Enhancing Teacher Preparation Through Clinical Experience

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Research consistently demonstrates that teachers matter more to student achievement than any other aspect of schooling. Effective educator preparation involves an integrated approach to building content knowledge and pedagogical expertise through coursework and in authentic educational settings during clinical preparation or practice, also known as clinical experience. Students benefit when prospective teachers engage in supported, intentional and hands-on teaching practice during their clinical experience. Teachers also report feeling prepared for the demands of the profession and are more likely to be retained in the classroom. Robust, relevant and reflective clinical experience is key to both attracting teachers and giving them the skills needed to succeed and stay in the profession.

Teacher shortages in some regions, schools and content areas have caused states to consider fast-tracking teachers into the classroom through avenues that include little or no clinical preparation. Teachers who enter the profession through these pathways are less likely to be prepared, less effective and less likely to remain in the profession than teachers who participate in clinical experience training. The impact of underprepared teachers is not distributed evenly, as teachers who lack clinical experience are most likely to be hired in Title I schools and in schools serving students of color.

This Policy Brief provides an overview of different clinical preparation models, a summary of key research on the benefits of robust clinical experience for recruiting and retaining an effective teacher workforce, and examples of state-level policies that support high-quality teacher preparation, including how to leverage clinical experience to improve workforce diversity.
What Is Clinical Experience?

KEY TERMS

Clinical experience: This comprises extended practice teaching that prospective teachers complete prior to certification. Clinical experience, sometimes referred to as student teaching or internship, is often the culminating activity in an undergraduate preparation program; however, experiences vary by institution and certification route. Many alternative preparation routes offer yearlong or longer clinical experiences that are integrated with program coursework.

Mentor teacher: This is a certified teacher in the school where the teacher candidate is completing their clinical experience. Mentor teachers can model best practices and offer coaching and co-teaching opportunities to prospective teachers. Some states also use the term cooperating teacher. Mentors can also refer to veteran teachers who provide support to novice teachers in the first few years of their careers, though in this brief mentor teacher refers to support during clinical experience.

Students of color/teachers of color: The terms students of color and teachers of color refer to individuals who identify as African American or Black, American Indian/Alaskan Native, Asian, Latinx, Pacific Islander, or two or more races. Any use of the term minority is derived from state language.

KEY ELEMENTS OF CLINICAL PREPARATION

Robust clinical experience requires strategic partnerships and intentional design. According to the American Association of Colleges for Teacher Education, key elements of clinical preparation include:

• Strong partnerships between schools and educator preparation programs.
• School sites that support rich learning experiences for students and teachers.
• Classroom placements that offer experience in content and/or grade level areas.
• Highly skilled mentor teachers.
• Educator preparation program staff that create coordinated and cohesive experiences for teacher candidates to bridge theory and practice.
• Clinical curriculum with clear, relevant and strong links between theory and practice.
• Robust classroom placement requirements.
• Performance assessments.
Clinical Experience in Traditional Teacher Preparation Programs

In traditional teacher preparation programs, students are typically required to complete a certain number of hours or semesters of clinical experience in a classroom setting, often as the culminating experience in their certification program. According to the National Council on Teacher Quality (NCTQ), as of 2020, 78% of traditional teacher preparation programs include a semester or more of clinical practice, and an additional 21% include at least 10 weeks.

While most traditional preparation programs require prospective teachers to complete some form of clinical experience, it is not common for students to get paid for these experiences. This often means that only students able to work without pay during the clinical experience can afford the traditional pathway into the profession, which causes equity concerns. Survey results from one educator preparation program found that more than 80% of students worry about their financial situation.

States often set a minimum number of required clinical experience hours in statute or regulation or may include requirements for teacher clinical experience in their standards for educator preparation programs. In addition, states often enforce standards for clinical practice through the educator preparation program accreditation process, including partnerships with national accreditation organizations. Given the documented importance of clinical experience for teacher retention, confidence and student achievement, states and institutions want to ensure that candidates’ clinical experiences are effective and equitable.

As a result, policy not only focuses on the length of these experiences, but often ensures that quality mentor or cooperating teachers are in place and that teacher candidates receive observation or evaluation; it also may help coordinate the placement of teacher candidates. Some policymakers have additionally focused on financial supports for students in traditional teacher preparation programs.

Accreditation

Minimum requirements for educator preparation programs are often implemented through accreditation. While standards can vary among states, the Association for Advancing Quality in Educator Preparation and the Council for the Accreditation of Educator Preparation are national accrediting bodies with metrics that measure
educator preparation programs’ effectiveness based on clinical preparation.

- **AAQEP standard 3** examines quality program practices to “ensure that candidates, upon completion, are ready to engage in professional practice, to adapt to a variety of professional settings and to grow throughout their careers. Effective program practices include consistent offering of coherent curricula; high-quality, diverse clinical experiences; [and] dynamic, mutually beneficial partnerships with stakeholders.”

- **CAEP standard 2** focuses on clinical experience and evaluates the program based on partnerships and experiences that “develop candidate’s knowledge, skills, and professional dispositions to demonstrate positive impact on diverse students’ learning and development.”

It is important to note that while both accrediting bodies seek to evaluate program effectiveness with metrics inclusive of clinical experience, less than half of the roughly 2,100 educator preparation programs in the U.S. participate in the accreditation process.

### Clinical Experience in Alternative Preparation Pathways

Teacher candidates may also gain clinical experience through alternative preparation programs. Alternative preparation programs offer a pathway into the classroom for individuals who may not have a background in education. There are a wide range of these programs available and, thus, a wide variety of requirements and options for teacher candidates when it comes to clinical experience.

Alternative preparation programs offer increased flexibility and often shorter time requirements, and they can attract a broader and more diverse group of potential teacher candidates. According to data analyzed by TNTP, roughly 30% of teachers in traditional programs are teachers of color compared with 53% of teachers of color in alternative certification programs.
Nationally serving alternative preparation programs include Teach for America and TNTP Teaching Fellows. State programs — such as the Academy for Urban School Leadership in Chicago, Illinois, and the Arkansas Teacher Corps — work to fill the need for teachers at the local level.

The Teacher Residency Model

While not always classified as an alternative certification program, the teacher residency model is one form of alternative educator preparation that is based on the idea that a relevant and robust clinical experience leads to high levels of preparedness and effectiveness in the classroom. This innovative pathway of teacher preparation allows individuals holding noneducation-related bachelor’s degrees to receive high-quality preparation through an integration of teacher coursework and classroom experience. According to a 2016 report, the strengths of teacher residencies include:

- Targeted recruitment of teachers for high-need and hard-to-staff positions.
- Hands-on experience teaching in the schools and subject areas where candidates are likely to teach.
- A highly supported developmental trajectory for teachers involving coaching and mentorship from the clinical experience through the teacher’s early career.
- Financial incentives and support during the residency experience, and often beyond, for teachers who stay in placement districts.

Data in this report suggests that teacher residencies are effective in recruiting and retaining diverse teachers, with 45% of residents in 2015-2016 being teachers of color. Nationally, the average of teachers of color entering the field was 19%. Residency programs and partner districts report that 80%-90% of residents are still teaching in the same district after three years and 70%-80% remain for five years or more. This is compared with national data that suggests that up to 50% of teachers serving in schools with the highest needs leave within the first five years.

Though residencies are a still a relatively new model of teacher preparation, some data suggest that residency trained teachers improve student achievement in various subject areas. Additionally, residencies in locations across the U.S. work to address the enduring and systemic inequities present in school systems.

Examples of residency programs include:

- California’s San Francisco Teacher Residency, which is integrated into the San Francisco Unified School District and is part of the district’s human capital strategy, strategically aligns clinical practice placements with district
instructional and hiring needs. Residents receive $15,000 plus benefits and are placed in cohorts at schools that are likely to hire them as full-time teachers, which gives residents the opportunity to experience a full year in the school where they may work after graduation.

- **Colorado**’s [Public Education and Business Coalition Teacher Residency](#) offers placements in both urban and rural locations, and the residency coursework can be applied toward master’s degrees at seven different colleges and universities in the state of Colorado. In addition to the support provided during the residency year, the program offers up to five years of support in the form of high-quality professional development.

- **Massachusetts**’ [Boston Teacher Residency](#), where aspiring teachers learn from clinical experiences in Teacher Academies, provides flexible staffing models that allow teams of teachers (novice and experts) to work alongside one another in a way that promotes both student and teacher learning.

**Clinical Experience and Teacher Workforce Connections**

When clinical experience is designed thoughtfully and strategically by policymakers and postsecondary institutions, it can be used as a tool to address shortages in the teacher workforce and build a stronger and more diverse teacher pipeline.

**Teacher Recruitment and Retention**

Many states throughout the country grapple with teacher shortages in specific subjects and schools. It is common for schools to have teacher shortages in science, math, English as a second language classes, special education and in [schools](#) with a greater population of students from low-income backgrounds. However, it is important to note that teacher labor markets are state-specific, so teacher shortages vary from state to state. Research demonstrates that teacher shortages have negative impacts on [student achievement](#) and can be [costly](#) for districts and states.

Strategic clinical experience may help strengthen the educator workforce by increasing the number of qualified and effective educators who stay in the profession and teach in shortage areas. Research demonstrates that between [30%](#) and [45%](#) of teachers leave the profession in the first five years. Many teachers [cite](#) demands of the job as a large source of stress and say stress is a major reason they leave the profession.
Strategic placements during clinical experience may help novice teachers feel more prepared for the demands of the job and more interested in teaching where they are most needed. Further, research demonstrates that teachers trained in classrooms similar to those they teach in after graduation are more likely to remain in the classroom and may be more likely to be hired in a similar environment.

In addition to improving teacher retention, research shows that when clinical experience occurs in schools with similar demographics to where the teacher is ultimately hired, they are more effective. A study of an urban teacher preparation program showed that teacher candidates were more likely to be hired and retained in similar schools if they completed their clinical experience with the support of mentors in schools where high percentages of students were impacted by poverty. Additional research suggests that teacher candidates are also more likely to be effective if they gain clinical experience in schools with low teacher turnover and higher rates of professional collaboration. Policymakers may consider strategies to better align clinical experiences with hiring needs, so that prospective teachers are well-positioned to fill vacancies.

Teacher Diversity

Despite well-documented benefits of teacher workforce diversity, teachers of color are underrepresented in the educator workforce and in teacher preparation programs. Recent data reveals that nearly 80% of the teacher workforce is white and nearly 64% of students enrolled in traditional teacher preparation programs are white; however, 47% of the student population in the United States is Black, Latinx or Asian.

Given the implications of clinical experience on student achievement and teacher retention, policymakers may consider using teacher clinical experience as a policy lever to diversify the teacher workforce. Research demonstrates that novice teachers of color benefit from receiving ongoing support from mentor teachers who work to understand the unique experiences of teachers of color in the classroom. Student teachers of color may similarly benefit from the ongoing support of mentor teachers of color.
Research also suggests that “rising tuition and the high cost of student loans can dissuade students of color from pursuing careers in education.” Students of color are much more likely than white students to be impacted by student debt; and Black, Latinx and Asian students report that loans limited their postsecondary institution choice. Further, postsecondary institutions leave Black students with significantly more debt than their white peers, and this disparity in debt grows from $7,400 to $25,000 in the first four years after graduation. To support the training, retention and effectiveness of teacher candidates of color, policymakers may want to consider levers to create high-quality, accessible and financially supported opportunities for in-classroom learning experiences tailored to their needs.

Policy Considerations

Policymakers may consider a variety of policy levers when exploring ways to support strong, high-quality clinical experience that addresses the needs of the labor market. Below are some considerations for policymakers as they make decisions about how to best support strong clinical experience to contribute to a strong and sustainable teacher pipeline in their state.

Does the state outline minimum requirements for clinical experience in statute or regulation? Many states outline minimum requirements for clinical experience — for length and observation or evaluation — in statute or regulation. Research demonstrates that the length of teacher clinical experience is associated with teacher retention and feelings of preparedness. As a result, policymakers may want to consider requiring a minimum length of clinical experience for preservice teachers in statute or regulation. Policymakers may also consider requiring a minimum number of observations or evaluations of the teacher candidate completing their clinical experience. These observations or evaluations provide an opportunity for the candidate to receive feedback on their teaching.

In Delaware, educator preparation programs must have clinical experiences throughout the program that are aligned with the program curriculum. The Capstone Clinical Residency is a requirement for educator preparation and must be at least 10 consecutive weeks (200 hours). West Virginia requires candidates to meet the proficiency standard on a performance assessment to complete their educator preparation program.

Does the state have a strategic vision for the teacher pipeline? States considering educator preparation policy may want to think about teacher preparation strategically and systemically in coordination with the states’ overall vision for teacher quality. As state policymakers consider various options, they may want
to note research on the sustainability and effectiveness of policy initiatives, which suggests that individual programs may run into limitations in attempting to make systemwide reform. Educational researcher Michael Fullan suggests that “coherence making strategies” are a key ingredient to success, as such initiatives maintain focus and build capacity within systems toward a common goal. According to Fullan, “... systems will be successful if they focus on a small number of key strategic elements, deploy them in concert, build capacity on the part of the implementers, persist with the process over time, and monitor and learn as they go in relation to actual results and effective practices.”

Regarding teacher quality specifically, policymakers may consider alignment between policies affecting teacher preparation (including clinical experience), teacher licensure, teacher evaluation and opportunities for advancement in the profession. They can also consider how to engage teachers in policy design and implementation.

Can the state encourage strategic recruitment and preparation of teachers of color through clinical experience? Partnerships among state agencies, postsecondary institutions, local education agencies and youth organizations can promote strategic recruitment and preparation of teachers of color. For example, the Pennsylvania Department of Education’s Aspiring to Educate program provides Black youth a pathway into teaching that incorporates mentorship from the Center for Black Educator Development. The mentorship is provided during high school, through college and into teachers’ early careers. Candidates receive free or reduced tuition at six state universities and are strongly encouraged to teach in Philadelphia’s public schools upon completion of their degrees. The Arkansas Geographical Critical Needs Minority Teacher Scholarship Program provides scholarships of $1,500 per year for individuals defined by the state as minority; who are enrolled in, or accepted for enrollment in, an approved program; and who express an intention to teach in a geographical area of the state where there is a critical shortage of teachers.

Does the state allow teacher candidates to be compensated for clinical experience or provide other financial aid for aspiring teachers? Providing teacher candidates with financial aid or compensation during their clinical experience may help recruit and retain more teachers from diverse backgrounds by minimizing financial barriers to teacher preparation. The demands of teacher clinical experience can make it difficult for prospective teachers to work at the same time, often causing financial strain. Further, the cost of undergraduate preparation may be a barrier for students of color who want to enter the teaching profession, especially given the low rate of compensation for teachers compared with other professions and the
disproportionate impact of loans on students of color. Research shows that Black graduates are left with $43,000 more debt than white graduates 12 years after earning a bachelor’s degree.

As of 2019, a minimum of 11 states have at least one financial incentive program in statute explicitly designed for teachers of color. Indiana, for example, administers the William A. Crawford Minority Teacher Scholarship, which provides up to $4,000 to those the state defines as minority students who are enrolled as a full-time student at an eligible institution, are pursuing a teacher education course of study and have committed to teaching for at least three years if hired as a teacher in the state. Enacted this year, Oklahoma H.B. 1038 allows a student teacher to receive compensation for up to one full year and removes a requirement that had to be completed prior to taking a paid position as a student teacher.

**Does the state encourage the strategic selection of mentor teachers for teacher candidates?** According to NCTQ, 16 states do not have requirements specifying who can work as a cooperating teacher. As noted previously, research demonstrates that teacher candidates benefit from having a highly qualified cooperating teacher during their clinical experience. Teacher candidates of color also benefit from mentor teachers who reflect their racial identity. Policymakers may consider putting evaluation or experience policies in place to ensure clinical experience is guided by highly qualified mentors.

For example, Arizona requires mentor teachers to have at least three years of experience, receive a classification of effective or highly effective on their educator evaluation, and receive “adequate training from the professional preparation institution.” States can also support mentor teachers by connecting the role to teacher leadership opportunities, including policies for licensure advancement and/or financial incentives.

**Does the state require or encourage teacher candidates to complete their clinical experience in certain schools?** Where a teacher candidate completes their clinical experience may make a difference in their effectiveness, their likelihood to remain in the profession, and their likelihood to get hired in and remain in similar schools. As a result of this connection, policymakers may want to consider either requiring teachers to complete their clinical experience in a school similar to where they see themselves teaching once certified, or require them to complete clinical experience in a variety of environments, including shortage areas.

For example, Michigan requires educator preparation programs to offer a variety of grade level and content experiences within the required 600 hours of clinical experience they must offer for prospective teachers. The state also articulates an
expectation that teacher candidates have opportunities to work with students representing the “cultural, linguistic, and socioeconomic diversity of Michigan’s diverse communities, including students who come from underrepresented or marginalized populations.” Washington requires placement to be “targeted to high-need subject areas, including special education and English learner, and high-need geographic areas, including Title I and rural schools.”

Does the state collect and disaggregate data regarding teacher preparation programs? Data collection and reporting allows states to recognize shortages and to target recruitment efforts. More specifically, data regarding teacher preparation program enrollment and completion may be useful for predicting future trends in the teacher labor market. States may consider disaggregating teacher preparation program enrollment and completion in both alternative and traditional certification programs; they may do this by concentration and ethnicity to help target workforce diversity efforts, to identify teacher shortages and to locate where in the teacher pipeline their efforts should be focused.

For instance, Massachusetts publishes educator staffing data, including data on educator preparation program enrollment, in a format easily accessible to the public, sorted by school or district, and disaggregated by race and ethnicity. In addition to state-specific preparation program enrollment data, the federally required Title II reports include data on the race, ethnicity and gender of teacher candidates.

As policymakers continue to focus their attention on building a healthy, sustainable and diverse teacher pipeline, creating requirements that encourage high-quality clinical experience for prospective teachers will help ensure that effective teachers enter and stay in the teaching profession.

Final Thoughts

Clinical experience is a vital part of prospective educator preparation and has many benefits for teachers and the students they teach. As policymakers continue to focus their attention on building a healthy, sustainable and diverse teacher pipeline, creating requirements that encourage high-quality clinical experience for prospective teachers will help ensure that effective teachers enter and stay in the teaching profession.
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