the intern finished and through the program with a credential.”

CTC faculty member

Observations of Student Teaching

Every program that included a student teaching component (or, in the California programs, a job-embedded clinical experience) also required cooperating teachers or program faculty to formally observe the participants’ classroom practice. These observations were meant to provide immediate feedback about what was going well and what participants needed to work on, as well as to contribute to their final assessment.

Some programs used standards-based protocols in an effort to make the observations as formal and objective as possible. ARC faculty, for example, relied on the Connecticut Competency Instrument—a state-issued set of teaching standards—for every classroom observation. California Teacher Corps faculty used a protocol based on the California Standards for the Teaching Profession. In these two programs, assessment of teaching competence reportedly carried somewhat more weight in determining whether participants earned immediate certification than it did in other programs. Connecticut’s ARC faculty could require participants who did not demonstrate sufficient skill during the summer clinical component to repeat student teaching in the fall. When we interviewed them during the summer program, ARC site directors said that they

One MINT faculty member emphasized that participants who were not performing well in the classroom usually chose to withdraw or were “counseled out” by faculty.

planned to ask a “half dozen” participants to repeat student teaching. In the California program, assessments of classroom teaching competence were supposed to count for one third of a participant’s overall grade for the program. Several California Teacher Corps faculty reported that, in determining a participant’s overall grade, they counted teaching performance as more than the one third it was supposed to count; however, no faculty member recalled failing someone in the program for unsatisfactory teaching alone.

In Louisiana, where student teaching was not required, only Green River incorporated summer student teaching into its program. Summer cooperating teachers were expected to observe participants and provide feedback. Faculty members said that they expected participants who were not performing well to leave voluntarily. The program director noted that observations of student teaching did not function as assessments, “not in a formal sense.” Another program administrator noted, “There isn’t a good accountability lever.”

In the Massachusetts MINT program, faculty members reported using their judgment, rather than formal standards, in observing, assessing, and making recommendations. One MINT faculty member explained that he did not use a rubric or protocol, instead trusting his “gut, as an experienced teacher” when reviewing candidates’ summer teaching performance. He, like nearly every other MINT faculty member we interviewed, emphasized that participants who were not performing well in the classroom usually chose to withdraw or were “counseled out” by faculty.

Reliance on Portfolios as a Summative Assessment

All of the programs in the sample except Louisiana’s Ogletree required candidates to prepare teaching portfolios for their summative assessments. Participants assembled evidence of the work they had done, typically lesson plans, examples of student work, records of their mentors’ classroom observations, personal reflections, and short papers. Most programs required one submission at the end of summer training; MINT required a second portfolio near the end of the first year of teaching. The California Teacher Corps required participants to submit several portfolio assignments over the months of this job-embedded training, each equally weighted.

ARC, MINT, and Green River all sent participants’ portfolios to be reviewed by independent panels, a process that could lend credibility to the programs by reassuring the public and district personnel that teachers who were trained in these alternative certification programs met state standards. However, these objectives were often subverted by an over-arching commitment to support any and all aspiring teachers.

The Case of MINT: Reviewing Portfolios

In the MINT program, two portfolios were due, one at the end of summer and another after the first year of teaching. The director explained that the state had decided to institute the portfolio requirement several weeks into MINT’s first summer session in 2000, and initially these portfolios carried little weight. A board of independent reviewers, all teachers certified by the National Board for Professional Teaching Standards, assessed portfolios against modest standards. However, in 2002 the director established standards for review, and for the first time a small number of MINT participants’ portfolios failed to meet the standards, reassuring the state director that the portfolio review process was no longer the “ridiculous rubber stamp” it once had been.

Reluctant to decline certification to any participants, MINT administrators gave those who failed another chance, providing them with extra support from portfolio

assessors in an online chat room. Subsequently, the MINT director shifted responsibility for assessing portfolios from the independent board to the program faculty at each site: “I really think that the training provider needs to see their people all the way through.” While this move was intended to provide more consistent support and meaningful assessment for participants, it eliminated the objectivity that an independent review panel might provide and did little to encourage directors to make hard judgments about quality.

Plumville and California Teachers Corps: Standards Inconsistently Applied

Louisiana’s Plumville program and the California Teachers Corps relied on both administrators and faculty members to review their portfolios. In interviews, these faculty members said they were committed to the participants’ success and spoke of personalizing the standards. For example, although he attended “norming” sessions in which faculty agreed on standards for portfolio review, one California Teacher Corps faculty member said that he considered every portfolio differently based on the participant’s personal situation and classroom teaching performance: “It’s a case-by-case type of thing, and I’ll adjust my scales accordingly.” Other faculty members in the program listed different priorities in their grading, from an emphasis on well-organized portfolios to a focus on well-crafted lesson plans.

Throughout this study, it was abundantly clear that portfolios were not popular with any constituency—not the program participants, not the faculty members, not the directors. A few participants said they enjoyed creating their portfolios: Dierdre, a CTC participant, said she found it “uplifting” to see evidence of her growth and hard work displayed in one binder. Most others, however, found the portfolio requirement a burden. One participant expressed a common view when he described the portfolio requirement as “a hoop to jump through,” rather than a constructive learning experience or true measure of performance. Assembling portfolios during the intense summer experience or during the first year of teaching was a task that claimed precious time from their job search or their teaching. Yet candidates seldom expressed fear of failing; for them, a completed portfolio was just one more step on the road to certification.

Participants in large programs like Massachusetts MINT and Connecticut ARC reported receiving very little useful feedback on their portfolio, which is not surprising, given that faculty members variously described them as “bulky,” “cumbersome,” and “tedious” to review. Program directors struggled to organize the portfolio process so that it would be useful, efficient, and authentic, but all too often the review became a time drain and a bureaucratic ritual. As one reviewer for Louisiana’s Plumville program put it, “It’s hard because last year we had, I think, 10, 9 or 10 portfolios to look at. And it’s quite a bit of stuff to look at . . . I don’t have the time I would like to have to spend a lot of time with them.” For large programs such as ARC or MINT, with 15 to 168 participants per site, the demands were even greater.

What Are the Consequences of Failure?

Program directors and faculty treated the portfolio requirement as a means for encouraging a weak candidate to work harder until it became possible to justify awarding a license. This orientation to assessment was also apparent in ARC officials’ response to failed student teaching. ARC candidates who did not perform adequately in the summer student teaching placement were not removed from the program, but were

One participant expressed a common view when he described the portfolio requirement as “a hoop to jump through,” rather than a constructive learning experience or true measure of performance.

asked to repeat their student teaching in the fall. The director reflected, “Hopefully with that extra time, they’ll be able to effectively show and demonstrate the teaching competencies.”

Although it may seem that the program administrators were squandering a chance to ensure the quality of the teaching force, they may actually have been responding sensibly to an environment in which there was a growing demand by school district officials for more certified teachers. Their emphasis on supporting weak candidates rather than dismissing them from the program may simply reflect the fact that most participants could, by policy, become teachers of record—in some cases initially certified—regardless of whether or not they successfully completed the program. For example, Massachusetts MINT participants were provisionally certified once they passed the state teacher test (MTEL) and found a job. If they were to fail the program, they would no longer be associated with MINT, but they could still teach and eventually might apply for professional standing.

In Connecticut, someone who failed the ARC requirements might apply to teach on a Durational Shortage Area Permit (DSAP), which the Northborough site director described as “a 1-year certification under which a person can teach normally, and get paid normally. But before they can move on, they have to complete the requirements of their certification program.” DSAP’s can be renewed at least once, allowing program participants additional time to earn passing reviews on the Connecticut Competency Inventory, a rubric used to assess classroom teaching. Of 55 participants at his site in 2002, the site director expected 2 would “get DSAPed” that summer.

At the California Teacher Corps and Ogletree University sites, many of the program participants were already teaching on emergency permits. Given that a goal of these programs is to help those individuals become certified, it makes sense to give them whatever support and knowledge they might need along the way. From that perspective, tough judgments made to eliminate poor candidates would be counterproductive. However, automatic approvals raise legitimate questions about what a license stands for.

Why Was Assessment Not Used More?

Throughout this study, the incentives to encourage participation limited what the programs could provide. Low tuition and rapid training created the most obvious problems in that they reduced the time and financial resources available to programs. Although program providers often expressed concern that they could not offer all candidates courses in subject-specific pedagogy or well-matched student teaching placements, they rarely expressed the view that assessments should be more rigorous. Nor did they suggest that, given additional resources, they would commit them to the process of carefully judging candidates’ performance. Unlike coursework or student teaching, the role of assessment did not elicit concern or initiative, suggesting that those who provided the program did not perceive it to be an important priority or their responsibility. They might, however, have been responding to participants’ assumptions that they would have a teaching position. Given that the states wanted them to produce more certified teachers and that the candidates were intent on having a paid classroom assignment, it was unlikely that program directors would hold the line on quality.

Assessment is Left to the District and the State

When program assessment functions more as support or ritual than as a mechanism for quality control, the responsibility for judging the competence of new teachers is passed along to the districts that hire them or to the state in which they work. Directors of the Massachusetts MINT and Connecticut ARC programs said that they counted on the fact that weak candidates would not find jobs. Thus, district hiring practices become a *de facto* means for determining who was fit to teach. This is ironic given that alternative certification programs were developed in part to address teacher shortages. Districts in desperate need of teachers would be likely to hire them, particularly when these job candidates arrived with the imprimatur of a formal program authorized by the state. That such districts were likely to serve low-income students only intensifies this troubling irony.

The Connecticut program director said “I sleep better at night” knowing that the state-sponsored BEST program will provide both support and assessment for ARC graduates.

In three of the four states, participants who completed their alternative certification program and found a job moved into a statewide induction and assessment system required of all new teachers. The Louisiana Teacher Assistance and Assessment Program (LaTAAP) employed a school support team and portfolio review process, funded and coordinated by the state. California sponsored the Beginning Teacher Support and Assessment (BTSA) program for all new teachers, which provided mentoring, ongoing professional development, and assessment. In Connecticut, the Beginning Educator Support and Training (BEST) Program offered similar support and review of novice teachers’ practice. In order for new teachers in these three states to be fully licensed, they had to successfully complete the additional training and review.

Although state money generally is allocated to fund such extended training and review, the task of providing services and completing reviews often falls to school administrators and school-based mentors. Thus, the responsibility for quality control ultimately rests with the schools that hire teachers from alternative certification programs. In essence, school personnel take on what the summer program coordinators do not have the inclination, time, or manpower to do. The Connecticut program director said “I sleep better at night” knowing that the state-sponsored BEST program will provide both support and assessment for ARC graduates.

In fact, there was some evidence that Connecticut’s review process for all new teachers (both traditionally and alternatively certified) was a challenging assessment. Candidates had to prepare portfolios with extensive data—documentation of 6-8 hours of instruction with one class, including lesson plans, video-taped segments, samples of students’ work, daily logs, and extensive written reflection about instruction. All portfolios were then reviewed by external assessors with regard to basic skills and discipline-specific competencies set forth in the state’s Common Core of Teaching. In 2001-2002, 6% of the new teachers in the state’s induction program were ARC graduates. Approximately 90% of all new teachers successfully completed the portfolio assessment on the first submission and the remaining 10% were offered “portfolio assessment conferences,” where they could receive feedback and subsequent training from portfolio scorers before preparing a new submission. Over the first 3 years of the program, only 2% of the teachers who submitted portfolios failed to eventually meet the state’s standards (Sergi, 2002).

Considerable capacity is required to carry out such reviews, and Connecticut committed substantial resources to train the assessors and those assisting candidates who initially failed. Other states had a less extensive and demanding process, often relying on school districts to conduct the assessments of new teachers. However, local districts—

particularly large, urban ones—often lack the needed capacity to carry out such reviews. Understaffed, dysfunctional human resource departments in the districts and schools that are already overburdened are likely to regard this obligation as an overwhelming one for which they are ill-equipped and under-funded.

Summary of Findings: Assessment

Overall, fast-track programs did not have the capacity or the inclination to judge whether their graduates were ready to teach.

In general, assessment proved to be a weak lever of quality control for the alternative certification programs in this study. Although most programs had some assessments in place (assignments, portfolios, and observations of student teaching), these tools were rarely used to decide whether candidates would earn licenses. Instead, these assessments were seen by program faculty as opportunities to offer support to candidates in developing their skills. Because these fast-track programs were designed to increase the quality and number of teachers (often in shortage areas), program directors used assessments to provide feedback to candidates rather than to weed out poor teachers. Therefore, districts and states were expected to shoulder the responsibility of ensuring their teachers were prepared to teach well. Given that many districts lacked the capacity to carefully assess new hires, much of the responsibility for judging and ensuring quality fell to state assessment programs, where they existed. Only Connecticut appeared to have a rigorous statewide review process in which all new teachers were assessed by the state before being fully licensed. Overall, fast-track programs did not have the capacity or the inclination to judge whether their graduates were ready to teach.

Factors That Affect New Teachers’ Sense of Preparedness

Those seeking to assess the promise of alternative certification programs often ask whether they adequately prepare teachers for the challenging work of classroom teaching. This simple question has no simple answer, since there are so many interpretations of what “adequate” preparation should include, so much variety in who these prospective teachers are, and such a range in what programs actually offer. Nonetheless, it is an important question to investigate.

In this study we considered the experiences of 80 individuals participating in 13 program sites, asking them to answer this question on their own terms. By interviewing the participants twice, once during the program and again 6 to 8 months later, we sought to understand whether they thought that their programs provided sufficient foundation for their early months in the classroom. Admittedly, these inquiries with participants were limited in that they could not provide data (based either on classroom observations or student performance) about whether they actually were effective as teachers. However, the interviews could help us understand how the teachers, themselves, assessed their training once they were in the classroom, and what they thought might have increased their chances for success in their new role.

Given differences among the programs included in our study, we had expected the participants to report that some programs were, overall, more effective than others, and we hoped to identify the elements that contributed to the teachers’ sense of readiness and confidence during the early months in the classroom. Prior sections of this report closely examine key programmatic features and explore why certain conditions and circumstances—having a job secured before the start of training, working with a knowledgeable and skillful cooperating teacher, or having access to expert advice about subject-specific pedagogy—contributed to a candidate’s sense of competence and self-assurance. However, it also became clear during our analysis that the program is but one factor contributing to the new teacher’s sense of preparedness. Also important are the skills and experiences of individuals who enter the program as well as the support they receive in the schools where they begin their teaching.

Traditional teacher preparation programs invest heavily in pre-service training on the assumption that a rich and substantial set of courses and clinical experiences will give teachers what they need to succeed in the classroom. Few who are involved in alternative certification programs expect that their programs can adequately prepare the new teachers for all aspects of their job or fully anticipate their professional needs over time. Rather, these programs introduce a different approach to preparation, one in which teachers are assumed to develop over time, and the process of acquiring knowledge and expertise is distributed across several stages of the teacher’s career. Alternative certification programs depend minimally on pre-service preparation and, instead rely substantially on the skills, knowledge, and life experience that the candidates bring to teaching, as well as the ongoing support and professional development that new teachers

will receive on the job. Thus, much of the responsibility for preparation is shifted from the pre-service program to school-based support.

As we have seen, most of the alternative certification programs we studied included some follow-up support, such as periodic meetings for members of the cohort to reflect on their work, sessions in subject-specific pedagogy, or seminars in critical topics such as special education. However, this assistance was short-term and, according to the many candidates, proved to be insubstantial or marginally related to their needs in the classroom. Rather, it was largely in their schools as they worked with colleagues (or where they worked in isolation) that their professional development continued (or lapsed) during their first year on the job.

These three elements—the person, the program, and the school—contribute to the teacher's sense of preparedness during the first year.

Factors That Determine the New Teacher's Sense of Preparedness

Thus, in considering the new teacher's sense of preparedness, it is important to extend our perspective beyond the contribution of the program itself. We must also look back at who these entrants to teaching were and what they brought to their new career, and we must look forward to see how adequately the school where they began their career supported them in their continuing development as teachers. These three elements—the person, the program, and the school—contribute to the teacher's sense of preparedness during the first year.

If a new teacher's sense of preparedness and opportunity for success depends on these three factors, there are many possible outcomes given the variation in candidates, program experiences, and schools as workplaces. Notably, however, these factors are not simply additive, but they interact in complicated ways. Thus, the outcome is often hard to predict. For example, a candidate with strong subject-matter preparation might succeed despite a weak program if the school he enters offers deep and sustained support. A candidate who lacks solid subject-matter preparation or prior experience with children may fail despite a carefully designed and well-executed program and adequate school-based support. Thus, it is not only unwise, but impossible, to render any summary judgment about alternative certification programs—or even about most individual programs. No program is the sole (or, perhaps, even the primary) factor determining a new teacher's success or failure. One must always weigh how other influences contribute to the outcome. What purposes, experiences, knowledge, and skills did the teaching candidates bring to their training? Given their individual strengths and needs, how well did the particular program elements that they encountered support their learning and growth? And, given each individual's personal characteristics and program experience, how well did the school site support the participant's entry into the classroom and development as a new teacher?

The Teaching Candidate's Knowledge, Skills and Experience

Each participant brings to the alternative certification program a particular background, including knowledge of subject matter and prior work or personal experiences that are relevant to teaching. Who these prospective teachers are, what they know and have done, and what they therefore need or can make use of in their

initial training all influence both how individuals experience the alternative certification program and how prepared they will be for their early months of teaching.

Traditional teacher preparation programs generally are designed for a relatively homogenous group of first-career entrants, who are assumed to bring to their training similar academic coursework and only a modest amount of relevant life experience. By contrast, the condensed, often minimal, training that most alternative certification programs provide often is justified either on the grounds that prospective teachers who have subject matter knowledge do not need extensive preparation in pedagogy, or that through life experience these candidates have acquired the knowledge and skills they need to sustain them on the job.

As outlined early in this report, the participants in the alternative certification programs we studied included first-career entrants, mid-career entrants, and current teachers. Individuals in these groups brought different levels of commitment to teaching, with the mid-career entrants generally expressing a greater commitment to teaching long-term than the first-career entrants. They brought differing levels of life experience, with some having raised children or trained colleagues in other fields, and others having just graduated from college. The amount of recent relevant experience they had in schools differed as well. Some current teachers had been in the classroom for years, and some of the mid- and first-career entrants had volunteered or substituted in schools while others had not.

Knowledge of Subject Matter

Among the candidates interviewed for this study, there were also notable differences in how well they knew the subject they planned to teach. Some had completed a master's or doctoral degree in their area of specialization, and others had earned a major or minor in their subject as undergraduates. There were individuals who had routinely used the content of their subject in their work over 10-20 years. A journalist, Daniel, had practiced the craft of writing that he planned to teach as an English teacher. Caleb, an industrial chemist, had current knowledge of the content he would be teaching. For others, the subject they had studied in college was somewhat remote, although these individuals often said they were confident that they had command of the content. As Mark, who had majored in history as an undergraduate said, "Content-wise, I don't have a problem."

There were also candidates who lacked formal training in their subject but had acquired sufficient knowledge, either on their own or on the job, to pass a state's licensing test. Harold, who had a PhD in chemistry, wanted to teach physics or math. Anastasia, a candidate who had majored in political science, was preparing to teach science. Samantha, a candidate for a license in secondary English, had majored in acting as an undergraduate. And Regina, a prospective social studies teacher who had majored in criminal justice, read history intensely before the program started. Such individuals brought greater needs to the training programs than did those with strong preparation in their subject.

Relevant Experience

Candidates also brought varied experience in teaching-related activities. Some had actually worked as teachers in other settings, such as higher education, outdoor education, or adult classes in English as a Second Language. Manuel, an adjunct college instructor who was seeking a license to teach high school Spanish, had taught in higher education for over 13 years.

“My job for many, many years was to take complex technologies and explain them to lay people. . . . So for me, it’s been a form of teaching my whole life, different audiences.”

Calvin, a mid-career entrant to teaching

Others had spent extensive time in their prior jobs doing tasks similar to those of teaching—preparing training programs for new workers, teaching formal courses in their content areas, or counseling employees—and they expected that this would enable them to make a relatively easy transition to classroom teaching. Jane said that as an engineer in research and development she had learned to present complicated information to managers and could foresee doing the same for her students. Similarly, Rhoda said that during her career as an energy economist she had plenty of practice presenting and explaining materials to “less sophisticated audiences.” Calvin, who had worked in technology, explained, “My job for many, many years was to take complex technologies and explain them to lay people. . . . So for me, it’s been a form of teaching my whole life, different audiences.” Kristin said that, as a result of working for 9 years as a lawyer in a District Attorney’s office, she could think on her feet and was prepared for “whatever could come—different questions [or] a fire alarm.” Such individuals generally were undaunted by the prospect of planning curriculum and lessons or translating the content of their subject for students. Many others, however, lacked such experience and confidence.

For most participants, the prospect of working closely with students was not only familiar but very welcome. Many had worked with children and adolescents in various camp and community settings. Those mid-career entrants who had raised their own children or worked with youth in sports or religious groups for years often expressed more confidence than younger entrants about assuming the authority that comes with teaching. In explaining how being a parent prepared her for teaching, a mid-career entrant, Leah, said that a younger novice might see high school students as only slightly younger contemporaries, while she regards her students as “kids.” She believed that this attitude helped her deal with them more confidently. However, raising children did not necessarily prepare individuals for managing a group of 25-30 children, some of whom might not share the new teacher’s views about the value of formal schooling or expectations about appropriate classroom behavior. As Jane, a mother of several children observed, “The real deal is different.”

Candidates’ prior experience in schools also varied widely. Some first-career and mid-career entrants were returning to schools for the first time since completing high school. Although many found the activity and routines of schools familiar and engaging, others were surprised that schools seemed to be less orderly and accommodating settings than they recalled. Anticipating a career change, some candidates recently had spent time working in schools as volunteers, paraprofessionals, or short-term substitute teachers. Some even had worked as long-term substitutes, assuming full-time responsibility for classes over a semester or a year. Rhoda, the former energy economist, thought that she needed a more realistic experience to supplement the summer program ahead of her. Intending to become licensed in middle school mathematics, she became a long-term substitute in a seventh-grade math class from January to June. A first-career Spanish teacher, Klara, said that she would have been “very fearful and very frightened” to take on a regular job if she had not had one year in an interim position designed to cover a shortage area.

Several candidates in California were working full-time as instructional aides and thus, when they began their program, were familiar with the district’s curriculum and had observed full-time teachers’ classroom management practices close-up. Others in California, Louisiana, and Connecticut already were employed full-time as teachers of record, having been hired on emergency certificates. A number had taught several years; one of Ogletree’s participants, Angela, had taught for 6 years before enrolling in the

program. These experiences heightened candidates' sense of readiness for the challenges of working in schools today. Leah, a mid-career entrant who had spent 2 years as a full-time math teacher, regarded her alternative certification program as a source of professional development rather than a source of just-in-time training to ensure initial survival. Samantha, who had taught English as a long-term substitute at the charter school where she would have a full-time job in the fall, viewed her participation in the program as "paying dues."

"I have had some really hard jobs with high pressure, big pay, and none of them have been nearly as hard as teaching, and anyone considering a career change into teaching has to be prepared to work really hard."

Ted, MINT program participant

Certain Combinations of Characteristics Led to Early Success

Certain combinations of personal characteristics and experiences augured well for individuals' confidence and early sense of success in the classroom. For example, based on these teachers' accounts both before and after they entered the classroom, prospects appeared to be promising for a mid-career entrant who was motivated by the chance for meaningful work and had strong subject matter preparation, particularly when he or she had used that subject on the job, or when earlier work responsibilities were analogous to the tasks of teaching. The candidate's likelihood of success seemed to increase if he or she had raised children, worked extensively with youth, and had become familiar with the current climate and culture of schools by volunteering or working as a substitute.

For example, Ted had completed an undergraduate degree in engineering and a master's degree in materials science. He had been director of operations in a technology company, where he supervised 55 people. When his company was bought by another and he was laid off, Ted began to act on the career change he been considering for several years. He had been thinking, "Do I really like what I am doing? No, I don't really like what I am doing. If I don't really like what I am doing, why am I doing it?" Despite the pay cut that would come with his career change, Ted's wife encouraged him to consider teaching, which he was drawn to because "it's a public service job, and you can really feel good about your public service." While investigating paths to entry, he taught math one year in a suburban district. He explained, "I had my own ideas about how to teach, and I definitely learn by experience, and I learned what ideas worked and what ideas didn't work." However, Ted thought that he had reached the limits of what he might learn on his own: "There were some things that I really, as much as I tried to figure out, had a hard time figuring out." The "biggest was, what makes these kids tick? . . . It's not just figuring out for one kid, it's for the wide range of kids that you get because they are so different." Ted brought to his summer training a very realistic view of the work ahead: "I have had some really hard jobs with high pressure, big pay, and none of them have been nearly as hard as teaching, and anyone considering a career change into teaching has to be prepared to work really hard."

By contrast, a first-career entrant who was ambivalent about teaching, lacked strong subject preparation, or had little experience with youth or familiarity with schools beyond his own education, would be less likely to find the program adequate. At 22, Chad was entering teaching right out of college. As an undergraduate, he had majored in biology, minored in chemistry, and taken a few education courses, which he thought had been too theoretical to be useful. He was attracted to the practical, condensed nature of the alternative certification program. Because the program was tuition-free, he could earn a license while saving money to buy a house. Not having experienced teaching in other settings or relevant work in other organizations, Chad pursued and landed a job teaching science at his high school alma mater. Once in the classroom, he expressed reservations about continuing long-term as a classroom teacher, both because his power and influence might be limited in this role, and because he saw teaching as a

personal challenge with demands for growth: "It's going to require me to improve myself, especially with social skills. Because I'm a loner, and I don't get out much." Chad said that teaching required him to "think about people" which did not come naturally to him.

Ted and Chad provide distinct contrasts in their readiness for the alternative certification program and for teaching. In fact, few individuals we interviewed entered their program with the full range of personal features associated with success, although none lacked all of them. Importantly, many candidates began their program with only a few qualifications that might compensate for the brevity of the training and sustain them in challenging work settings. However, the candidates' readiness was only the first factor contributing to their sense of preparedness. The second was what they experienced in the program itself.

The Program That Candidates Experienced

The program contributes to the prospective teacher's development by introducing key topics of education, basic instructional strategies, and an initial opportunity to observe experienced teachers at work or practice teaching on their own. Although many of the programs we studied look similar on the surface, we have seen that there were notable differences among them. Also, there is important variation within each program that may not be obvious from a summary of its overall design. For example, a program may offer each participant an instructional methods course, yet not provide an instructor specializing in each subject for which it offers a license. Thus, for example, a prospective social studies teacher may be obliged to attend an English methods course. Similarly, the clinical experience of individuals within the same program can vary greatly. One candidate may practice teaching in his area of licensure and be supervised by an expert teacher and skilled mentor in the field. Another candidate in the same program may be assigned to practice teaching in a subject for which he will not become licensed, under the supervision of reluctant mentor who is, himself, teaching out of field. Therefore, it is important to know about not only the particular program that a candidate completes, but also the specific activities and opportunities that he or she experiences in that program.

Candidates reported having a wide range of experiences which followed from the programs' intentional differences in design and delivery. When training was sponsored by school districts, rather than outside vendors, it usually was grounded in the curriculum and practices of the local district. Training that took place simultaneously with teaching and was job-embedded, as in California's distance learning program, allowed candidates to use their current class and students as the text for their analysis and interpretation of readings and lessons. Katrina said that the CTC program was popular because "everyone likes the idea that you are learning while you are doing it." Several candidates said that they selected university settings because they knew they would be taught by knowledgeable faculty. However, Jack, a prospective special education teacher, chose his district-sponsored program over a university-sponsored program because he "wanted to learn the ropes" in the district where he would teach.

Whatever their philosophy or format, programs typically offered some preparation in generic pedagogy, some attention to subject-specific pedagogy, and some experience in a classroom setting. As we have seen in earlier sections of this report, candidates judged certain of these experiences to be well-designed, intense and useful, but judged others to fall short on several counts.

Andrew described classes in generic pedagogy as “abysmal.” Regina said that this part of the program was “enormously helpful.”

General Instructional Strategies

A program offered what participants believed was solid preparation in generic pedagogy when they were taught practical skills by strong, seasoned teachers. Such coursework enabled candidates to grasp key concepts, which relate to all grades and subjects, such as the variation in students' learning styles, while also acquiring specific strategies for planning lessons and managing classroom behavior. There were some candidates who judged classes in generic pedagogy to be weak. Andrew described them as “abysmal,” while Percy called them “ratified common sense.” However, others found this training valuable. Regina said that this part of her program was “enormously helpful.” Nancy reported, “I learned a ton of things.”

Subject-specific Instructional Strategies

A few programs provided rich sessions in subject-specific pedagogy, preparing the candidates for the particular challenges of teaching individual subjects, e.g., how to initiate discussions of literature in English, how to use manipulatives in mathematics, or how to teach from original sources in history. Making this part of the program work well was particularly challenging when programs offered preparation in several license areas but had limited resources to hire instructors with expertise in each.

At the Massachusetts MINT site operated by Lyceum University, a university instructor taught a much-revered methods course for all the program's prospective science teachers—one teacher in chemistry, one in biology, one in physics, and three in middle school general science. Nancy, a former research biologist who had passed the state teacher's exam in chemistry, general science, and biology, realized that, despite her extensive work as a scientist, she had no idea how to approach teaching ninth-grade physical science in the fall. She explained that she was grateful for this methods course, in which the instructor might announce that the day's lesson would be “an eighth-grade class on convection. And she would run it as a class, and hand us the notes, and we would become eighth graders.” Although this approach could never address the particular content needs of all participants who would teach the range of science subjects in middle and high school, everyone could benefit from understanding the process and the “experiment of the day.” Occasionally the instructor would stop and step out of role to make observations or answer questions. She also taught topics such as how to assess lab reports or how to ensure safety in the lab, and she showed films of effective and ineffective teaching. Caleb, a chemist, also extolled the value of this class: “It was just wonderful. It was exactly what I had wanted. And here, instead of me having to figure it out, it was being shown to me, how to do it and how to make it a success. . . .” However, both Nancy and Caleb noted that there were only five such sessions during their training, which provided only an initial foundation for their work ahead.

Among the candidates we interviewed, there was far more criticism than praise for the subject-specific methods sessions offered by these programs. Sometimes there was simply too little time devoted to this part of teaching to make it useful. For example, candidates in three MINT program sites had minimal subject-specific training, consisting of one full day and a few hours of follow up, during their entire 7 weeks of coursework. Often participants criticized these sessions for being poorly planned and taught. Lucy, a prospective social studies teacher who had majored in accounting, said that she was “not much better off” for having participated in the social studies sessions offered by her program. By contrast, Malcolm, a mid-career entrant in the ARC program, praised his social studies methods course, which was taught daily by experienced social studies teachers.

Clinical Experiences

Participants also expressed widely divergent views of their student teaching experiences, which depended on the quality of the cooperating teacher. Some described working with exemplary teachers who also served as skillful mentors. Andrew, a prospective chemistry teacher, felt that he and his cooperating teacher were “kindred spirits” and he valued the opportunity to work with him. Such responses were unusual, however. Many other participants were disparaging of their cooperating teachers, criticizing them as “barely competent” or “inexperienced,” or dismissing the clinical component as “next to useless, a waste of money and time.” Chad, a first-career entrant, was assigned to a math classroom even though he planned to teach science. His cooperating teacher occasionally allowed him to take over the class, but offered little feedback. Abraham, who was assigned to conduct practice sessions for students who had failed the state exam, had no cooperating teacher. At first he was disappointed, but “horror stories” from others in his cohort about the poor quality of cooperating teachers convinced him that he actually had a good placement. Directors, faculty, and participants believed that doing student teaching in a realistic classroom setting under the supervision of a qualified teacher and skilled mentor could greatly enhance the candidate’s sense of preparedness. However, most programs did not consistently offer high-quality student teaching placements.

Although most candidates did not expect to be fully trained in an abbreviated program, some had not realized how little they knew or how much they would need to learn.

Few Programs Received Uniform Praise

Of the programs studied, only Plumville’s (the small, district-sponsored program that offered training for a license only in special education) elicited uniformly positive comments from participants for being sufficiently focused, substantively grounded, and well supervised. Candidates in other programs reported more or less satisfaction with their preparation, depending on the match of their individual knowledge, experience, and needs with what their program provided. Some had only praise to offer, saying that the program had met or exceeded their expectations. Usually, however, candidates’ judgments were mixed. For example, Leah, who had already taught a year of ninth-grade algebra, offered a mixed review, saying the program had given her a “better angle” on teaching, and she had learned how to handle cases of students with special needs, how to address different learning styles, how to conduct parent conferences, and what her responsibilities were as a teacher. However, she “still didn’t get better methods for teaching my particular course [mathematics].”

The quality of the program offerings proved to be more important to some individuals than others. Several respondents observed that their program was not for everyone, particularly candidates having no recent experience with young people. For example, Taylor said that the program “is going to be what you make of it.” It would not work for someone whose attitude was “Tell me everything.” Rather, he said, it required someone ready “to seek out opportunities.” Some participants came to their program with very measured expectations about what such abbreviated training could deliver, and they emphasized the importance of being “realistic.” Jane, a prospective math teacher, said, “I came in with a really open mind. I realize that [the program is] accelerated. I figure, whatever they can give us, let’s do it.” Dennis, who also planned to teach math, explained that the program gives candidates “a taste” of what teaching will be like, and then it is “up to us to make something of it.”

Many Participants Ultimately Found Training Lacking Once on the Job

Although most candidates did not expect to be fully trained in an abbreviated program, some had not realized how little they knew or how much they would need to

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learn. Theresa, a mid-career entrant, said in July that it was her “mission” to teach and that she planned to teach until retirement. She thought that her program had “provided excellent training, excellent resources,” and looked forward to her second-grade urban class. However, the demands of teaching were much greater than she expected—“It was bigger than I am” —and she left teaching in October. Similarly, Ruth, a mid-career entrant who in July said “I feel well-prepared,” reported in April that she had found teaching to be much more challenging “in every way” than she had anticipated. She found behavior management “overwhelming” and teaching all subjects in a self-contained classroom very demanding. She credited the program with providing her “a starting point, a structure” in lesson planning and classroom management, but found that she had to substantially adapt what was presented. She did not feel at all ready to teach a class of low-income students and did not think that she was prepared for the racial issues that emerged in her classroom: “I needed to be taught to deal with black children as a white teacher.” In retrospect, she thought that the summer program should have been longer and more “reality based,” allowing her to work under the supervision of a master teacher.

The Schools They Entered

The third factor that influences participants' sense of preparedness is the school site where a new teacher's career actually begins. Although it is obvious that schools differ markedly, it is not always apparent how such differences in the workplace affect a new teacher's opportunities for initial success and continued development. A school that is well equipped, orderly, and focused on learning provides a setting where an individual can continue to grow as a teacher. In such schools, teachers can practice recently acquired skills and develop instructional strategies that make the best use of their personal strengths. Practical and sustained induction, regular feedback about their teaching, and ongoing access to expert teachers' classrooms and advice all contribute to a new teacher's development. However, many schools do not provide such support. A school that lacks basic supplies or is riddled with disruption can fail a new teacher who is intent on success. By ignoring the needs of novices, leaving them to flounder without assistance in a sink-or-swim environment, such schools fail to offer the support new teachers need.

The logic of providing minimal training in alternative certification programs is grounded not only in the belief that able and experienced candidates do not require extensive preparation, but also in the expectation that the schools where candidates begin to teach can and will provide adequate induction and continuing support for them to learn on the job. Most of the candidates we interviewed hoped for attention and guidance from their future colleagues and principal. However, just as the candidates differed in their backgrounds, so too did the school sites where they began their work.

Schools that are organized to orient new teachers and provide sustained assistance and feedback from expert colleagues can compensate for weak or inadequate programs, especially when the individual candidates are resourceful and savvy. However, schools that offer no guidance or collegial support, or in the extreme are hostile and alienating, can prove to be the downfall for candidates who otherwise entered their program with personal strengths and had decent, though minimal, training. A candidate who begins the program with weak subject-matter knowledge and unrealistic expectations and then encounters poor, mismatched training will almost certainly fail in a school site where he is expected to figure out the job on his own.

Environments for Teaching

The schools these candidates entered proved to be dramatically different workplaces, which either augmented the new teachers' opportunities for learning and growth or erected barriers to progress. Some participants described schools that had sound, well-equipped facilities that were conducive to good teaching and learning. These new teachers had detailed curricula to rely on and sufficient supplies to support instruction. They said that their schools emphasized the importance of learning and had strong norms and rules that ensured orderly student behavior and constructive relations with parents.

Nancy had hoped to teach in an urban district but could not secure a job before the start of her summer training, and so she agreed to teach ninth-grade physical science in a suburban school. Her new school provided a well-equipped building, a fully-developed curriculum, a mentor who taught the same subject, and plentiful resources. With the support of a colleague, she successfully wrote three small grants during her first year to secure science equipment, laptops, and other resources for her department.

However, some candidates taught in schools that were decrepit, lacked basic equipment, had no curricula, provided only outdated textbooks, had disorderly corridors, and expected new teachers to fend for themselves. For example, Maria, an urban kindergarten teacher who was hired after school started, had no furniture or materials with which to begin teaching. Even teachers who had solid command of subject matter and thought that their alternative certification program had provided them with sufficient grounding in basic teaching skills were daunted when they found themselves in schools seemingly set up to discourage good teaching.

For example, Harold, who had a PhD in chemistry, accepted a job teaching physical science at an urban high school 4 days before the students arrived. He had found the summer program useful and was optimistic about his new career. In summer school, he had taught geometry under the close supervision of a cooperating teacher who provided helpful feedback. Initially, Harold feared that the summer school students might be disrespectful and hard to teach, but was surprised to find them engaged. However, his job in the fall proved to be far less satisfying. Harold's school provided no induction except for an assigned mentor who offered no real assistance. He had no classroom of his own and wheeled a cart with all his materials from room to room. He decided not to conduct science experiments because he lacked sufficient equipment and was dismayed by his students' misbehavior and apparent lack of interest. Often students talked back to him and sometimes threw their test papers on the floor when they did not know the answers. By April, Harold reported feeling incompetent and totally overwhelmed by his work.

Although there were certainly exceptions, the most supportive school sites often were located in suburban settings where new teachers had a good chance of being hired early and, thus, participating in their summer training with their particular school and assignment in mind. The least supportive sites were typically located in low-income rural and urban communities. They often hired candidates late, and teachers reported feeling unprepared for the demands of working there.

Teaching Assignments

The character of the new teachers' first assignment proved to be central in determining whether they would succeed during their first months on the job. Individuals who had been hired early and knew what they would teach before the summer training started usually also had assignments that were reasonable—for example, no more than five classes at the secondary level with two preparations in one

“I really felt lost in September when somebody handed me the keys. I walked into my room and had no clue what to do once the door closed behind me.”

Harry, a mid-career entrant to teaching

subject. However, some new teachers—especially those hired very late—taught the courses that were left after more experienced teachers had been assigned. Typically, they were given multiple preparations, sometimes in two subjects or even two schools, and often in the lowest levels of a tracked subject. Sometimes teachers were required to teach part of their schedule outside their field of license, thus dramatically increasing the stress of lesson planning and reducing the chance of success. Although new teachers often encounter such demands, and many leave the classroom because of them, novices prepared in fast-track programs were particularly vulnerable because they had less training and practice to rely on.

For example, Anastasia, an urban high school teacher, was assigned to teach both biology (in which she was seeking certification) and civics (in which she had majored in college). Although she was generally competent in both subjects, preparing to teach two different subjects each day was difficult. Rebecca, the “one and only” science teacher in a small, urban “second chance” charter school, was licensed in English but assigned to teach biology, chemistry, physics, and environmental science, none of which came with a curriculum. Samantha, an English teacher in a charter school, had three seventh-grade English classes each day and, over the course of the week, also taught six periods of interdisciplinary classes, one period of speech, and one period of test preparation. When asked what she taught, she responded “Chaos, otherwise known as English.”

Not only did a heavy teaching load and large classes make the work of a new teacher especially hard, it discouraged the kind of deliberate planning and ongoing reflection that faculty in their pre-service program had urged them to continue. In some cases, no amount of commitment to teaching, love of young people, subject matter knowledge, or just-in-time training could compensate for an unreasonable and unmanageable teaching assignment.

Support from Colleagues

The candidates also described receiving very different levels of support from their new colleagues at the school site. Some encountered indifference or hostility from experienced teachers who had nothing but contempt for alternative certification. Others were simply ignored. Harry, a mid-career entrant teaching in an urban middle school recalled, “I really felt lost in September when somebody handed me the keys. We had a staff meeting . . . and they said, ‘Okay, go work on your rooms,’ and everyone else knew what that meant. I walked into my room and had no clue what to do once the door closed behind me.” Julie, an urban first-grade teacher with 3 years of teaching experience in another country, was generally satisfied with the preparation provided by her pre-service program. However, she too, felt totally unsupported by those in her school. Her assigned mentor never visited her until October when she had decided to quit, and there was no collaboration among teachers at her grade level. As she explained, “When things were going in a way that I needed help, and knew I needed help, there wasn’t anybody to help me out.”

In April Chad reported that his assigned mentor—who was in charge of the school’s mentoring program—had observed him for only 5 minutes and answered just a few questions. Although he felt that he could get support from other members of his department, he struggled to know what to ask: “I don’t really know exactly what I need, and no one actually has the time to listen to my entire story to help me figure out what I need. If I can say, you know, ‘Who’s in charge of this?’ I can get an answer to a question like that. But if I don’t even know what I need to know, then I’m lost.” Similarly, Rhoda’s assigned mentor was the outgoing union president who was not currently teaching.

Some other new teachers found a generally congenial spirit in their school, but few offers of help and little in the way of feedback. Given that most participants had, at best, a truncated student teaching experience, such isolation constrained rather than promoted their further development.

Many individuals did experience more supportive opportunities to work with colleagues, and often they said that this was the one thing that kept them in teaching. They described having formal coaches or informal mentors who offered materials, lesson plans, encouragement, and advice about how to improve their teaching and how to succeed in the school. Their colleagues became their new teacher educators. Jack, a special education teacher, worked in an inclusion setting with three veteran teachers having 10, 16, and 35 years of experience. He said that he had “three teachers all year to lean on . . . I don’t think I could have made it if . . . I didn’t have this group of teachers.” Daniel, who taught English in a suburban high school, said that he, too, was very well supported. He conferred daily with his mentor, a veteran English teacher whose classroom adjoined his. He met weekly both with the ninth-grade teachers of other subjects as well as those teaching the same classes he did.

Abraham, a mathematics teacher at an urban high school, also described extensive interactions with colleagues. He met daily with a team of three teachers, including two novices and one veteran. The veteran teacher also served as his mentor. Abraham said that many from his cohort in the alternative certification program complained that they were not getting support in their schools, but he felt that he had plenty. “If there wasn’t any support, I think I could have quit. For people who don’t have support, I don’t know how they do it. But I get a lot—through my mentor, my other teachers . . .” He described going to peers for advice about how to teach particular topics, such as fractions: “I go to other teachers . . . anybody who will listen . . . I go to a lot of teachers.” Stella, a CTC North site participant, also reported that she could go to “all the other teachers” in her school for help. “[I]t’s really a good support system.”

In the best of school settings such as these, candidates quickly were incorporated into a well-developed, positive professional culture. New teachers had easy and frequent access to teachers at all experience levels, could observe their peers often, and could expect helpful feedback about their teaching. This experience truly extended and expanded learning that began in their pre-service program.

Thus, the quality of the school as a place to continue learning to teach significantly influenced teachers’ sense of preparedness and success. In some cases, an unsupportive workplace totally undermined any confidence the candidate had gained in his training and discouraged any further learning on the job. In other cases, a school that was well organized for the induction and continued growth of new teachers encouraged a candidate to feel much better prepared and more optimistic about her work as a teacher.

Summary of Findings: New Teachers’ Sense of Preparedness

As these examples illustrate, no alternative certification program stands alone in preparing a teacher. Who the candidates are, what training they have had, and what experience they bring greatly influence how instructive and useful the components of the program will be. The programs themselves offer different experiences for the participants, depending on their subject area or their luck in being assigned to a realistic teaching experience or having a skilled and generous cooperating teacher. Finally, the

“If there wasn’t any support, I think I could have quit. For people who don’t have support, I don’t know how they do it. But I get a lot—through my mentor, my other teachers . . .”

Abraham, a mid-career entrant to teaching

school site can enhance a new teacher's initial experience with ample resources, an orderly environment, a fair and appropriate assignment, and supportive colleagues. However, it also can thwart growth and early success with inadequate supplies, a chaotic environment, a heavy or poorly matched assignment, and indifferent or hostile colleagues. The person, the program, and the school site all contributed to these candidates' sense of preparedness during their first year and, thus, must be figured into any calculation of the promise of alternative certification programs.

Conclusion and Recommendations

This study was designed to examine and compare a set of fast-track alternative certification policies and programs with a focus on how they worked and how the participants experienced and assessed them. By analyzing data from various sources, we came to understand in some detail how these programs played out for state officials, program directors, faculty and candidates. Because we did not collect data about the teachers' subsequent performance, we could not compare the effectiveness of these programs, either with one another or with traditional preparation programs. However, we could assess the programs on their own terms: Did they deliver what they promised and what the legislators and program directors set out to do? If so, what made that possible? If not, what stood in the way? We also could consider how the participants, who quickly put to use what they had learned, assessed the training their program had provided. Did they think it had given them what they needed to succeed in their first year? If so, what worked? If not, what was lacking?

We chose to study programs in states that took a range of approaches to managing alternative certification, from Connecticut, with its highly centralized policies and practices, to Louisiana, which took a much more decentralized approach. Thus, we could explore how different approaches at the state level influenced the selection, training and assessment of the candidates who ultimately became classroom teachers.

Statewide and Locally-grounded Programs

The programs we studied were either designed to prepare candidates for a wide array of settings (statewide) or for a particular setting (locally-grounded). The statewide programs in our sample offered licenses in multiple fields, thus requiring them simultaneously to prepare teachers for as many as 10 subjects and any number of district contexts where those who completed the program might eventually find jobs. This ambitious set of goals proved to be very challenging, given the limited resources and short time available for pre-service training. Consequently, statewide programs tended to fall back on providing generic pedagogical training. They had difficulty arranging clinical experiences for candidates, especially when they had no ongoing relationships with local summer schools. The exceptions were CTC North and South. Although they were statewide in that they provided training for candidates in many settings, their 18-month duration, distance-learning curriculum, and job-embedded design enabled them to circumvent some of these problems.

The locally-grounded programs we studied were more specialized than the statewide programs since they limited their focus to a particular district's students, policies, curriculum, and practices. These programs were more likely to guarantee candidates jobs and to provide ongoing support once they started to teach, largely because the program directors were affiliated with (and often employed by) the local district that

sponsored the program. Candidates in locally-grounded programs also had more opportunities than those in statewide programs to learn about and work with the kinds of students they would teach. Rather than having a general introduction to curriculum, these teachers became familiar with the particular curriculum they would be using in September. However, this tailored approach had both advantages and disadvantages. Although their time in pre-service preparation was deliberately centered on the curriculum and priorities of their district, these candidates did not become familiar with other curricula and instructional approaches which might have enriched their repertoire of strategies for use in the classroom. Also, if the new teachers eventually decided to transfer to another district, they might find their training less portable than that offered by a statewide program.

The Incentives Worked

We found considerable evidence that the incentives offered by most fast-track alternative certification programs were effective. Rapid, inexpensive, convenient, and practical pre-service training attracted the non-traditional candidates whom policymakers and program providers sought to recruit into teaching. Target groups included those who were entering teaching at mid-career from other lines of work, candidates who were likely to remain committed to a local community, men, people of color, and prospective teachers of science, mathematics, and special education. The distribution of such individuals varied from site to site in response to the purposes and design of the program, the sources of potential applicants, and the priorities of the director and faculty. For example, the Ogletree program, which was designed to prepare African-American teachers to work in a local school district serving a high proportion of minority students, attracted African-American candidates. By contrast, the MINT program at Greyson College included almost exclusively mid-career entrants, all of whom were white. In the programs we studied, many participants were becoming licensed in fields that routinely experience shortages (math, science, and special education), although more were preparing to teach in non-shortage fields, such as social studies or English. The purposive nature of our sample does not allow us to draw conclusions about the relative effectiveness of these programs in attracting non-traditional candidates, although all programs did successfully recruit at least one of these subgroups.

The low cost of alternative preparation was especially attractive to mid-career entrants and to current teachers who had a job but no license. In all program sites but two (CTC North and South) tuition was much lower than that of traditional pre-service programs in the vicinity. All programs carried few opportunity costs as well; short training required them to lose little time as paid employees. In CTC North and South, the higher tuition was offset by the fact that candidates held paid positions throughout their training. Many programs also made the training convenient for candidates by providing it within the district where they would eventually work (Plumville, Louisiana); strategically locating training sites throughout the state (Massachusetts); or offering a distance-learning curriculum that could be completed while holding a full-time teaching job (CTC North and South in California). Participants often were attracted to these programs by the promise of practical rather than theoretical training. Also many sought out this training in the belief that the programs would arrange jobs for them, although only the district-based programs in our sample successfully provided assistance in finding positions.

Incentives Introduced Limits on Capacity

Ironically, the same features that attracted candidates limited what these programs might offer. Given the low tuition and limited time available for training, most program directors had to make do with substantially less money and time than would be available to directors of longer, better funded programs. Directors often said that, as a result, they could not deliver on their promises to candidates or meet their own standards for what the programs should provide.

At first, most of the programs we studied simply appeared to be condensed versions of traditional programs, compressing what might otherwise be 8 months of pre-service training into 5 to 8 weeks. Like traditional programs, they offered coursework and a clinical experience, usually student teaching. However, the training in most of the alternative certification programs focused almost exclusively on practical teaching skills rather than the theory or research that illuminates the complex demands of teaching and is usually included in traditional programs. This focus on the practical skills of teaching satisfied candidates, who widely viewed theory and research as remotely related to the challenges they would soon face in the classroom. Further, the programs offered training in generic teaching skills (lesson planning or classroom management) rather than in how to teach specific subjects, thus allowing program directors to cope with the limits on teaching time.

Although candidates endorsed practical training, they were disappointed when limited resources led to limited opportunities. This occurred to varying degrees in different programs. Respondents raised particular concern about five aspects of their programs: learning how to teach a particular subject; understanding how to effectively teach low-income students of color; working with students in classroom settings (observations or practice teaching); job placement; and follow-up support.

Learning to Teach a Subject

Small programs that prepared teachers for several fields rarely could afford to hire faculty specialists for each. Although offering several licenses at a single site made the training convenient for candidates, it further stretched the program's scarce resources. Providing good preparation for six teachers in disparate fields (e.g., social studies, French, English, and mathematics) proved to be far more demanding and costly than providing good training for six teachers in one field. As a result, few programs gave more than passing notice to strategies that expert teachers use in teaching particular subjects. When programs did offer such training, candidates were often grouped in ways that compromised the goal of providing insights about subject-specific pedagogy. For example, program faculty often were expected to address the concerns of more than one subject within the same class (math *and* science or English *and* social studies), while individuals who were the only one in their cohort preparing to teach a subject such as French or business were simply added to larger groups, whatever their focus.

In the extreme, some programs committed only a few hours over the course of the program to subject-specific pedagogy. Larger programs, such as the three in Connecticut, could consolidate resources at a single site serving many candidates. For example, having 15 candidates in social studies, rather than 3 as at the smaller program sites, made it possible to hire a faculty member skilled in teaching that subject. In follow-up interviews, participants from other sites repeatedly said that they were disappointed not to have had more preparation in how to teach their subject. This limitation became

Providing good preparation for six teachers in disparate fields proved to be far more costly than providing good training for six teachers in one field.

more apparent after they began teaching, even for those who had advanced degrees in their content area. Knowing a subject was not the same as knowing how to teach it.

Learning How to Teach Across Boundaries of Race and Class

Many candidates we interviewed were entering teaching with the hope of serving students in low-income communities. Since most of the prospective teachers in our sample were white and middle-class, this usually meant that they would be teaching students of a different race or ethnicity who lived in very different social and economic conditions than their own. The exception was in Ogletree's program where African-American candidates were preparing to teach African-American students. However, bridging differences in social class continued to be a challenge for these candidates. Few who entered with hopes of teaching in low-income schools found assistance in understanding what it would mean for them or what they might do to succeed. This was especially true in broad, statewide programs. Even in Massachusetts' MINT, which had a goal of preparing teachers for high-need districts, candidates reported that the challenges of teaching across racial and socio-economic divides were inadequately addressed.

Working with Students and Teachers in Classroom Settings

Third, many participants who were enrolled in programs that included student teaching said that those experiences were unsatisfactory. This was due largely to the programs' lack of capacity to arrange appropriate summer school placements for all candidates. Programs had to depend on district-based summer schools to offer classes in the subjects their candidates were preparing to teach, and to find mentors with the willingness and expertise to supervise them. Because summer schools typically offer a small range of courses, candidates frequently were assigned to teach subjects outside their field or grade level. For example, a prospective chemistry teacher was assigned to teach algebra and a candidate for a high school history license was assigned to teach middle school language arts. Even more problematic, the mentor teachers to whom they were assigned sometimes were, themselves, teaching out of field and were rarely trained as mentors. Often mentor teachers were told at the last minute that they would be expected to fulfill that role, which some candidates said led to resentment and neglect.

In an effort to ensure better placements for their candidates, several directors of established programs had, over time, developed effective partnerships with specific schools. Even then, however, assignments of candidates to subjects and classes often involved ill-advised compromises. For example, the director of MINT's Lyceum program made it a priority to assign candidates to good mentors even if they did not offer a match in subject and grade level. When these mentors demonstrated real interest, the candidates were grateful for their advice and encouragement, even though the prospective teachers often expressed regret that they had no chance to observe someone skillfully teaching their subject. Generally, the candidates made the best of whatever assignment they had. New programs that had no prior relationship with schools encountered great difficulty making the student teaching component worthwhile. Candidates and faculty alike often suggested that this was a poor use of precious time.

Finding a Job

Fourth, programs were largely unsuccessful in assisting candidates with job placement even though having easy access to jobs had been an incentive for many participants to consider alternative certification. This was a special challenge for statewide programs. As with student teaching, this limitation resulted from most programs' lack of established

New programs that had no prior relationship with schools encountered great difficulty making the student teaching component worthwhile.

relationships with the local school officials who controlled hiring. Teachers First encountered difficulty at its three Massachusetts MINT sites, since neither they nor the state had experience working with the human resource departments of local school districts.

Only locally-grounded programs, such as those in Green River or Plumville, could offer assurances that all candidates would be hired. As we saw in Connecticut's ARC Blainesville site, promised teaching positions might disappear with budget cuts, forcing candidates to become free agents in a suddenly tight job market.

Most program directors and faculty spoke as if their responsibility for candidates ended with the summer.

Follow-up Support on the Job

Fifth, given limited resources, programs could seldom provide the kind of follow-up support that many candidates said they needed. Even though advocates often promote alternative certification programs as an opportunity for on-the-job training, most program directors and faculty spoke as if their responsibility for candidates ended with the summer. Massachusetts MINT programs offered periodic seminars through the fall on topics such as special education or how to prepare a teaching portfolio, which most candidates assessed as marginally helpful.

However, such follow-up rarely extended to observing candidates at work in their classroom, and when it did, it was because faculty volunteered their time. In Louisiana's locally-grounded programs of Plumville and Green River, where those who provided the program had a long-term stake in candidates' performance, district personnel often did follow the new teachers into their classroom. Also in Louisiana, Ogletree professors visited their candidates' classes, but these efforts were totally voluntary on the part of the faculty and, therefore, not a guaranteed component of the training. New teachers who could count on colleagues within their school for advice and assistance did not report that the absence of substantive, reliable follow-up support from their program was a serious problem. However, when candidates had little interaction with their new colleagues and were struggling to survive in challenging schools, the lack of follow-up support seriously compromised their satisfaction and chance of success.

Programs Used Different Approaches to Ensure Quality

States and programs used different approaches to increase the likelihood that their graduates would be qualified to teach. Of the various levers of quality control available to them, they most often relied on recruitment and selection. Program directors reported investing considerable financial and personal resources in attracting and choosing the candidates they thought would succeed in their program or, as one director suggested, in spite of their program. Repeatedly, directors explained that careful selection of candidates was essential for their success, particularly since they had limited time and resources to provide coursework (especially in how to teach each subject) and limited capacity to offer appropriate matches and good supervision in student teaching placements.

By contrast, assessment proved to be a weak means of quality control, both during the program and upon its completion. Most programs required candidates to prepare extensive portfolios for a summative assessment, but these virtually never were used to distinguish qualified from unqualified candidates. Those directing or teaching in programs saw portfolios as a chance to offer constructive feedback and encouragement to their prospective teachers, all of whom were likely to have their own classroom in the

fall, whether or not they succeeded in the program. For their part, candidates seldom regarded portfolio assignments as anything more than a requirement to be completed for licensure, a “hoop” or a “hurdle.”

A fundamental concept underlying alternative preparation is that much more of a candidate’s training should take place on the job than typically occurs in traditional preparation programs. Along with that shift from pre-service to in-service preparation there is an implicit shift in the appropriate locus of assessment; responsibility for judging candidates’ readiness to teach moves from the pre-service programs to the district that hires them. However, there is little evidence that districts in need of teachers are likely to adhere to standards that these pre-service programs do not. This is especially true in urban or rural school districts experiencing the shortages these programs often were meant to address. Given that reality, it seems that the best opportunity for using assessment to regulate the quality of new teachers rests in state-sponsored induction and review programs that are required for all new teachers, regardless of their training. California, Connecticut, and Louisiana all had such programs, although we did not study them directly. It is important to acknowledge, however, that teachers under review in state-sponsored assessments often have spent 1 to 3 years teaching students with no guarantee that they are well qualified. Further, it is clear that, in requiring summative assessments for all teachers, these states also faced daunting challenges of capacity, since closely inspecting the practice of every new teacher takes considerable time, skill, and resources.

This is not a simple story of strong programs producing strong teachers and weak programs producing weak teachers.

Programs Were But One Factor in a Teacher’s Success

The alternative certification programs that we studied differed in the extent to which they actually provided what they promised and what candidates said they needed. However, this is not a simple story of strong programs producing strong teachers and weak programs producing weak teachers. One of the most important findings of our research is that the new teachers’ sense of preparedness for classroom teaching depended on far more than good training. Preparedness ultimately was the combined product of what the individual brought to the training, what the program provided, and what support the teacher’s school eventually offered. States and districts that are considering such programs would be advised to take this more complicated equation into account.

As program directors realized, a condensed pre-service program is not right for everyone. Candidates with strong content knowledge and prior work experience during which they have made use of that knowledge may more readily meet the challenges of planning curriculum and translating content for students than individuals whose preparation is grounded entirely in academic coursework. Those who have had extensive experience with children, as parents, coaches, or youth workers, may more easily grasp the demands of classroom management or the need to devise different strategies for motivating individual students than do recruits who have little experience with children. Those who recognize the need to strategically gather additional knowledge, resources, and experience throughout their teaching career are more inclined to continue developing and refining their practice once they are in the classroom than those who imagined that a brief preservice program would teach them all they would need to know for success in the classroom.

Just as the readiness of individuals and the quality of programs varied, so too did the support provided by the schools where candidates started their teaching. Some found

Centralized arrangements offered the promise of greater capacity to be realized from economies of scale.

themselves in workplaces where administrators took their novice status into account and provided ongoing advice and assistance. These new teachers were assigned a reasonable schedule of courses in their field of license and they were not required to teach the most difficult students or the most demanding schedule. They had their own classrooms and sufficient resources, such as a curriculum, books and paper. Perhaps most importantly, they benefited from colleagues who offered day-to-day advice and support. At the other extreme were schools where the new teachers were given unreasonable assignments, had few resources to support their teaching, and generally were ignored by their more experienced colleagues. In these situations, a strong candidate with solid training and ongoing school-based support could succeed; however, a weak candidate with a poor program experience who then was ignored by his colleagues was more likely to fail. Most candidates experienced something in between, as those with insufficient skills and experience sometimes found what they needed in the program and their school to carry them through, and those with personal strengths sometimes relied successfully on school-based induction and support, despite failings of their pre-service program.

Thus, all three components—the individual’s background, the training program, and the school-based support—played a role in candidates’ preparedness. For most individuals, no single component was sufficient in itself. Our study suggests that, at a minimum, the preparation of qualified teachers depends on careful, rigorous selection of candidates, program components that prepare them to teach a particular subject and to interact constructively with a range of students, and a school that takes responsibility for continuing professional development. The findings of our study do not support the belief, advanced by some, that a candidate’s sense of success in the classroom depends only on strong content knowledge or that a condensed pre-service program can, in itself, effectively prepare a teacher.

Recommendations for Policymakers

Policymakers who consider approving or sponsoring alternative certification programs should recognize the wide variety of program options that exist and carefully consider what to endorse, what to fund, what to require, and what role to play in implementing the programs.

Consider the Tradeoffs in Using Centralized or Decentralized Approaches

We chose to study programs in four states that exerted different levels of control in implementing their alternative certification policies. Connecticut and Massachusetts took a far more centralized approach than did Louisiana and California. Centralized arrangements offered the promise of greater capacity to be realized from economies of scale. Officials in these states were able to recruit widely and admit selectively, based on criteria such as subject majors, academic grade point averages, standardized test scores, and prior experience. Centralized approaches also allowed the states to consolidate resources and to provide specialized training for candidates. However, statewide programs were difficult to develop and maintain because of their size, the wide range of candidates they were intended to serve, and the many subjects and teaching contexts for which they were preparing teachers.

Programs that are geared to prepare candidates for work in a range of settings have the potential advantage of acquainting prospective teachers with various curricula and instructional strategies as well as helping them understand what it will mean to teach in different kinds of communities. However, if there are serious limits on the funding or

It would be unrealistic to turn teacher preparation over to local districts without expanding their capacity.

length of these broadly-gauged programs, it would be wise for sites to offer licenses in only one or two subjects. Different sites within a state might be dedicated to particular subjects. Although this would require candidates to forego the convenience of having access to a program site that offered every subject, it would ensure that the site they traveled to would specialize in the subject they intended to teach.

Taking a decentralized approach had the advantage of providing more focus on local needs and practices. District-sponsored programs could recruit candidates who were knowledgeable about and committed to local schools. However, given limited capacity for recruitment, there was less assurance that they could recruit a large and strong pool of candidates from which to choose. Locally-grounded programs also could concentrate on preparing candidates to teach that district's curriculum or to succeed with students from a single community. They could arrange for reasonable matches in student teaching assignments with mentors who had a professional stake in preparing the candidates. Whereas state-sponsored, centralized programs could do little to assist candidates with job placement, a decentralized, well-organized district program could match candidates with job openings.

This study suggests that there is promise in shifting more training to local school districts, particularly if this arrangement enables candidates to achieve greater depth of preparation by concentrating on a single district's students and curriculum. However, effectively preparing teachers requires more than assigning them to work alongside experienced teachers, and there are very real limits on what most local districts can provide. It would be unrealistic to turn teacher preparation over to local districts without expanding their capacity to provide rigorous coursework and supervision, particularly if the programs are expected to grow.

Align Purpose and Design

In order for a program to work well, its purpose and design must be aligned. If the goal of an alternative certification program is to place new recruits in areas of local shortage, a model where selection and training happen close to the district may have the best prospect for success, since local candidates are more likely to apply and then remain in the community after their training than candidates recruited from afar. If the goal is to address the lack of talented or knowledgeable people in the profession statewide, centralized recruitment can yield a deep pool of applicants from across the state, and selection can be rigorous and competitive. If the problem is unqualified teachers who already hold jobs but need professional development and credentials, a job-embedded model like that of the California Teachers Corps offers promise for training that need not be compressed and rushed.

Use Partnerships to Increase the Capacity of Alternative Certification Programs

This research shows that it is extremely hard for any single organization to successfully develop and run an alternative certification program. However, different partners—universities, local districts, non-profit organizations, consortia of districts—can join together in providing such a program. For example, a locally-grounded program could draw upon relationships with the university that are well-established through traditional preparation programs, and the best university instructors (who may also teach in the traditional preparation program) could offer sound, detailed advice and training in how to teach particular subjects. They could bring to bear lessons from research about important topics such as cognition, learning styles, or literacy. They could train mentors. Teachers First, the non-university sponsor in this study, offered specialized expertise in

recruitment and selection, which the states, universities, and districts often could not provide on their own. Local districts can identify mentors and summer school teaching assignments, ground the candidates' preparation in the local curriculum and community, connect candidates with jobs, and offer sustained induction. However, creating successful partnerships requires a substantial investment of time as well as an assurance that the collaboration will serve the interests and accommodate the needs of both parties. States can introduce incentives for partners to collaborate and provide programs that offer higher-quality preparation.

Thus, if assessment is to become a strong lever of quality control, the states may have to provide it, making firm judgements about every new teacher's performance.

Ensure that States and Districts Are Involved in Assessment

Every program in the sample incorporated some method for assessing candidates (in most cases, a portfolio), but these assessments were not used consistently or rigorously. The reason did not seem to be a lack of capacity, but a lack of interest and inclination. Because directors knew that a central purpose of their program was to produce more teachers quickly, they showed little interest in making hard decisions about the candidates' readiness for the classroom. By and large, programs allowed anyone who showed up regularly and completed the assignments to pass. Thus assessment was left to the district officials who decided whether to hire these teachers, to the administrators responsible for their ongoing supervision, or to state assessment programs that reviewed the performance of all new teachers (such as the BEST program in Connecticut).

The fact that many of the candidates of alternative certification programs that we interviewed did not find jobs until late in the summer or after school had started may suggest that they were not the first choice of school administrators, who may well have wanted to hire more extensively trained teachers. However, most of the candidates we interviewed eventually were hired, suggesting they were needed. Once the new teachers are hired, district officials bear responsibility for assessing them, especially in the first 3 or 4 years before they receive tenure. However, expecting districts to rigorously assess new teachers either before they are hired or during their first months on the job may be unrealistic, given the many demands that these school officials face. Thus, if assessment is to become a strong lever of quality control, the states may have to provide it, making firm judgments about every new teacher's performance. Alternatively, states may have to moderate the pressure they sometimes put on programs to produce teachers in volume, offering instead incentives and technical support for conducting regular and meaningful performance assessments.

Recommendations for Programs

At first, alternative preparation may seem to be a simple, efficient approach to teacher training, one that demands fewer resources and is more agile than the traditional approach to preparation. However, this study revealed that these programs must contend with unique challenges imposed by the very incentives that they offer candidates. Reconciling promises of brief, inexpensive, convenient, and practical pre-service training with the constraints those incentives introduce—less time, fewer resources, and inopportune timing—can be done responsibly only if programs have a sound design, sufficient resources, first-rate faculty, and established working relationships with schools and districts. This study has begun to explore the ways in which program directors approach this challenge, and we offer the following recommendations for those who would establish and run alternative certification programs.

*Quick-paced
preparation is not
right for everyone.*

Select Candidates Carefully

Alternative certification programs, particularly intense fast-track programs, place many demands on candidates for rapid learning and performance. As we have seen, most programs assume that candidates begin their training with good command of the subject they will teach and, thus, the programs do little to develop candidates' content knowledge. However, programs did not always set a high standard for content knowledge, and there were candidates in some programs who acknowledged that they had a limited grasp of their subject. This was particularly true in Massachusetts, where candidates who had passed the state tests in more than one subject were preparing for several fields simultaneously in the hope of finding a job in one. However, our interviews revealed that often they did not feel knowledgeable in each. Thus, simply counting applicants' academic credits or assessing their GPA may be insufficient. Carefully assessing a candidate's content knowledge and confidence is essential.

Similarly, it may be difficult to judge in advance whether a candidate has the social skills and self-knowledge to succeed with a range of students, particularly those of a different race or living in different economic conditions. Candidates who share social and cultural experiences with their students may find the transition to teaching easier than those who feel unfamiliar and ill-at-ease with their students and families. If prospective participants who are white and middle-class intend to teach in schools serving low-income, minority students, they must have more than good intentions, since there is little time in the condensed programs to prepare them for the social and emotional demands of their new job.

Candidates also have to be comfortable with a rapid training experience that leaves little time for reflection and seldom provides repeated opportunities to master difficult skills. Quick-paced preparation is not right for everyone, and program providers would be wise to recognize that. Similarly, because the programs are geared to prepare candidates only for successful entry, rather than for long-term mastery, those responsible for program admissions should screen out candidates who would be highly dependent on instructors or seem unlikely to seek out resources on their own. Such qualities are not easily assessed using paper credentials and, thus, program providers would need to invest significant resources in one-to-one interviews.

Although the statewide programs that recruited widely had a surplus of candidates, several of the locally-grounded programs did not. Notably, however, Louisiana's Plumville had more applicants than it had places in the program, and still chose not to fill the program because the director thought that there were not enough strong applicants. By contrast, Louisiana's Ogletree took all who applied, in part to ensure that the program would be fully funded. This might work if the program could carefully monitor candidates' performance and dismiss those who were not competent. However, given the shortage of teachers in many districts, virtually every candidate who completes the program will eventually find a way to the front of a classroom. Thus, the most effective lever for maintaining quality control appears to be that of thorough and rigorous selection.

Offer Licenses Only in Subjects for Which There are Faculty Experts

Having access to licenses in multiple subjects at a single site offers more convenient training for candidates, but this convenience significantly increases the demands on the program. Unless a program is large and has access to extensive resources, as in Connecticut, it is better to specialize in a very small number of subjects per site. Training in how to teach a subject should be provided throughout the candidates' training, with classes being taught by expert teachers who understand and can demonstrate

specialized instructional strategies. Programs should provide a specialist for each field of license, never combining subjects that are thought to be related, such as science and mathematics, or social studies and language arts.

Prepare Teachers to Work with Students of Different Races and Backgrounds

The greatest challenge many new teachers face is learning to work with students who differ from them in race, ethnicity, or social class. No matter how sincere and committed they are, white middle-class candidates are likely to be unprepared for the demands of teaching in low-income schools that serve many students of color. New teachers will need assistance in understanding the lives and concerns of their students; coming to terms with their own apprehension, bias and expectations; and developing strategies for classroom management and instruction that work.

Devise the Best Possible Clinical Experience

Although candidates valued their experiences working with students, in most summer schools of this study, student teaching was not seen to be a good use of time. Placements were seldom appropriate, mentors were rarely qualified, and the school setting scarcely resembled what the new teachers would encounter in September. In only a few cases did candidates tell of excellent placements and mentoring. Given these limitations, program directors might reconsider whether to feature this component of the program. Structured observations of expert teachers at work, such as those arranged in Louisiana's Plumville program, were said to be valuable. Arranging for candidates to observe and discuss the instructional strategies of several master teachers might contribute more to a candidate's preparation than teaching out of field in the presence of a lackluster mentor. However, it is important to note that providing such a productive experience still is time-consuming, and it does not address the candidates' need for practice teaching before taking on full-time classroom responsibilities.

Build Productive Partnerships to Increase Program Capacity

Programs with large demands and limited resources must rely on partners (e.g., external vendors, universities, and school districts) if they are to provide new teachers with what they need. It takes time—often several years—for collaborators in such a partnership to identify their shared interests, define their distinct responsibilities and contributions, and refine their working relationships. These programs are not self-contained, mobile service units. Thus, programs should not be expected to be up and running immediately, and program directors should invest time in negotiating and cultivating working relationships with other organizations.

Provide Job Placement Assistance for Teachers Applying to Hard-to-staff Schools

Alternative certification programs often are thought to provide a mechanism for addressing the teacher shortage in hard-to-staff urban and rural schools. However, delayed hiring in large urban districts often discourages candidates from waiting for jobs in high-need schools. Thus, relying on alternative certification programs to staff such schools is unwarranted without significantly greater investment in job placement.

Ensure On-the-job Support

Some suburban districts where candidates found their jobs offered sustained and substantive induction for new teachers, including the provision of well-matched mentors,

a regular induction seminar, and opportunities to observe other teachers. However, in many low-performing, low-income schools, new teachers found negligible support. Graduates of a statewide program who are employed by many districts at some distance from the program site may find it hard to meet regularly. However, it is important for program officials to maintain some on-the-job contact. Candidates from a locally-grounded program can meet together regularly and often find it worthwhile to do so. Program directors and staff should not conclude that their work is done once teachers enter the classroom. In many ways, it has just begun. This study suggests that sufficient funding is essential to ensure that such follow-up support can occur.

Consider the Potential of New Pedagogies Such as Distance Learning

Distance learning curriculum, such as that provided by the California Teacher Corps, offers promise as a mechanism for extending training, controlling the quality of instruction, and supporting candidates while they teach. Only a few of the programs we studied deviated from the traditional program of pre-service coursework and student teaching, and only CTC offered an alternative to face-to-face training. As new technologies continue to develop for improving the quality of professional development, their potential for preparing candidates for initial licensure should be explored. The experience of CTC with distance learning also suggests that technology can be used productively to continue to support and provide new knowledge to teachers, even those who are teaching in remote locations.

Review the Role of Assessment in the Program

The formal assessments introduced by the programs we studied largely served a ritual function, providing very little in the way of quality control. Preparing portfolios consumed a great deal of candidates' time, yet in most cases they received little feedback. In these programs, the time and attention given to portfolio development might better have been used to further develop and refine these novices' teaching skills. However, if only qualified, competent individuals are to be admitted to teaching, program staff must continue to accept responsibility for early, thorough, and decisive assessments. In addition, as the first professionals to work with these aspiring teachers, program faculty must understand their responsibility to counsel out or dismiss participants who are unfit to complete the training or commit to the hard work of teaching.

Recommendations for Participants

This study also yields suggestions for prospective teachers who might consider or enter alternative certification programs.

Consider Carefully Whether the Program is Right for You

Individuals who are intent on enrolling in an alternative certification program should carefully weigh the advantages and disadvantages of short, intensive programs. Candidates in this study who were eager to move rapidly into the classroom frequently found when they began teaching that their condensed pre-service training had not adequately prepared them for the demands of their new job. Having a license did not necessarily mean being ready to teach. Therefore, candidates would be wise to candidly assess for themselves whether they have solid knowledge in their subject and adequate practice using it, whether they have sufficient experience working with youth,

and whether they are familiar with and comfortable being in schools today. Only those who are confident in all three areas should consider fast-track alternative certification programs.

Choose a Program That Fits Your Career Plans and Training Needs

Those selecting an alternative certification program should choose one that fits their career goals. Individuals committed to remaining in a local district may find that a locally-grounded program is right for them. However, those who do not plan to teach in a single district might find that a statewide program or a longer, more comprehensive university-based program allows them to grow more in teaching while maintaining flexibility in their job search. Candidates who are currently teaching without a license would do well to look for a program that provides sustained on-the-job support and training. No applicant should assume that any program can, in itself, provide all that is needed to succeed as a teacher.

In considering program options, candidates should pay particular attention to whether they will have access to expert training in their field of license as well as experience working with teachers and students in the kind of setting they plan to enter. Prospective participants should investigate whether they will have the advantage of well-supervised student teaching and whether they will work with mentors who achieve success with a wide range of students. By creating partnerships that enhance their capacity, alternative certification programs should be able to provide rich coursework and worthwhile clinical experiences. If not, candidates might be better off considering a different preparation program.

Prepare for Continuous Learning in a Teaching Career

Once they have finished their alternative certification program, candidates will likely need to depend on colleagues in their school for ongoing support. Therefore, they should seek a school where continuous learning is the norm. Often this requires a more extensive job search than the candidates expect, particular those who mistakenly assume that their program will lead easily to a job. However, the time and effort of a careful job search are well spent, since the induction experiences of a new teacher during the first 2 years on the job are likely to be of greater lasting importance than the training provided by a condensed pre-service program.

Toward a Different Model of Teacher Preparation

Fulfilling the promise of alternative certification programs proved an elusive goal for many programs in this study. Despite variation in program design and the level of state oversight, these programs encountered a common irony: the very incentives designed to attract candidates limited the extent to which quality control was possible. Program directors, faculty, partners, and participants described inconsistent success in arranging workable field placements during the summer; providing condensed, inexpensive coursework in subject-specific teaching methods for diverse groups of students; and adequately assessing and supporting candidates. Ultimately, the programs largely left on-the-job training and quality control up to the hiring schools. These alternative certification programs may have opened the profession to new candidates, but they rarely provided sufficient services, and they struggled to serve as gatekeepers of quality in the process. Even at their best, these fast-track programs seemed unlikely to offer candidates more than a running start.

Ultimately, the programs largely left on-the-job training and quality control up to the hiring schools.

Teacher preparation, whether traditional or alternative, must be understood as a continuous rather than a one-shot process.

However, the CTC job-embedded training model differed markedly from the standard fast-track approach to pre-service preparation and, by its difference, suggested the possibility of other strategies for preparing teachers. CTC provided evidence that there is promise in thinking creatively about how to prepare teachers rather than simply compressing the traditional model into a brief period of pre-service training. Many teacher preparation programs—both traditional and district-based—are working towards greater integration of training and teaching. When training occurs concurrently with classroom teaching, candidates who are engaged daily in teaching as full-time interns or teachers of record can test and selectively incorporate what they learn in coursework or seminars. On-the-job mentors can observe their work and provide detailed feedback and ongoing assistance. Teacher preparation, whether traditional or alternative, must be understood as a continuous rather than a one-shot process. It extends throughout a teacher’s career in the classroom, whether that career is short or long. Without planned and continuous professional development, many of the teachers we studied will never become as effective as they might be, and research suggests that they may leave teaching as a result (Johnson and Birkeland, 2003).

Similarly, statewide and locally-grounded programs both had advantages, and the lessons we learned from each can inform an emerging, more flexible model of teacher preparation. Increasing prospective teachers’ knowledge about a broad array of curricula, pedagogy, and professional concerns can give teachers greater insight, authority, and versatility in their work. At the same time, increasing their understanding about what it takes to work effectively in any particular setting may enable them to find their footing quickly. This suggests that, although programs may have a dominant orientation—either being geared broadly toward a range of school settings, as in the statewide programs studied here, or focused primarily on a particular district, as in locally-grounded programs—neither should become the exclusive model. Candidates in a statewide program should secure positions early and focus at least part of their training on their future district’s community and curriculum. Candidates in a locally-grounded program should be encouraged to learn about instructional approaches that differ from those featured by their district. Every candidate should develop both a broad understanding of curricular and instructional options as well as a confident grasp of what it means to teach in a particular district and community.

Interest in alternative certification continues to grow as programs proliferate and various organizational partners experiment with arrangements for pre-service training and on-the-job support. In the process, the distinction between alternative and traditional programs has blurred, with each morphing into the other. Traditional programs have begun to streamline their training, while fast-track programs have begun to deepen theirs. Throughout these changes, it appears that universities will continue to have an important role in providing new knowledge about best instructional practices for teachers. As district-based programs develop, universities can serve as partners in teachers’ ongoing preparation, with faculty providing courses about topics that the districts may lack the capacity to offer, such as adolescent literacy, subject-specific pedagogy, analysis of student assessment data, new uses of technology, or instructional strategies for students with disabilities. Universities can provide professional development and advanced training for experienced teachers, who can then serve as mentors and leaders within schools. If alternative certification programs are to expand in ways that contribute to better instruction and stronger schools, the larger system of education and its supports must develop and change as well.

Endnotes

- 1 In Louisiana, a school district is referred to as a “parish.” We have used the term district in this report for consistency and to avoid any confusion for the reader.
- 2 This calculation is based on a comparison between one year of resident graduate-level tuition at Louisiana State University, Baton Rouge, reported for Spring 2003, available at www.bgtplan.lsu.edu/fees/02-03/grad, and one year of tuition for graduate students at Tulane University, New Orleans, 2003-04, available at www.tulane.edu/finaid/2004gradcoa.shtml.
- 3 The MINT program model studied here and the Massachusetts Signing Bonus Program have since been discontinued. The state now authorizes an array of district-based licensure programs in a decentralized arrangement.
- 4 This interview is designed by researcher Martin Haberman to identify candidates who have the skills and dispositions to succeed in urban settings. The fact that CTC uses this tool for selection is somewhat ironic, given that many program interns teach in rural rather than urban settings.
- 5 PRAXIS I measures candidates’ academic skills in math, reading, and writing. PRAXIS II, Subject Assessments, measure candidates’ knowledge of the subjects they will teach, as well as general and subject -specific pedagogical skills and knowledge. For more information, see: <http://www.ets.org/praxis/prxaboutI.html>
- 6 See the NCATE website www.ncate.org for more information.
- 7 Other examples of clinical experiences include videotaping teaching practice, observing veteran teachers, “microteaching” (when students demonstrate a lesson before colleagues and instructors).
- 8 See the “Massachusetts Institute for New Teachers Request for Responses” dated November of 2003. As the program no longer exists, contact the Massachusetts Department of Education for more information.
- 9 See “The Alternate Route to Certification Program Information and Application, 2004” for further information. Board of Governors for Higher Education, Department of Higher Education, State of Connecticut. Available: www.ctdhe.org.
- 10 Three of the participants we interviewed in CT did not respond to requests for a second interview. At the time of the first interviews in early August, they did not have jobs. One person chose not to seek a job in her first year after completing the program.

Endnotes

- 11 One of the participants in the Massachusetts sample did not respond to requests for a second interview, so we do not have data on his final job placement. At the time of his first interview in August, he did not have a job offer.
- 12 Late or very late hiring is particularly common in large urban districts. Recent research shows that urban districts often do not make offers to prospective teachers until shortly before the school year begins (Johnson et al., 2004) and applicants frequently withdraw from the process altogether, leaving the urban districts for the suburbs (Levin & Quinn, 2003).
- 13 This experience is consistent with survey findings reported by Liu & Johnson (forthcoming 2006), who found that, across four states, 33% of first- and second-year teachers were hired after the start of the school year. For alternative route teachers, the picture of hiring was especially bleak. In modeling the probability that a new teacher would be hired after the school year had started, Liu (2004) found that the odds of being hired late for new teachers who entered teaching through an alternate route—either by completing a non-traditional preparation programs such as an alternative certification program, or teaching on an emergency permit—are 10 times the odds for those teachers who completed traditional, university-based teacher preparation programs (p.132).

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