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Pathways to Instructional Leadership

Implementation and Outcomes from a Job-Embedded School Leader Training Program

The Pathway to Leadership in Urban Schools (PLUS) is a program aimed at developing the skills of school administrators in the area of instructional leadership. This report focuses on the initial implementation of PLUS in one large urban district, where the program focused on

newly hired school assistant principals (APs). APs in the PLUS program (hereafter referred to as *Leaders*) received coaching and professional development (PD) in their first two years on the job, and they were evaluated with a focus on their instructional leadership contributions. As part of the program, they worked with a caseload of teachers, providing them coaching support and conducting cycles of classroom observations and feedback. In addition to evaluating how the program was implemented, we also evaluated the professional trajectories of Leaders

KEY FINDINGS

Implementation and Perceptions of PLUS

- More than one-third of new assistant principals (APs) in the district participated in Pathway to Leadership in Urban Schools (PLUS), and the program influenced the selection criteria for all new APs in the district.
- Many Leaders—APs in the PLUS program—perceived the job-embedded coaching they received from PLUS staff to be the most valuable component of the program and described their PLUS cohort as a key source of support.
- Most Leaders viewed PLUS as good preparation for the role of school leader, but some desired additional emphasis in areas other than instructional leadership.
- Most Leaders struggled to find adequate time to coach teachers because non-instructional leadership responsibilities often took priority.

Impacts on Participants, Teachers, and Students

- Students of teachers coached by Leaders had somewhat larger English language arts achievement gains than students of comparison teachers who received business-as-usual district supports.
- Teachers whose students had very low achievement gains departed the district at higher rates if they had received coaching and observation from Leaders.
- Leaders were not significantly different from other new APs in the rates at which they remained in the district or were promoted to principal roles.

over time and the impacts of the coaching that they provided to teachers during their participation in the program.

Under the Every Student Succeeds Act of 2015, principals and assistant principals continue to face pressure to promote instructional quality and increased student achievement. Research evidence increasingly demonstrates the important role of school leaders in improving student outcomes (Branch, Hanushek, and Rivkin, 2012; Grissom, Kalogrides, and Loeb, 2015; Leithwood et al., 2004). Although school leaders do not typically have a direct impact on student learning (e.g., through classroom instruction), they can influence student outcomes through their role as instructional leaders (Hallinger, 2011; Heck and Hallinger, 2014). Instructional leadership is characterized by a focus on improving teachers' classroom instruction (Leithwood et al., 2004) and can be an effective way for school leaders to improve student academic outcomes (Leithwood and Jantzi, 2005). In particular, principal leadership activities related to establishing learning goals, coordinating curriculum, and developing teacher learning have been associated with improved student performance (Robinson, Lloyd, and Rowe, 2008), as have such activities as coaching, evaluation, and development of the educational program at a school (Grissom, Loeb, and Master, 2013).

Historically, much of the research on school leadership has focused on principals and their role as instructional leaders (Robinson, Lloyd, and Rowe, 2008). Consequently, there are numerous programs that train principals to be effective instructional leaders and a substantial body of research focused on examining the effectiveness of these programs for improving student and teacher outcomes (Herman et al., 2017). In contrast, the role that APs play in improving student outcomes has not been a focus of much empirical research to date (Searby, Browne-Ferrigno, and Wang, 2016; Oleszewski, Shoho, and Barnett, 2012; Marshall and Hooley, 2006), despite emerging evidence that non-principal administrators focusing on instructional leadership may facilitate improvements in some student outcomes (Steele, Steiner, and Hamilton, 2020). In particular, although instructional leadership in the form of teacher coaching has been shown to be effective at improving

teaching and student learning, it is not clear how best to prepare and support APs to conduct effective coaching to improve teachers' instruction at scale or in a job-embedded context (Kraft, Blazar, and Hogan, 2017).

The AP role, like the principal role, does not always have a precise job description. Historically, the AP role has been focused on discipline rather than on instructional leadership (Barnett, Shoho, and Oleszewski, 2012; Marshall and Hooley, 2006; Oleszewski, Shoho, and Barnett, 2012). As Searby, Browne-Ferrigno, and Wang (2016) note, this is surprising given that the AP role is a common entry point to the principalship. In recent years, however, the increased focus on improving student outcomes has shifted expectations for the AP role. APs are now frequently expected to assume some instructional leadership tasks, such as evaluating teachers, organizing teacher PD, and making decisions about curricula (Robinson, Lloyd, and Rowe, 2008), although few APs report spending substantial amounts of time on such tasks (Hausman et al., 2002). For example, in one small qualitative study, novice Canadian APs reported that they experienced substantial pressure to perform duties historically associated with assistant principalship (e.g., filing paperwork, supervising student events, addressing student discipline issues) and to avoid more instructionally focused tasks (Armstrong, 2010).

Unlike for principals, there have been few studies of induction or PD opportunities for APs, and little is known about the extent to which APs are trained to undertake instructional leadership activities—particularly those relating to observing and coaching teachers to improve classroom instruction. In a multiyear survey of APs in Orange County, California, participants' desire for PD on the topics of student learning, instruction, and curriculum became more important over time (Oliver, 2005). The positioning of the AP role as preparation for the principalship, coupled with a growing expectation that APs engage in instructional leadership, points to the importance of understanding the extent to which APs are ready to undertake such activities and the effectiveness of efforts to develop their capacity in this area.

In this report, we examine a program designed to develop APs' skills in—and to refocus their job responsibilities toward—instructional leadership.

In this report, we examine a program designed to develop APs' skills in—and to refocus their job responsibilities toward—instructional leadership. The PLUS program was developed by TNTP (formerly The New Teacher Project) to recruit and develop promising school leaders. PLUS is a two-year induction and credentialing program designed to help novice school leaders effectively manage teams of teachers, improve teaching through coaching and targeted feedback, and create a supportive learning environment in their schools. Since its inception in 2014, the program operates partnerships with several U.S. cities and trains school leaders in various roles, including principals (e.g., in Philadelphia, Pennsylvania, and Kansas City, Missouri) and lead educators and teacher leaders (e.g., in Camden, New Jersey).¹ Research about the PLUS program in other contexts offers some evidence of small improvements in student math and English language arts (ELA) scale scores and graduation rates, and most participants reported feeling well prepared for school leadership roles (Steele, Steiner, and Hamilton, 2018, 2020).

This authors of this report aim to evaluate the implementation and potential impacts of the PLUS program in its first four years in one large, urban public school district that serves more than 40,000 students in more than 100 schools spanning grades K–12. More than half of students in the district come from socioeconomically disadvantaged backgrounds, more than 80 percent are nonwhite, and more than one-quarter are classified as English language learners. In this district, we focus on three cohorts of Leaders in the two-year program. We discuss the design of the program, its implementation, and the experiences of participants. We also use available district administrative records to examine the effects of the program on students and staff

at schools. The intended audience for this report includes policymakers, practitioners, and academics seeking either to implement or understand the impacts of programs aimed at enhancing K–12 school instructional leadership.

In the next section, we provide a brief description of the PLUS program and its theory of change, after which we detail our research questions and the scope of our evaluation. We follow this with a summary of the data and methodologies used in this study. Next, we analyze the program design in comparison with business-as-usual district practices. Then, we share our findings regarding how PLUS was implemented, including participants' perceptions of and experiences during the program. We then describe our findings regarding the program's impacts. We conclude with a discussion of implications for policy and practice. A separate technical appendix accompanying this report provides greater detail regarding our data, samples, methodology, and results from additional exploratory analyses that we conducted.

The PLUS Program and Its Theory of Change

The PLUS program is intended to promote effective instructional leadership among new school administrators. The program supplements existing administrator selection and induction systems by ensuring that interested administrators receive robust PD and practice in instructional leadership. TNTP based this focus on the growing body of research that suggests that improved student achievement outcomes are linked to school leaders' focus on instructional leadership, particularly coaching of teachers (e.g., Branch, Hanushek, and Rivkin, 2013; Grissom, Loeb, and Master, 2013). The remainder of

Using data collected through [the AP selection] process, PLUS staff worked to recruit interested candidates whose performance indicated the best fit for the instructional leadership training program.

this section describes how the PLUS program was implemented in the district that was the focus of this study.

In this district, PLUS was a state-approved principal credentialing program focused specifically on selecting and preparing APs. Individuals who wish to hold school administrator positions in the district must obtain two credentials: a preliminary Administrative Services Credential that then must be converted into a second administrative credential within five years. Leaders had already earned their preliminary credential, and most sought to earn their second administrative credential upon successful completion of PLUS. The district covered the cost of the PLUS program for APs, while APs who did not take part in PLUS pursued their second certification via other pathways that were not paid for by the district.

As part of the way PLUS was implemented in the study district, PLUS-related criteria and selection screens were integrated into district systems for hiring all new district APs. These new screens included multiple rounds of activities, such as writing exercises, role plays, and interviews. Using data collected through this process, PLUS staff worked to recruit interested candidates whose performance indicated the best fit for the instructional leadership training program. In this way, the program influenced the overall AP recruitment pipeline while also recruiting participants who would take part in PLUS.

The PLUS program was job-embedded and, in the study district, included both PD components and additional expectations of APs to take on instructional leadership roles in their schools. Development activities included a five-day preservice

training component, monthly PD sessions, job-embedded biweekly leadership coaching from PLUS staff, and support from peer Leaders and program alumni. Host principals at Leaders' schools were also expected to facilitate Leaders' PLUS activities and to serve as informal mentors. Additionally, PLUS required Leaders to identify, in coordination with their principal, a caseload of five teachers in their school for whom they would provide formal cycles of instructional coaching and observation. Through this work, Leaders were expected to demonstrate the skills that the program was helping them to develop. The non-instructional and administrative duties required of a school leader, such as budgeting, facilities management, or legal compliance, were not a primary focus of the program. PD on these topics was provided separately by the school district.

Successful completion of the program was assessed by TNTP through an evaluation process common across PLUS programs. All the PLUS programs used the same data, rubrics, and completion criteria to evaluate participants but avoided making comparisons among participants from different programs. There was ongoing assessment of Leaders' progress throughout the program, and they received a formal assessment rating once in each year of the program. TNTP drew on a variety of research on principal evaluation approaches to develop the PLUS process,² which were based on multiple measures of Leaders' performance. These evaluations were conducted in addition to annual district evaluations of all administrators.

In this district, the PLUS program was first established in school year (SY) 2015–2016. This report examines the first four years of program implementation and impacts for the first three

cohorts of Leaders. Cohorts I, II, and III participated in preservice training at the start of SYs 2015–2016, 2016–2017, and 2017–2018, respectively, and each cohort was in the program for two full school years. TNTP and district staff worked together to implement the program during the period of this study, and PLUS was designed to evolve into a district-run selection and training program for school leaders. The partnership was structured so that PLUS staff would work with the district for three years, after which district staff would take full ownership of the program.

TNTP intended that the PLUS program activities and supports described above would have a positive impact on a range of intermediate (1–3 year) and long-term (3–5 year) outcomes, as shown in TNTP’s PLUS program logic model in Figure 1. In addition to training district APs to be instructional leaders and helping them attain the credential that would qualify them for a district principal position, TNTP designed the PLUS program to improve teacher effectiveness and teacher retention in schools. TNTP hopes that, in the long term, the program will help improve student achievement and school culture in Leader-led schools; retain Leaders in the district, who would eventually move into district principal

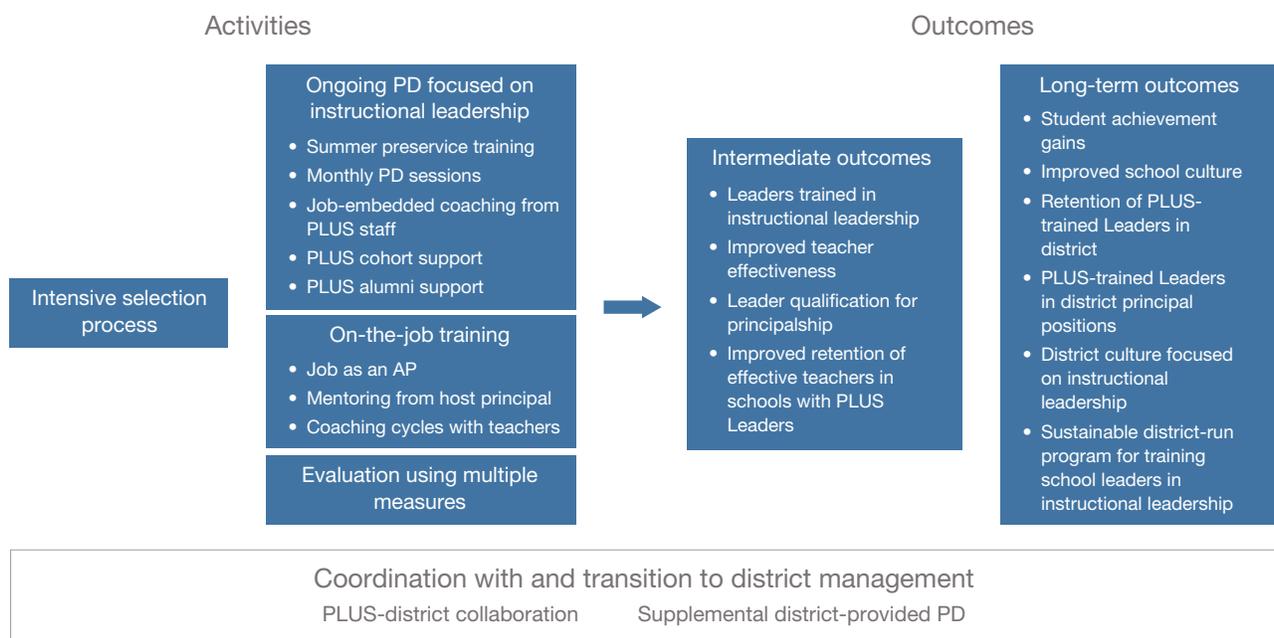
positions; help the district cultivate a culture focused on instructional leadership; and ultimately facilitate a sustainable, district-run program for recruiting and developing instructionally focused school leaders.

Focus of This Report

In this report, we used a combination of data sources to document how the PLUS program was implemented in the study district and to explore some of the potential impacts on staff and students that are hypothesized in the program’s theory of change. We specifically addressed the following four research questions:

1. What were the features of the PLUS program, and how did those features compare with historical district practices for AP selection, training, and support?
2. To what extent was the PLUS program implemented as intended, and what were Leaders’ experiences at each stage of the PLUS program?
3. How did the professional trajectories of Leaders compare with those of other new APs in the district?

FIGURE 1
TNTP’s PLUS Program Theory of Change



4. To what extent did Leaders influence the student achievement outcomes or job-retention outcomes of teachers that they coached as part of the PLUS program?

Our evaluation budget for studying the implementation and impacts of the PLUS program was limited. As a consequence, we focused on aspects of implementation and impact that we could address using data collected in a cost-efficient manner. Our data included program documentation and implementation metrics collected by TNTP and information from recurring background interviews with TNTP staff, supplemented with primary data collection in the form of phone interviews with PLUS program participants as they went through each stage of the program. We used this combination of primary and secondary data to evaluate the fidelity of program implementation and how it was experienced by Leaders. We also worked with the district to access longitudinal administrative records on school leaders, teachers, and students. Using these administrative data, we evaluated some of the potential impacts of PLUS. However, we were unable to address several of the hypothesized impacts in the program's theory of change, including impacts on district and school culture and intermediate impacts on Leaders' and teachers' practices.

In the following section, we first summarize our available data and our methodology. Then, we address each of our four research questions, presenting findings related to the unique features of PLUS, its implementation, and the available evidence of impacts that PLUS had on administrator and school outcomes. We conclude with a discussion of implications and directions for future research.

Data Sources and Methods

Implementation Data and Analyses

TNTP provided us with access to administrative and program data that we used in combination with other sources to analyze program implementation. TNTP tracked (1) Leaders' participation in PLUS training, PD, and coaching activities, (2) data on which teachers were coached by Leaders during

their participation in the program; and (3) the performance of Leaders in the program as part of their assessments of Leader performance. In addition, TNTP provided extensive background materials related to PLUS systems and performance standards. We also conducted background interviews at regular intervals over the course of the study with TNTP staff who managed the program. We used these interviews to gain an overall understanding of the program's design and intended implementation and to explore the evolution of the program over time and in response to new challenges and opportunities.

We supplemented the program data and background interviews with interviews with half of the Leaders in Cohorts I, II, and III during the two years they participated in PLUS and one year after completing the program. Following a semistructured protocol, the interviews allowed us to document leaders' experiences in the PLUS program and to gauge their perceptions of program utility; these interviews provided an additional data source that allowed us to assess some aspects of program implementation (e.g., PLUS-provided PD sessions, job-embedded coaching, Leaders' coaching of teachers, host principal supports).

We analyzed the implementation data to address the first and second research questions using qualitative analysis coding software and coded these data using a thematic codebook. We structured the codebook to capture PLUS program components and how they changed over time, implementation details, and Leaders' experiences and to enable analysis of similarities and differences over time, across cohorts, and across Leader characteristics. To address the first research question, we summarized the coded data to describe each program component as described by TNTP staff and Leaders, including changes over time and descriptions of current district practices. We then triangulated the interview data with the program materials and descriptions provided by TNTP to generate our final description of each program component.

To address the second research question, we summarized the coded data to capture TNTP staffs' and Leaders' accounts of implementation and Leaders' experiences with the program. We also analyzed the Leader interview data according to a

limited number of Leader characteristics (i.e., school grade level and focus of the AP role). The summaries included common themes across study years and PLUS cohorts as well as cases of disagreement. We did not find many differences across cohorts or across Leader characteristics. We then triangulated the interview data with the implementation fidelity metrics provided by TNTP to assess the extent to which program components were implemented as intended. Additional detail about the implementation data sources, including interview participants, questions asked, and the analytic approach, can be found in the technical appendix that accompanies this report.

Impact Data and Analyses

We focused our impact analyses on Leader, teacher, and student outcomes that could be observed in the available district administrative records. Unfortunately, although the PLUS program documented changes over time in the leadership skills of participating Leaders, there were no similar data on leadership skills for other district APs that would provide a comparison point for these outcomes. We did not independently analyze data from the PLUS program's own Leader evaluations, although TNTP conducted its own analysis of these internal program data. Instead, we reference some of the findings from TNTP's analysis in our findings related to the implementation of PLUS. We also lacked sufficient longitudinal data on school-wide instructional culture and climate outcomes. Therefore, we did not examine whether those outcomes may have been influenced by Leaders' work.

APs' influence on school instructional performance is likely more localized than that of

principals. Given the design and goals of the PLUS program, we expected that its primary near-term impacts on schools might be improvements to instructional efficacy and job retention among those teachers who worked most closely with Leaders through the formal cycles of observation and coaching that Leaders ran as part of the program. Program participants' professional success might also be apparent in Leaders' own progression and retention in the district.

To facilitate our impact analyses, we collected administrative and program data about administrators, teachers, and students. These data included individual student demographics and achievement data from multiple school years, links between students and their teachers and schools in each year, and data about administrators, including whether they participated in PLUS and, if so, which teachers they coached as part of the PLUS program.

Using the available district administrative data, we conducted the following analyses of impact for this report:

- **Analysis of Leaders' rates of retention in the district.** We compared the rate at which Leaders were retained in the district with that of other new APs who did not participate in PLUS. We focused exclusively on new-to-the-role APs in both the PLUS and comparison groups to allow for a fairer comparison. In theory, an effective PD program could have improved the rate at which new APs remained in the district by improving their working experience.
- **Analysis of Leaders' rates of promotion within the district.** We also examined whether Leaders tended to be promoted to principal positions within the district earlier

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than other new APs who did not participate in PLUS. In theory, new APs who were invited to join PLUS and received PLUS supports may have been stronger instructional leaders and, as a consequence, promoted to principal roles at a higher rate.

- **Analysis of the effects of Leaders on achievement gains for the students of teachers that they coached.** We examined whether the students of teachers coached by Leaders during their time in the program had greater achievement gains than students in the same school who were taught by comparable teachers who did not receive Leader coaching. In theory, Leader coaching may have been more helpful for teachers than “business-as-usual” supports provided to teachers by the district. This analysis was limited to teachers of students in tested subjects in grades 4–8.
- **Analysis of effects of Leaders on the job retention of teachers that they coached.** We examined whether teachers coached by Leaders were more likely to remain in the district than comparable teachers in the same school. In addition, because Leaders had different goals for teacher retention depending on teachers’ job performance, we explored retention effects separately for subgroups of teachers who differed with respect to their students’ achievement gains.

As we discuss in the following section, our analyses of Leaders’ effects on coached teachers is not representative of all of the longer-term instructional impacts that Leaders may have had. Nevertheless, participation in the PLUS program represented a shift in role expectations for a substantial number of new APs in the district, and one with potentially important implications for students and teachers in the district. We considered Leaders’ coaching assignments to be a useful indicator of the teachers most directly affected by APs’ participation in the PLUS program.

We did not anticipate that the impacts of PLUS APs on school-wide student achievement outcomes would be large enough to reliably detect given their limited span of control and our limited sample

size of PLUS-led schools. Their effects on schools may have also been confounded with principals’ effects on schools. Nevertheless, following prior research on another instance of the PLUS program (Steele, Steiner, and Hamilton, 2020), we conducted exploratory analyses of trends in PLUS-led school performance over time after the placement of a PLUS AP. These exploratory analyses, as well as all of our analytic data, methods, and limitations, are discussed in greater detail in the technical appendix accompanying this report.

Limitations

As previously discussed, our ability to evaluate the implementation and impacts of PLUS was limited by our available data and project resources. In particular, our research budget did not allow us to conduct interviews beyond those with Leaders and selected TNTP program staff. We were unable to interview non-PLUS APs, host principals, or district staff, which hampered our ability to fully document the extent to which some aspects of the program were implemented. In addition, the data available did not allow us to rigorously assess implementation quality.

The interview data used in the implementation analysis provided information about program implementation and a rich picture of Leaders’ experiences during and after their tenure with the PLUS program. At the same time, note that the limitations of interview data, which are self-reports, are thus subject to various biases, such as social desirability. Moreover, although the interview data are crucial for providing context and include approximately half the Leaders in each PLUS cohort, the perceptions of the Leaders in this sample may not be representative of the full population of Leaders.

Our impact analyses also had important limitations. First, the impacts that we were able to evaluate provided an incomplete picture of all of the potential contributions to school, staff, and student performance that are hypothesized in the PLUS logic model. Our analyses aimed to provide clues about the impact of the program, not to serve as a comprehensive assessment. In particular, we had limited information on the longer-term impacts of Leaders after they completed the two-year program.

The PLUS program was in many ways a district-wide reform with the potential for broader impacts on district culture and practice. It influenced how APs were selected across the district, and it ultimately enrolled a substantial portion of all APs in the district.

In theory, fully trained PLUS alumni would have larger impacts on teacher and student outcomes later in their careers. Unfortunately, the district did not keep records of PLUS alumni's instructional leadership work with specific teachers. In addition, we did not examine Leaders' effects on teachers over the long term but focused instead on the contemporaneous effects of coaching in the year in which it occurred.³ Finally, we lacked sufficient data on teachers not coached by Leaders to conduct a comparative analysis of impacts on outcomes more proximal to APs' work, such as changes in teachers' instructional practice or to the school-wide instructional culture or climate.

There are also some limitations that may have influenced the results of our analyses, and these should be kept in mind when interpreting our results:

- **Coaching was steered toward teachers with fewer supports.** Leaders were encouraged to coach teachers who were not already receiving coaching and other supports. As a result, it is likely that our measures of Leader coaching effects are benchmarked to some extent against the impacts of other unobserved PD provided to some comparison teachers. The most common support of this type that we are aware of was a district-wide induction program for new teachers that involved biweekly coaching with a focus on formative assessment practices. Comparing Leader coaching to the business-as-usual supports provided to some comparison teachers would

be expected to bias our estimates of Leader impacts downward.

- **Lack of pretreatment data on coached teachers' performance.** When analyzing coached teachers' impacts on student achievement, we did not control for teachers' effectiveness in prior school years because of a lack of historical performance data for most coached teachers.⁴ A specification check that we conducted indicated that this limitation may have introduced some bias to our estimates of Leader impacts on student achievement, again in a downward direction. We discuss this and other limitations of our analyses in greater detail in the technical appendix of this report.

Finally, the PLUS program was in many ways a district-wide reform with the potential for broader impacts on district culture and practice. It influenced how APs were selected across the district, and it ultimately enrolled a substantial portion of all APs in the district. It also introduced new expectations for APs in the area of instructional leadership and for their school principals who were asked to provide mentorship and support. Although we did not evaluate the effects of the program on the district overall, we recognize that this was an important area of potential impact for PLUS.

PLUS Design and Implementation

What Were the Features of the PLUS Program and How Do They Compare with Historical District Practices for AP Selection, Training, and Support?

In this section, we draw on PLUS program data provided by TNTP and background interviews with TNTP staff to address the first research question. In Table 1, we provide a brief description of the PLUS program following TNTP's theory of change displayed in Figure 1. The table summarizes the primary components of the program and describes the aim, key activities, and changes over time and contrasts each component with general district practices that were in place. As we mentioned earlier in the report, the PLUS program itself was designed to transition to district management after three years of grant-funded collaboration with TNTP. This hand-off occurred gradually, with the district taking over full management of the program after the third year of implementation.

While TNTP was managing the program, the first component of PLUS that was implemented was a redesign of how APs were selected in the district. Following the introduction of PLUS, all new AP candidates participated in multiple rounds of individual and group interviews and responded to writing prompts anchored in real-world scenarios to assess leadership skills.⁵ The PLUS selection process was not used in the first year of the study (SY 2015–2016) because the district had already hired APs for that year. To fill Cohorts II and III, TNTP was able to use its selection model to recruit novice APs with an interest in instructional leadership. All AP candidates in the district went through the same selection process, but invitations to take part in PLUS were extended to a subset of APs hired in the district in SYs 2016–2017 and 2017–2018 (study years 2 and 3). New APs who were not selected to participate in PLUS could obtain their second administrative credential through the state's school administrator association, but the district did not cover the cost.

The PLUS program was designed to serve 12–15 Leaders per cohort, a number that aligned with

program capacity. PLUS candidates were identified from the pool of AP applicants based on their scores in the selection process; the highest-scoring candidates were recruited to PLUS, provided they were interested. The selection process aimed to identify APs who had some instructional expertise and displayed the characteristics that TNTP considered necessary in a strong instructional leader. Over time (study years 2–4), district staff (particularly assistant superintendents, who were responsible for hiring APs) became more involved in the selection process, and PLUS staff provided commensurately less support. PLUS and district staff also worked together over time to revise the content of interview activities so that it reflected district priorities and continually refined the interview process to improve candidates' experiences. There were three different AP roles in this district: one focused on pupil services, one focused on curriculum and instruction, and one had a general focus that encompassed both pupil services and curriculum and instruction. APs in all three of these roles could, and did, participate in PLUS.

The second main component of PLUS was ongoing PD focused on developing Leaders' instructional leadership skills, with a specific focus on improving teacher practices. In particular, Leaders learned how to observe and provide feedback to teachers to help them improve their instructional practices. Leaders also learned how to improve overall teacher quality through retention; Leaders were taught to encourage high-performing teachers to stay and low-performing teachers to find employment elsewhere. Monthly PD sessions also included dedicated time for cohort support, during which Leaders worked in small groups with their cohort members to solve problems and receive feedback and support. As graduates of the program proliferated in the district, the program vision called for PLUS alumni to informally support other Leaders in their schools, attend PLUS PD sessions as topic experts, and share tips for navigating district systems. In contrast, the district's preexisting AP PD programs, which continued to support both PLUS and non-PLUS APs during the study time frame, focused on the operational and managerial aspects of school leadership (e.g., budgeting, building

TABLE 1
Description of the PLUS Program

Program Component	Aim	Key Activities	Changes over Time	Contrast to General District Practice
Intensive selection process	Select applicants with the highest potential for success as instructionally focused APs.	<ul style="list-style-type: none"> • Candidates selected for all open AP positions through multiple rounds of interviews and activities • Multiple activities, including writing prompts and scenario-based case studies, used to evaluate candidates' real-world skills and characteristics of a strong instructional leader. • PLUS staff support of district assistant superintendents in selecting new APs • PLUS candidates invited to participate based on high scores during selection and their interest in the program; candidates completed an additional interview with PLUS staff 	<ul style="list-style-type: none"> • The selection process was not used to hire APs or select Cohort I Leaders in the first year of the study because APs had already been hired by the district. • After Cohort I, all AP candidates went through one concurrent process for their school-based position and for the PLUS program. • Over time, TNTP staff played an increasingly smaller role, and district staff played an increasingly larger role in the AP screening and selection process. • Revisions were made to the content of interview activities to respond to district priorities and context and process changes were made to improve candidates' experience. 	<ul style="list-style-type: none"> • After Cohort I, the selection process was the same for PLUS and non-PLUS APs. However, APs with the highest scores during the selection process (indicating potential for success as instructional leaders) and interest in the PLUS program were selectively recruited into PLUS from among all new AP hires.
Ongoing PD focused on instructional leadership	Develop APs with strong leadership practices, focusing on instructional leadership and improvement.	<ul style="list-style-type: none"> • Five-day preservice training in the summer prior to the first year of PLUS • Biweekly in-person coaching • Monthly daylong PD sessions in the first year of the program; every other month in the second year • Support from PLUS cohort members • Support from PLUS alumni 	<ul style="list-style-type: none"> • Leaders in Cohorts I and II were coached by TNTP staff coaches; Cohort III Leaders were coached by district staff coaches. • After the district assumed sole management responsibility, the PD included more non-instructional aspects of school leadership and district context. 	<ul style="list-style-type: none"> • Other district PD for APs was not focused on instructional leadership. PD sessions covered operational and administrative topics, such as budgeting, facilities management, and legal compliance.

Table 1—Continued

Program Component	Aim	Key Activities	Changes over Time	Contrast to General District Practice
On-the-job training	Develop APs with strong instructional leadership practices. Require APs to observe and coach a caseload of teachers to improve teacher performance and student learning.	<ul style="list-style-type: none"> Leaders' responsibilities focused on instructional leadership Six- to eight-week coaching cycles with caseloads of five teachers, which includes weekly coaching conversations and formal observations using an instructional rubric to track teacher improvement and analyze student work for alignment with grade-level content Work to support selective retention among coached teachers Mentoring from host principal 	<ul style="list-style-type: none"> Caseloads of teachers that PLUS required Leaders to coach decreased from five to three when the district assumed sole management of the program. The district adopted the TNTP Core Teaching Rubric for teacher coaching and development. Host principals in years 2–4 received additional guidance and some training around expectations for mentoring and supporting Leaders. 	<ul style="list-style-type: none"> APs' instructional leadership responsibilities were assigned at the discretion of the school principal. APs in the curriculum and instruction role were generally responsible for observing and evaluating teachers, but APs in the pupil services role were not. Induction training was provided to novice teachers. Teachers in schools with district coaches received some coaching support, separate from any Leader coaching. Leaders were encouraged to coach teachers who were not receiving other coaching supports.
Evaluation using multiple measures	Assess the leadership skills of APs using a research-based evaluation system that includes multiple measures. Reference APs' own assessments of the teachers they coached.	<ul style="list-style-type: none"> 360-degree survey completed by Leaders' coach, coached teachers, and host principal Normed on TNTP Core Teaching Rubric Coached teacher improvement on TNTP Core Teaching Rubric Normed on student work-analysis rubric District-specific measures of student outcome improvement School vision that meets TNTP standards 	<ul style="list-style-type: none"> The approach to measuring coached teachers' student improvement shifted from using available student assessments to analyzing examples of student work for grade-level content. 	<ul style="list-style-type: none"> General district practices for evaluating administrators involved principals observing and evaluating APs' performance on the district leadership competencies yearly. APs and principals met to develop a leadership plan focused on a selection of the competencies. This leadership plan provided the basis for the end-of-year evaluation.

management) and did not include instructional leadership.

Another aspect of PLUS PD was job-embedded coaching from PLUS coaches for all Leaders in the program. In the first two years of the program, coaches were TNTP employees—generally experienced former principals—who were specifically trained to coach school leaders. We refer to these coaches as *TNTP staff coaches*. In the third year of the study (SY 2017–2018), as responsibility for executing the program began to transition from TNTP to the district, coaches included district employees, such as former principals and staff from the district's office of professional learning and leadership, in addition to TNTP staff coaches. We refer to these coaches as *district staff coaches*. These

district staff coached Cohort III Leaders during their two years in PLUS, and TNTP staff continued to coach Cohort II Leaders.

The third PLUS component involved on-the-job training. Leaders were employed as APs and were expected to practice instructional leadership through coaching a caseload of teachers. This coaching included repeated cycles of observation and feedback aligned with the TNTP Core Teaching Rubric, which was ultimately adopted by the district for use in teacher development. As part of their coaching work, Leaders were also expected to encourage high-performing teachers to remain teaching and to help steer persistently low-performing teachers toward exiting the district. In the first two cohorts, PLUS expected Leaders to coach a caseload of five

teachers; subsequently, this caseload decreased to three teachers. Leaders were encouraged to coach teachers who were not receiving other coaching supports. All Leaders were expected to meet this coaching expectation regardless of the focus of their AP role. APs in the curriculum and instruction role generally did have responsibility for observing and evaluating teachers, but for APs in the pupil services role, including some who were in PLUS, this was not a primary expectation of the job. For non-PLUS APs, instructional leadership responsibilities were assigned at the discretion of their school principal and in accordance with their job role.

The program vision called for host principals to informally mentor the Leaders in their buildings. However, host principals were not selected by PLUS for participation. Rather, any principal who had a PLUS AP in the building became a host principal by default. PLUS program staff did offer some guidance and training sessions starting in the second year of the study for host principals, but, on the whole, expectations were informal.

In the fourth PLUS component, Leaders were evaluated on multiple measures in a process developed by TNTP. This evaluation was distinct from and in addition to the general district evaluations for APs. As described in Table 1, this supplemental evaluation had multiple components. These included 360-degree surveys of the Leaders' performance, which were completed by the Leader, PLUS coach, mentor, principal, and teachers whom the Leader coached; evidence that the Leader could reliably assess teacher performance on the TNTP Core Teaching Rubric; evidence that the performance of teachers coached by the Leader was improving, as measured by the Core Teaching Rubric; PLUS coach determination of the ability of Leaders to assess the quality of student work; improvement on local measures of student performance set by the districts; and evidence of the development of a school vision plan according to TNTP goals. Taken together, the scores on these individual measures added up to 100 points. A score of 60–100 points was considered “principal ready” and 40–59 points was considered “leader ready”—that is, ready for school leadership but not yet prepared for a principalship. Leaders with a score below 40 would not earn certification through

the program. The Leader evaluation process changed only slightly across the course of the study to adjust to the district's changing student-assessment policies. At the beginning of the study, Leaders tracked student progress using available assessments. As the district phased out its use of these assessments for student progress-monitoring, PLUS focused the student outcome portion of the Leader assessment on analyzing student work. Leaders were therefore trained to assess examples of student work for grade-level content as part of their coaching of teachers.

In the next section, we draw on our interviews with Leaders, background interviews with TNTP staff, and program implementation data to describe the extent to which the program was implemented as intended.

To What Extent Was the PLUS Program Implemented as Intended, and What Were Leaders' Experiences at Each Stage?

Intensive Selection Process

A substantial portion of new APs in each year participated in PLUS. Table 2 provides an overview of the scale of PLUS recruitment over time. In addition to revamping the overall hiring process for all new APs in the district, PLUS recruited and prepared 37 percent ($n = 31$) of new APs hired in the district across its first three cohorts. Cumulatively after three years of the program, Leaders represented 36 percent ($n = 29$) of all APs working in the district.

In Table 3, we summarize the characteristics and initial school assignments of Leaders compared with other new AP hires. Leaders were more likely than other new APs to work in middle schools or K–8 schools and somewhat less likely to work in high schools. Demographically, they were less likely to be women. They also were less likely to be black or Asian than other new APs. However, it is difficult to make a clear demographic comparison between Leaders and other new APs because Leaders were more often classified in the other category in terms of their race and ethnicity.

TABLE 2

Total and New District APs and Proportion Who Participated in PLUS, 2015–2016 Through 2017–2018

	2015– 2016	2016– 2017	2017– 2018
Total district APs	80	89	80
Total PLUS APs (and alumni) in the district	12	23	29
Percentage of district APs from PLUS	15	26	36
PLUS APs new to the AP role	11	10	10
Non-PLUS APs new to the AP role	16	21	15

NOTE: APs who transitioned to another position (e.g., principal, central office) do not appear in this table. New PLUS APs and new non-PLUS APs were individuals who were new to the role of AP in the district but may have held other roles in the district previously. Across the three cohorts, 31 out of a total of 37 Leaders were new to the AP role in their first year.

Most Leaders did not have prior experience working as APs in the district prior to beginning PLUS, and they tended to have less experience in other roles in the district than other new AP hires. Separately, in our interviews, we asked Leaders to describe any prior leadership or coaching experience they had; about half reported that they had some prior experience. Some Leaders reported that they had held positions as coaches, and others had reportedly held positions as teacher leaders or school administrators.

Across the three cohorts of Leaders that we examined, there were two participants who were initially selected to be in the program but who dropped out of the program early in their first year, and district records do not identify them as affiliated with the program. PLUS staff described these two cases as being individuals who did not fully engage in the program and were “counseled out” as a result.

Most Leaders’ professional goals were aligned with the PLUS focus on instructional leadership. We asked first-year Leaders to describe their professional goals for participation in PLUS. Most reported that they hoped to improve their instructional leadership skills, obtain their second administrative credential, and ultimately attain a principal position in the district. Not surprisingly, these Leaders’ reported goals were well aligned

with PLUS program objectives. Leaders’ goals that related to improving their leadership skills included improving their confidence as leaders, improving their communication skills, building trust with teachers and staff, using data effectively, and understanding and recognizing good teaching. Some Leaders also hoped to improve their skills coaching teachers and aspired to increase the amount of time they spent coaching teachers, improving instruction through coaching, and creating a culture of coaching in their schools. In addition, most Leaders aspired to be a school principal, and about half of those who wanted to be a principal hoped to stay in the district. The Leaders who did not plan to seek a principal position in the district cited a high cost of living, district expectations, and district politics as deterrents.

Ongoing Professional Development Focused on Instructional Leadership

Leaders were expected to participate in three structured PD activities: a summer preservice training (for Leaders in their first year of the program), biweekly coaching sessions (in both years), and one PD day each month (for Leaders in their first year; for Leaders in their second year, the PD day occurred every other month). PD activities focused on developing Leaders’ instructional leadership skills—with the goal of ultimately improving student achievement—in their schools. PLUS PD was designed so that peer supports—from others in the cohort and from PLUS alumni—were a component of the monthly in-person PD sessions. The coaching sessions that Leaders received from PLUS staff were conducted at Leaders’ schools and overlapped with their on-the-job training as APs in their schools. In this section, we discuss the coaching sessions as part of the instructionally focused PD. We also discuss the other aspects of on-the-job training, such as coaching caseloads of teachers and mentoring from host principals, in the later section about on-the-job training.

TABLE 3

Characteristics and Initial School Assignments of New APs, 2015–2016 Through 2017–2018

	PLUS APs New to the AP Role	Non-PLUS APs New to the AP Role
School assignments		
Percentage elementary school	25.7	31.2
Percentage middle school	28.9	21.3
Percentage high school	29.0	38.6
Percentage K–8 school	12.9	7.9
Percentage other	3.2	2.0
AP characteristics		
Years of prior experience in other roles in the district	6.3	9.7
Percentage women	48.5	67.4
Percentage Hispanic	9.6	9.9
Percentage black	6.4	17.4
Percentage white	48.5	40.7
Percentage Asian	6.4	21.5
Percentage other race and ethnicity	25.7	11.8
Total <i>n</i>	31	52

Preservice Training

Preservice training was implemented as intended and focused on developing Leaders’ instructional leadership skills. The preservice training consisted of a five-day workshop in the summer prior to the Leader’s first year as an AP. Program attendance records indicate an average preservice session attendance rate of 94 percent. According to PLUS program documentation, preservice training topics focused on instructional leadership, accurate observation and evaluation of instruction, and coaching teachers. Topics included exploring leadership styles, setting goals to build stronger relationships with school community members, and use of the TNTP Core Teaching Rubric in teacher observation and feedback cycles. Using the Core Rubric to observe teaching practice, analyze instruction, and determine focus areas for teacher growth was a key focus of preservice training. Leaders were also trained in reliable use of the rubric and practiced achieving consistent ratings across multiple observers. Our interviews with TNTP staff

who organized and led the preservice training are consistent with program documentation.

In-Person Coaching

PLUS in-person coaching was job-embedded, but the focus on instructional leadership topics shifted over time. Our interviews with Leaders and staff, as well as program materials provided by TNTP, confirmed that coaching was job-embedded; it occurred at Leaders’ school sites and focused on topics that arose in their daily work as APs. Program coach logs indicated that all Leaders met with coaches at least once every two weeks, with meetings lasting from 90 to 120 minutes each. These data sources also confirm that the coaching provided by TNTP staff coaches was focused on instructional leadership—particularly helping Leaders develop their skills as coaches of teachers.

Our interviews with Leaders are consistent with the program data. The Leaders we interviewed reported that they met with their TNTP staff biweekly during their first year in the program.

Some Leaders reported that the biweekly meetings continued in their second year of PLUS, while some reported less frequent—generally monthly—meetings during the second year as a result of the Leader having difficulty scheduling a time. Leaders and PLUS staff reported that TNTP staff coaches accompanied Leaders on classroom observations and feedback sessions with the teachers that the Leader coached. TNTP staff coaches provided feedback to the Leader to help the Leader improve coaching of teachers. Generally, Leaders and their coaches worked together to determine the agendas for coaching meetings, which were generally focused on instructional coaching and leadership (e.g., designing PD for teachers, providing targeted feedback). Most Leaders reported that coaching sessions also focused on a range of skills needed for successful leadership, such as time management and delegating tasks.

Cohort III Leaders, who were coached by district staff coaches, reported the expected frequency of meetings held at their school sites but described a broader range of topics covered in coaching sessions. The Cohort III Leaders we interviewed reported that their district staff coaches spent less time addressing how to coach teachers and more time focused on non-instructional topics (e.g., navigating district systems and politics) than Leaders coached by TNTP staff coaches. Our interviews with PLUS staff confirmed Cohort III Leaders' reports of this shift in emphasis.

Leaders perceived the job-embedded coaching they received to be the most valuable component of the PLUS program. Nearly all the Leaders we interviewed across study years and cohorts viewed

Leaders perceived the job-embedded coaching they received to be the most valuable component of the PLUS program.

the coaching component of PLUS as a key strength of the program and a crucial support for their work as APs. Leaders valued their coaches' experience and described close, supportive relationships that helped Leaders solve problems in the moment and build their skills as APs. Leaders particularly valued receiving honest feedback and support on a variety of topics central to effective school leadership but not directly covered in the PLUS PD sessions. These topics included time management, delegating tasks, having difficult conversations with teachers, providing actionable feedback to teachers, and working with host principals who did not prioritize instructional leadership. Leaders said that their PLUS coaches helped them solve problems that came up in their AP roles, and several observed that the high quality of the coaching support was unique to PLUS and not something other school leadership programs offered. In addition, several Leaders noted that their coaches helped build their confidence as school leaders. In the 2019 interviews, several PLUS alumni expressed the wish that they still had access to their PLUS coach. Cohort III Leaders, who were coached by district staff coaches, were as positive about their coaching support as Leaders in other cohorts, even though the topics emphasized were slightly different, as we noted above. Overall, these findings are consistent with prior research, in which novice school leaders in other programs reportedly found value in coaching and mentoring and noticed improvements in their leadership practice (Knechtel et al., 2015; Steele, Steiner, and Hamilton, 2018; Turnbull et al., 2016).

Monthly Daylong PD Sessions

PLUS in-person PD sessions occurred as scheduled and topics focused on developing Leaders' skills instructional leadership. Our interviews with PLUS staff and review of program documentation indicated that in-person PD sessions were held monthly and attended by Leaders in their first year of the program (Leaders attended these workshops every other month during the second year of the program). Leader attendance rates at PD sessions averaged 92 percent. These program data are consistent with our interview data, in which some

Leaders mentioned that they were sometimes unable to attend PD sessions, generally because their host principals pressured them to prioritize their AP job responsibilities.

According to TNTP staff, Leaders, and program documents, monthly PD sessions included topics similar to those covered in the preservice training (e.g., use of the TNTP Core Teaching Rubric for classroom observation), use of coaching cycles to help teachers improve their practice, and dedicated time to practice coaching and leadership skills, such as holding post-observation conferences and giving targeted feedback. In later years of the program, topics covered in the monthly PD sessions expanded to include analysis of student work as an indicator of student learning and as a tool for instructional improvement, equity, strategies for teacher retention, and strategies for supporting continuous improvement (e.g., professional learning communities). Monthly PD sessions also included dedicated time for cohort support, when Leaders worked in small groups with their cohort members to solve problems and receive feedback and support. In addition, according to TNTP staff, PLUS alumni occasionally attended these sessions in the third year of the study to serve as content experts (e.g., on data use) and to share tips about how to navigate district systems.

Leaders valued PLUS PD sessions but suggested areas for improvement. Across cohorts and years, most Leaders found the summer preservice training and monthly PD days to be helpful for preparing them for their role as APs in the district. Many Leaders shared that the PLUS PD sessions were specifically designed for their role as APs and valued that the material they learned in those sessions was easy to apply directly to their work in schools. As one Leader said, in 2017:

[PLUS PDs] supported me with refreshing my memory but also giving me some tools that I can rely on and then share with my teachers and support them with. Especially with the Common Core [state standards, which are] still relatively new in our district and any kind of resource or support I can provide teachers with to help them with that is good. I have

A majority of Leaders viewed PLUS as good preparation for instructional leadership, even if they could not always use their coaching skills.

appreciated that I feel more comfortable about talking to teachers about [the Common Core].

However, several Leaders in all cohorts and years felt that PLUS PD could be improved. These Leaders reported that they found PLUS PD to be repetitive and that it excluded some topics that were priorities for their role as district APs. For example, a few Leaders reported that most PD sessions included time to practice observing and rating teacher practice using the TNTP Core Teaching Rubric and found this to be repetitive. Other Leaders wished they had PLUS support in compiling data for their school performance plan or training from PLUS on creating a master course schedule for their school. In addition, several Leaders said that it was difficult to find the time to leave their schools to attend PLUS PD for a full day. But a majority of Leaders across study years and cohorts found PLUS PD to be valuable despite these challenges.

A majority of Leaders viewed PLUS as good preparation for instructional leadership, even if they could not always use their coaching skills.

Nearly all the Leaders we interviewed across the four years of the study agreed that the PLUS program prepared them to be good instructional leaders and prepared them to effectively coach teachers with the goal of instructional improvement. One Leader described their experience as follows:

Absolutely [PLUS is adequately preparing me for my school leadership responsibilities].

Leaders described their PLUS cohort as a key source of support, but alumni support was informal and not yet a well-developed component of the program.

PLUS is a big reason why I am still in this job when I had many reasons why I didn't have to be an administrator anymore. PLUS reminds us that being an administrator is not just about running a school but is also about helping other teachers improve so that ultimately our students can do better—and so PLUS puts students back in the forefront of what we do as administrators. If I can help five teachers improve their practice, then 500–600 students are getting better. I think PLUS has been beneficial for me and has kept me in this line of work because it forces us to look at that.

However, almost all Leaders acknowledged that they were often not able to use their coaching skills as much as they would have liked because the non-instructional aspects of their jobs were so demanding. For example, many of these Leaders reported that they struggled to find time to visit the classrooms of the teachers they coached and had difficulty scheduling coaching conversations with teachers because their jobs required that they address student behavioral incidents, building-management issues, and parent concerns as they arose.

According to most Leaders, PLUS was good preparation for the role of school leader, but some desired a focus beyond instructional leadership. In each year of the study, a majority of the Leaders we interviewed said that PLUS was doing a good job of preparing them for the role of school leader. However, some Leaders noted that PLUS was not preparing them for the non-instructional aspects of school leadership, such as budgeting, community relations, staffing, or legal compliance, and wished that PLUS would include these topics. Although the district's typical AP PD nominally included these topics, at least some Leaders we interviewed desired more of a

balance between instructional and non-instructional topics in their training from PLUS. The extent to which Leaders viewed the focus on instructional leadership as a concern varied. Some Leaders opined that preparation for coaching teachers was the most important skill they could learn as APs; others said that they knew the program focused on instructional leadership and did not expect preparation in other areas. Still others wished that PLUS could expand its focus beyond instructional leadership. These Leaders reported that non-instructional responsibilities were a large part of their job and did not feel that PLUS was adequately preparing them for those aspects of the school leader role. In the words of one Leader, "I think it [PLUS preparation] would not be sufficient alone," implying that preparing Leaders for other non-instructional duties was important. These reports are consistent with a recent study of another PLUS program in a midsize urban district. The PLUS participants in that study also expressed a desire to learn about the operational and managerial aspects of school leadership (Steele, Steiner, and Hamilton, 2018).

Support from PLUS Cohort Members and Alumni

Leaders described their PLUS cohort as a key source of support, but alumni support was informal and not yet a well-developed component of the program. Our interviews with PLUS staff and Leaders indicate that the monthly PD sessions included time for Leaders to work with their fellow cohort members to troubleshoot issues they were facing in their jobs as APs. Across cohorts and years, most Leaders agreed that their PLUS cohort was an important source of emotional and professional

support. In each year of the study, Leaders talked about using their cohort as a sounding board for brainstorming solutions to challenges they were having in their jobs. Leaders also talked about how they valued having a group of like-minded colleagues with whom they could “vent” during their PD sessions. In addition to seeking support from cohort members during face-to-face PD sessions, some Leaders said that they connected with one another through email or text message and, in some cases, these relationships lasted into their first year as PLUS alumni. We found that most Cohort III Leaders who participated in the 2019 interviews reported particularly strong ties with others in their cohort, possibly because they were still in the second year of the two-year program.

The value of cohort support described by Leaders in this district is consistent with findings from other research. For example, PLUS participants in another district found similar value in support from their cohort members (Steele, Steiner, and Hamilton, 2018), as did participants in a recent evaluation of the New Leaders Aspiring Principals program, which similarly aims to partner with school districts and charter management organizations to train principals in instructional leadership (Gates et al., 2019).

As we described earlier, the vision of the PLUS program called for alumni to occasionally attend monthly PD sessions as content experts and to share guidance on navigating district systems. TNTP staff reported that some program alumni did attend the monthly PDs for this purpose. However, this type of alumni involvement had little chance to mature because only one cohort of Leaders had graduated prior to the district assuming sole management of the program. In addition, as the PLUS program matured, and as Leaders proliferated in the district, some Leaders worked in the same school as another Leader or PLUS alum. In the last two years of the study (SYs 2017–2018 and 2018–2019), we asked Leaders who worked in a school with another Leader or alum the extent to which that Leader or alum served as a source of support. The extent to which Leaders reported feeling supported by other Leaders or alums at their school varied. For example, one Leader said that the other Leader in their school was their “biggest support at the school,” while another said

TNTP staff reported that many Leaders found it difficult to make time to conduct coaching cycles as frequently as intended.

that the other Leader in their school held a different role, which made collaboration difficult. This variation in support from Leaders in the same school is consistent with TNTP staff accounts, which noted that the expectations for support of this type were not formal or systematic.

On-the-Job Training

Most Leaders struggled to coach five teachers on a weekly basis. According to program documentation and interviews with PLUS staff, Leaders were initially expected to coach a caseload of five teachers per year while participating in PLUS. Leaders were trained to engage in “coaching cycles” with teachers. Each coaching cycle was six to eight weeks and was expected to include weekly classroom observations using the TNTP Teaching Core Rubric, a post-observation discussion in which the Leader and the teacher agreed on an area of instructional practice that the teacher would work to improve, and the Leader providing the teacher with targeted feedback and suggestions to support improvement. However, TNTP staff reported that many Leaders found it difficult to make time to conduct coaching cycles as frequently as intended. This was particularly a challenge for APs in pupil services roles, in which instructional leadership was not a primary job responsibility.

Our interviews with Leaders reinforced this finding. Most Leaders reported that they were neither able to coach the number of teachers that PLUS expected nor could they meet with them as

Host principals received limited training, and the support they provided to Leaders reportedly varied.

frequently as recommended in the PLUS coaching cycle. Most Leaders we interviewed reported coaching an average of three teachers and meeting with them about every other week. All the Leaders we interviewed reported doing their best to meet PLUS coaching expectations but that it was difficult to find the time because other non-instructional aspects of their job (e.g., addressing student behavior incidents, creating a master schedule) intruded. Most Leaders reported feeling stressed about this tension and unsure about how to prioritize tasks; some felt pressure from their building principals to set aside their coaching responsibilities. A few Leaders reported that they struggled to schedule coaching meetings with teachers because the teacher's schedule was too busy, but this was not a common challenge among the Leaders we interviewed. However, a few Leaders reported that they were generally able to meet PLUS expectations for coaching teachers. These Leaders were more frequently in the curriculum and instruction AP role and reported that their host principals helped them prioritize coaching by allowing them to delegate other responsibilities.

Other coaching supports for teachers may have been a barrier to coaching by Leaders. In our interviews with some Leaders, we heard that another barrier to their coaching of teachers was the presence of other coaches. Our interviews with PLUS staff confirmed that some schools had other coaching supports, such as instructional reform facilitators or literacy coaches, in place for teachers. According to PLUS staff, Leaders were responsible for selecting the teachers on their coaching caseload and were encouraged to coach teachers who were not receiving other coaching. However, the Leaders we interviewed reported that coaching assignments were selected primarily by school principals with input from the Leaders. Principals and Leaders determined which teachers to coach in various ways, including selecting

new teachers and asking teachers if they would like to be coached.

PLUS alumni reported using their PLUS training in instructional improvement to inform teacher feedback and evaluation but often did not engage in formal coaching cycles. We interviewed PLUS alumni of Cohorts I and II one year after they completed the program. PLUS alumni in both cohorts reported that they used their PLUS training, especially in instructional improvement, when providing feedback to teachers and in formal teacher evaluations. For example, one Cohort II leader in 2019 said:

I use the terminology “demonstration of learning” and “culture of learning,” and I specify what I mean by “engagement” and what . . . high-quality assignments should look like. So, I’m able to translate that skillset [from PLUS] into conversations about classroom practice, whether . . . it’s in a sustained and regular ongoing coaching cycle or a one-off evaluation or just me popping in and having follow-up conversations.

However, in line with current PLUS participants, PLUS alumni noted that they still struggled to find the time to engage in full coaching cycles with teachers because their other, more-pressing administrative responsibilities (e.g., addressing student discipline issues, interacting with families) took precedence. It is noteworthy that the several PLUS alumni in both cohorts who had moved into a principal role reported that their new duties further limited their ability to engage in full coaching cycles with teachers.

Host principals received limited training and the support they provided to Leaders reportedly varied. The TNTP staff we interviewed confirmed that host principals were not selected by PLUS for participation in the program. Although TNTP

staff reportedly did their best to informally steer Leaders to accept AP positions with principals who were supportive of PLUS, TNTP staff had little influence over where AP vacancies occurred and where Leaders accepted an AP position. Instead, principals who had a PLUS Leader in their building as an AP became a host principal by default. TNTP staff confirmed that the program did not offer any training for host principals in the first year but did offer training sessions and informal guidance via email for host principals starting in the second year of the study. This informal guidance requested that host principals allow their Leaders sufficient time to conduct weekly coaching meetings with the teachers on their caseload and to attend the monthly PLUS PD sessions. Host principals were also asked to support their Leader by having a meeting with their Leader's PLUS coach and attending the host principal trainings and their Leader's PLUS review meeting.

In the first two years of the study, most Leaders reported that their host principals were generally not aware of the PLUS program and the Leader's PLUS responsibilities. However, we heard fewer reports of host principals being unfamiliar with PLUS in the final two years of the study. Host principals may have become more familiar with PLUS over time as the program expanded and as PLUS began offering information and training sessions for host principals. In at least one case, a Leader believed these sessions were helpful to an extent.

Across cohorts and years, about half of the Leaders we interviewed reported that their host principals were focused on instructional leadership and supportive of their PLUS activities. According to Leaders, supportive host principals provided them with feedback about their overall performance and the time to engage in coaching cycles with teachers and attend PLUS PD sessions. In contrast, some Leaders reported that their host principals did not prioritize instructional leadership and, as a result, did not allow the Leader to prioritize their PLUS activities. Other Leaders who described challenging relationships with their host principal said their host principals were not supportive because they were busy, overworked, and generally unavailable. This finding is consistent with another recent study of a PLUS program, in which participants reported

wide variation in the support and mentorship they received from their principals (Steele, Steiner, and Hamilton, 2018).

Evaluation Using Multiple Measures

Leaders were evaluated using multiple measures, and almost all earned their certification. Our review of program documents and interviews with PLUS staff indicated that Leaders were evaluated using multiple measures in the process designed by TNTP for use across its PLUS programs, as described in Table 1. In addition, although we did not independently analyze Leader evaluation data, TNTP conducted a variety of analyses of Leaders' progress and performance. Although Leader evaluation scores varied, all Leaders who fully participated in the program were ultimately rated as either "leader ready" or "principal ready" and earned their certification. However, over the three PLUS cohorts, two Leaders opted out of the program after failing to make progress early in their first year, and these individuals did not earn their certification through PLUS. In addition, TNTP documented a clear pattern of improvement over time in the ratings that PLUS coaches gave Leaders as part of the 360-degree evaluation process.

The PLUS program also collected data confirming that, as of their second year in the program, all Leaders could accurately assess the alignment of math and literacy tasks to Common Core state standards and that all Leaders were sufficiently normed on the use of the TNTP Core Teaching Rubric for classroom observations. TNTP further documented the core rubric scores of teachers coached by Leaders in SY 2016–2017 and

Leaders were evaluated using multiple measures, and almost all earned their certification.

Misalignment between PLUS and district expectations for APs, along with administrative hurdles, were a challenge in the first years of the program.

2017–2018. During this period, data from Leaders' core observational ratings were collected from both the beginning and end of the year for 67 percent of coached teachers, and 78 percent of those with documented ratings demonstrated improvement over time in their core ratings.

Most Leaders found analyzing student work to be a valuable exercise but rarely used it when coaching teachers. As described earlier in this report, Leader evaluations were partly informed by the data they collected about student work quality among the teachers that they coached. This activity, which relates to both Leader evaluations and Leader coaching of teachers, shifted in year 3 of the study to replace district student assessments with analysis of student work as the main student outcome emphasized in the coaching of teachers. Our interviews with PLUS staff and Leaders confirmed that PLUS PD sessions included training Leaders to analyze samples of student work starting in year 3 of the study. They also confirmed that these analyses focused on assessing the extent to which classroom tasks met grade-level standards. Leaders were expected to use the results of this analysis as a means of monitoring student progress in coached teachers' classrooms and for providing feedback to teachers to help them develop tasks that met grade-level standards.

In the 2018 and 2019 interviews, we asked Leaders about their opinions of student work

analysis and their use of the technique in coaching sessions with teachers. In general, Leaders spoke positively about analyzing student work and said that it could be a useful tool for providing feedback to teachers when classroom tasks and assignments did not meet grade-level standards. However, many Leaders in both years and across cohorts reported that they rarely analyzed student work and did not often discuss it in their coaching conversations with teachers. These Leaders did not often analyze student work because it was time consuming for the Leader and the teacher, was difficult to do in content areas in which they were not experts, felt like a compliance activity, and, according to a few Leaders, was threatening to the teachers they coached.

Coordination with and Transition to District Management

Misalignment between PLUS and district expectations for APs, along with administrative hurdles, were a challenge in the first years of the program. In the first two years of the program, most Leaders reported that many district leaders did not share the PLUS program's emphasis on instructional leadership as a key responsibility of APs. The TNTP staff we interviewed confirmed this and reported that, as a result, district leaders did not encourage host principals to allow their AP Leaders to prioritize their PLUS tasks. As we described earlier in this report, about half of the Leaders we interviewed reported receiving minimal support from their host principals.

This challenge was compounded, according to Leaders, by the fact that the district and PLUS used different teacher observation rubrics, had different criteria for AP performance evaluations, and did not coordinate their PD calendars. For example, several Leaders noted that there were often conflicts between PLUS PD sessions and district PD sessions. In such cases, Leaders reported that they felt obligated to attend the district sessions because they were required as part of their job as APs. In the second year of the study, one Leader described the PLUS-district misalignment as follows:

The PLUS program evolved with the transition to district management but retained many PLUS structures and the focus on instructional leadership.

I don't know how much anyone in the district knows about PLUS unless they are actually in it. I think that is, again, a part of the struggle that my peers in PLUS feel—PLUS wants us to do this, and the district wants us to do that. I am in PLUS because I value what PLUS is asking of me, but I can't do both of them [district requirements and PLUS requirements] at the same time and do both of them well.

Some of these alignment challenges were resolved over time as the PLUS program became more embedded in the district. For example, TNTP staff reported that the district adopted the TNTP Core rubric for use in teacher development and coaching observations (but retained the state-mandated rubric for teacher evaluations), and PD scheduling conflicts were resolved when the district took on sole management of the program.

The district's expectations for APs shifted over time to emphasize instructional leadership, but host principal support remained inconsistent. Leaders' descriptions of the district's expectations for APs to focus on instructional leadership shifted over the four years of the study. As we discussed earlier in this report, in the first two years of the study, Leaders reported that the district did not emphasize instructional leadership or encourage school leaders to prioritize it in their work. Furthermore, Leaders perceived that this misalignment with PLUS program priorities made it difficult for them to improve in

their work coaching teachers. However, Leaders' comments in the third and fourth years of the study (SYs 2017–2018 and 2018–2019), when district staff coaches began to coach Leaders and when the district assumed sole management of the program, revealed a change. Most Leaders reported that the district was becoming more aligned with PLUS and beginning to encourage school leaders to focus on instructional leadership and to spend time coaching teachers. In the final year of the study, when the program had fully transitioned to district management (SY 2018–2019), we asked Leaders if they believed PLUS had changed district culture related to instructional leadership; many Leaders agreed that this was the case. Several Leaders perceived that PLUS had changed district culture by highlighting the importance of instructional improvement and creating a network of like-minded leaders who could rely on one another for support. Although most Leaders appreciated the shift in emphasis, many continued to report that their host principals did not allow them to organize their time to prioritize PLUS activities.

The PLUS program evolved with the transition to district management but retained many PLUS structures and the focus on instructional leadership. In the fourth year of the study, we asked Leaders to share their perceptions of the transition to district management and the new, district-run, program. Most Leaders noted that district staff took the opportunity to tailor the program more closely to their district's context by including training about district-specific context and policies (e.g., budgeting, school operations, navigating the district political environment). Leaders reportedly appreciated the support on non-instructional topics and district-specific activities that the new program provided. For example, one Leader said that covering the “nuts and bolts” aspects of planning and budgeting, such as meeting with the budget analyst, was particularly valuable. In addition, many Leaders noted that the new program continued to emphasize training in instructional leadership and coaching teachers. The TNTP staff we interviewed concurred with Leaders' reports and noted that the evolution of the program was beneficial in that it was more closely tailored to the needs of district APs. TNTP staff mentioned

Leaders were not significantly different from comparable new APs in the rate at which they remained working as administrators in the district.

other points of continuity with the PLUS program, such as use of the TNTP Core Teaching Rubric for teacher coaching and development, job-embedded coaching, and in-person PD that included preservice training and monthly group sessions.

However, TNTP staff acknowledged that the transition to district management was not always smooth. Although the district was reportedly a strong and receptive partner and transition planning was a multiyear process, TNTP staff reported that there was limited time for TNTP and district staff to work side-by-side managing the program. In addition, some Leaders reported that the first year of the program under district management was disorganized. For example, several Leaders reported that the district's expectations around leadership and leadership coaching were not clearly defined and that the school leader evaluation system was not aligned with a focus on instructional leadership activities. For example, one Leader noted that there was a "lack of clarity [about how to] exactly . . . run the program with integrity" and "I feel a little bit like lost children."

PLUS Impact Results

In this section, we present findings from analyses evaluating various PLUS outcomes. We begin by presenting findings related to the career trajectories of Leaders compared with other APs who were also new to the AP role in the district. Then we present

findings related to Leaders' impacts on teachers they coached during their time in the program and on the students of coached teachers. We provide additional exploratory findings related to trends in school-wide achievement in schools where Leaders worked in the technical appendix.

How Did the Professional Trajectories of Leaders Compare with Those of Other New APs in the District?

In this section, we review findings related to the retention and promotion of Leaders within the district. Overall, newly hired Leaders were not significantly different from other newly hired APs in terms of the rates at which they were retained or promoted to principal roles. However, our sample sizes were small, and we lacked sufficient statistical power to reliably detect any differences in retention or promotion that were not large.

Descriptively, 97 percent of Leaders were retained as administrators in the district after their first year of PLUS, and 87 percent were retained as administrators after their second year. About 10 percent of the Leaders who were new to the AP role in the district when they were first hired were promoted to a principal role in the district by their second year, and 24 percent were promoted by their third year.

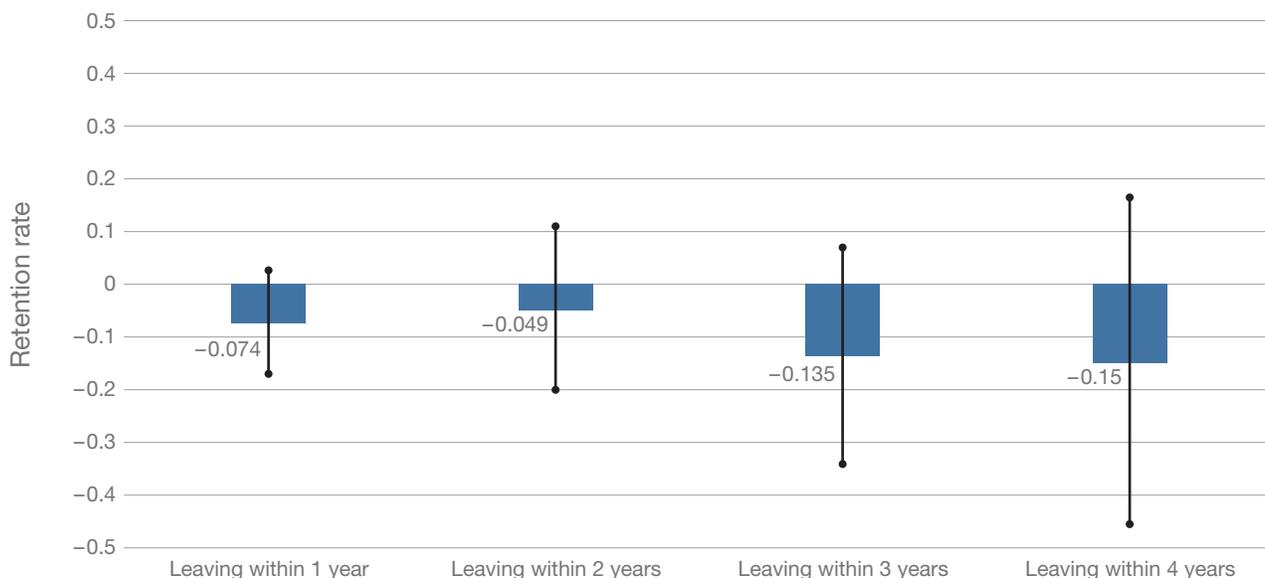
Leaders were not significantly different from comparable new APs in the rate at which they remained working as administrators in the district.

We were able to evaluate retention outcomes for at least two years for all Leaders, for three years for Cohorts I and II, and for four years for Cohort I. Our results are shown in Figure 2. Leaders' retention rates were not significantly different from rates for other similarly experienced APs in the district, when controlling for all other factors. However, by their third and fourth years, PLUS alumni were directionally less likely to have departed the district (about 14 percent and 15 percent less likely, respectively).

Leaders were not significantly different from comparable new APs in the rate at which they were

FIGURE 2

Difference in Cumulative Rate of Departure from the District for Leaders Relative to Other New APs



NOTE: Samples include only Leaders and comparison APs who were initially brand new to the role in the district. 95-percent confidence intervals shown. No results are statistically significant at the $p < 0.05$ threshold. Additional details regarding sample sizes and PLUS cohorts included in each outcome year are provided in Table A.12 of the technical appendix.

promoted to principal roles within the district.

We were able to evaluate within-district promotion rates for at least two years for all Leader cohorts, for three years for Cohorts I and II, and for four years for Cohort I. These results are shown in Figure 3. Leaders’ promotion rates were not significantly different from other similarly experienced APs in the district, when controlling for all other factors. However, by their fourth year, PLUS alumni were directionally more likely to have been promoted (about 11 percent more likely).

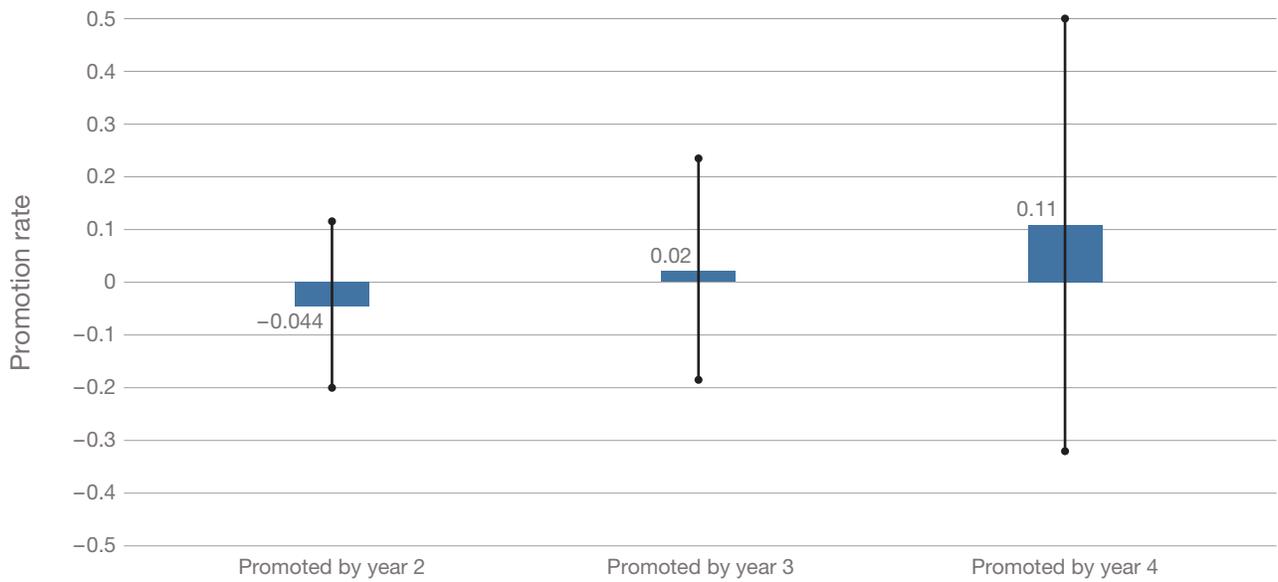
Most Leaders who stopped working as district administrators did so to take on principal positions elsewhere. Among the four Leaders who stopped working as district administrators during the period of our study, three did so to take on new roles as principals in different districts, and one took on a role in the district central office. Unfortunately, we lacked promotion data from comparison APs who left the district during this time. Although all Leaders who left the district were promoted to principal roles, we cannot assess how unusual that is relative to typical promotion rates for comparison APs who left the district.

To What Extent Did Leaders Influence the Student Achievement or Job Retention Outcomes of Coached Teachers?

In this section, we discuss findings related to our evaluation of Leaders’ impacts on the teachers they coached. Overall, we see some evidence of positive PLUS impacts associated with the teacher coaching that Leaders did during their participation in the program. Because coaching assignments were not consistently documented by the district in the first year of the study, these analyses were limited to coaching that took place between SYs 2016–2017 and 2018–2019.

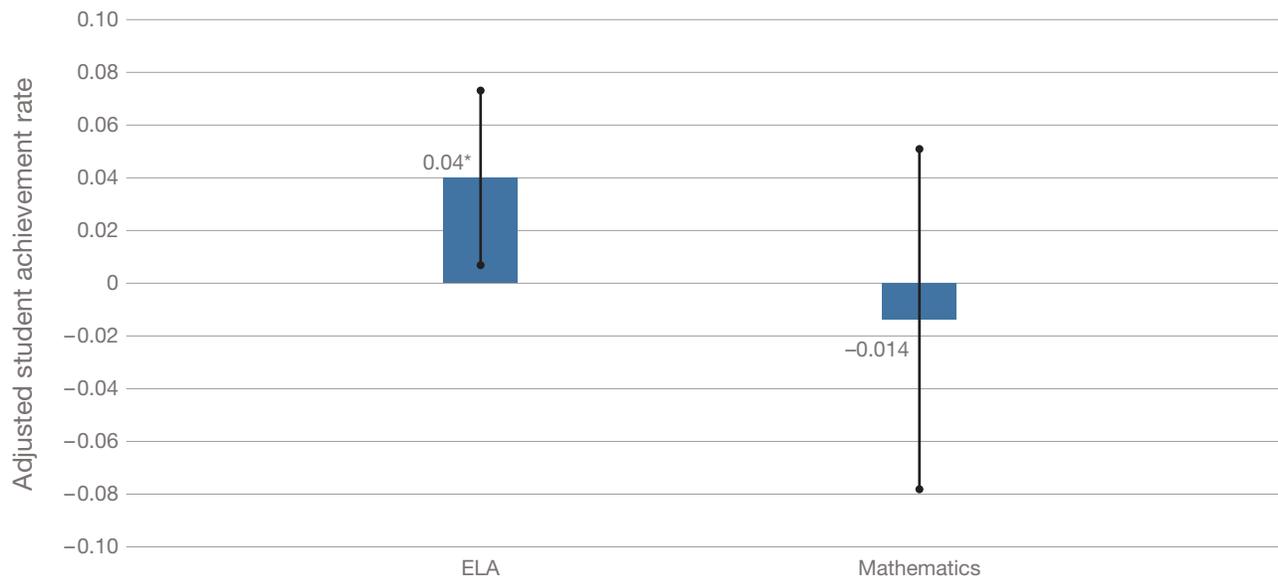
Students of teachers who received coaching from Leaders performed better in ELA exams than students of comparison teachers. Figure 4 shows the association between receiving coaching from a Leader and student achievement gains for teachers teaching ELA or mathematics in grades 4–8. Across our pooled sample of 65 coached ELA teachers over three years, we found that coached teachers’ students

FIGURE 3
 Difference in Cumulative Rate of Promotion to a Principal Role Within the District for Leaders Relative to Other New APs



NOTE: Samples include only Leaders and comparison APs who were initially brand new to the role in the district. 95-percent confidence intervals shown. No results are statistically significant at the $p < 0.05$ threshold. Additional details regarding sample sizes and PLUS cohorts included in each outcome year are provided in Table A.13 in the technical appendix.

FIGURE 4
 Adjusted Student Achievement of Leader-Coached Teachers Relative to Comparison Teachers



NOTE: Samples consists of students taught by teachers in grades 4–8 who taught ELA or mathematics between SYs 2016–2017 and 2018–2019. 95-percent confidence intervals shown. * = $p < 0.05$. Additional details including sample sizes are provided in Table A.14 in the technical appendix.

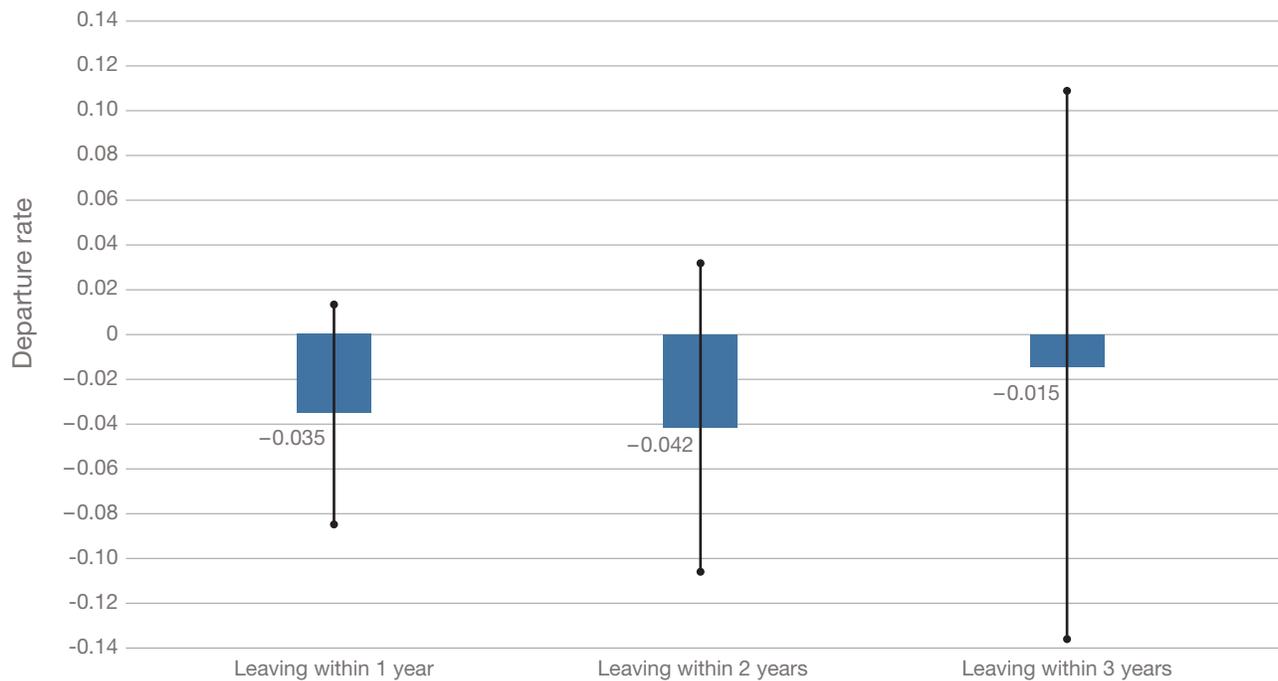
made significantly more gains in ELA than the students of comparison teachers in the same schools. The difference in ELA achievement gains in the year of coaching was small, roughly equivalent to raising the performance of the median student from the 50th percentile to the 52nd percentile. This finding suggests that, in the year in which coaching took place, Leaders may have helped the teachers they coached to be more effective in their ELA instruction than other teachers who received business-as-usual district supports.

Students of teachers who received coaching from Leaders performed no differently on mathematics exams than students of comparison teachers. On average, across our pooled sample of 43 coached math teachers over three years, we did not find a statistically significant association with student achievement gains in mathematics. However, our sample size was not large enough to rule out the possibility of small positive or negative effects that we may have lacked the statistical power to reliably detect.

Overall, teachers coached by Leaders were neither more nor less likely to remain in the district than comparison teachers. We compared cumulative retention rates for PLUS-coached teachers relative to comparison teachers; results are shown in Figure 5. The sample of PLUS cohorts and teachers for which we could measure retention differed depending on whether we were measuring teacher retention within one, two, or three years of receiving coaching from a Leader. Across all teachers coached by Leaders, we did not identify a significant difference in the rates of retention in the district within three years of receiving coaching.

For a subgroup of teachers whose students had low achievement gains, coaching was associated with higher rates of leaving the district within two years. We examined retention rates for teachers who taught ELA and mathematics in grades 4–8, a sample for which we were also able to measure their students’ achievement gains in the year coaching was received. Within a sample of all teachers whose students’ achievement gains ranked in the bottom

FIGURE 5
Difference in Cumulative Rate of Departure from the District for Teachers Who Received Leader Coaching, Relative to Comparison Teachers



NOTE: 95-percent confidence intervals shown. No results are statistically significant at the $p < 0.05$ threshold. Additional details including sample sizes are provided in Table A.15 in the technical appendix.

20th percentile, we compared retention rates between those coached by Leaders and those not coached by Leaders. Results from this analysis are shown in Figure 6. The sample of PLUS cohorts and teachers for which we could measure retention differed depending on whether we were measuring teacher retention within one, two, or three years of receiving coaching from a Leader.

Among all teachers whose students' achievement gains ranked in the bottom 20th percentile, those who were coached by a Leader were significantly more likely to leave the district within the next two years. Although the sample sizes were quite small and our retention effect estimates are imprecise, the adjusted difference in second-year retention rates indicates a leave rate that is about 86 percentage points higher (i.e., nearly twice as high) for Leader-coached teachers whose students had low achievement gains compared with uncoached teachers whose students had low achievement gains. Leader-coached teacher leave rates within three years were directionally, although not significantly, higher. The results suggest that Leader coaching played a

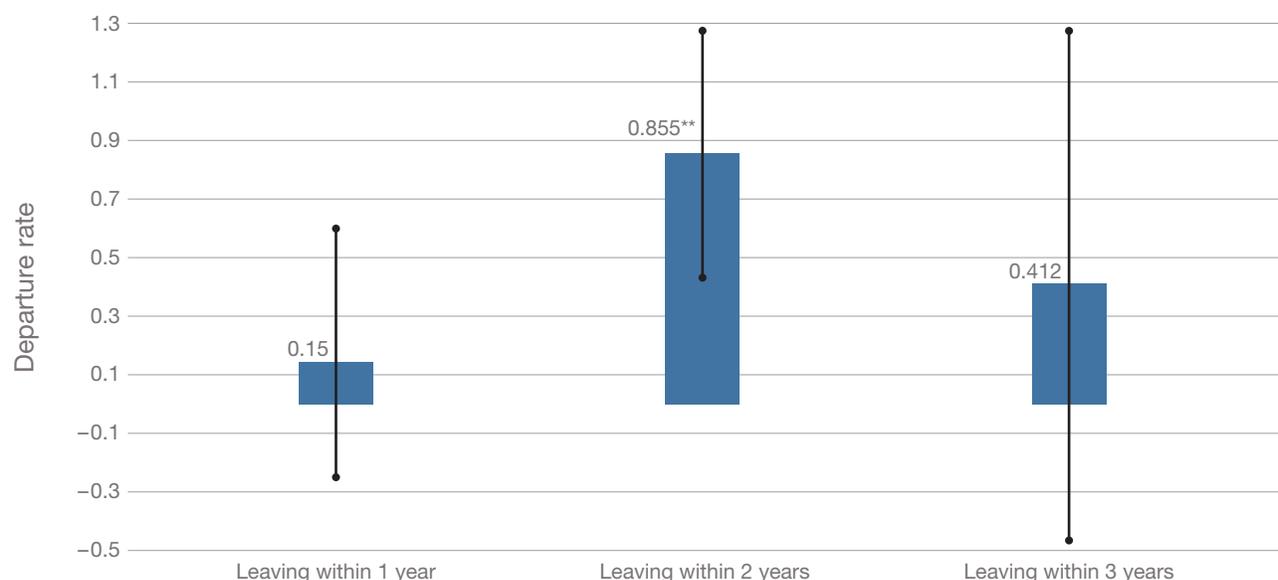
part in spurring lower-performing teachers to leave the district. Among the remaining sample of teachers whose students had higher achievement gains, Leader coaching was not significantly associated with retention rates. Those results are provided in Table A.16 in the technical appendix.

Implications and Directions for Future Research

In this report, we presented the results of a four-year study of both the implementation of TNTP's PLUS program in a large, urban public school district and the program's impacts on Leader, teacher, and student outcomes. In this section, we discuss the implications of our findings and suggest directions for future research.

PLUS contributed to a shift in district practice that placed greater emphasis on instructional leadership for APs. The implementation data we collected suggest that the PLUS program contributed to a greater district-wide emphasis on instructional leadership for APs in three ways. First, PLUS

FIGURE 6
Difference in Cumulative Rate of Departure from the District for Teachers with Low Student Achievement Gains Who Received Leader Coaching, Relative to Comparison Teachers with Low Student Achievement Gains



NOTE: Lower achievement gains sample is defined as the bottom quintile of teachers' student achievement gains. Sample includes only teachers in grades 4–8 who taught ELA or mathematics. 95-percent confidence intervals shown. ** = $p < 0.01$. Additional information including samples sizes and results among teachers with higher student achievement gains are provided in Table A.16 in the technical appendix.

substantially influenced how all new APs in the district were selected. After the first year of the study, the district had adopted the PLUS selection model and used it to select all APs. The PLUS selection model was designed to screen applicants based on their knowledge of and interest in instructional leadership and involved numerous activities intended to select the most-qualified applicants who were the best fit for the role. Second, the PLUS program contributed to establishing new expectations for APs around the centrality of instructional coaching as part of their school leadership responsibilities. The data we gathered from TNTP staff and Leaders suggest that PLUS provided extensive training in instructional leadership to APs through ongoing PD, job-embedded coaching, and on-the-job training. In the final two years of the study, some Leaders perceived a change in overall district culture to emphasize instructional leadership. Third, when the district assumed sole management of the program, TNTP staff and Leader reports indicate that the district maintained the focus on instructional leadership.

Leaders reported feeling prepared for instructional leadership but most struggled to meet the ambitious expectations for coaching that PLUS advocated. A majority of the Leaders we interviewed reported that they felt that PLUS had prepared them for taking on an instructional leadership role. However, a majority of Leaders found it challenging to coach the expected number of teachers and to use the full coaching cycle advocated by PLUS. The program's expectations for coaching teachers were ambitious, and Leaders reported that they struggled to balance the traditional expectations of the AP role with instructional leadership and coaching, such as addressing student discipline issues, building management, and interacting with families and community members. Most Leaders reported feeling stressed about this tension and unsure about how to prioritize tasks. Some Leaders described feeling pressure from their building principals to ignore their coaching responsibilities. Leaders in the pupil services AP role reported that finding time to focus on instructional leadership was particularly challenging, while Leaders in the curriculum and instruction AP role reported somewhat fewer

challenges. As we noted earlier in the report, the experiences of Leaders in this study were not unique; participants in another PLUS program reported similar feelings regarding preparation and challenges related to coaching teachers (Steele, Steiner, and Hamilton, 2018).

Despite Leaders not coaching teachers as much as was intended, Leader coaching appears to have had positive impacts on teachers' student achievement gains. Our findings suggest that receipt of Leader coaching may have had positive impacts on student achievement, relative to business-as-usual district instructional supports that were provided to comparison teachers. The relatively small size of the coaching impacts that we found are consistent with estimates from prior research studying job-embedded coaching, which is often less impactful than coaching interventions conducted in the context of efficacy trials (Kraft, Blazar, and Hogan, 2018). Although the impacts we identified were small, they are noteworthy given the multiple factors that may have led our estimates to be more conservative. First, we evaluated the effects of Leader coaching by Leaders while they were still in the process of receiving PLUS coaching and PD, presumably before they had received the full benefits of the program. Second, we measured the impacts of Leader coaching compared with unobserved district induction and other supports that were more likely to have been provided to comparison teachers. Third, our models may not have fully accounted for possible selection biases if Leaders and principals tended to assign coaching to less-effective teachers. In spite of these factors, we identified a positive association between Leader coaching and student achievement gains.

Leader coaching appears to have contributed to reduced retention of lower-performing teachers. We found that Leader coaching was associated with higher rates of departure from the district among low-performing teachers. This finding is consistent with the PLUS program's goal of training Leaders to identify high- and low-performing teachers and to encourage high-performing teachers to stay while encouraging low-performing teachers to leave the district. Although we do not know whether low-performing teachers left the district voluntarily or involuntarily, the coaching that Leaders practiced

Our findings suggest that job-embedded coaching, training in operations and management in addition to instructional leadership, and a cohort model were highly valued by Leaders and may be important aspects of AP training programs.

in PLUS, which emphasized repeated cycles of observation and feedback, could have played a role either way. Coaching observations presumably made Leaders, and perhaps host principals as well, more aware of teachers' performances. This likely would have affected personnel-management decisions. Additionally, receiving more negative feedback about their work might have indirectly encouraged teachers who were lower performing to leave the district.

Our findings suggest that job-embedded coaching, training in operations and management in addition to instructional leadership, and a cohort model were highly valued by Leaders and may be important aspects of AP training programs. Given that relatively little is known about which aspects of leadership training programs novice APs find most valuable, our findings suggest three potentially important characteristics of such programs. First, the novice APs in this study found the job-embedded coaching to be the most valuable aspect of the program. Specifically, Leaders reported that their PLUS coaches helped them develop key leadership skills—such as time management and delegating tasks, which were not always directly addressed in PLUS PD sessions—and practice those skills in their daily work as APs. Leaders found their PLUS coaches to be particularly helpful in developing strategies to work effectively with host principals who did not prioritize instructional leadership and in building their confidence as school leaders. Thus, job-embedded coaching may be a critical support for novice APs, particularly in their first two years in the position. The flexible nature of job-embedded coaching could be one way for programs to provide

support in the topics not directly addressed by program PD.

Second, the novice APs in our study reported a desire for training in operations, management, and navigating district systems in addition to instructional leadership. All the novice APs who participated in the interviews for this study valued the PLUS program's emphasis on instructional leadership, but most also desired training in the non-instructional aspects of their role. Leaders' desire for additional training in this area was strong; Leaders who had already received some training in these topics still expressed an interest in additional training. Ensuring that novice APs can access training in both domains has the immediate benefit of preparing the AP for their job responsibilities and the long-term benefit of preparing them for a principalship. Thus, district leaders—particularly those who supervise APs—may wish to ensure that novice APs have access to training in both domains. The evidence we have available suggests that the district retained the job-embedded coaching and cohort model in their version of the program and also incorporated training in operations and management in addition to instructional leadership.

Third, the novice APs in our study reportedly found the support from their cohort to be a key source of emotional and professional support. Most of the Leaders we interviewed said they valued having a group of like-minded colleagues with whom they could commiserate and brainstorm solutions to issues they were facing in their schools. In some cases, the relationships that Leaders developed with others in their cohort lasted into their first year as PLUS alums. The fact that other recent studies of

school leader preparation programs (Gates et al., 2019; Steele, Steiner, and Hamilton, 2018) have found a similar result provides some evidence that such a cohort model could be a key aspect of AP training programs.

When implementing a job-embedded AP development program, districts and external partners should set realistic expectations for APs and engage with host principals early. Our findings suggest two key implementation lessons for district and external program providers. First, our interviews with Leaders indicate that setting realistic expectations for AP instructional leadership tasks—particularly related to coaching teachers—could help alleviate stress and potentially increase adherence to the coaching model. A majority of the Leaders who participated in our interviews reported that one reason they were not able to meet the program’s ambitious expectations for coaching teachers was because their non-instructional job responsibilities took priority. Future programs could address this challenge in more than one way. One possibility would be to adjust the expectations for AP instructional leadership broadly, and teacher coaching specifically, to fit in the time allowed by non-instructional duties. Another possibility would be to adjust APs’ non-instructional tasks to allow more time to coach teachers. In this study, the available evidence suggests that the district used a combination of these approaches. After district leaders assumed sole management of the program, they began to shift the AP role slightly to have more of a focus on instructional leadership, but they also adjusted AP coaching expectations to reduce caseloads to three teachers (from five).

Second, our data suggest that efforts to engage host principals early were informal and somewhat limited. Many Leaders reportedly had difficulty meeting PLUS expectations for teacher coaching because of variable, often limited support from their host principals. In addition, PLUS had limited ability to recruit host principals into the program. Limited support from host principals was also a challenge in another recent study of a PLUS program (Steele, Steiner, and Hamilton, 2018). In our study district, it is possible that early, more systematic engagement with host principals could have improved their

knowledge of the program and their support of Leaders. If possible, program leaders may wish to consider ways to identify principals who would be supportive of APs taking on instructional leadership roles and actively place novice APs with those principals. Alternatively, program leaders could consider planning for varied levels of support from host principals and providing APs with tailored support.

The PLUS program evolved through its transition to district management and retained its focus on instructional leadership, but culture change was gradual. As we describe earlier in this report, TNTP designed the PLUS program to be absorbed and sustained by the district. The evidence we gathered in this study indicated that the program evolved through its transition to sole district management to include a greater emphasis on training in non-instructional aspects of the AP role and adjusted expectations for AP coaching of teachers to be more manageable. The district retained the instructional leadership focus and many of the PLUS structures, such as job-embedded coaching. In addition, the Leaders we interviewed perceived that the district’s culture had shifted over the four-year period of the study to emphasize instructional leadership for APs.

The transition of the program to district management suggests several strategies that may be effective in similar contexts, as well as some areas for improvement. In this study, three strategies might have been effective in facilitating the transition. First, TNTP staff described the district as a committed and receptive partner. Second, planning for the transition began early, in the second year of the program, and was supported by an advisory board and ongoing meetings that included TNTP and district staff. Third, several district staff responsible for school leader PD joined PLUS as Leader coaches in the third year of the program. All these activities likely provided district staff with multiple opportunities to become familiar with PLUS program management and to think about ways in which the program could be refined. One area for improvement, as described by TNTP staff, would be for a more consistent group of district staff to have worked alongside TNTP staff

managing the program for the entire duration of the grant.

However, the shift in district culture, as reported by most Leaders, was gradual. In the first two years of the study, the Leaders we interviewed described a culture that was not focused on instructional leadership. We started to hear that the culture was shifting in the third year of the study, and, in the fourth year of the study, most Leaders reported that the district culture had shifted to place more of an emphasis on instructional leadership. This perceived shift coincided with district staff taking on more responsibility for program management.

Additional research and more comprehensive data are needed to fully understand the impacts of APs' instructional leadership work. Measuring the instructional contributions of APs is a complex undertaking that would ideally use more data than we had the capacity to collect for this study. Future research would benefit from records detailing APs' responsibilities in greater detail, including the individual teachers or teams that they worked with most intensively in each year. Tracking individual connections in this way would allow researchers more opportunity to relate changes in teacher and student outcomes directly to APs' efforts and to differences in the supports that APs received. Future research would also benefit from collecting more-proximal measures of APs' and teachers' practices over time and from tracking key alternative sources of instructional support that they may have received. Additional data on proximal impacts would allow for analysis of interim impacts on educators' practices even if ultimate outcomes are more difficult to measure. Data on alternative sources of instructional support can inform our understanding of the business-as-usual context against which instructional interventions is compared.

Research evaluating impacts of AP training should keep in mind APs' varied responsibilities and contributions. The implementation findings from this study highlight the wide array of responsibilities that APs have. Research that is

limited to a narrow focus on instructional impacts might miss important trade-offs between allocating APs' time to instructional development versus various other leadership tasks, including operations and management and school discipline and culture. Future studies would benefit from continuing to collect data on various activities that APs engage in, and they should examine outcomes related to these aspects of the job.

Summary

In sum, this study points to some of the impacts, benefits, and challenges of the PLUS program and the partnership between TNTP and district leadership, which aimed to shift the emphasis of the AP role to include more instructional leadership activities and to develop APs' capacity to do this work. The findings from this study suggest that, supported by the program, Leaders' instructional leadership work may have contributed to improvements in student learning and to more-selective teacher retention. Our implementation findings indicate that most aspects of the program were implemented as intended and most Leaders believed that PLUS was preparing them for instructional leadership. Most Leaders perceived the job-embedded coaching to be the most valuable aspect of the program and appreciated the support from their cohort members, findings that are consistent with other research on school leader PD. We found that the program evolved as it transitioned to district management while maintaining a focus on instructional leadership and preserving some of the structures that Leaders found most valuable (i.e., the job-embedded coaching and cohort model). Some of these changes appeared to adjust for implementation challenges that arose during the first three years of the study, such as revising coaching expectations, shifting the AP role to emphasize instructional leadership, and including training in management and operations in addition to instructional leadership.

Notes

¹In Camden, the lead educator role is similar to that of an assistant principal.

²According to program materials provided by TNTP, staff drew on research examining the role of value-added models (Grissom, Kalgorides, and Loeb, 2015), objective and subjective measures (Viano and Henry, 2016), and teacher ratings of principals (Goldring et al., 2015) to develop the PLUS Leader evaluation approach.

³In the technical appendix, we provide additional context about our decision to focus on contemporaneous coaching effects.

⁴For many coached teachers, prior effectiveness data were not available because they were new teachers or teachers who had not previously taught in tested grades and subjects. We also lacked historical data on teachers' prior performance for all teachers coached prior to SY 2017–2018.

⁵The APs who did not go through the full PLUS hiring process were current district administrators who were transferring to another position or appointed because of an unexpected vacancy or emergency situation.

⁶The TNTP Core Teaching Rubric, also known as TNTP Core (TNTP, 2014), is a tool for assessing teacher practice through the observation of student behavior. The rubric is agnostic to subject area and contains four domains (Culture of Learning, Essential Content, Academic Ownership, and Demonstration of Learning) with each domain scored on a five-point scale. TNTP Core is intended to help teacher leaders and administrators provide teachers with actionable feedback and professional development within the context of a multidimensional evaluation system (McEachin et al., 2018).

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About This Report

An increased focus on improving student outcomes in recent years has shifted expectations of assistant principals (APs), who are now expected to assume some instructional leadership tasks. But the contributions of APs toward improving student and staff outcomes has not been a focus of much empirical research to date. There have been few studies of AP professional development opportunities, and little is known about the extent to which APs are trained to undertake instructional leadership activities. The authors of this report present findings about implementation and impacts on student outcomes from a four-year study of the Pathway to Leadership in Urban Schools (PLUS) program in a large, urban public school district. PLUS was developed by TNTP (formerly The New Teacher Project) to train APs in instructional leadership. The findings in this report could help policymakers, district staff, and training program providers understand participants' perceptions of programs that focus on training APs in instructional leadership and the impact that such a program can have on student and staff outcomes. The findings could also help program providers and district staff understand some of the benefits and challenges associated with training school leaders in the context of district-provider partnerships.

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. TNTP sponsored the report, with funding from the U.S. Department of Education's Investing in Innovation (i3) grant program, grant number U411C140039.

More information about RAND can be found at www.rand.org. Questions about this report should be directed to bmaster@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.

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