



The Effects of Financial Incentives on Teacher Turnover in Early Childhood Settings: Experimental Evidence from Virginia

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Summary:

- Turnover is high among early educators, and staffing problems in early childhood settings have become even more pronounced during COVID-19. There is growing interest, both at the state and federal levels, in strategies to recruit and retain early educators. In particular, many states are considering strategies involving improving teacher compensation.
- In 2019, using funding from a federal Preschool Development Grant, Virginia piloted the Teacher Recognition Program, which offered early educators up to \$1,500 if they remained teaching at their sites over an 8-month period.
- As part of a research-policy partnership, we conducted the first randomized controlled trial testing the impacts of financial incentives on teacher turnover in ECE settings.
- Early educators in the Teacher Recognition Program were 11 percentage points more likely to still be teaching at their sites by the end of the 8-month period.
- Effects were particularly pronounced among teachers at child care centers. At centers with access to the financial incentives, 15% of teachers left, compared to 30% of teachers at centers without access to the incentives.
- These findings suggest investments in early educators can improve employment stability for those working with children at a critical developmental period.

Young children thrive when they have stable and engaging relationships with their caregivers.¹ Unfortunately, teacher turnover is a problem for many early care and education (ECE) sites. Recent studies suggest that in the U.S., roughly one-third of early educators turn over each year.² High levels of turnover have negative implications for child development and make it difficult for ECE sites to operate effectively and reliably, creating challenges for parents who need to go to work.³

Staffing issues are particularly pronounced in child care centers. A recent study of one state showed that almost half of child care teachers left their positions in a

single year, which was nearly double the turnover rate observed in ECE sites based in public schools.⁴ This turnover is also far higher than typically observed among K-12 teachers⁵; in Virginia, 10.5% of K-12 teachers turned over from the 2018-19 to 2019-20 school years.⁶ The COVID-19 pandemic exacerbated these staffing challenges, with many child care site leaders struggling to find the teachers they need and having to turn families away or eliminate classrooms.⁷

There is growing recognition that professionalizing and stabilizing the ECE workforce will require increased compensation.⁸ One approach is using financial incentives (e.g., bonuses tied to retention).⁹ A handful of states and localities piloted incentive programs prior to the pandemic,¹⁰ and many more are using American Rescue Plan Act (ARPA) funds to support teacher compensation and try to improve employment stability for early educators.¹¹ Increased teacher compensation is especially likely to matter moving forward, given the low wages that are common for early educators¹² and the economic precarity brought on by the pandemic.¹³

Despite the growing use of public dollars for early educator financial incentives, there are few rigorous studies on whether they can reduce teacher turnover. This report summarizes findings from an evaluation of a unique financial incentive program for early educators launched in Virginia in 2019. The evaluation provides the first-ever experimental evidence on whether offering financial incentives to early educators – in this case, up to \$1,500 if they continued to teach at their sites – led to reductions in turnover. We found pronounced effects on teacher turnover, particularly among child care teachers.

1. Program and Study Context

What is Virginia's Teacher Recognition Program?

In 2019, Virginia was awarded a federal Preschool Development Birth through Five Initial Grant (PDG). Through a partnership between the Virginia Department of Education, the Virginia Early Childhood Foundation, and the University of Virginia, the state began a set of efforts to increase access to stable, affordable, and high-quality ECE.

One of these efforts was establishing the Teacher Recognition Program, a financial incentive program designed to support teacher retention and to recognize teachers for their work with young children. In its pilot year, eligible teachers at publicly funded sites participating in the PDG B-5 initiative could receive up to \$1,500. More than 500 center- and home-based child care sites

accepting child care subsidies, Head Start centers, and school-based pre-k sites were included.¹⁴

Teachers at these sites were eligible if they worked directly with young children ages 0 to 5 for at least 30 hours per week. To receive the full \$1,500 amount, teachers had to continue meeting these requirements *and* remain at the same site for the full eight-month duration of the program (May 1st, 2019 through December 31st, 2019). There were no requirements for how teachers could spend these dollars. Teachers who left their sites during the program period or were otherwise ineligible could not claim remaining payments, but they were not required to return prior payments.

Evaluating the Impact of the Teacher Recognition Program

For 25 of the 26 Virginia cities and counties participating in the PDG pilot year, there was sufficient funding to ensure that any site wanting to participate in the PDG could sign up, and any eligible teacher could be part of the Teacher Recognition Program. However, in Fairfax County (the largest county in Virginia), there were not enough funds during the pilot year to cover full participation for all sites who opted into the PDG. To allocate the limited resources as fairly and equitably as possible, the county compiled a list of sites interested in participating in the PDG and then selected a subset for participating both in the broader program and in the Teacher Recognition Program through random assignment (i.e., a lottery).

This lottery created the first opportunity we know of to test the impacts of an incentive program on teacher turnover in ECE settings. Specifically, teachers at half the sites (36) were invited to participate in the Teacher Recognition Program and could receive up to \$1,500 over the program period. Teachers at the remaining PDG sites could not participate in the Teacher Recognition Program.¹⁵

At the end of the 8-month period, our partners contacted site leaders to verify whether each participating teacher was still working at least 30 hours per week with children ages 0 to 5. They completed this employment verification both at sites with access to the payments and at sites that did not have access to payments. The primary purpose of the verification was to determine whether teachers were eligible to receive their payments – but verifying employment for all teachers also allowed us to test whether teachers who had access to the Teacher Recognition Program continued to teach 0-5 children at their sites at higher rates than did teachers at the other sites. In this report, we use the term

teacher turnover to mean teachers who failed to maintain these requirements by the end of the program period.¹⁶

Who Was in the Study?

The evaluation included nearly 600 early educators in Fairfax County, Virginia.¹⁷ Table 1 summarizes our sample. Most (85%) taught and cared for children in publicly funded child care centers and the rest did so in school-based programs. About half were assistant teachers and the other half lead teachers.

On the whole, the sample was racially diverse.¹⁸ About one in five teachers reported they were Black, one-quarter of teachers reported they were Hispanic or Latino, and another quarter were White. The remainder identified as another race and/or two or more races. Annual earnings were, on average, just under \$40,000.

Teacher characteristics varied considerably across ECE sectors and by teaching roles. For instance, 24% of lead teachers working in child care identified as White, compared to 71% of lead teachers working in school-based sites. Less than half of child care lead teachers held a Bachelor’s degree, compared to all lead teachers in school-based sites.

Notably, there were significant differences in compensation: On average, child care lead teachers in our sample received half the pay of lead teachers in school-based sites. In both child care centers and schools, assistant teachers earned

Table 1. Descriptive statistics for study sample.

Variable	All teachers	<u>Child Care Centers</u>		<u>School-Based Programs</u>	
		Assistant teachers	Lead teachers	Assistant teachers	Lead teachers
Number of teachers	568	237	245	38	48
<i>Race/Ethnicity</i>					
Black, not Hispanic	19%	19%	22%	13%	8%
Hispanic or Latino	24%	28%	25%	24%	4%
White, not Hispanic	26%	17%	24%	39%	71%
Other/two or more races	31%	36%	29%	24%	17%
Age (in years)	42.0	39.8	42.3	49.9	42.7
ECE experience (in years)	10.5	7.7	12.1	13.2	11.6
Has at least a Bachelor's degree	47%	35%	47%	41%	100%
Estimated annual earnings (\$)	38,496	30,670	36,042	32,601	70,487
Healthcare from site	82%	83%	75%	100%	98%

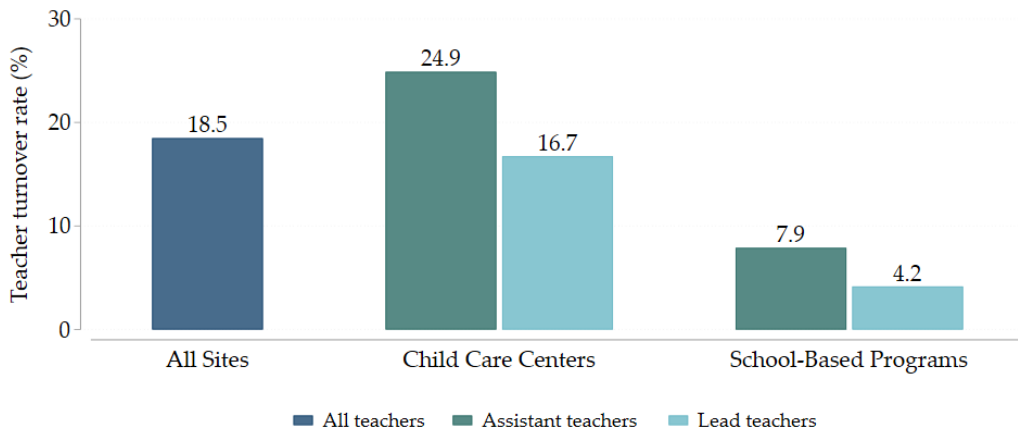
Note: With the exception of race/ethnicity, which come from application data for the Teacher Recognition Program, characteristics in the table above were self-reported in a baseline survey conducted in May 2019.

lower wages than lead teachers, though this gap was much more pronounced in schools.

2. Impacts of the Teacher Recognition Program on Teacher Turnover

The goal of our study was to see if the Teacher Recognition Program led to reductions in turnover for teachers at sites with access to the payments. In the overall sample, across sites with and without access to the financial incentives, 19% of teachers were no longer at their original site teaching children 0-5 after the 8-month period (Figure 1). However, this varied substantially across ECE sectors and teaching roles. Turnover was far higher among child care center teachers (25% for assistant teachers and 17% for lead teachers) than among teachers in school-based ECE sites (8% and 4%, for assistant and lead teachers respectively).

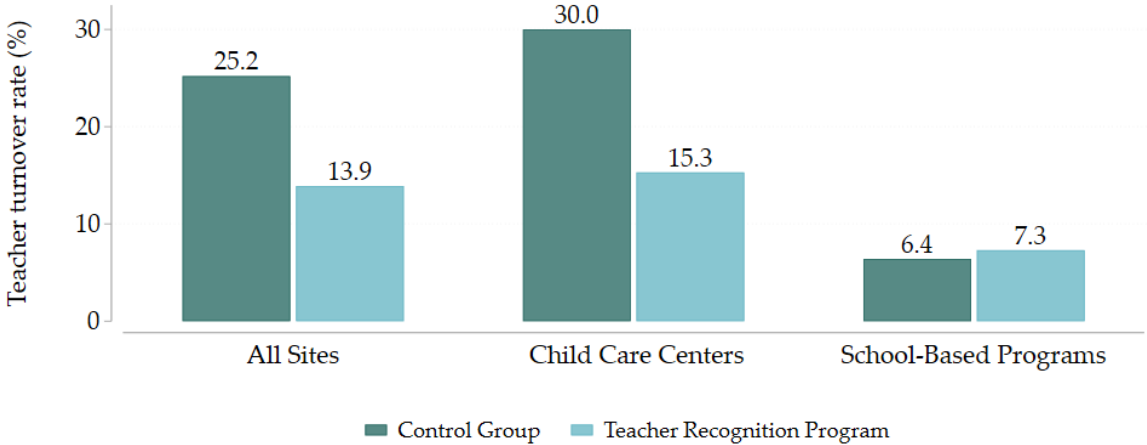
Figure 1. Turnover rates by ECE sector and teaching role.



Our primary experimental results, shown in Figure 2, address whether turnover rates for teachers varied by their participation in the Teacher Recognition Program. In sites *not* receiving the payments, one-quarter of teachers had turned over by the end of the 8-month period. In contrast, only 14% of teachers in the Teacher Recognition Program left their sites during this time. In other words, these teachers were 11 percentage points less likely to leave their sites than their peers not receiving payments.

Figure 2 also shows the results separately for teachers in child care centers and teachers in school-based ECE sites. Our hypothesis was that the impact of the Teacher Recognition Program would be larger in child care centers relative to school-based sites, given their significantly lower compensation levels.

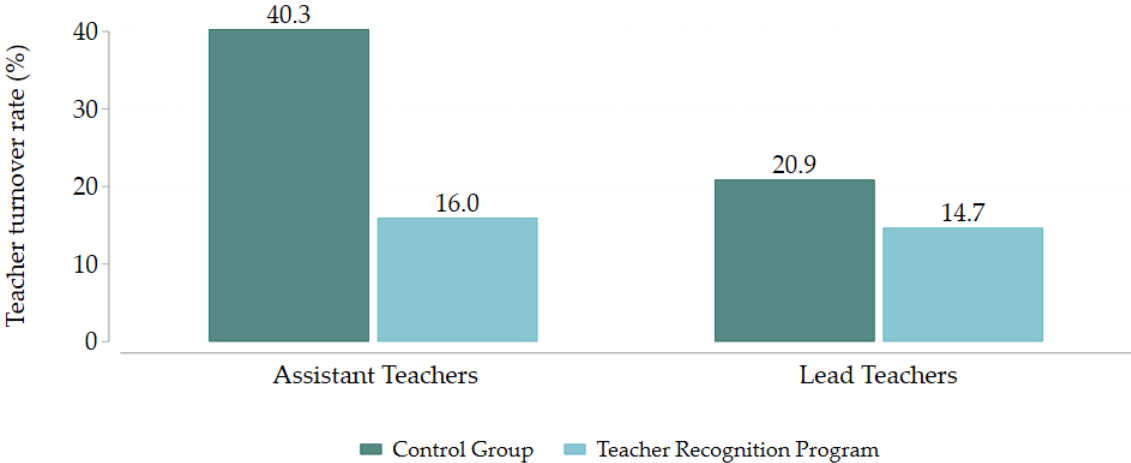
Figure 2. Program impacts, overall and by ECE sector.



This was indeed the case: Child care teachers without access to the payments turned over at double the rate of teachers in the Teacher Recognition Program (30% vs. 15%). In contrast, nearly all school-based teachers – regardless of whether they were selected to receive payments or not – were still teaching at their schools.

We also compared the impact of the Teacher Recognition Program on lead versus assistant teachers within child care centers (Figure 3). Child care assistant teachers – who had the overall lowest pay and highest turnover rates in our sample – saw the most benefit from the Teacher Recognition Program. Forty percent of assistant teachers at sites that did not receive payments left their sites. This was true of only 16% of assistant teachers at sites with access to the stipend. Differences were more modest among lead teachers.

Figure 3. Program impacts for child care, by teaching role.



3. How Might the Teacher Recognition Program Have Helped Teachers?

The experiment showed that the Teacher Recognition Program led to significant drops in turnover, especially among child care teachers. However, these experimental results do not explain why the program had this large effect. To learn more about the way the Teacher Recognition Program may have worked, we conducted a follow-up survey in May 2020, about 4-5 months after still-eligible teachers received their last payments.

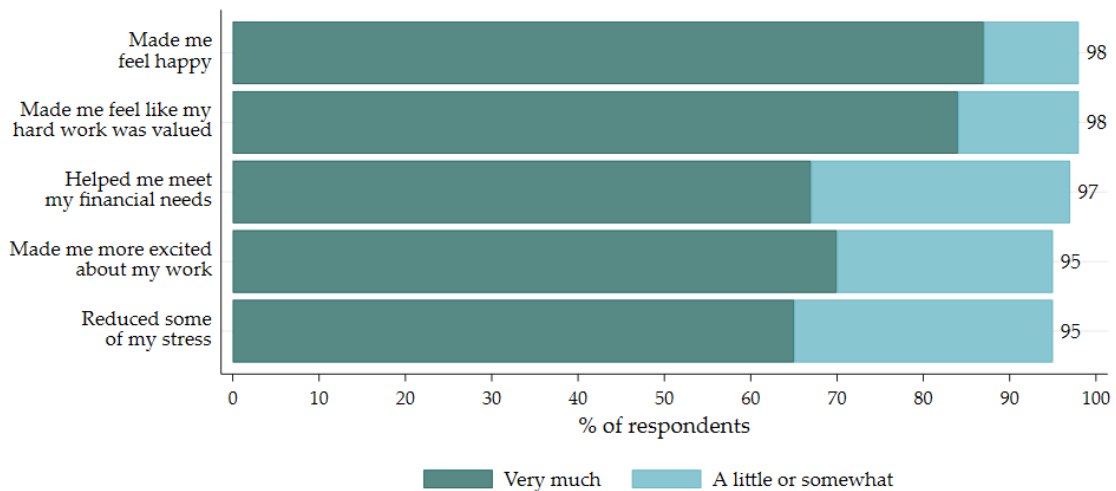
This section explores survey responses from teachers who were eligible for the financial incentive.¹⁹

“It was the first time in my 18 years of teaching that my work has been recognized.”

One way in which the Teacher Recognition Program may have influenced teachers is by increasing their sense that their work was appreciated. Indeed, as shown in Figure 4, nearly all respondents indicated that the program made them feel like their hard work was valued (98%) and made them more excited for the work they do (95%).

Many teachers echoed these sentiments of appreciation in their write-in comments. One wrote, “It was the first time in my 18 years of teaching that my work has been recognized.” Another shared, “The recognition and acknowledgement meant everything. For so long, early childhood educators have been unnoticed. This grant was a great way to make educators feel

Figure 4. Teachers’ Perceptions of the Teacher Recognition Program: “Overall, receiving the payment(s) through the Teacher Recognition Program...”



Note: Based on 237-245 responses.

appreciated.” A third teacher elaborated on the positive effects she saw from this feeling: “Teachers perform better when they feel validated and valued.”

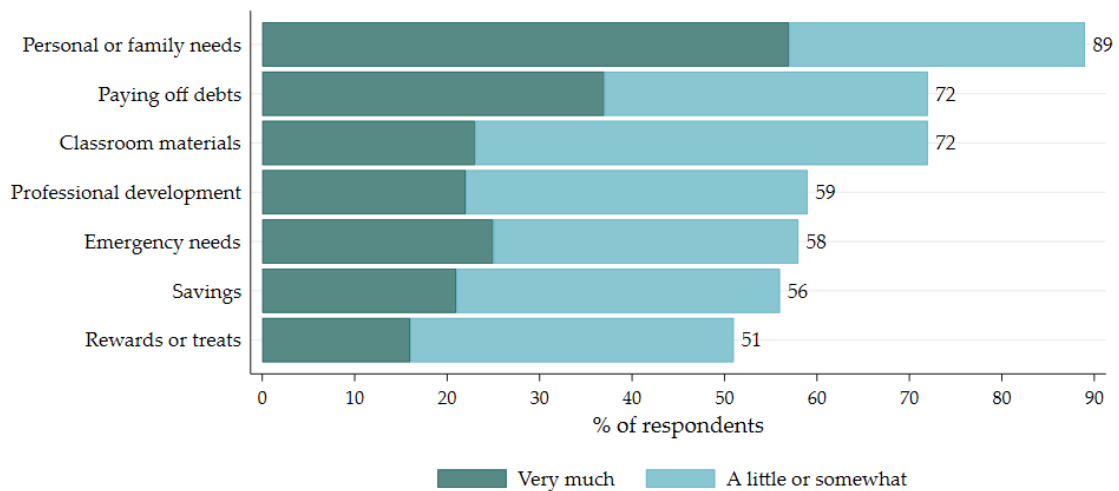
Another way the Teacher Recognition Program likely influenced turnover was by alleviating teachers’ financial burdens. Nearly all respondents (97%) reported that the program helped them meet their financial needs at least a little, and 95% reported it reduced their stress (Figure 4).

“I could continue to go to work and not worry about food, car bills, or my child's care.”

When asked about how the Teacher Recognition Program helped with expenses (Figure 5), the vast majority of teachers indicated that the payments helped meet basic needs “some” or “very much.” Eighty-nine percent of respondents reported that the payments helped with meeting their personal or family needs (e.g., housing, food, bills, household supplies), and 72% reported that the payments helped pay off debts. Many teachers also reported using it toward their classrooms (72%) or for their own professional development (59%).

One teacher wrote, “It meant I could continue to go to work and not worry about food, car bills, or my child's care.” Another explained, “Because of this grant, I was able to keep a roof over my children's head. My youngest was hospitalized and I didn't have enough PTO left to use.”

Figure 5. Teachers’ Perceptions of the Teacher Recognition Program: “The payments helped with the following expenses...”



Note: Based on 215-237 responses.

The Teacher Recognition Program was overwhelmingly well-received by participating teachers, impacting their professional and personal lives. One teacher's written comments summarized these points and the influences of the program she saw on teacher turnover: "I remember the day teachers started receiving their checks and there was such a buzz of excitement. I know for one of the teachers, receiving that check meant she could finally make necessary car repairs after having an accident several months prior. I know all of the teachers who were eligible appreciated it and it definitely made an impact on how long they continued to work at [our site]."

4. Implications

Virginia's Teacher Recognition Program was designed to reduce early educator turnover by offering financial incentives to teachers if they continued to teach at their sites. Our study – the first experiment to test the impact of financial incentives for ECE teachers – has two key takeaways.

The first is that turnover among early educators is high. Even before the pandemic, 19% of early educators in our study turned over in just 8 months. This level of teacher turnover far exceeds both within-year and annual turnover rates observed among K-12 teachers.²⁰ Turnover was far higher for teachers working in child care settings, who earn considerably less than their counterparts working in schools. These sector differences compromise policymakers' ability to build cohesive, high-quality early childhood systems and support the consistency of caregiver relationships for young children.

The second takeaway is that financial incentives can drastically reduce turnover in ECE. Overall, in our full sample, the financial incentives led to a drop in turnover rates from 25% to 14%. The impact was particularly pronounced in child care centers. In these contexts, the offer of a \$1,500 financial incentive cut turnover in half, reducing it from 30% of teachers leaving over an 8-month period to 15%. That we found greater impacts among child care teachers is not surprising, given that \$1,500 represented a considerably larger increase in compensation for these teachers.²¹

Our evaluation highlights the promise of compensation reforms to strengthen and stabilize the ECE workforce and provides compelling evidence that early educators with historically lower compensation may benefit most from financial incentives. The findings are particularly timely in light of the pandemic's large toll on early educators and the child care sector in particular. About four in five child care directors report having difficulty filling vacant positions.²² Without

adequate teaching staff, many child care centers are having to turn away children and families.²³

In Virginia, an urgent need to address these staffing challenges, combined with compelling evidence from this experiment, led the state to expand the Teacher Recognition Program. The state invested \$8 million over two years to serve more than 6,000 teachers and increase the incentive amount to \$2,000. Virginia, teachers who participated in the Teacher Recognition Program during the pandemic reported that it helped them manage COVID-related financial needs, with two in five saying it led them to stay in their positions longer than they otherwise would have stayed.²⁴

Many other states are using recovery dollars toward bonuses and financial supports for teachers.²⁵ Virginia's experience with the Teacher Recognition Program provides encouraging evidence that these types of investments have powerful short-term impacts on turnover and may help alleviate the pressing financial conditions facing the ECE workforce.

At the same time, recovery dollars only provide temporary solutions. Addressing the instability of the ECE workforce will ultimately require substantial, sustainable long-term investments. President Biden's *Build Back Better* proposal may provide states with the resources needed to pursue new strategies and longer-term solutions to child care teacher compensation. As policymakers experiment with new approaches to supporting the ECE workforce, it will be important to understand which approaches are most successful, for whom, and in what contexts.

Virginia is committed to answering these questions, iteratively refining their approach to teacher compensation based in part on findings from a set of studies aimed at learning how states can best support large-scale efforts to enhance compensation for child care teachers. Employing rigorous evidence helped the state expand compensation during the pandemic and continue to build toward a sustainable, long-term solution for sufficient teacher compensation across sectors.

Endnotes

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- ¹⁴ Note that in Fairfax, all Head Start teachers were employed in public elementary school buildings and they are included in the school-based sample for this analysis.
- ¹⁵ The randomization was blocked by sector (i.e., child care centers versus school-based ECE sites versus family day homes) so that sites assigned to the Teacher Recognition Program did not disproportionately favor one sector over another.
- ¹⁶ For most teachers, this concept captures real departures from the site. However, this definition could include teachers who, according to their site leaders, stopped working with 0-5 children or reduced their hours but remained at their sites.
- ¹⁷ Notably, this study did not include the 36 early educators in Fairfax family day homes participating in the PDG (19 in the Teacher Recognition Program and 17 in the comparison group). They were dropped from the analysis due to small sample sizes and our lack of power to detect impacts for this group of teachers. Additionally, we worried that teacher turnover may be conceptually different for family day homes (i.e., the family day home owner would only “turn over” if they shut down their business).
- ¹⁸ Teachers were asked a set of two questions; respondents first reported whether they identified as Hispanic and/or Latino, and then reported their race. This two-question format aligns with how teacher race/ethnicity data are collected by the Virginia Department of Education. Respondents could choose from one or more of

the following categories: White, Black or African American, Asian, American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, and Other. We collapsed some of the categories in the analysis due to small sample sizes and concerns about identifiability.

- ¹⁹ Of the 338 teachers who were in the experimental study and at sites assigned to the Teacher Recognition Program, 270 completed the follow-up survey, representing an 80% response rate for this group. The sample sizes in this section ranged from 215 to 245 teachers, as teachers were not required to answer all questions.
- ²⁰ Goldhaber & Theobald (2021).
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