

Learning from Multiple Routes

The variation in teacher preparation pathways can propel our understanding of how best to prepare teachers.

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One of the most significant changes in the teaching profession over the past two decades has been the rapid growth of alternative routes into teaching. Such routes typically enable individuals with a bachelor's degree to begin teaching as the teacher of record before completing all the coursework required for full certification. Although alternative pathways to a teaching career were rare in the 1980s, 49 U.S. states now allow some form of alternative certification (Feistritzer, 2008).

The prevalence of such routes differs dramatically by state. In some states, such as California and New Jersey, alternative routes are not so alternative anymore; roughly 40 percent of New Jersey teachers enter the classroom through alternative routes (Grossman & Loeb, 2008). However, in states such as Vermont, Washington, Alaska, and North Dakota, relatively few alternative pathways exist.

The prevalence of alternative routes also

varies by district. In some large urban districts, including New York City; Oakland, California; Washington D.C.; and Chicago, Illinois, several different alternative programs provide a significant number of teachers for city schools. For example, from 2000 to 2004, the number of teachers in New York City entering from alternative certification grew from essentially zero to more than 2,800, largely replacing the emergency certified teachers, whose numbers dropped from 3,886 to 607 (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2006). Even more striking, the majority of math teachers in New York City now enter the classroom through the New York City (NYC) Teaching Fellows program. However, in the more affluent Scarsdale school district, just 14 miles from the Bronx, relatively few teachers enter through these routes.

The current proliferation of pathways, which reflects the increasing demand for teachers, is not limited to the United States. Other countries, including the Netherlands





and Israel, are also experimenting with alternative routes as the demand for teachers increases.

The existence of multiple routes is also not limited to teaching. The nursing profession, in particular, offers candidates a variety of ways to enter nursing, from accelerated community college programs, to four-year Bachelor of Arts programs, to advanced degree programs (Benner, Sutphen, Leonard, & Day, 2009).

Given the growth of alternate routes, particularly in urban school districts, and the ways in which the multiplicity of pathways has begun to define the teaching profession, we need a clear understanding of these programs. According to some, the existence of multiple routes into teaching is not so much an innovation as a return to an earlier period in our profession during which teachers were prepared locally (Fraser, 2007; Zeichner & Hutchinson, 2008).

A Varied Landscape

Despite the common terminology used to describe them, alternative routes vary widely in their program design. Four features capture the range of variation.

Feature 1: Nature of the Provider

In the current landscape of teacher education, three providers predominate—institutions of higher education; private providers, including nonprofit organizations; and districts. Virtually all alternative route programs represent partnerships among these providers.

Most urban residency programs are run by the district, but with the support of either a university or nonprofit organization. For example, the Boston Teacher Residency program was launched by the Boston Public Schools in partnership with the University of Massachusetts. In contrast, the Academy for Urban School Leadership, a not-for-profit organization, runs the Chicago Urban Teacher Resi-



dustry program in partnership with both Chicago Public Schools and National-Louis University. Similarly, the New Teacher Project partners with both districts and local universities to run its teaching fellows programs. Many of these programs could best be described as hybrid models.

Universities are a key player in most alternative route programs. In addition to providing the vast majority of traditional preparation programs either through undergraduate or master's programs, they provide much of the coursework for many alternative programs.

Feature 2: Response to Labor Market Needs

Alternative route programs often arise in response to specific labor market needs. The NYC Teaching Fellows program was developed to meet concerns about teacher shortages that arose as a result of legislation that eliminated temporary licenses for teachers. These programs often target high-need certification areas, such as special education, math, and science.

For example, when the NYC Teaching Fellows program failed to recruit a sufficient number of math teachers, the organization created its Math Immersion Program, which is designed to increase the number of math teachers for the district. The program works with candidates who are interested in teaching math but who did not major in math in college. In addition to the regular preservice training provided to all NYC Teaching Fellows, Math Immersion candidates receive two weeks of intensive training in math.

Some programs target other dimensions of the labor market. Teach for America, for example, provides teachers for difficult-to-staff schools in both urban and rural districts. Others focus on increasing the diversity of the teaching force. Such programs include

the Boston Teacher Residency program and Milwaukee's Metropolitan Multicultural Teacher Education Program, which was developed for paraprofessionals working in Milwaukee public schools who hold bachelor's degrees, but who have not completed a teacher certification program.

Feature 3: Coursework

Programs vary widely with regard to the timing and character of coursework and field experiences. University-based programs usually require students to complete all their coursework and fieldwork before certification. Alternative routes more typically have participants enroll in an abbreviated training program, often for six to eight weeks during the summer, before becoming the teacher of record in local schools. Teachers then complete their courses for certification while they are full-time teachers. Some programs, such as Teach for America, run their own training programs, whereas others, including the NYC Teaching Fellows program, contract with local universities.

Other alternative routes offer an extended residency program in which participants take courses and spend substantial time in schools before taking on full responsibility for a classroom. This extended model best describes most urban residency programs as well as such programs as the Teacher Education Institute in Elk Grove, California. This model of graduated responsibility also describes many 5th-year university-based programs, often not considered alternative, in which students spend half the day in schools and half the day in coursework, gradually increasing their responsibility for a classroom over the year.

Many universities are currently gearing up to create urban residency programs as part of the federal stimulus plan. Further complicating the distinctions between traditional and alternate

programs, a number of teachers enrolled in university-based programs teach full-time before completing all their certification requirements. This overlap in program features across pathways is one reason why many scholars have suggested that the distinction between alternative and traditional programs is blurry at best and misleading at worst (see Grossman & Loeb, 2008; Humphrey & Weschler, 2007; Zeichner & Conklin, 2005).

The overlap in program features across pathways blurs the distinction between alternative and traditional programs.

Feature 4: Recruitment and Selection

According to a number of studies, alternative routes have succeeded in attracting a new pool of teachers into the classroom, although the characteristics of this pool can vary greatly by program. Highly selective programs like Teach for America and the NYC Teaching Fellows have been successful in attracting prospective teachers with far stronger academic qualifications than those who enter teaching through more traditional pathways.

However, not all alternative routes are highly selective. Humphrey and Wechsler's (2007) study of seven alternative certification programs showed that although the percentage of participants who had attended a competitive college was high for Teach for America (79 percent), it was low for other programs, such as Milwaukee's Metropolitan Multicultural Teacher Education Program, where only 6 percent of participants had an undergraduate degree from a competitive college. The variation in teacher characteristics by program illus-

trates the difficulty of making sweeping generalizations about alternative certification programs and the kinds of people they recruit.

One of the reasons that the selectivity of undergraduate institutions and other measures of academic ability vary so much across alternative route programs is that not all of these programs aim at increasing the academic ability of incoming teachers. As we have pointed out, a number of alternative programs

aim at increasing the racial, ethnic, and gender diversity of the teaching force.

There is some evidence that alternative programs have been more successful at recruiting male teachers, as well as black and Hispanic teachers (Hammerness & Reininger, 2008). In our survey of teacher candidates in New York City, we found that 30 percent of Teach for America candidates and 31 percent of Teaching Fellows candidates were male, compared with 22 percent in traditional education graduate programs and 7 percent in traditional undergraduate programs. Similarly, 58 percent of Teach for America candidates and 56 percent of NYC Teaching Fellows were white, compared with 67 and 63 percent of candidates from traditional graduate and undergraduate programs, respectively (Boyd et al., 2006).

A Look at Outcomes

We must weigh the success of alternative routes according to outcomes for students. The effectiveness of alternative-route teachers is a crucial

question for urban districts, where the majority of teachers from alternative routes are placed.

Effect on Student Achievement

The evidence on how teachers from alternative routes perform in classrooms is mixed. The accumulated evidence on Teach for America, which is the most studied of all alternative routes, indicates that achievement results for corps members' students either mirror or exceed the results of students whose teachers entered from university-based programs.

Teach for America teachers are typically more effective in math than in English language arts and more effective in middle and high school than in elementary school (Boyd et al., 2006; Decker, Mayer, & Glazerman, 2004; Raymond, Fletcher, & Luque, 2001). Only one study has looked at the effect of Teach for America at the high school level. In their study in North Carolina, Xu, Hannaway, and Taylor (2008) found that students of Teach for America teachers had substantially higher achievement gains during the course of the year than students of teachers from traditional routes. Although data included teachers from various subject areas, the results were largely driven by differences in math and science. The evidence on other early-entry alternative routes into teaching is both sparser and less positive.

Comparing positive effects by pathway is problematic. The variation in teacher effectiveness across teachers who went through the same pathways is larger than the average differences in teacher effectiveness between pathways. In other words, both alternative and university-based programs have more and less effective teachers. This variation suggests that the existence of alternative routes into teaching alone, even highly selective alternative routes, cannot ensure high-quality teaching and learning, particularly in high-poverty schools.

Teacher Retention

Mirroring the diversity of alternative routes, the retention of alternative route teachers also varies meaningfully across programs. For example, Teach for America teachers tend to show higher retention than other teachers in their schools during and after their first year but substantially lower retention than other teachers in subsequent years. This could, in large part, be due to the fact that Teach for America requires a two-year commitment. On the other hand,



in a study of New York City teachers, we found that NYC Teaching Fellows teachers remained in their schools at approximately the same rate as traditional teachers in the same schools, at least over their first few years of teaching (Boyd et al., 2006).

In a national sample of teachers, Grissom (2008) found that although the attrition of alternative route teachers is higher than those of teachers from traditional pathways, the differences are relatively small, with 82.3 percent of alternative route teachers and 85.6 percent of teachers from university-based programs remaining in their schools over a one-year period.

Promising Practices

Despite the heated rhetoric around teacher education and alternative routes, with providers on both sides claiming the virtues of their approach,

the reality is much more varied. In the current environment, with a diversity of programs serving different needs and operating more or less effectively, we can learn more by shifting away from a focus on differences in pathways and looking instead for program features that improve outcomes for teachers and students.

So what can we learn from the best programs—university-based and alternative alike—about how best to recruit, select, and prepare highly effective

teachers? How can we make such practices more common across the more than 1,300 institutions and organizations that prepare teachers?

Promising practices include

- *Doing a better job of selecting applicants* with propensities or skills that are related to effectiveness in particular settings. For example, Teach for America identified the attributes of its most successful teachers and then developed screening procedures designed to identify candidates with these leadership and organizational skills. In fact, some researchers have pointed out that the positive effects of Teach for America teachers may largely be the result of the organization's emphasis on recruitment and selection rather than on teacher preparation (Zeichner & Conklin, 2005).

- *Providing novices with high-quality feedback on teaching performance.* The

development of new rubrics for classroom observations offers the potential to provide targeted feedback around specific classroom practices. Both alternative route programs, such as Teach for America and NYC Teaching Fellows, and university-based programs, such as that offered by the University of Virginia, have begun to use such rubrics.

■ *Organizing coursework around the core practices of teaching.* Teaching is complex work, involving the orchestration of many routines and practices. Identifying a subset of high-leverage practices that novices must master early on and then organizing preparation around these practices could better prepare novices for the classroom. Several universities, including the University of Michigan, Stanford University, and the University of Washington, have been exploring ways to organize teacher education around such practices as how to lead a productive discussion, how to select appropriate math problems, and how to set up small-group work. Rather than just reading and discussing such practices, novice teachers try them out and receive targeted feedback on their efforts.

An emerging program of research in teacher education has begun to demonstrate the link between features of programs across pathways and student achievement. Our own study in New York City of the relationship between teacher education and student achievement found that teachers who had the opportunity to engage in activities that are closely related to the practices they would engage in as new teachers were more likely to be effective in their first year (Boyd et al., 2006). These activities included the opportunity to study the curriculums used in New York and to engage in such activities as analyzing student work and conducting a reading assessment of a student.

Similarly, programs that were better

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able to control the field experiences of their students were also more effective. Programs that had primary authority for selecting cooperating teachers and that required more supervision of novice teachers had graduates who had a greater effect on student achievement. This line of research, although only in its infancy, has the potential to accelerate the improvement of all teachers. **EL**

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