Examining the Effects of HOME WORKS! The Teacher Home Visit Program on Student Academic Outcomes

Lauren Scher and Sherri Lauver

Abstract

HOME WORKS! The Teacher Home Visit Program (HOME WORKS!) aims to bridge the gap between school and home, build relationships, reverse distrust, and foster partnerships between teachers and families to improve success at school. This evaluation used a blocked, cluster randomized controlled trial (RCT) design to examine the effects of the HOME WORKS! intervention on student academic outcomes. The version of the home visiting model examined in this study includes two home visits per student per year and two family dinners (at school) per school per year. It was implemented through a partnership between a not-for-profit and participating school districts. Concentric Research & Evaluation, and its partner, Synergy Enterprises Inc., assessed the impact of HOME WORKS! in 11 schools in St. Louis Public Schools (Missouri) during the 2017–18 school year. Study findings revealed that teachers implementing HOME WORKS! reported creating strong connections with families, but also experienced challenges in implementing the program with fidelity. More than 80% of participating teachers reported that their first home visit enabled them to improve their relationship with the student's family. They also mentioned other perceived benefits, including a better understanding of academic challenges, the ability to discuss student growth and progress, and beneficial discussions about student behaviors. At the end of the year, students in HOME WORKS! and comparison classrooms did not differ significantly on academic outcomes and behaviors as measured by available school administrative records data.

Key Words: teacher home visiting intervention, home visit, RCT, impact evaluation, family engagement, parent engagement, family–school partnerships

Introduction

This study used a blocked, cluster randomized controlled trial design (RCT) to examine the effects of a home visiting intervention called HOME WORKS! The Teacher Home Visit Program (hereafter referred to as HOME WORKS!), which has been operating in St. Louis, Missouri and its surrounding communities since 2007. The primary goals of HOME WORKS! are to increase parent/guardian and teacher engagement, improve student achievement and attendance, and reduce negative classroom behaviors.

History, Goals, and Potential of Home Visiting Programs

Teacher home visiting programs have become increasingly popular in urban school districts as part of school reform efforts funded largely by the U.S. Department of Education (e.g., through Title I of the Elementary and Secondary Education Act of 1965, amended and known as the Every Student Succeeds Act of 2015 [ESSA]). ESSA authorizes funding for family engagement programs that "lead to improvements in student development and academic achievement." A review funded by the U.S. Department of Health and Human Services (2019), based on evidence from 50 home visiting models, suggests that home visiting programs help support the health, development, and early learning skills of children who are not yet of school age. Decades of research on Title I parental involvement suggests that when low-income families are meaningfully involved in schools, their children demonstrate gains in academic achievement, behavior, and attendance (Bryk et al., 2010; Dearing et al., 2006; Henderson & Mapp, 2002; Sheldon & Jung, 2018). Yet data from the National Household Surveys suggest that family engagement among particular subgroups, such as minority parents, parents with lower educational attainment, and parents who do not speak English at home, remains substantially lower than that of their peers in White, English-speaking, and affluent households (Child Trends, 2018). Developing trust and communication among parents, teachers, and school leaders may be important to students' long-term success (Bryk et al., 2010; Stetson et al., 2012). Home visits give teachers an opportunity to establish positive relationships with families and gain greater insights into families' strengths and challenges. An RTI International study showed that home visits may decrease implicit bias that can negatively impact students' school experience by improving partnerships between educators and families to support student success and shift teachers' mindsets toward more equitable relationships. (McKnight et al., 2017).

Recent quasi-experimental and descriptive studies suggest that home visiting programs may yield positive academic, behavioral, and attendance outcomes. A quasi-experimental study by Sheldon and Jung (2015) found that students whose families received home visits using the Parent Teacher Home Visit (PTHV) model in Washington, D.C. were more likely to achieve or exceed grade-level reading comprehension, having 1.55 times higher odds of scoring *Proficient* on the Text Reading Comprehension assessment. They also reported that students receiving home visits were absent, on average, 2.7 fewer days than nonparticipants (Sheldon & Jung, 2015). A multi-level large-scale study by Sheldon and Jung (2018), with controls at the student and school levels and representing 33,000 students in three large urban school districts across the country, found that attending a school systematically implementing the PTHV model was associated with 35% higher odds of scoring *Proficient* on standardized English language arts (ELA) assessments and 21% lower odds of being chronically absent than nonparticipants. Another quasi-experimental study of teacher home visiting for 7,362 students in a K–12 charter school system in Texas found that students whose families received home visits had significantly higher positive reward system scores, grades in mathematics and ELA, and a significantly higher number of log-ins to the school system's parent portal (Wright et al., 2018). The results of this study should be reviewed with caution, as student background characteristics were not taken into account when comparing the treatment and comparison groups.

One widely used evidence-based program is Families and Schools Together (FAST). The FAST model offers a more comprehensive set of services than HOME WORKS!, including the creation of an afterschool, multifamily support group of parents and teachers with home visits and eight weekly, multifamily sessions where families share meals, communicate, and play together. An experimental study of the FAST program found statistically significant positive differences for teacher-reported measures of academic performance for youth in Grades 1 through 4; at a two-year follow-up, students who were assigned to FAST had stronger teacher-reported measures of academic performance and social skills than students in the comparison group (McDonald et al., 2006). An experimental evaluation of FAST with 400 students and families in New Orleans showed that parents involved in FAST were more likely to volunteer at school or be in a school leadership position one year after FAST ended; however, it did not show any impact on students' behavior or academic performance as evaluated by their teachers (Layzer et al., 2001).

In recent years, HOME WORKS! commissioned a quasi-experimental, retrospective study to examine the effects of its programming on student academic outcomes. Using administrative records data for over 2,700 students across

four school districts in and around St. Louis, the study found that students who received at least one home visit scored 5% higher on the STAR literacy assessment, were 13% less likely to miss at least two weeks of school, and had similar levels of disciplinary referrals as students attending the same schools who did not receive a home visit. The differences were more pronounced for students who received two home visits versus those who did not participate in HOME WORKS! (Concentric Research & Evaluation & EMT, 2016).

How Previous Studies Informed the HOME WORKS! Evaluation Design

While the emerging evidence is promising, these findings should not be overstated. In HOME WORKS! (and many home visiting programs for school-age youth, such as PTHV), teachers and families participate voluntarily. It is therefore quite possible that any effects observed reflect underlying differences between those who choose to engage in the program and those who do not. For example, an academically motivated teacher may choose to implement the program, and a parent may choose to participate, resulting in differences between home visiting recipients and non-recipients that may be less due to participation in home visits and family dinners than to underlying motivation and connection to school. The current study's RCT design aims to remove this concern by focusing only on teachers who were motivated to sign up for the program, half of whom were assigned at random to participate in programming during the 2017–18 school year while the other half continued with regular parent outreach practices. School records for all students of these HOME WORKS! and comparison teachers were analyzed, regardless of teacher interest in HOME WORKS!.

A Partnership to Evaluate HOME WORKS! in the St. Louis Public Schools

Through a Low-Cost, Short-Duration Evaluation grant from the U.S. Department of Education's Institute of Education Sciences (IES), the research team partnered with HOME WORKS! and St. Louis Public Schools (SLPS) to examine the effects of the intervention on student academic outcomes and behaviors. The primary aims of the evaluation were to understand whether students enrolled in HOME WORKS! classrooms (relative to classrooms assigned at random to programming as usual) scored higher on 2018 standardized reading assessments, missed fewer days of school, and experienced fewer disciplinary incidents over the course of the 2017–18 school year than students in non-HOME WORKS! classrooms.

The evaluation used administrative data obtained by the school district and from teacher logs collected by HOME WORKS! to estimate program impacts, explore variation in participation rates, and gain an understanding of the challenges and perceived promise of program participation. Data from parents and students were not included due to budget considerations.

The HOME WORKS! "2+2" Model

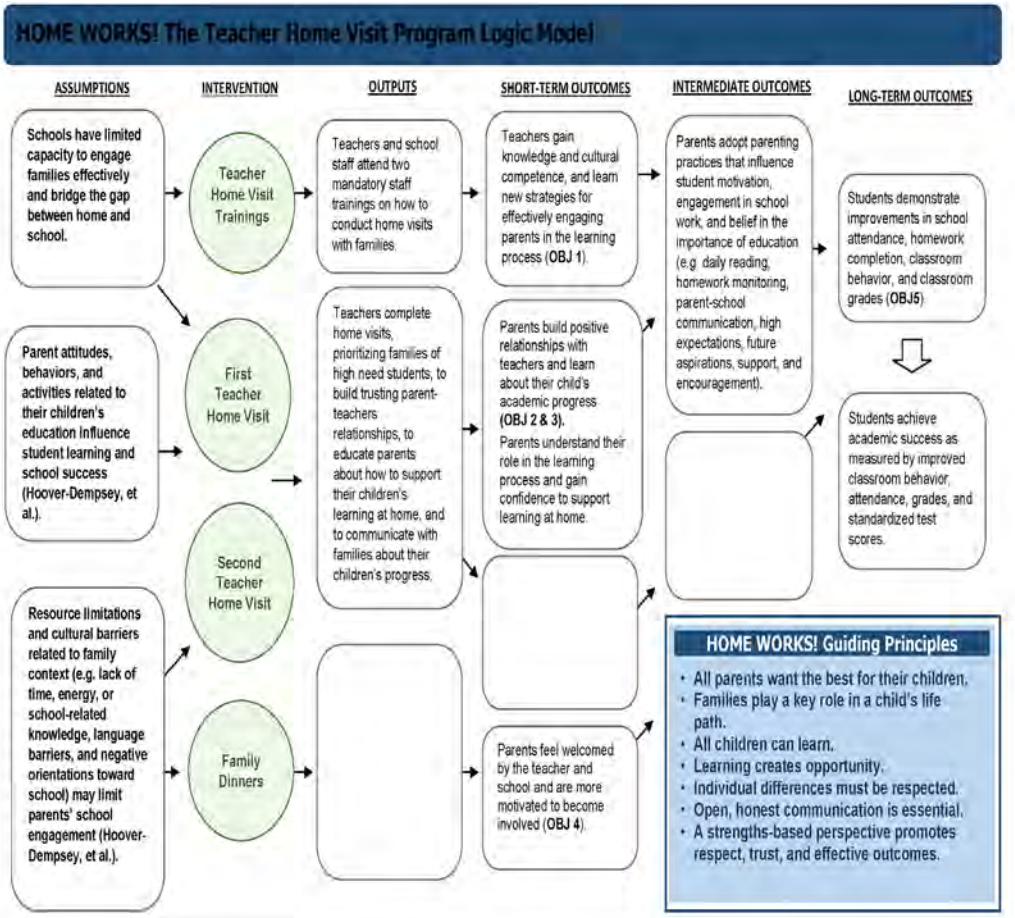
During the 2017–18 school year, HOME WORKS! operated in 27 prekindergarten through high schools in nine Missouri school districts and one charter school, including 15 SLPS schools (14 elementary schools and one high school). To achieve its mission to "partner families and teachers for children's success," the HOME WORKS! organization has developed several home visit model variants. The current study focused on the most commonly used model at the time, the "2+2" model, which encourages two home visits per student and participation in two family dinners at school over the course of the school year.

The HOME WORKS! program operates as a partnership between the HOME WORKS! not-for-profit organization and participating school districts. While the HOME WORKS! organization provides the funding for trainings, family dinners, and site coordinators, schools must pay half of the extra pay provided to school personnel for each home visit. HOME WORKS! staff work with school and district staff to ensure appropriate record keeping and data collection and to make sure the program is implemented with fidelity.

HOME WORKS! Theory of Change

Based on the HOME WORKS logic model (see Figure 1), a successful home–school partnership encourages ongoing communication and trust, empowers parents to engage with their children's education, fosters student engagement, and sharpens teaching practice. The underlying theory is that mutual respect and communication will improve school attendance, reduce negative in-school behaviors, and increase academic achievement. The HOME WORKS! program was modeled on the PTHV Project (http://www.pthvp.org), which was created by parents in a low-income neighborhood of Sacramento, California, in 1998.

Figure 1. Logic Model for HOME WORKS! The Teacher Home Visit Program



Note. From HOME WORKS! Website: https://www.teacherhomevisit.org/wp-content/uploads/2017/11/HOME-WORKS-2017-18-Logic-Model.pdf

Two Home Visits per Year per Student

Under the "2+2" model, two members of the school's faculty and staff (typically the child's teacher and another school staff member such as another teacher, paraprofessional, school nurse, or counselor) meet families in their homes at the start of the school year to discuss grade-level expectations and build rapport. Parents' primary language is taken into consideration when visitors are assigned to the home visit. Teachers and parents discuss supporting a home environment and expectations for learning, nurturing responsibility for homework and daily reading, and the parents' views on the child's educational needs. Finally, the visit gives the teacher the opportunity to discuss the child's academic progress. By the second visit, a teacher continues to strengthen the

relationship and can also discuss with parents or caregivers the student's academic strengths, challenges, and specific strategies to increase success. Because most second visits occur in spring, teachers also often make recommendations for summer enrichment activities or make referrals to social service agencies.

Due to potential staff time constraints, HOME WORKS! allows some flexibility in the timing of visits, and teachers prioritize students who may benefit most from two visits. The priority characteristics as defined by HOME WORKS! include low academic performance, behavioral and social–emotional concerns, English language learner, high absenteeism or tardiness rates, homework completion concerns, and low parent engagement. Also, students are prioritized if parents request a visit.

Two Family Dinners, Hosted by the School and HOME WORKS!, for All Participating Teachers and Families

The two family dinners, which generally occur in each semester of the school year, provide an opportunity for school personnel, students, and their families to "break bread" in an informal setting. Dinners, donated by a restaurant or purchased by HOME WORKS!, occur in the school cafeteria, and anywhere from 35 to 400 family members (e.g., parents and siblings) attend these events. Teachers, other school staff members, and volunteers also attend these events and circulate among families to engage them in conversation. In a prior evaluation, 97% of families stated that the dinners made them feel more welcome and connected to school (Evaluation, Management, and Training Associates, Inc., 2018).

Staff Training for Home Visits

Teachers, other school staff, and school administrators who participate in home visits attend two staff trainings per year held at the beginning of the year and then again later in fall or winter. The trainings stress the importance of parent engagement, cultural competency, the goals of each home visit, and give staff an opportunity to practice common scenarios that may be encountered during a visit and to practice using the online database where they log their home visit. Experienced teachers who have conducted home visits also attend trainings to share successful strategies for outreach and recommendations to work around logistical barriers. During the second training, teachers have opportunities to discuss successes and challenges and get recommendations for upcoming visits.

Study Design and Methods

The current study was implemented over the course of the 2017–18 school year. Eleven Title I eligible elementary schools in the St. Louis Public Schools participated in the study. The district enrolls approximately 23,000 students. The research team worked in partnership with SLPS and HOME WORKS! staff to implement the study design and carry out data collection activities.

Design

The study employed a blocked, cluster randomized controlled trial (RCT) design in which volunteer teachers in Grades 1–3 were randomly assigned within schools and grade level blocks to implement the HOME WORKS! program or to continue with typical parent outreach. Block randomization by school and grade level ensured equal sample sizes of groups based on these variables, while cluster randomization by classroom allowed all students within a particular classroom to be assigned to the same condition (HOME WORKS! or comparison).

Study Recruitment

In the spring through summer of 2017, school district leaders, HOME WORKS! staff, and the research team organized meetings with elementary school principals and staff to discuss the program and the study design. To be eligible to participate in the study, school leaders and a majority of teachers in the focal grade levels (Grades 1–3) needed to express interest in participating. District leaders restricted recruitment to schools that had stable leadership and were not taking on any other major new initiatives. Schools that were already implementing HOME WORKS! were also excluded from the study, as the program was already broadly available to all teachers. Two additional elementary schools that were part of this study had previously participated in HOME WORKS! under different leadership but had not participated within the prior three school years.

Random Assignment

Random assignment occurred in August and September of 2017. HOME WORKS! encouraged home visits to begin early in the school year (including before the school year officially began). For this reason, and for logistical purposes, most schools requested professional development training prior to the first day of the school year. The research team conducted random assignment as close to the training as possible, using the most updated teacher and student classroom rosters. HOME WORKS! program staff provided a list of interested

teachers in each school. Within each school and grade level block (when there were multiple volunteer teachers per grade level), the research team randomly assigned these interested teachers' classrooms to the HOME WORKS! or comparison conditions using a random number generator.

Study Sample

The 11 schools participating in the study served over 3,200 students, of whom 84% were African American, 12% were White, and 3% were of Hispanic descent. According to data provided by SLPS, approximately 9% of students in participating schools were designated as English learners, and 13% received special education services through an Individualized Education Program (IEP). Approximately 39% of the district's third grade students were not meeting grade-level standards in ELA during the 2017–18 academic year (Missouri Department of Education, 2017). The participating schools predominantly served students in PreK through Grades 5 or 6, with one school serving students through Grade 2 (see Table 1). Average attendance rates over the 2017–18 school year for students in the focal grade ranges for this study ranged from 92% to nearly 96%. Across the participating schools, the percentage proficient in reading varied substantially, ranging from 0% to nearly 57% of students scoring at *Proficient* or *Advanced* levels on the ELA assessment of the Missouri Assessment Program (MAP) test.

Table 1. Characteristics of Participating Schools, 2017–18

School	Grades Served	K–12 Enrollment	Attendance Rate (%) Grades 1–3	% *Proficient* or *Advanced* on Grade 3 ELA MAP Test
1	PK–6	285	93.4	10.0
2	PK–5	380	94.3	16.7
3	PK–6	191	92.1	0.0
4	PK–5	551	94.0	26.4
5	PK–5	220	92.3	6.5
6	PK–6	420	95.7	56.9
7	PK–5	231	92.1	17.4
8	PK–6	273	93.4	14.6
9	PK–6	337	93.8	0.0
10	PK–2	462	94.7	N/A
11	PK–5	332	93.2	29.7

Because randomization and assignment occurred before the school year began, instances of not-unexpected attrition occurred. These were caused by

teacher reassignments, lower-than-anticipated student enrollment in focal grades, inability to schedule training, and three schools that decided to opt out of participating. In total, 74 teachers in 14 schools were randomly assigned to the HOME WORKS! or comparison conditions (38 HOME WORKS! and 36 comparison teachers). Following random assignment, three schools left the study and did not participate in any HOME WORKS! programming. Within the remaining schools, two additional classrooms were removed from the study because they were disbanded due to lower-than-expected enrollment. The remaining baseline sample included 56 study classrooms (27 HOME WORKS! and 29 comparison). After additional sample attrition due to missing student-level data, 49 classrooms remained in the research sample (25 HOME WORKS! and 24 comparison) across 11 schools (see Figure 2).

Students were eligible for inclusion in the analyses if they were enrolled in one of the participating classrooms at the time the official enrollment counts were submitted to the district. Across the 56 classrooms that took part in the study, 1,132 students were eligible for inclusion in analyses, including 589 students enrolled in 27 HOME WORKS! classrooms and 543 enrolled in 29 comparison group classrooms. The focal sample used in primary analyses excluded all students with missing baseline or outcome data. This resulted in a final analysis sample of 361 students within 25 HOME WORKS! classrooms and 302 students within 24 comparison group classrooms (see Figure 3). The initial baseline sample sizes within these remaining 49 classrooms (prior to sample loss due to missing data) included 563 HOME WORKS! students and 509 comparison students.

Data Collection

The study relies on administrative records provided by HOME WORKS! (teacher logs) and SLPS school data, which included demographics and outcomes (attendance rates, test scores, disciplinary referrals). These data were provided by the school district at the beginning and end of the 2017–18 academic year.

The research team also received student- and classroom-level program administrative data that was collected regularly by the HOME WORKS! organization through teacher training and family dinner attendance forms and online teacher logs. At the teacher level, HOME WORKS! administrative data included attendance at the two training sessions and the number of first and second home visits conducted. At the student level, the HOME WORKS! administrative data included information about each home visit, including the timing of the home visit, as well as participation in family dinners. These data were purged of students' identifying information and merged with the

deidentified student-level data from the school district prior to delivery to the research team for analysis. These data were used to present participation rates and to examine the characteristics of students who took part in HOME WORKS! programming. The descriptive analysis also discussed the characteristics of home visits, including where visits took place, duration of the visit, whether students participated in the visits, topics covered, and teachers' perceptions of the benefits of the home visits.

Figure 2. Classroom-Level Sample Flow

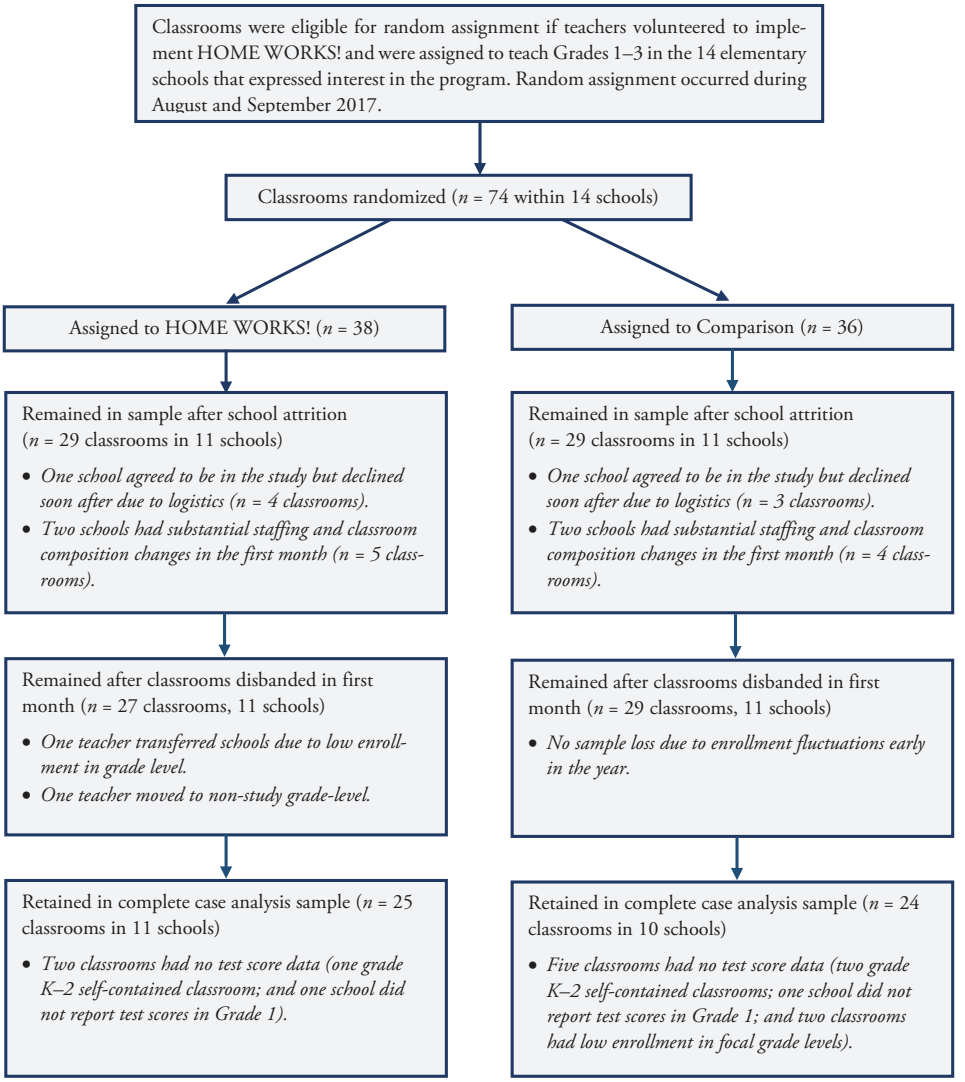
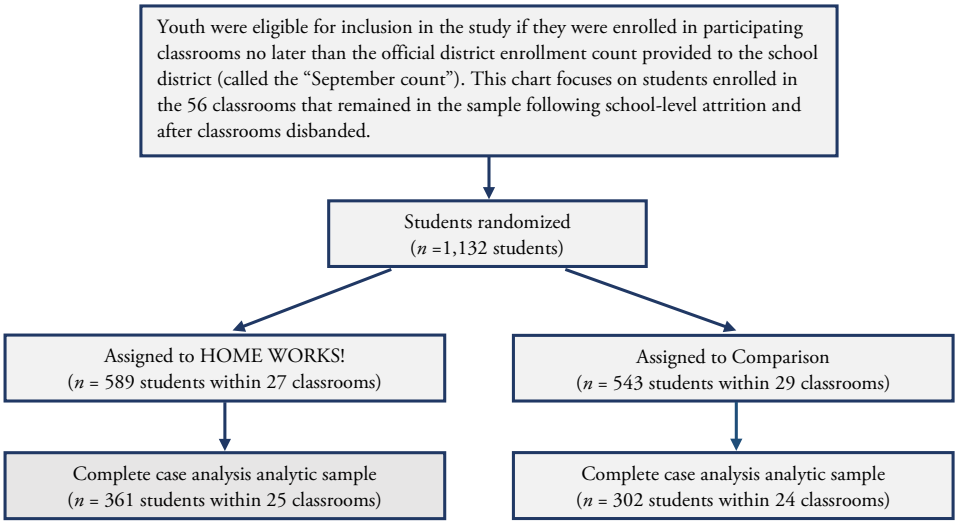


Figure 3. Student-Level Sample Flow



Data Sources and Instruments

All outcome measures included in this study are ones regularly collected by the participating school district. These outcomes were collected at baseline (from the 2016–17 school year) as well as at follow-up (at the end of the 2017–18 school year). In addition, the study team obtained school administrative records data required for the analysis; these included demographic information (gender, race and ethnicity, grade level) as well as baseline measures of English learner status, gifted status, and receipt of special education services. End-of-year 2017–18 measures of English learner status, gifted status, and receipt of special education services were also obtained to explore whether there were differences between HOME WORKS! and comparison students; however, these analyses are considered exploratory as the study was not initially designed to examine these impacts. This study focused on outcomes in three main domains: reading achievement, attendance, and student behavior. The data sources for each are described here.

Reading Achievement–STAR Reading Assessment (Grades 1–3)

The primary outcome examined in this domain was the STAR reading assessment, which was administered at all study schools in all focal grade levels (Renaissance Learning, 2019). STAR is a well-established, computer-adaptive literacy and numeracy assessment that measures concepts such as understanding of print, phonological awareness, phonics and word recognition, fluency, and vocabulary acquisition and use. The STAR tests are the most widely used assessments in K–12 public schools.

Reading Achievement–Missouri Assessment Program (MAP) (Grade 3 only)

For the smaller subsample of students in Grade 3, the study examined state-level Missouri Assessment Program (MAP) English language arts (ELA). MAP testing begins in Grade 3. The research team considered a student to be proficient in a subject if the student received a rating of *Proficient* or *Advanced* on the ELA assessment. A student was not considered proficient if they received a rating of *Basic* or *Below Basic*. The MAP assessment data are considered to be exploratory, as they focus on less than one-third of the analysis sample.

Attendance and Chronic Absenteeism

The primary outcome of interest for this analysis was a measure of chronic absenteeism, defined as missing more than 10% of the school year (roughly 18 school days). The study also examined effects on overall attendance rates.

Disciplinary Referrals

Schools are mandated to collect and report the number of disciplinary referrals as part of state reporting. Because the frequency of disciplinary referrals for in-school and out-of-school suspensions is quite low for students in this age range, the study focused on an outcome measuring any reports of any suspensions as the primary measure of disciplinary referrals. This study also looked for HOME WORKS! effects on number of days of student suspensions.

Analytic Approach

In addition to the descriptive analysis, the research team conducted two other types of analyses. An intent-to-treat (ITT) analysis was used to estimate the effects for students enrolled in HOME WORKS! classrooms on academic outcomes. A treatment-on-the-treated (TOT) analysis was used to estimate the effects for students who received at least one home visit.

Intent-to-Treat Analyses

The benchmark analysis for this study focused on three primary research questions:

1. Do students enrolled in classrooms assigned to HOME WORKS! score higher on spring 2018 standardized reading assessments than students in non-HOME WORKS! classrooms?
2. Are students enrolled in classrooms assigned to HOME WORKS! less likely to be chronically absent than students in non-HOME WORKS! classrooms over the course of the 2017–18 school year?

3. Do students enrolled in classrooms assigned to HOME WORKS! experience fewer disciplinary incidents over the course of the 2017–18 school year than students in non-HOME WORKS! classrooms?

Under the ITT framework, students were considered to be in the intervention condition to which their classrooms were originally randomly assigned. Students who moved to a different classroom remained in the sample in their original classification; however, those who joined study classrooms after the September count were excluded from the analysis. This report presents results from a complete case analyses (663 students) that excludes students with any missing baseline or outcome data. The research team also conducted a sensitivity analysis that incorporated information from the full research sample (1,132) by using multiple imputation techniques to account for missing data. The research team also explored effects for subgroups of students who fit into the key categories that teachers were instructed to focus on when prioritizing families to be visited, including those who were chronically absent, demonstrated low reading achievement, or had prior disciplinary actions.

For all analyses, multilevel mixed-effects models were employed in which students (the unit of analysis) were nested within classrooms (the unit of random assignment) that were nested in grade levels within schools. The analyses included random assignment blocking characteristics (grade level and school) as fixed effects and adjusted standard errors for clustering at the classroom level (the level of random assignment). Additional student-level control variables included race and ethnicity, gender, baseline measures of the primary outcomes, and baseline measures of special education status, English learner status, and gifted status. Baseline measures were based on data from the 2016–17 school year. Classroom-level covariates (classroom averages of percent female, White, and Hispanic) were also included in the models to control for differences in the demographic composition of classrooms.

Treatment on Treated (TOT) Analyses

The TOT analysis examined how students who received home visits fared in terms of academic achievement in comparison to similar students in the comparison group. The research team employed two-stage least squares (TSLS) analytic methods to obtain the complier average causal effect (CACE) estimates of program effects. This analysis measured the effect for students whose family took part in at least one home visit.

In determining the analytic strategy, the research team conducted diagnostics to assess whether there was sufficient indicator strength—in other words, whether there was a strong association between treatment assignment and program participation rates. A first-stage *F* statistic was estimated, then adjusted

for clustering, to determine instrument strength, following What Works Clearinghouse standards (U.S. Department of Education, 2019). All TOT analyses included only the sample members with non-missing baseline and outcomes variables (complete case analysis sample). Among this analytic sample, 180 out of 361 students in the HOME WORKS! condition received a home visit and were considered "compliers" for the purposes of the TOT analysis. Three hundred out of 302 comparison students with non-missing baseline or outcome data complied with their assigned status (i.e., did not receive a home visit).

Study Findings

This study examined the impact of HOME WORKS! in a real-world setting of an urban, high-needs school district. This section first describes the characteristics of the participating schools, teachers, and students. Information from the teacher logs was used to describe the characteristics of the home visits and teachers' perceptions of the benefits of these visits. The next discussion addresses the results from the impact analysis that estimated program effects on student academic outcomes.

HOME WORKS! Implementation

Teacher Participation in Professional Development and Home Visits

All study teachers who remained in their assigned classrooms at the beginning of the school year participated in HOME WORKS!. Although all teachers attended the professional development sessions and participated in home visits, the number of visits completed was fewer than anticipated. The principal and site leader at each school set a goal for the total number of home visits to be completed (Table 2). These ranged from 17 to 60, with the average student goal per teacher ranging from 6.25 to 20. Of the 11 participating schools, six met their student goals. One school significantly exceeded its goal of 25 by completing 70 visits.

During visits to schools in the spring of 2017, site leaders noted various reasons for low numbers of visits, including (1) family nonresponse or "no-shows" for both visits and the family dinners, (2) teachers' concerns for their personal safety after dark, (3) lack of teacher release time, (4) competing priorities and time constraints, (5) teachers living far from the students they taught, and (6) understaffing due to illness (two staff members were required per visit). Site leaders also mentioned that teachers showed interest in conducting home visits prior to the school year when there was plenty of time and daylight, but class rosters were not available until just as the school year began. With other family

obligations and events, teachers were mostly not available to conduct visits on weekends. Some sites allowed teachers to leave the building during their preparation periods or personal lunch breaks to complete visits, but many were reluctant to do so.

Table 2. Visit Goals and Number of Visits Completed by School

School	Student Visit Goal	Average Visit Goal Per Teacher	Total Number of Visits Completed
1	38	13	23
2	60	20	26
3	24	12	16
4	40	8	46
5	18	18	22
6	27	9	40
7	17	17	11
8	17	17	10
9	20	10	37
10	25	6	70
11	40	20	55

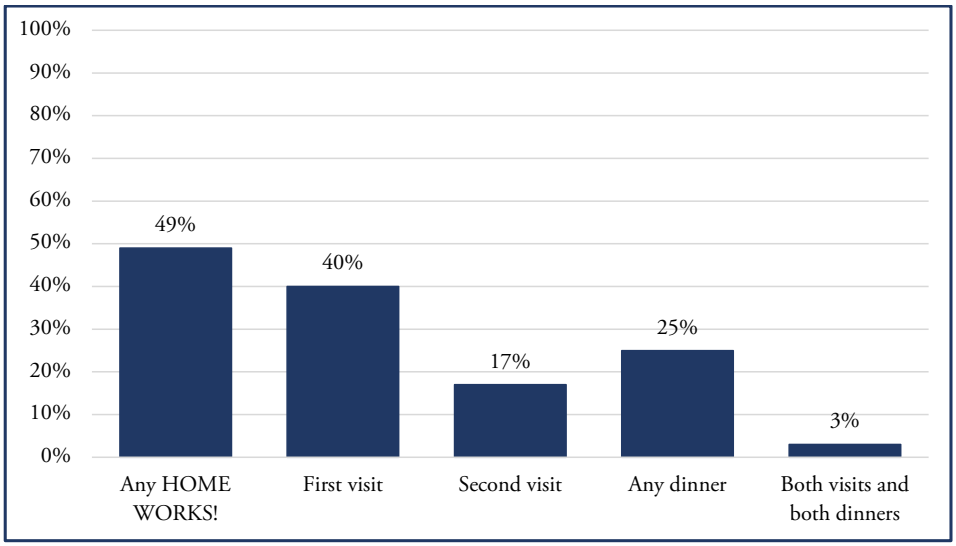
Note. Highlighted rows indicate schools that met their priority student goals. This table includes the total number of visits (aggregating first and second visits).

To boost the number of finished visits across all schools (those that were part of the study and those that were not), HOME WORKS! offered additional financial incentives to teachers who completed a certain target number by the holiday break in December, and again by the end of data collection in early April. Only 2 of the 25 teachers participating in the RCT study received this incentive, a $15 gift card for completing between 5 and 9 visits. HOME WORKS! also provided a Valentine's Day "Thank You" gift card for completing a minimum of one visit. At least 3 teachers in every school received that gift, with as many as 10 teachers in one school receiving it.

Student and Family Participation

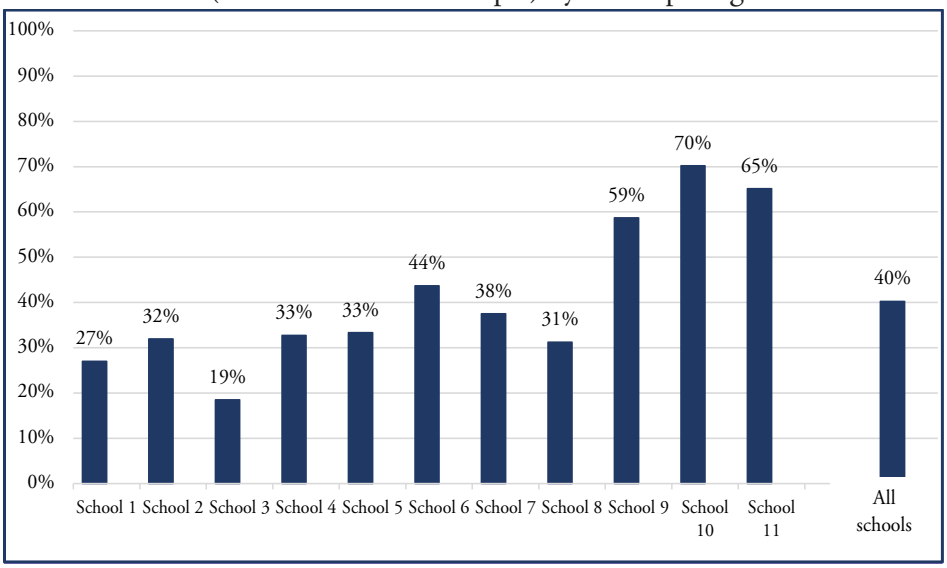
Approximately half of the families with students in HOME WORKS! classrooms actively participated in any program services, and 40% received a first visit (see Figure 4). Only 3% participated to the fullest extent possible, receiving both home visits and attending both dinners.

Figure 4. Participation Rate of Families With Children in HOME WORKS! Classrooms



There was wide variation across schools in the percentage of students receiving visits, with a range of 19–70% (see Figure 5).

Figure 5. Percentage of HOME WORKS! Students Who Received at Least One Home Visit (Full Randomized Sample) by Participating School



Teachers did not always reach the students they prioritized when making home visits. During their training, teachers were asked to prioritize visits based on student need, using "priority characteristics" such as low academic

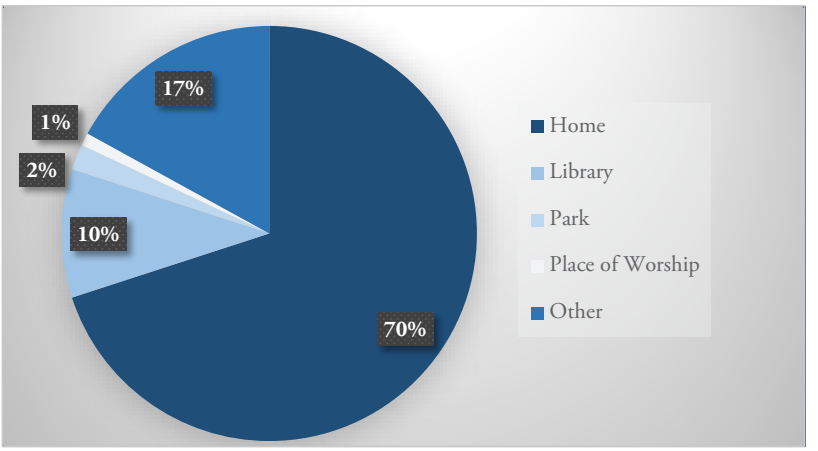
performance, behavioral issues or social–emotional concerns, low parent engagement, attendance and/or tardiness issues, low homework completion, or a family's request for a visit. Nearly 40% of families who received a first visit were not identified by the teacher as having a priority characteristic. Similar patterns were found when looking at more objective measures of "priority" based on 2016–17 baseline school records information. For example, 53% of HOME WORKS! students who received a home visit fell into one of three key priority categories examined in the impact subgroup analysis: scoring more than half a year below grade level on the STAR reading assessment, chronically absent, or ever receiving a disciplinary referral.

For students recorded by their teachers as being part of a priority category, low academic performance and student behavior were the most commonly reported characteristics. Just over half of students with second visits did not fit teacher-defined priority characteristics. Students with two home visits were significantly more likely than those receiving one home visit to be African American (87% versus 78%) and less likely to be English learners (5% versus 11%). Discussions with HOME WORKS! staff suggest that teachers understood the need to prioritize visits but had difficulty reaching all families.

Characteristics of Home Visits

Approximately 70% of the home visits were held in students' homes, the preferred venue to meet the family (see Figure 6). Visits held outside the home were in neutral, non-school locations, such as libraries, parks, benches outside the school, community centers, and fast food establishments. Home visits averaged 40 minutes in length, with 90% completed within 30 to 60 minutes. The shortest reported visit was 15 minutes, and the longest was 300 minutes. Students were present during the home visit about 90% of the time.

Figure 6. Home Visit Locations



Teachers discussed a variety of topics during home visits. They presented a student's "plan for success" in the majority (93%) of first visits. Teachers also discussed academic and attendance data in almost all visits. Table 3 provides examples of the most common recommendations that teachers made to families.

Table 3. Examples of Recommendations Made to Families to Support Student Success

Recommendation	Examples
Practice reading skills (*n* = 106)	• Student should read 20 minutes daily. • Mastery of sight words to improve reading level. • Student needs guidance in reading comprehension.
Importance of parents' role in supporting students (*n* = 37)	• Gave parent resources to support learning at home, parent asked for afterschool resources and other activities available for student to make progress in reading. We also discussed behavior and strategies that I will use at school, and they will work with the student at home as well. • Dad will listen to the student read and help the student practice their multiplication facts. When the student is reading, the student will focus on comprehension. • The student's dad had agreed to assist with homework completion. The father has also agreed to read daily with the student. We agree to support the student, as well. Working daily on sight words will assist with the student's reading.
Complete homework (*n* = 24)	• The student is encouraged to complete homework daily. The student is also encouraged to read daily. • The student will complete their homework and go to the library to read books. The family will create a schedule for homework completion. • The child will do homework before playing video games.
Work on behavior (*n* = 42)	• Begin a daily behavior chart. • Send behavior charts home daily, reward if returned, make phone calls home when necessary to redirect behavior. • The student is to work on self-control and anger issues. The student is to stay in their seat and not walk out of class.

Teachers' Perceptions of Benefits of Home Visits

Teachers were enthusiastic about the quality and benefits of the first visits: More than 80% reported that the first visit enabled them to improve their relationship with and enhance their understanding of the student's family. For example, one teacher learned that there had been some "drastic changes within the house" and that "mom is trying to iron out the wrinkles." Another teacher

noted that a child who alternated living with the mother and father was now "living solely with the father, which was a major transition and causing behavior change. Knowing this has shed some insight on this promising child."

Other perceived benefits teachers cited included a better understanding of academic challenges, the ability to discuss student growth and progress (particularly during the second visit), and beneficial discussions regarding student behavior. For example, one teacher mentioned it was helpful to meet the parents to "discuss strategies to implement to improve behavior with the student and the student's older sibling." Another teacher noted that "it was great to see the student's mom set on making sure the student does well. The student's mother expressed interest in helping the student get above grade level. It was great to talk about strategies the student can use to help become a better reader."

After the second visit, teachers again cited an improved relationship and understanding of the family as the biggest benefits. They also found it helpful to share student progress or growth and to discuss academic challenges or behaviors in school. For example, one teacher noted that the parents "had concerns about the student's progression in talking over the plan for success. Since doing the second home visit, it was beneficial to see where the parent felt the student was struggling academically." In another situation, a teacher stated that "this visit was especially beneficial because the parent was able to see growth and compare them to the goals that we set in the first visit. The student…has made steady progress in all areas. The family was very happy with our visits and inquired about any further visits this year."

Family Engagement Opportunities Available to Members of the Control Group

Almost none of the students in the comparison classrooms participated in HOME WORKS! activities. Families in the comparison group who did not participate in HOME WORKS! programming had other parent involvement opportunities available through their child's school. Those school events were available to both HOME WORKS! and comparison students, and included a variety of activities throughout the year, such as regular Parent Teacher Organization events, meetings for parents of English learners, and special events. In a typical SLPS school, an open house was held at the beginning of the year, and award ceremonies and recognition events were held at the end of the year to celebrate student achievement. In some study schools, two parent–teacher conferences and an open house were offered, along with four Parent Teacher Organization meetings. Eight other enrichment events occurred throughout the year. Some events were academic in nature, such as a Literacy Family Night at one of the schools, while others centered on holidays or themes, such as Trick-or-Treat or a Father–Daughter Dance. Most parent involvement events

were held at the schools, although some special events took place at other locations, such as the Botanical Gardens Family Night at the Missouri Botanical Garden. The research team did not receive attendance data from these events, so it is not possible to know if these events were widely attended.

HOME WORKS! Impacts

Impacts on Academic and Behavioral Outcomes

To measure the effects of HOME WORKS! on student academic outcomes, the research team focused on 663 students who had complete baseline and outcome data. Sensitivity analyses that used imputation methods to account for missing data yielded nearly identical results and are not discussed in this article but can be provided upon request. The primary analysis sample included 361 students enrolled in 25 HOME WORKS! classrooms and 302 students enrolled in 24 comparison classrooms. Among this sample of HOME WORKS! students with available baseline and outcome data, 50% participated in at least one home visit, and 59% took part in at least one HOME WORKS! activity (home visit or family dinner).

Given the random assignment design, the HOME WORKS! and comparison groups would be expected to share similar background characteristics. Indeed, at baseline, the HOME WORKS! and comparison group students were similar in terms of demographic characteristics as well as baseline academic measures (see Table 4). Approximately half of the students were female. More than three-quarters were African American, 18% were White, and 4% were Hispanic. Students were roughly equally distributed across grade levels, with slightly more students in Grade 2 represented in the analysis sample.[1] About 15% of students were designated as English learners in the prior school year, and about 10% received special education services through an IEP. About 4% were designated as gifted and talented, and less than 2% had been retained in grade from the prior school year.

In terms of academic performance, more than 40% of the analysis sample scored at least one-half year below grade level on the STAR reading assessment at the beginning of the 2017–18 school year when the HOME WORKS! intervention commenced. About 9% were chronically absent in the prior school year, and just under 6% had received a disciplinary referral in the prior school year.

Table 4. Background Characteristics of Analysis Sample

Characteristic	Analysis Sample (n = 663)	HOME WORKS! Students (n = 361)	Comparison Students (n = 302)
Female	47.8%	47.0%	49.0%
African American, non-Hispanic	76.8%	77.0%	75.0%
Hispanic	4.4%	5.0%	4.0%
White, non-Hispanic	18.3%	18.0%	21.0%
Other race or ethnicity	0.6%	0.0%	1.0%
Grade 1	28.1%	24.0%	26.0%
Grade 2	41.2%	41.0%	40.0%
Grade 3	30.8%	35.0%	33.0%
English learner status	14.6%	15.0%	16.0%
Receives special education services	9.7%	11.0%	9.0%
Gifted status	4.4%	1.0%	6.0%
Retained in grade from prior year	1.8%	1.0%	2.0%
STAR Fall 2017 reading (grade level)	1.7 (SD = 1.15)	1.6 (SD = 1.12)	1.8 (SD = 1.17)
Scored at least one-half year below grade level on STAR reading	44.3%	47.0%	42.0%
Attendance rate prior school year	94.9%	95.0%	95.0%
Was chronically absent during prior school year (attendance below 90%)	8.7%	10.0%	8.0%
Received a disciplinary referral during prior school year	5.6%	4.0%	7.0%

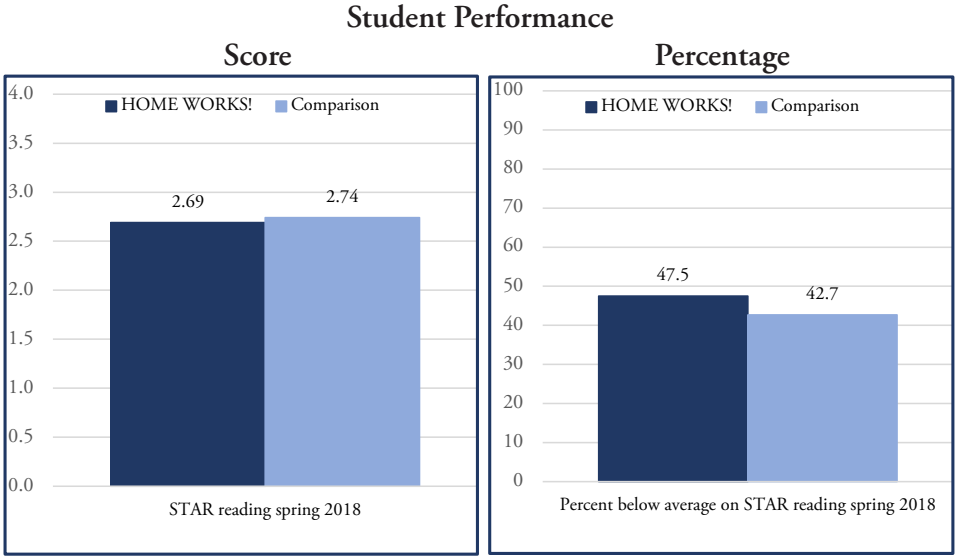
Note. SD = standard deviation. There were no statistically significant differences between HOME WORKS! and comparison students ($p < .05$). All baseline estimates and analyses are adjusted for grade- and school-level blocking characteristics and clustering at the teacher level. Standard deviations for the STAR test are unadjusted.

Academic Achievement

To measure program effects on student achievement, the research team measured differences in STAR reading assessments between students enrolled in HOME WORKS! classrooms and students enrolled in comparison group classrooms. The research team examined the overall grade-level-equivalent score as well as the percentage of students who scored half a grade level below average on the STAR assessment (see Figure 7). In both cases, comparison students scored slightly higher than HOME WORKS! students, but these differences were not statistically significant.

Similar results were found when focusing on students who received at least one home visit. Again, comparison students scored slightly higher than HOME WORKS! students on the spring 2018 STAR assessment, but the differences were minimal and not statistically significant.

Figure 7. Spring 2018 STAR Reading Assessment Scores for HOME WORKS! and Comparison Students

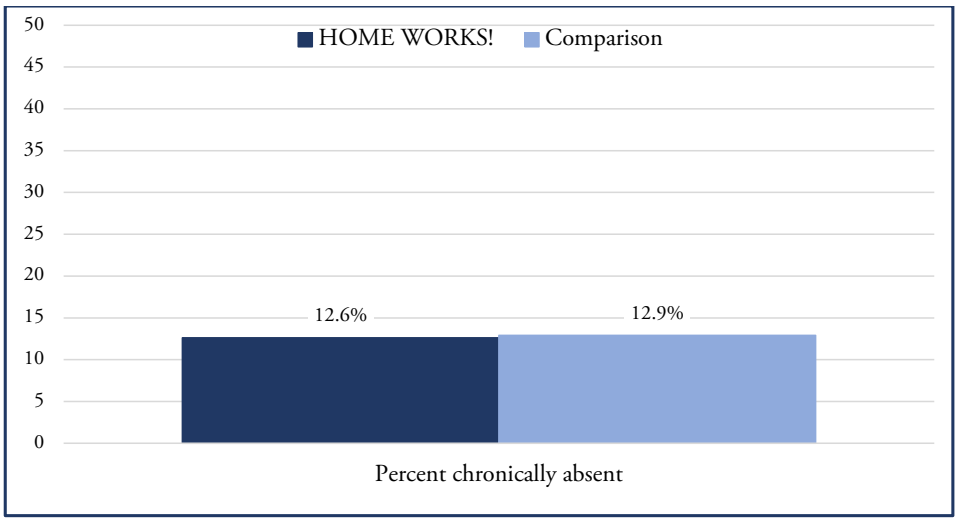


Note. Differences are not statistically significant (p = .496 for the STAR reading score, and p = .143 for percent below average). Means are regression-adjusted.

Attendance and Chronic Absenteeism

Overall attendance rates were relatively high and nearly identical for both the HOME WORKS! and comparison students. On average, students attended school 95% of the time. While the overall attendance rate was similar to that reported in the baseline year, the percentage of students who were chronically absent increased. During the 2016–17 baseline year, 9.2% of students were chronically absent, meaning they were absent more than 10% of the time. During the 2017–18 study year, the incidence of chronic absenteeism rose to 12.8% for students included in the analysis sample. HOME WORKS! students had slightly lower rates (0.3 percentage points difference) of being chronically absent than comparison students, and this difference was not statistically significant (see Figure 8).

Figure 8. Rates of Chronic Absenteeism for HOME WORKS! and Comparison Students



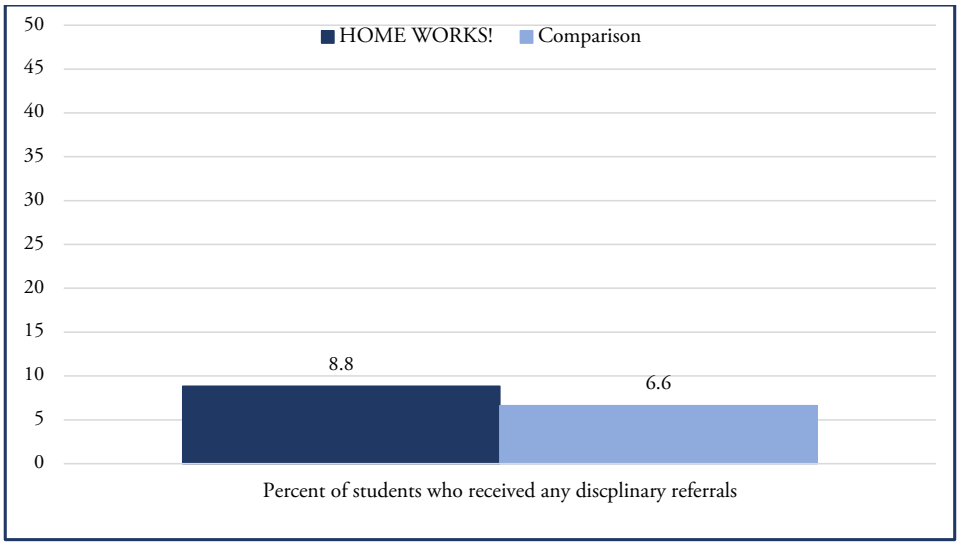
Note. Differences are not statistically significant (p = .907). Means are regression-adjusted.

Similarly, when focusing on students who participated in at least one home visit, the estimated difference in chronic absenteeism between HOME WORKS! and comparison students was close to 1 percentage point. This difference was not statistically significant, and overall attendance rates were nearly identical for both groups.

Disciplinary Referrals

Disciplinary referrals for in-school and out-of-school suspensions were rarely reported by participating schools. On average, less than 8% of students in the analysis sample received one or more disciplinary referrals during the 2017–18 school year, and students who received infractions averaged about 3 days of suspension across the school year. A slightly larger proportion of students in HOME WORKS! classrooms received any disciplinary referrals (8.8%) than students in comparison classrooms (6.6%); however, this difference was not statistically significant (see Figure 9). When focusing on students who participated in HOME WORKS! programming, differences between the HOME WORKS! and comparison students were more pronounced (a 5 percentage point difference) but remained non-statistically significant. Similarly, the study found no statistically significant or substantively important differences between the groups in terms of the overall length of the disciplinary referrals.

Figure 9. Rates of Disciplinary Referrals for HOME WORKS! and Comparison Students



Note. Differences are not statistically significant (p = .350). Means are regression-adjusted.

Additional Exploratory Analyses

Teachers were instructed to focus on students who had particular priority characteristics, which HOME WORKS! defined to include low academic performance, behavioral and social–emotional concerns, high absenteeism or tardiness rates, homework completion concerns, and low parent engagement. Also, students were prioritized if parents requested a visit. The research team examined whether there were differences in academic outcomes for HOME WORKS! and comparison students who fit into these key priority categories. Specifically, the research team examined effects for students who were at least a half-year below grade level in reading at the start of the study year, students who were chronically absent in the prior school year, and students who had any disciplinary referrals in the prior year. These analyses should be considered with caution, as they are based on substantially smaller samples of students, and there is evidence that these groups varied in terms of background demographics. The research team also examined effects by gender, race and ethnicity, and grade-level subgroups. Results were similar to those in the overall analyses.

Results from these exploratory subgroup analyses are summarized in Table 5. Among the students who fit into these three priority subgroups, less than half participated in a home visit (column 2 of Table 5). In accordance with the intent-to-treat analysis, all students were included in the subgroup analysis, regardless of whether they received a home visit. HOME WORKS! students who scored below average at baseline did not differ from comparison students in terms of 2017–18 academic outcomes.

For students who were chronically absent at baseline, a statistically significant difference favoring the HOME WORKS! group was found in subsequent rates of chronic absenteeism. This positive relationship should be interpreted with caution because the analysis was based on a very small sample of 58 students within 30 classrooms, and students in the HOME WORKS! group in this analysis were much more likely to be female than students in the comparison group. Thus, differences in outcomes between the HOME WORKS! and comparison groups may be due to HOME WORKS!, but may also be due to underlying differences between the analyzed groups.

Table 5. Subgroup Analyses Based on "Priority" Characteristics

Subgroup	Sample Size	% HOME WORKS! Students Who Received a Home Visit	Star Reading Achievement	Chronic Absenteeism	Any Disciplinary Referrals
Low-achieving	294	48	NS	NS	NS
Chronically absent in prior school year	58	37	NS	+	NS
Had at least one disciplinary referral in prior school year	37	48	+	+	NS

Note. NS = no statistically significant differences. + = statistically significant differences favoring the HOME WORKS! group.

The analysis of students who had received a disciplinary referral in the prior school year is based on an even smaller sample size of 37 students within 18 classrooms with substantial differences in the gender and grade level composition of the sample. While the analysis did not show any differences in the percentage of students who received a disciplinary referral in the study year, there were statistically significant differences favoring the HOME WORKS! group for the spring STAR test scores, as well as lower rates of chronic absenteeism after controlling for gender, grade-level composition, and other background characteristics. Again, this result should be considered with caution given the lack of baseline equivalence between the groups.

Summary Findings

This study by external evaluators at Concentric Research & Evaluation and Synergy Enterprises, funded by the U.S. Department of Education's Institute of Education Sciences, aimed to understand whether the HOME WORKS! "2+2" model had positive effects on achievement, attendance, and behaviors

during one academic year. The research team designed the study in partnership with HOME WORKS! and SLPS to examine the effects of the program, as implemented, in 11 elementary schools in a high-needs school district. Schools were recruited, and volunteer teachers were randomly assigned to the HOME WORKS! or comparison conditions. Students in HOME WORKS! and comparison classrooms shared similar background characteristics at random assignment.

Over the course of the academic year, HOME WORKS! teachers took part in two professional development events, conducted home visits, and participated in family dinners at their schools. The "full" HOME WORKS! model (two teacher home visits and two family dinners at the school) was seldom experienced. About half of the students assigned to HOME WORKS! classrooms participated in any single HOME WORKS! activity, and less than 5% of students and their families took part in two home visits and two family dinners. Approximately 70% of the home visits were held in students' homes. The remaining visits were held in neutral, non-school locations such as libraries, parks, and fast-food establishments. Home visits averaged 40 minutes, with 90% of visits completed within 30–60 minutes. Students were present during the home visit approximately 90% of the time. A student's plan for success was discussed, along with students' attendance, academic performance, and reading skills in 93% of the home visits.

Teachers overwhelmingly reported positive benefits to participating in home visits. More than 80% of participating teachers reported that their first home visit enabled them to improve their relationship with and enhance their understanding of the student's family. Teachers also commonly discussed learning more about the student's challenges at home (including limited resources and recent changes in the family's situation or home environment) and a child's strengths, weaknesses, and individual interests. Other perceived benefits included a better understanding of students' academic challenges, the ability to discuss student growth and progress (particularly during the second visit), and beneficial discussions about student behaviors.

To measure program effects on student achievement, the research team measured differences in STAR reading assessments between students enrolled in HOME WORKS! classrooms and students enrolled in the control group classrooms. Students in HOME WORKS! classrooms and comparison classrooms scored similarly on STAR reading assessments ($p > .10$). Rates of chronic absenteeism were also similar for students enrolled in HOME WORKS! and comparison classrooms ($p > .10$). Students in HOME WORKS! classrooms had a slightly higher incidence of in-school and out-of-school suspensions, but the difference was not statistically significant. Similarly, the study found

no statistically significant or substantively important differences between the groups in terms of the overall length of the disciplinary referrals.

Discussion

The results from this study, which did not find statistically significant effects of HOME WORKS! on student reading achievement, attendance, or disciplinary referrals, run counter to other recent evidence that suggests home visiting has a positive effect on student outcomes (McDonald et al., 2006; Sheldon & Jung, 2015; Sheldon & Jung, 2018; Concentric Research & Evaluation & EMT, 2016). We suggest that there are a few potential reasons for this discrepancy.

First, prior studies, including a study of HOME WORKS!, have been based on quasi-experimental studies, comparing students who participated in home visits with students who have not. Based on the current study's findings, it is possible that the results from prior quasi-experimental studies indicate that families who chose to engage in home visits may already have stronger connections to school than those who do not. Non-experimental studies may not be able to capture underlying differences in the characteristics of these families (for example, academic motivation or connection to school) that may provide an alternative explanation for differences in academic outcomes. Future quasi-experimental research efforts might examine the connection between family characteristics and program participation to get a better sense of the incentives for, and barriers to, participation.

Second, the program was not implemented as intended. Only about half of the students in HOME WORKS! classrooms received a home visit, and very few students received the full model of two home visits and two family dinners. Implementation challenges are not new to this program, particularly in schools serving a large proportion of high-needs students. Other parent engagement models have learned that caregiver employment status, number of siblings in the family, family social support, and school turnaround status are significant predictors of recruitment and retention for FAST (Families and Schools Together, 2021; McMackin, 2020). HOME WORKS! is investigating various ways to increase the number of families who participate in its program.

HOME WORKS!'s challenges may have been further amplified by the rollout of the program with a limited number of teachers per school. When HOME WORKS! typically recruits schools, the organization encourages as many teachers as possible to participate in programming in a given year so that the program operates as a "whole school" model. However, in the study schools, the research study design dictated that only a portion of teachers in

the early grade levels be randomly assigned to implement the program. The rollout of the program with a limited number of teachers per school may have impeded strong program implementation and the development of a schoolwide culture around the program, which may have diminished the potential program impact on student achievement. Also, all teachers in this study were new to the HOME WORKS! intervention, and it is possible that it takes time for teachers to become accustomed to the program and devise successful strategies for parent outreach. Future research efforts should consider examining schoolwide program implementation over multiple school years.

Finally, the outcomes that were available are based on data readily accessible through school administrative records but may not be the most malleable in the short term for an early elementary school population. Many prior studies focused on shorter-term, teacher-reported academic and behavioral outcomes. In this study, although teachers anecdotally reported benefits of home visits, such as improved relationships with families and better understandings of student needs, these did not necessarily translate into statistically significant improvements in academic achievement, attendance, or behavior. Given the relatively young age of the students in the study, there was very little variation in attendance rates, chronic absenteeism, and disciplinary referrals, making it difficult to detect differences between HOME WORKS! and comparison students. Both administrative and teacher-reported data may be necessary to gauge a program's potential for short- and long-term influences on behavioral and academic outcomes.

Given the discrepancy of findings in this study of HOME WORKS! and prior studies of home visiting programs, future studies should continue to use rigorous designs, along with thorough implementation studies, to examine the potential program effects of home visiting programs. Researchers may also wish to examine the connection between family characteristics and program participation to get a better sense of the predictors of and barriers to participation. It may be worthwhile to consider school-level designs, and to measure implementation and outcomes over time, which would enable schools to have the opportunity to develop a schoolwide culture around home visiting programming. Such studies could also incorporate additional data collection efforts to get a better understanding of parent and teacher perspectives on the programming, changes in teacher behaviors, and changes in student and family engagement with school.

Based on the lessons learned from the current study and additional ongoing internal program evaluation, the HOME WORKS! organization has since collaborated closely with SLPS as well as other partner districts to develop strategies that strengthen and tailor programs to the needs of schools. As this and

similar programs across the country continue to build and refine home visiting programming for school-age families, additional research–practice partnership efforts should investigate: (1) barriers to family participation and how best to reach high-needs families; (2) ways to support teachers in implementing the program with fidelity, perhaps through extra release time and/or additional communication skills training; (3) whether different levels or types of teacher incentives can increase participation; and (4) what role a broader schoolwide culture around parent and family engagement plays in the successful implementation of home visiting programs.

Endnote

[1]The complete case analysis sample was similar to the full sample of students enrolled in participating classrooms at baseline. One notable difference is that there were fewer students in Grade 1 in the analysis sample (largely because baseline STAR testing data were not available for some Grade 1 classrooms).

References

Bryk, A. S., Sebring, P. B., Allensworth, E., Easton, J. Q., & Luppescu, S. (2010). *Organizing schools for improvement: Lessons from Chicago.* University of Chicago Press.

Concentric Research & Evaluation and Evaluation, Management, and Training Associates (EMT). (2016, September). *HOME WORKS! The Teacher Home Visit Program: Exploring outcomes during the 2014–15 school year*. https://www.teacherhomevisit.org/wp-content/uploads/2017/02/Concentric-HW-report-9.29.16.pdf

Child Trends. (2018). *Parent involvement in schools.* https://www.childtrends.org/indicators/parental-involvement-in-schools

Dearing, E., Kreider, H., Simpkins, S., & Weiss, H. B. (2006). Family involvement in school and low-income children's literacy: Longitudinal associations between and within families. *Journal of Educational Psychology, 98*(4), 653–664.

Evaluation, Management, and Training Associates. (EMT). (2018). *Implementation findings from HOME WORKS! The Teacher Home Visit Program: 2017–18 school year annual evaluation report.* https://www.teacherhomevisit.org/wp-content/uploads/2020/03/2017-2018-home-works-annual-evaluation-report.pdf

Families and Schools Together. (2021). *FAST program: Brief overview*. https://www.familiesandschools.org/what-we-do/fast-program

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement.* SEDL.

Layzer, J. I., Goodson, B., Creps, C. Werner, C., Werner, A., & Bernstein, L. (2001). *National evaluation of family support programs. Volume B: Research studies*. Abt Associates. https://www.familiesandschools.org/app/uploads/2014/08/FAST-RCT-ABT-Research-Associates-Article.pdf

McDonald, L., Moberg, D. P., Brown, R., Rodriguez-Espiricueta, I., Flores, N. I., Burke, M. P., & Coover, G. (2006). Afterschool multifamily groups: A randomized controlled trial involving low-income, urban, Latino children. *Children & Schools, 28*(1), 25–34.

McKnight, K., Venkateswaran, N., Laird, J., Robles, J., & Shalev, T. (2017). *Mindset shifts and parent teacher home visits.* RTI International. http://www.pthvp.org/wp-content/uploads/2018/02/PTHV_Study1_Report.pdf

McMackin, M. K. (2020). *Predicting recruitment and retention of caregivers for the Families and Schools Together Program using health beliefs model variables* [Unpublished doctoral dissertation]. University of Wisconsin–Madison.

Missouri Department of Education. (2017). *District report card: St. Louis City (115115).* https://apps.dese.mo.gov/MCDS/Reports/SSRS_Print.aspx?Reportid=6a5392af-6f3d-46a5-92e1-f39fdfa861c2

Renaissance Learning. (2019). *Renaissance STAR Reading and Renaissance STAR Math assessments.* https://www.renaissance.com/products/star-reading/

Sheldon, S. B., & Jung, S. B. (2015). *The family engagement partnership: Student outcome evaluation.* Johns Hopkins University, Center on School, Family, and Community Partnerships. https://www.researchgate.net/publication/319226886_The_Family_Engagement_Partnership_Student_Outcome_Evaluation

Sheldon, S. B., & Jung, S. B. (2018). *Student outcomes and Parent Teacher Home Visits.* Johns Hopkins University, Center on School, Family, and Community Partnerships. http://www.pthvp.org/wp-content/uploads/2018/12/181130-StudentOutcomesandPTHVReportFINAL.pdf

Sheridan, S. M., Knoche, L. L., Kupzyk, K. A., Edwards, C. P., & Marvin, C. A. (2011). A randomized trial examining the effects of parent engagement on early language and literacy: The Getting Ready intervention. *Journal of School Psychology, 49*, 361–383.

Schulting, A. B. (2009). *The kindergarten home visit project: A kindergarten transition intervention study* [Doctoral dissertation]. Duke University. https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/2481/D_Schulting_Amy_a_201005.pdf?seq

Stetson, R., Stetson, E., Sinclair, B., & Nix, K. (2012). Home visits: Teacher reflections about relationships, student behavior, and achievement. *Teacher Education, 21*(1), 21–37.

U.S. Department of Education, Institute of Education Sciences. (2019). *What Works Clearinghouse standards handbook, Version 4.1.* https://ies.ed.gov/ncee/wwc/Docs/referenceresources/WWC-Standards-Handbook-v4-1-508.pdf

U.S. Department of Health and Human Services, Office of Policy, Research, and Evaluation. (2019). *Home visiting evidence of effectiveness review: Executive summary* (OPRE Report #2019-93). https://homvee.acf.hhs.gov/sites/default/files/2020-02/homevee_effectiveness_executive_summary_dec_2019.pdf

Van Voorhis, F. L., Maier, M. F., Epstein, J. L., & Lloyd, C. M. (2013). *The impact of family involvement on the education of children ages 3 to 8: A focus on literacy and math achievement outcomes and social–emotional skills*. MDRC.

Wagner, M., Spiker, D., & Linn, M. I. (2002). The effectiveness of the Parents as Teachers program with low-income parents and children. *Topics in Early Childhood Special Education, 22*(2), 67–81.

Wright, K. B., Shields, S. M., Black, K., & Waman, H. C. (2018). The effects of teacher home visits on student behavior, student academic achievement, and parent involvement. *School Community Journal, 28*(1), 67–90. https://www.adi.org/journal/2018ss/WrightEtAlSpring2018.pdf

Author's Note: This study was supported by a Low-Cost, Short-Duration Evaluation grant (#305L170005) from the U.S. Department of Education's Institute of Education Sciences. The opinions expressed are those of the authors and do not represent

views of the U.S. Department of Education. The authors would like to express deep appreciation to the leadership at the St. Louis Public Schools for their partnership on this project, including Superintendent Kelvin Adams and Deputy Superintendent of Accountability Cheryl VanNoy. The authors are also greatly indebted to Karen Kalish, founder of HOME WORKS!, who has served as a thought partner and strong believer in evidence to support program improvement.

Lauren Scher is a senior researcher at Mathematica, Inc., where she participates in numerous evaluation technical assistance projects to help grantees and evaluators design and implement studies that will yield useful evidence to guide decisions aimed at improving public well-being. She is the former partner and co-founder of Concentric Research & Evaluation where she served as the principal investigator of this experimental study of a teacher home visiting program. Correspondence concerning this article may be addressed to Lauren Scher, Ph.D., Senior Researcher, Mathematica, Inc., 955 Massachusetts Avenue, Suite 801, Cambridge, MA 02139, or email lscher@mathematica-mpr.com

Sherri Lauver is a senior researcher at Synergy Enterprises, Inc., and served as the co-principal investigator of the study. She is a senior researcher with 20 years of experience designing and directing educational research, evaluation, technical assistance (TA), and strategic planning projects with clients in government and nonprofit organizations. Dr. Lauver is committed to improving outcomes for disadvantaged students, families, and neighborhoods through research initiatives that support evidence-based programs and policies.