Teaching Residency Programs: A Multisite Look at a New Model to Prepare Teachers for High-Need Schools

Executive Summary

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Numerous staff members from Mathematica contributed in diverse ways over the course of this study. Sheila Heaviside was the survey director for most of the study period but was preceded in this role by Pat Nemeth and Missy Thomas. Linda Mendenko oversaw the resident and mentor surveys. Annette Luyegu oversaw the program, teacher-of-record, and mobility surveys. Jacqueline Agufa led the collection and compilation of data for the samples of residents, mentors, and novice teachers, as well as districts’ teacher-employment records. Angela Deng and Boris Shkolnik developed systems that supported survey activities and sample management. Additional staff who contributed to the survey efforts included Veronica Barrios, Leonard Brown, Susan Golden, Kevin Manbodh, Kimberly Ruffin, Michael Smith, and Marcia Tobias. Margaret Sullivan analyzed data on programs, with assistance from Mary Anne Anderson. Maureen Higgins prepared the data summarizing the characteristics of the novice teachers’ and mentors’ schools, with assistance from Jessica McElroy and Brittany English. Raúl Torres led the programming for analyses of the mentor, resident, and novice teacher survey data and prepared the figures. Alyssa Maccaroni programmed analyses of program survey data. Jeremy Page led the code review. Alfreda Holmes formatted the report.

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EXECUTIVE SUMMARY

Elementary and secondary education stakeholders around the country, especially in large urban districts, have long struggled to staff low-performing schools with well-qualified teachers and to retain the teachers they hire (Berry et al. 2007). In The Higher Education Opportunity Act of 2008 (Public Law 110–315), Congress responded to these challenges by creating the Teacher Quality Partnership Grants Program to fund a relatively new model of teacher preparation known as teaching residency programs (TRPs). TRPs are a pathway to teaching for those who already have a bachelor's degree. In this model of teacher preparation, prospective teachers simultaneously complete coursework and have a supervised fieldwork experience lasting at least one school year (the residency). The residency takes place in high-need schools and gives the resident opportunities to practice his/her craft and take on increased teaching responsibility under the guidance of an experienced classroom teacher in settings where the resident will be hired. This model of teacher preparation is expected to attract different types of candidates than traditional teacher preparation programs and better prepare teachers to meet the demands of teaching and thus to improve student achievement and teacher retention.

This report provides implementation findings based on the 30 TRPs that received funding through one of 28 Teacher Quality Partnership residency grants awarded in fall 2009 and spring 2010. Although some of the 30 programs had been operating prior to the grant award, most were newly established and data collection generally covers their second year of operation. For a subset of the TRPs, the report also provides in-depth information from the 2011–2012 school year on three groups of program participants: (1) residents who were in their residency year of the program, (2) classroom mentors of those residents, and (3) novice TRP teachers (former residents who were in either their first or second year as teachers of record). This subset includes 12 programs that are among the largest or most experienced TRPs that received grant program funding. The study also provides comparative information on non-TRP novice teachers in the same districts served by these 12 TRPs.

Following are the study’s major findings:

- **In keeping with their intended purpose and the grant requirements, the residency programs provided a fieldwork experience, typically with a trained and experienced mentor teacher, along with integrated coursework.** Residents reported an increase in the number of days fully in charge of instruction between the first and second halves of their residency (21 versus 37 days, on average). Most TRP mentors had substantial teaching experience (10 years, on average), were trained by the residency program (averaging 37 hours of training), and had prior mentoring experience (an average of 3.5 semesters). TRPs included the equivalent of 10 courses, on average, with core emphasis on content and pedagogy, classroom management, and student assessment and a lesser emphasis on child development and education philosophy. Most residents reported that their fieldwork reinforced what they learned in their coursework and that their coursework was well-integrated with their residency classroom experiences (83 and 68 percent of residents, respectively).

- **The residency programs somewhat broadened the pool of people entering the teaching profession in the participating districts.** Novice teachers in the study who

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1 The Teacher Quality Partnership grants were available to fund certain baccalaureate teacher preparation programs, in addition to TRPs.
had completed a TRP appeared more likely than their non-TRP peers to have made a
distinct career change when they joined their programs. For example, they were more
likely than non-TRP teachers to report having worked in a full-time job other than
teaching (72 percent versus 63 percent). However, novice TRP and non-TRP teachers
had similar demographic characteristics (sex, race/ethnicity, and age).

- **Novice teachers from residency programs had similar retention rates to other
  novice teachers.** Focusing on teachers after their first or second years of teaching,
about 92 percent of TRP teachers and 90 percent of non-TRP teachers reported staying
in the same district from spring 2012 to fall 2012; about 4 percent of TRP teachers and
6 percent of non-TRP teachers were no longer teaching. None of these were statistically
significant differences.

**Teacher Quality Partnership Residency Grants**

The Department of Education’s Institute of Education Sciences sponsored a descriptive study
of the TRPs that received Teacher Quality Partnership residency grants. The purpose of the
residency grants is to improve the quality of new teachers serving in high-need districts and schools
by creating or expanding model teaching residency programs. The discretionary grant competition
included the following requirements:

- A partnership composed of at least one institution of higher education and at least one
  high-need school district. Within the institution, both a school of education and a school
  of arts and sciences must be part of the partnership.
- Admissions goals and priorities aligned with the hiring objectives of the partnership’s
  high-need district(s) and candidate selection that is likely to provide effective teachers
  and broaden and diversify the pool of teachers in the districts served.
- At least one academic year of teaching alongside a trained and experienced classroom
  mentor teacher, prior to becoming the teacher of record. The mentor teacher is to be
  teaching high-need subjects and grade levels in a high-need school.
- Rigorous graduate-level coursework leading to a master’s degree.
- A one-year living stipend or salary offered to residents during their residency year in
  exchange for subsequently teaching full-time in a high-need school for a minimum of
  three years.
- Two years of induction support after placement as a full-time teacher in a high-need
  school.

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2 Congress called for a study of the programs funded with TQP grants, of which TRPs are one type.

3 According to program requirements, a high-need district serves a substantial number or percentage of children
from low-income families and also (1) employs a high percentage of teachers who do not teach the subject or in the
grade level in which they trained; (2) experiences a high teacher turnover rate; or (3) hires a high percentage of teachers
with emergency, provisional, or temporary certification or licensure. Schools qualify as high-need if they (1) are among
the district’s poorest (in the top 25 percent according to various poverty measures), or (2) have a certain percentage of
students eligible for a free or reduced-price lunch (at least 60 percent for elementary schools and at least 45 percent for
other schools).

4 No program requirements defined high-need grades or subjects; applicants could designate them based on the
teacher needs of their partner districts.
Research Questions and Study Design

This study addresses the following research questions:

1. What are the characteristics of residency programs funded by the Teacher Quality Partnership Grants Program?

2. What are the characteristics and experiences of residency program participants? How do the characteristics and experiences of novice residency program teachers compare with those of novice teachers from other programs?

3. What are the retention rates and mobility decisions of novice residency program teachers and other novice teachers? What are the characteristics of schools that novice teachers leave and enter?

To address these questions, we relied primarily on data from original surveys and interviews conducted with various sets of TRPs, but also collected secondary data from district administrative records and other sources. Information on programs is representative of all 30 TRPs, but because of the study’s sampling approach (explained below), information on mentors, residents, and novice teachers is not.

Program samples. Seeking to balance a preference for representative data on TRPs and their participants with a need to use resources efficiently, we used different, overlapping sets of programs for different data collections (Figure ES.1). Study resources enabled us to collect basic information on programs from the full universe of 30 TRPs, but for additional information, we drew a random sample of 15 TRPs (represented by the horizontal/blue striped area of Figure ES.1). The 15 programs worked with a total of 48 partner districts, in which the proportion of students eligible for a free or reduced-price lunch—a common measure of economic need—ranged from 43 to 98 percent, with a mean of 75 percent.

To collect data on mentors, residents, and teachers of record, we used a purposeful (nonrandom) sample of 12 programs, which we referred to as the in-depth sample (represented by the vertical/red striped area of Figure ES.1). Three priorities influenced our selection of specific programs for the in-depth sample. To allow us possibly to observe retention for some TRP teachers into their fourth year of teaching in fall 2013, we prioritized programs that had placed a cohort of graduates in fall 2010. To maximize the number of mentors, residents, and novice teachers in the study, we also prioritized large programs. Indeed, although the in-depth sample included 40 percent of the TRPs, it accounted for about 60 percent of all TRP mentors and residents. Finally, to make data collections efficient, we prioritized programs that each served a single school district as well as multiple programs that partnered with the same district. The resulting 12 programs served six districts. The in-depth sample of 12 TRPs is not representative of the full set of 30 TRPs in the study. Six programs were in both the random sample and the purposeful sample, represented by the area of Figure ES.1 where the horizontal and vertical stripes overlap.

Program data collections. We surveyed the directors of all 30 TRPs in spring 2012 to gather information about program structure and operations. We gathered additional details from interviews with the directors of the random sample of 15 programs during spring and summer 2012.
Resident and classroom mentor data collections. We surveyed all residents who entered the 12 in-depth sample programs in 2011 and remained in these programs in the second half of their residency year. The sample included 390 residents. We also surveyed the mentors who worked with the sampled residents. The sample included 406 mentors. Both surveys addressed respondents’ backgrounds and experiences in these programs and were conducted in spring 2012.

Teacher-of-record data collections. We surveyed novice teachers of record from the 12 in-depth sample programs, as well as other novice teachers in the six districts that these programs served. We defined novices as individuals in their first or second year of full-time teaching as of spring 2012. (Because these teachers had completed TRPs in the past, the sample of novice teachers differed from the sample of current residents described above.) The survey collected information on novices’ backgrounds, training experiences, and teaching experiences. In fall 2012, we again surveyed the novice teachers to determine whether and where they were teaching in what would be their second or third year. The sample of novice teachers included 435 from TRPs and 376 from other programs.

Additional data sources on teachers and schools. The Department of Education’s Common Core of Data for the 2010–2011 school year provided information on the characteristics of schools where residents were placed and novice teachers were employed. Other information on school characteristics came from state and district websites. We used Barron’s rankings of college competitiveness (as of 2007–2008) to characterize residents’ and novice teachers’ undergraduate institutions.

Analysis. Because TRP and non-TRP novice teachers were likely teaching under different circumstances (for example, the former are intentionally placed in high-need schools), we controlled for school characteristics and subjects taught when comparing the two groups’ experiences and perceptions. Although our descriptive analysis controlled for some aspects of the novice teachers’ placements, any comparison of outcomes for the two groups may reflect not only the influence of the programs they attended but unmeasured characteristics of their teaching placements or other factors.5

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5 Throughout the report, when testing for differences between groups, we used two-tailed tests and applied a 5 percent critical value.
Detailed Findings

Screening and Participant Characteristics

Under the grant requirements, TRPs are supposed to recruit and admit “highly qualified individuals, including minorities,” either recent college graduates or “mid-career professionals” from fields other than education. Programs’ admission processes are supposed to favor candidates with (1) strong content knowledge or a record of accomplishment in the field or subject area they will teach, (2) strong oral and written communication skills, and (3) other attributes linked to effective teaching. Grant requirements also reference consideration of applicants who reflect the communities in which they will teach or represent populations underrepresented in the teaching profession. Together these guidelines suggest that TRPs may be viewed as a means to broaden or diversify the teacher pool in high-need districts. Findings on TRPs’ screening processes for applicants and on participants’ characteristics are summarized below.

Most residency programs looked for candidates with particular characteristics or experiences, and some required sample teaching lessons as part of their screening process.

- All 15 directors interviewed for the study sought participants who reflect the communities they would teach in or who are underrepresented in the profession. For example, 12 directors mentioned looking for racial/ethnic minorities. They also sought participants with particular skills, work experience, or life experience. For example, 10 mentioned looking for applicants with particular content or subject knowledge developed in a career or college coursework.

- Writing samples and interviews were the most common screening tools used by the 15 program directors interviewed; 15 used the former, 14 used the latter. Seven programs also required applicants to demonstrate their skills with a brief sample teaching lesson.

The residency programs attracted individuals whose work and education experiences differed from those of other novice teachers in the same districts; they did not attract individuals with different demographic characteristics.

- Since graduating from college (an average of about five to seven years before the study), TRP teachers were more likely than non-TRP teachers to report having worked in a full-time job other than teaching (72 percent versus 63 percent). In addition, TRP teachers were less likely to report having worked as a long-term substitute teacher (15 percent versus 31 percent), a short-term substitute (18 percent versus 31 percent), or a teacher’s aide (22 percent versus 32 percent). These findings suggest that teaching was more likely to represent a distinct career change for the TRP teachers than for the non-TRP teachers.

- Novice TRP teachers were less likely than their non-TRP peers to have a bachelor’s degree in education (9 percent versus 25 percent). They also were more likely to have received their bachelor’s degree from a college rated in the “most competitive” category based on admission standards and academic achievement of applicants admitted (26 percent versus 12 percent).

- Novice TRP and non-TRP teachers had similar demographic characteristics. Fifty-five percent of TRP teachers were white, non-Hispanic, as were 60 percent of non-TRP teachers. Twelve percent of TRP teachers were black, non-Hispanic, as were 10 percent
of non-TRP teachers. Nineteen percent of TRP teachers were Hispanic, as were 18 percent of non-TRP teachers. Twenty-four percent of TRP teachers were male, as were 28 percent of non-TRP teachers. The average age of both groups was 30 years. None of these was a statistically significant difference.

Program Characteristics and Participant Experiences

The TRPs are intended to provide a unique training experience that prepares teacher candidates for the challenges of teaching in high-need schools. To help residents master the craft of teaching during a residency lasting at least one school year, programs hire and train experienced teachers to serve as classroom mentors for residents. Mentors use demonstrations, hold one-on-one discussions, and provide feedback as they help residents assume increasing responsibility for instruction during the year. The residency is designed to complement the coursework that participants simultaneously undertake in pursuit of a master’s degree. A stipend is available as financial support during the residency. Participants continue to receive support after placement as a teacher of record. Findings on the characteristics and offerings of TRPs, on residents and mentors’ experiences in TRPs, and on the support offered to novice teachers are summarized below.

The residency programs provided a training experience in which residents spent considerable time with their classroom mentors and took on increasing instructional responsibilities over the year. Residents also completed a substantial amount of coursework, which in the view of most residents complemented the residency experience.

- Over half (54 percent) of residents reported typically spending four full days a week in their mentor’s classroom during the first half of their residency; 14 percent reported typically spending five full days a week with their mentor. Larger shares of residents reported spending four days (60 percent) or five days (18 percent) a week in their mentor’s classroom during the second half of the residency.

- Residents reported being fully in charge of their residency classroom for an average of 21 full school days during the first half of the year and an average of 37 full days during the second half. In addition, the percentage of residents and mentors reporting that residents had primary responsibility for each of nine instruction-related activities (such as planning lessons and working with small groups of students) increased from the first to the second half of the year. For both groups and for all nine activities the increases were statistically significant.

- Program directors in the interview sample reported requiring their participants to complete an average of 450 hours of coursework, with 218 hours the fewest and 649 hours the most required. Assuming that a typical college course involves about 45 hours of instruction (3 hours per week for 15 weeks), the average TRP’s total coursework is roughly equivalent to 10 college courses. Coursework scheduled during the residency period averaged 335 hours. For a typical residency lasting one full school year (about 36 weeks), 335 hours of instruction would average out to just over 9 hours per week.

- Eighty-three percent of residents reported that their work as a resident teacher reinforced what they learned in their coursework, and 68 percent reported that their coursework was well-integrated with their residency classroom experiences. Responses on these items varied substantially by program, however; the range was from 65 percent to 96 percent for the former item, and from 43 percent to 94 percent for the latter item.
The TRPs hired and trained experienced teachers to serve as classroom mentors to residents. Mentors in the in-depth sample reported having taught full time for an average of 10 years. In addition, 84 percent of the mentors said they had received some training for this role; the average amount of training they reported, in total, was 37 hours, and the longer they had served as a mentor, on average, the more hours of training they had received. TRPs reported providing 32 hours of training, on average, for new mentors.

Compared to other novice teachers in the same districts, graduates of residency programs reported greater ongoing support from their preparation program.

About 80 percent of both TRP and non-TRP first-year teachers reported being assigned to a mentor/master teacher or field supervisor during the 2011–2012 school year. Second-year TRP teachers, however, were more likely than their non-TRP counterparts to report having worked with these support staff (49 percent versus about 37 percent). In addition, among those assigned to this type of support staff, the second-year TRP teachers were more likely than their non-TRP counterparts to describe the person as affiliated with their teacher preparation program (46 percent versus about 21 percent). These findings suggest that TRP teachers maintain these support relationships longer than non-TRP teachers, possibly reflecting the TRPs’ delivery of a two-year induction program to former residents.

Perceived Outcomes and Teacher Retention

TRPs aim to produce teachers who are well-prepared to teach high-need subjects in high-need schools and districts. Part of the vision for TRPs is that the teachers they train will have higher retention in high-need schools than teachers trained in other programs. Teachers’ opinions about how prepared they felt for full-time teaching are summarized below. Also summarized are estimates for two sets of retention rates, those of first-year teachers into a second year of teaching and those of second-year teachers into a third year of teaching.

Novice residency program teachers felt more prepared than other novice teachers in the same districts.

TRP teachers were more likely than non-TRP teachers to report having felt prepared, at the start of their teaching careers, for six of eight teaching activities: creating lesson plans (86 percent versus 74 percent), using a variety of instructional methods (71 percent versus 53 percent), assessing students (70 percent versus 49 percent), interacting with parents (64 percent versus 54 percent), selecting and adapting curriculum and instructional materials (64 percent versus 49 percent), and handling a range of classroom management or discipline situations (57 percent versus 40 percent). The activities for which the two groups felt about equally prepared were teaching the subject matter and using technology in classroom instruction.

Novice residency program teachers and other novice teachers in the same districts had similar retention rates.

From spring 2012 to fall 2012—that is, as they moved into their second or third year of teaching—TRP teachers in the in-depth sample did not have higher or lower retention rates than non-TRP teachers in the same six districts. About 92 percent of TRP teachers stayed in the same district, and about 4 percent were no longer teaching. Among non-TRP teachers, about 90 percent stayed in the same district, and about 6 percent were no longer teaching. These were not statistically significant differences. In addition, neither
first-year TRP teachers nor second-year TRP teachers had retention rates that were statistically higher or lower than those of their non-TRP counterparts in the same cohort.

**Future Data Collection and Publication**

This report represents the first and largest of two publications planned for this study. The next publication will examine teacher retention rates using data collected in fall 2013.