Creating a pipeline of great teachers for all schools and students in your state is a crucial policy goal. Strengthening teacher pipelines requires states to examine multiple policy areas, including certification requirements, educator evaluation, compensation and career ladders, educator environment (e.g., working conditions), and the range of pathways that teachers take to enter the profession. In this Policy Snapshot from the Center on Great Teachers and Leaders (GTL Center), we bring into focus one policy area that governors, state legislatures, and state education agencies consider when weighing options for strengthening teacher pipelines: alternative routes to teaching.

To help inform state-level deliberations regarding this topic, we reviewed and synthesized current research and conducted a policy scan to examine common practices across states. The results are summarized in the following sections:

- Outcomes: Do Preparation Pathways Matter for Student Achievement and Teacher Recruitment and Retention?
- Research-to-Policy: Strategies for Setting Effective Policy for Alternative Routes

Throughout the sections, we include short spotlights on existing alternative pathways policies, which were selected because they provide examples of several of the characteristics and strategies described in the accompanying section. Further information about the research and common practices discussed as well as a detailed overview of state policies on alternative certification are available from the GTL Center upon request.

Outcomes: Do Preparation Pathways Matter for Student Achievement and Teacher Recruitment and Retention?

States often have multiple goals for promoting alternative routes into teaching:

- Produce a more diverse group of teaching candidates, including greater numbers of career changers, minorities, and male candidates (Boyd et al., 2012; Education Alliance, 2008; Klagholz, 2000; Shen, 1998)
- **Produce more teachers in high-need areas** to supply both content and geographic shortage areas for local needs and help fill hard-to-staff positions that other teachers leave for more preferred assignments (e.g., closer to home, better working conditions) (Boyd, Lankford, Loeb, & Wyckoff, 2005; Boyd et al., 2012; Johnson, Kraft, & Papay, 2012; Loeb, Darling-Hammond, & Luczak, 2005)

- **Change the culture of teacher preparation** to focus on providing more authentic clinical experiences, stronger mentor and coaching supports for new teachers, and tracking of a candidate’s success in the classroom after program completion

Do alternative routes help states achieve these goals? Identifying how a teacher’s preparation route impacts important education outcomes is an ongoing challenge. Researchers have demonstrated that variations within preparation programs and the characteristics of the participants as well as controlling for many factors that could influence study results make it difficult to disentangle and isolate the effects of preparation routes on outcomes (Humphrey & Wechsler, 2008; Moore Johnson, & Birkeland, 2008; Zeichner & Hutchinson, 2008).

While fully acknowledging these challenges, existing research does offer some information and guidance to consider when examining alternative routes as a policy priority (Feistritzer & Haar, 2008; Hammerness & Reininger, 2008).

**Student Achievement.** Research on differences in student achievement outcomes between alternatively prepared and traditionally prepared teachers is largely inconclusive (Ing & Loeb, 2008). Limitations and variations in research designs used in most existing studies may explain why no clear picture has emerged (Boyd et al., 2012; Clotfelter, Ladd, & Vigdor, 2005; Darling-Hammond, Holtzman, Gatlin, & Vasquez Heilig, 2005; Kalogrides, Loeb, & Béteille, 2013). The wide variation across and even within alternative pathway programs also can make it very difficult to identify differences in outcomes between alternative and traditional pathway programs (Boyd et al., 2005; Humphrey & Wechsler, 2008).

Two recent studies funded by the U.S. Department of Education’s Institute of Education Sciences may provide a clearer picture. Both studies used a random-assignment experimental design to compare teachers prepared through traditional routes and alternative routes. The first study, conducted in 2009, found no differences in student achievement outcomes between students of traditionally and alternatively prepared teachers (Constantine et al., 2009). The second study, conducted in 2013, compared Teach for America teachers with both traditionally prepared teachers

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**Federal Policy Update**

The federal government included a provision in recent budget legislation that extends a 2010 rule that allows teachers from alternative routes to be considered “highly qualified teachers” (Education Week, October 16, 2013).

**Partnership to Watch**

The Council of Chief State School Officers (CCSSO) has selected seven states—Connecticut, Georgia, Idaho, Kentucky, Louisiana, Massachusetts, and Washington—to participate in NTEP, a two-year pilot focused on transforming educator preparation and entry systems to the profession. With support from 17 national organizations, NTEP will help states take action in three key policy areas: licensure, program approval, and analyzing and reporting information to improve preparation programs (CCSSO, 2013, October 23).
and teachers prepared through other alternative routes. The authors found one difference in mathematics: Students of Teach for America teachers learned 2.6 months more mathematics in a year compared to students in the same school who were taught by teachers prepared through traditional or less selective alternative routes\(^1\) (Clark et al., 2013).

**Recruitment.** Although some programs do recruit a more diverse candidate pool in terms of gender, experience, and knowledge, many alternative routes still struggle to recruit teacher candidates who can meet specific district needs (Hammerness & Reininger, 2008). Alternative routes designed around a specific district’s needs for teachers with English language learner specializations, for example, may help ensure the teacher pipeline is effective in matching unique district needs with a pool of available candidates. This is one area of promise that alternative routes are still in the process of developing and refining.

**Retention.** Some data suggest that teachers prepared through alternative routes are more likely to “turn over” (e.g., leave the school for another teaching position, possibly in another school district). Studies that control for the type of school and teacher characteristics, however, find no differences between alternatively and traditionally prepared teachers in retention rates (Grissom, 2008). Preliminary results from a recent study by Ingersoll, Merrill, and May (2012) found no significant differences in attrition rates between teachers prepared through traditional and alternative routes; the amount and type of pedagogical training the teacher received, however, were strongly associated with teacher attrition. Teachers with little or no pedagogical training were twice as likely to leave the profession compared to teachers with comprehensive pedagogical training.

**Research-to-Policy: Strategies for Setting Effective Policy for Alternative Routes**

Independent organizations, such as the National Council on Teacher Quality; national accreditation organizations, such as the Council for the Accreditation of Educator Preparation (CAEP); and professional organizations, such as CCSSO, recommend a focus on candidates, capacity, and continuous improvement based on shared high standards for program performance. We offer six strategies below that are based on a review of four research reports on high-quality alternative routes as well as the CAEP Commission on Standards recommendations (which are for all programs, both traditional and alternative). The six policy strategies should be considered as priority actions when implementing systemwide requirements for alternative routes or bolstering existing requirements for these programs.

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\(^1\) Study limitation: The authors note that the recruitment and matching approach led to an underrepresentation of small schools and charter schools. The schools in the study were disproportionately from large, urban districts (Clark et al., 2013, p. 14).
Ensure programs focus on rigorous content and pedagogical knowledge.

The foundation for all teaching practice is a strong working understanding of the “critical concepts, theories, skills, processes, principles, and structures that connect and organize ideas within a field” (CAEP, 2013). Research findings suggest that teachers with strong content knowledge are more successful in promoting student learning, which also contributes to teacher retention creating a positive reinforcing cycle (Hill, Rowan, & Ball, 2005).

Developing pedagogical content knowledge “involves a shift in teachers’ understanding from comprehension of subject matter for themselves, to advancing their students’ learning.” Teachers with a strong command of pedagogy are able to present the content in a variety of ways that are best suited to different students’ needs (CAEP, 2013). Moreover, a recent study found that a strong focus on pedagogical development can encourage teacher retention (Ingersoll et al., 2012).

Set candidate selection requirements.

Rigorous state guidelines for program admission should promote higher standards for candidates and increase the likelihood of successful student outcomes (Allen, 2003; Johnson, Birkeland, & Peske, 2005).

Screening Process. Establish a screening process to ensure that candidates accepted into the program have the prerequisite knowledge and characteristics that make them likely to succeed in the program and in high-need placements.

Matching. Matching candidates to local openings in shortage areas is a core strategy that is increasingly an expectation for program approval.

In North Carolina, candidates for alternative routes must have a bachelor's degree and proof of subject matter knowledge, through coursework or Praxis II, and must meet one of the following criteria: a minimum 2.5 grade point average (GPA), five years of experience considered relevant by the employing local education agency, Praxis I, SAT score of 1100, ACT score of 24 plus a GPA of 3.0 in all senior-level courses, GPA of 3.0 on 15 semester hours of coursework completed within five years after bachelor's degree.

Although multiple alternative certification programs are available in North Carolina, one program—Guilford County Schools Alternative Certification Track (GCS-ACT)—is a 12-month locally customized licensure and support program. The program provides teachers with a $1,000 bonus for passing the Praxis II and completing the program in one year, provides cohort networking and support, and on-site coaching throughout the year.

Quote to Note

“Pedagogy was strongly related to teacher attrition. Beginning teachers who had taken more courses in teaching methods and strategies, learning theory or child psychology, or materials selection were significantly less likely to depart. The amount of practice teaching they had undertaken, their opportunities to observe other teachers, and the amount of feedback they had received on their teaching were also significantly related to whether new teachers remained in teaching” (Ingersoll et al., 2012, p. 33)
Capitalize on clinical practice through mentoring and ongoing support.

Opportunities for clinical practice that are tightly connected with academic content and professional coursework are critical for any preparation program, regardless of route (National Council for Accreditation of Teacher Education, 2010). Connecting clinical practice with strong mentoring structures during training and providing ongoing support after training is complete are essential ingredients to success (Humphrey & Wechsler, 2007).

Accelerate Growth. Research on the effectiveness of comprehensive mentoring and induction is mixed (Glazerman et al., 2010); however, some research suggests that teachers provided with strong mentoring become effective more quickly (Moir, 2009). High-quality programs support new teachers through mentoring by other high-performing teachers (e.g., teachers demonstrating effective or highly effective performance on evaluations) and through ensuring access to support from colleagues. For example, teacher candidates need opportunities to observe other teachers providing instruction, to work with teams of teachers, and to connect with colleagues across their district or state through online communities of practice.

Improve Retention. Mentoring is linked to teacher retention, particularly when the mentor has experience teaching in the same school. In addition, more hours of mentoring have a positive relationship with student achievement (Rockoff, 2008).

Align Efforts. Yusko and Feiman-Nemser (2008) found that mentoring and induction programs can work with teacher evaluation efforts in schools to successfully combine support and professional development with assessment and accountability.

Florida Alternative Certification

Developed by a K–20 collaborative team within the Florida Department of Education, the Florida Alternative Certification Program provides a range of ongoing supports and mentoring for participating teacher candidates. Each school district in Florida offers an alternative pathway to teaching. Through the Alternative Certification Program, candidates receive education training through both distance learning and in-person peer support. The program provides supports to candidates through:

- Peer mentors
- Online tutors
- The building administrator, who verifies demonstration of the Florida Educator Accomplished Practices
- An outside educator to provide feedback
- A collaborative partner from an institute of higher education or a district-level supervisor

Candidates receive a Temporary Certificate and are required to complete education preparation before qualifying for a Professional Certification.

Encourage strong, diverse partnerships.

District and university partnerships as well as business partnerships can be an excellent way to ensure alternative programs are meeting local needs. Collaborative partnerships, particularly those partnerships for preparation programs seeking accreditation, should bring together school districts,
individual school partners, and other community stakeholders with preparation programs. CAEP has identified several characteristics that mark effective partnerships:

- Mutual trust and respect
- Enough time to develop and strengthen relationships at all levels
- Shared responsibility and accountability
- Regular formative evaluation of partnership efforts

Measure program impact.

Evaluating the effectiveness of teachers after they are placed and working in the classroom provides data to preparation programs to continuously improve and meet their goals. It also provides data to inform program accountability (Feuer, Floden, Chudowsky, & Ahn, 2013) and helps policymakers to better allocate funds to the most effective programs. Multiple evaluation measures are possible, but some common measures include surveys of teaching effectiveness, teacher retention, employer satisfaction, and the satisfaction of teachers who complete the program (CAEP, 2013). Several states, such as Florida, North Carolina, Texas, and Louisiana are now requiring all preparation programs, both traditional and alternative, to track program graduates’ individual student growth scores.

The Boston Teacher Residency (BTR) program asks residents to commit to teaching in the Boston Public Schools (BPS) for three years after graduation. BTR is a member of the AmeriCorps state and national service network.

- Residents earn a master’s degree in education and receive a Massachusetts Initial Teaching License, an AmeriCorps Education Award, and tuition remission after completing the three-year commitment.
- Teaching responsibilities are slowly increased during the course of the residency; by the spring of the first year, residents are expected to teach 50 percent of the full teaching load in the classroom.
- Residents take an intensive two-month summer course during their first summer and continue taking classes one day and one evening per week during the school year.
- During the three-year postresidency, graduates are provided targeted courses and seminars, content-focused coaching groups, school-based coaching, and placement in collaborative clusters within schools.

Student Achievement. In a study of the BTR program, novice graduates demonstrated less effectiveness in raising student achievement in mathematics when compared to other teachers in the district with similar levels of experience; by the fourth or fifth year, however, teachers prepared through the residency program were outperforming Boston teachers with similar levels of experience and veteran teachers. The study authors note, however, that the results are based on a small sample of teachers in a limited set of grades and subjects (Papay, West, Fullerton, & Kane, 2011).

Retention. The program reports that, during a three-year period, 80 percent of BTR graduates hired by BPS remain in the district compared to 63 percent for other teachers in the district; 87 percent of graduates remain in the classroom, and 90 percent remain in the field of education. Over five years, 75 percent of BTR teachers remain in the district compared to 51 percent for other teachers.

Recruitment. BTR reports that its candidate pool is significantly more diverse and teaches in hard-to-staff subjects when compared to the district as a whole. Fifty-five percent of the program’s secondary graduates teach in mathematics or science, 37 percent of all graduates teach English as a second language or special education, and 49 percent are teachers of color.

Source: Boston Teacher Residency (http://www.bostonteacherresidency.org/)
Establish a quality assurance and continuous improvement process.

Robust quality assurance plans promote continuous improvement, enable accelerated development and testing of possible program changes, and expand the broader profession’s knowledge and practice. States should encourage the development of quality assurance processes that identify a range of measures and that set clear benchmarks for program performance. Whenever possible, programs should use external standards to set benchmarks. Finally, a critical part of quality assurance is inviting meaningful stakeholder engagement throughout the process. Programs should gather stakeholder perspectives, share program performance information with stakeholders, and involve stakeholders in generating concrete plans to improve program weaknesses (CAEP 2013).

Richmond Teacher Residency Program

The Richmond Teacher Residency program is a partnership between Virginia Commonwealth University (VCU) and Richmond Public Schools. The goal of the partnership is to provide targeted training to teachers for urban classrooms.

Program Tracks. The program includes a Secondary Track for upper level classrooms and a Special/Exceptional Education Track for elementary, middle, and high school special education classrooms.

Selection. To apply under the Secondary Track, candidates must have completed an undergraduate degree, maintained a GPA of 3.0 in the last 60 hours of undergraduate education, and majored in one of 10 subjects.

Curriculum and Commitment. Candidates complete a curriculum grounded in urban education, and the program is concurrent with a one-year teaching residency serving under a master teacher in Richmond Public Schools. Teachers also must commit to teaching a minimum of three years in Richmond Public Schools after completing the residency.

Benefits. Program participants receive a living stipend during the first year of residency, coursework at a reduced program rate at VCU, reduced cost apartments, and health insurance. At the end of the program, residents receive a master of teaching or master of education degree from VCU.

For more information about teacher residency programs, please see the GTL Center’s recent Ask the Team Brief: Teachers-in-Residence: New Pathways Into the Profession. (http://www.gtlcenter.org/sites/default/files/1579%20GTL%20Ask%20the%20Team_Teacher%20Residency%20Pr%20FINAL.pdf)
References


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**I WANT TO KNOW MORE!**

*For more examples or information about this topic, including additional examples of alternative pathways policies, please e-mail gtlcenter@air.org.*

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