ADDRESSING HIGH TEACHER TURNOVER RATES IN VIRGINIA CHILD CARE CENTERS

Technical Report

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Prepared for:
Office of Early Childhood Access and Enrollment, Virginia Department of Education

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Disclaimers

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency, including the Virginia Department of Education.

Grammarly and AI were used in the editing of this report.

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Glossary

Subsidized Child Care Center/Site	Provide child care services to low-income families at reduced rates, through funding from the Child Care Subsidy Program ("Becoming," n.d.).
Public Preschool	"preschool programs for at-risk four-year-olds unserved by the federal Head Start program" that are funded through the Virginia state government ("Virginia Preschool, n.d.).

Acronyms

CCSP	Child Care Subsidy Program
PTO	Paid Time Off
VDOE	Virginia Department of Education
VDSS	Virginia Department of Social Services
VECF	Virginia Early Childhood Fund

Executive Summary

In Virginia's subsidized child care centers, high turnover rates among lead (38%) and assistant teachers (49%) jeopardize stable, high-quality teacher-child relationships, which are crucial for positive student outcomes (Hall et al., 2023a; Hall et al., 2023b; McNally & Slutsky, 2020). These rates are substantially higher than the turnover rates in Virginia public preschools and K-12 (Hall et al., 2023b; Katz & Miller, 2023). Evidence suggests that insufficient teacher compensation drives high teacher turnover rates in child care (Bassok et al., 2023). Stress levels and job dissatisfaction also predict teacher turnover rates (Kwon et al., 2020; McMullen et al., 2020).

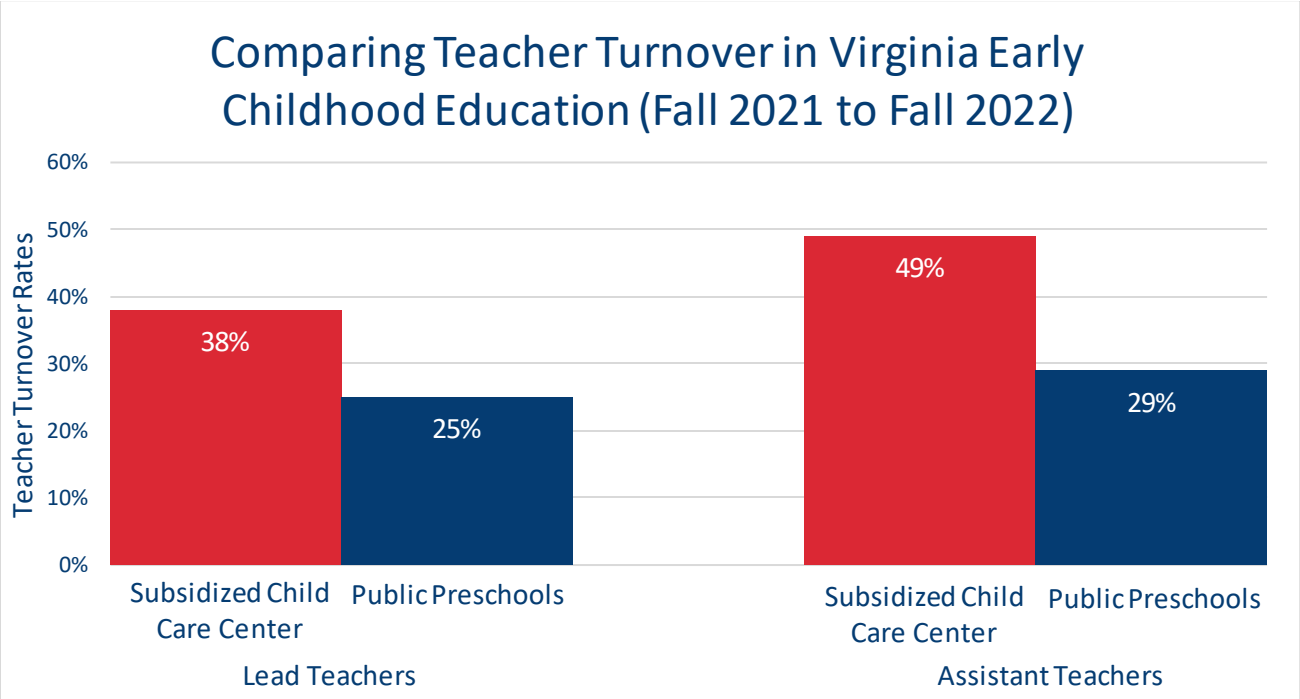
Overseeing the funding decisions for the Child Care Subsidy Program, the Office of Early Childhood Access and Enrollment in the Virginia Department of Education is particularly concerned about high turnover rates within subsidized child care centers. To assist the office's decision-making, this report explores the underlying problems contributing to turnover rates in Virginia child care centers and potential alternatives to addressing the problem. After considering existing programs in Virginia and the existing literature, this report examines paid time off, professional development for leadership, and mentoring programs as alternatives to addressing high teacher turnover rates. These three alternatives could involve altering the subsidy program or creating a grant because 1) these are two methods that the VDOE can use to effect change, and 2) they have relative advantages and disadvantages in effectiveness and administrative ease.

To assess these alternatives and approaches, this report uses three criteria: cost-effectiveness, administrative feasibility, and fundability. ***Based on these criteria, this report first recommends that the VDOE include an additional day of paid time off in future cost estimation models.*** While it does not have the lowest cost-effectiveness, this report prioritizes administrative feasibility and funding more to ensure governmental approval and successful implementation. However, one day of paid time off can address only a small portion of the teacher turnover issue. ***Because of the limitations of the first alternative, this report also recommends implementing a grant program for professional development for leadership.*** Both recommended options forfeit better cost-effectiveness scores for higher administrative feasibility and fundability. However, the VDOE should consider future contexts, evaluating whether conditions for more cost-effective options have changed. If these alternatives are pursued and receive funding, the Virginia Department of Education will play a critical role in ensuring successful implementation. Both recommendations necessitate working with the various levels of government, child care centers, and outside organizations. Therefore, effective communication and collaboration among these groups are crucial to ensure that relationships in the literature translate to improved teacher turnover rates and better outcomes for children.

Problem Statement

In Virginia's subsidized child care centers, high turnover rates among lead (38%) and assistant teachers (49%) jeopardize stable, high-quality teacher-child relationships, which are crucial for positive student outcomes (Hall et al., 2023a; Hall et al., 2023b; McNally & Slutsky, 2020).

Figure 1



cl(Hall et al., 2023b).

As shown in Figure 1, this rate substantially surpasses the rates in public preschools (Hall et al., 2023b). Lead teachers at subsidized child care centers also face a rate 16.9 percentage points higher than the Virginia public teaching profession (Katz & Miller, 2023). Additionally, high turnover rates exacerbate the shortage of qualified early childhood educators. In Virginia, 82% of subsidized child care centers had at least one vacancy compared to 46% of public preschool programs (Bassok & Weisner, 2023). Teacher shortages are prevalent across the U.S.; the child care workforce shrank 5.3% from 2020 to 2023 (Hall et al., 2023a).

Subsidized child care centers serve low-income families at reduced rates through funding from the Child Care Subsidy Program ("Becoming," n.d.). While these subsidies attempt to create more equitable access, high teacher turnover rates threaten this goal. Stable

relationships for children necessitate a relatively stable teacher workforce. 2023 Survey results in Virginia, conducted by the Virginia Department of Education, the University of Virginia, and the Virginia Early Childhood Foundation, show that 45% of lead teachers and 64% of assistant teachers have been at their child care center for two years or less ("2023 Child Care," 2024). Public preschool teachers tend to have more experience; lead and assistant teachers average three years longer ("2023 School-Based," 2024). High teacher turnover, particularly among newer teachers, means many students may not receive the necessary quality care (Bassok & Weisner, 2022). Research in K-12 indicates teacher effectiveness increases with experience (Kini & Podolsky, 2016). However, current turnover rates prevent teachers from gaining this experience. This threat to early childhood education quality could have negative implications for kindergarten readiness and long-term outcomes, including graduation rates and future income (Morrissey, 2020; Yoshikawa et al., 2013).

The current system fails to adequately prepare children for later schooling. In 2022, 40% of Virginia kindergarteners fell below readiness benchmarks ("Fall 2022," 2023). Students of color and those from low-income backgrounds face serious equity issues. They are 10 percentage points more likely to have below benchmark scores on readiness exams, further exacerbating the achievement gap ("Fall 2022," 2023; Morrissey, 2020). Current shortages have also contributed to child care sites not accepting new families ("2023 Virginia," 2024). This shortage exacerbates inequalities for women and children, as access to child care can promote workforce entry and vital early childhood experiences for children in lower-income families (Malik, 2018; Morrissey, 2020). Addressing teacher turnover can contribute to a more equitable and effective child care system that prepares children for kindergarten and later-life experiences.

Contributing Factors

Compensation

Insufficient teacher compensation drives the issue of high teacher turnover rates in child care. On average, lead teachers in Virginia earn just 37.87% of what K-12 teachers make (See Appendix A for calculations). Moreover, lead teachers in public preschools earn more than twice the amount of those in child care centers, while assistant teachers earn approximately two dollars more. Teachers in public preschools tend to have more education, likely accounting for much of the difference in compensation ("2023 Virginia," 2024). However, this gap remains concerning because of the financial insecurity experienced by many child care teachers. Moreover, only 48% of Virginia child care teachers express satisfaction with compensation ("2023 Virginia," 2024). This data highlights the importance of addressing compensation concerns to enhance overall job satisfaction in the sector. A randomized control trial of a financial incentive program for child care teachers in Virginia strengthens this assertion. The incentive reduced 8-month turnover by 50% (Bassok et al., 2023). This study provides strong evidence of the importance of compensation for reducing turnover in Virginia's child care centers.

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Benefits

High levels of burnout and stress among child care workers are linked to worse teacher-child interactions and higher turnover (Ansari et al., 2022; Kwon et al., 2020). These challenges underscore the need to address the broader issue of inadequate benefits within the child care sector. Fifty-four percent of child care teachers did not report satisfaction with their benefits compared to only 36% of preschool teachers reporting similarly ("2023 Virginia," 2024). This gap in satisfaction may result from the significant disparity in benefits received. While most public preschool teachers have benefits, such as paid sick leave and health insurance, only around half of child care teachers have similar coverage ("2023 Virginia, 2024).

Paid Time Off

Research suggests that paid time off (PTO) could mitigate turnover and reduce stress among workers. However, this relationship is somewhat inconsistent. Studies on paid sick leave demonstrate promising results. A difference-in-difference analysis with controls predicted that states that passed paid sick leave dampened the effects of pandemic on labor market participation by 33% (Shinall, 2022). Similarly, a study using propensity score matching and

controls for individual and employment characteristics found that workers with paid sick leave were 25% less likely to leave their jobs (Hill, 2013).

Additionally, some studies shows that paid time off predicts lower stress, less burnout, and higher workplace success (Herda, 2012; Small, 2019; Stoddard-Dare et al., 2018; Vander Weerdt et al., 2023). A meta-analysis on vacation days found small effects on well-being across studies. However, the effects on reduced exhaustion appeared to diminish quickly, with some studies indicating a decline as early as 12 days after the vacation (De Bloom et al., 2009).

The nursing profession has more mixed results. One study reported that registered nurses who received paid time off were approximately a fifth of a point more likely to report higher job satisfaction on a 5-point scale, a modest difference (Kovner et al., 2006). However, two other studies on PTO and turnover found conflicting results (Luo et al., 2013; Wiener et al., 2009). Additionally, evidence on PTO and related outcomes, such as work-life balance and job self-efficacy also did not demonstrate statistically significant results (Mulvaney, 2014; Schneider, 2020). Although distinct from job satisfaction, these findings reveal inconsistencies in the relationship. How workers use their time off may play a role in relationships; for example, caring for ill family seems to relate to greater stress and less productivity (Small, 2019). Overall, paid time off appears to have a modest, albeit somewhat inconsistent, positive relationship with factors such as turnover and stress.

Health Insurance

More research exists about the relationship between health insurance and turnover in early education. However, the evidence on the impacts of health insurance on turnover remains mixed. Having insurance is associated with a modest decrease (.59 standard deviations) in symptoms of depression in child care teachers. While not directly related to turnover, well-being has been connected to increased turnover (Roberts et al., 2019), making it significant. Additionally, interviews with 26 child care teachers reveal concerns about health insurance and uncertainty about whether they could afford to stay in their jobs (Schaack et al., 2022).

However, one national study found that centers with health insurance had less early educator turnover, but after adding controls, this association disappeared (Caven et al., 2021). Similarly, a state-wide study of early educators in a small mid-Atlantic state initially suggested a link between health insurance and intent to remain in the field, but this difference became insignificant upon further analysis (Holochwost et al., 2009). A study of 78 early childhood teachers in Texas found that, without controls, those with health insurance reported 12 times the commitment to their center; teachers without health insurance reported that they often considered quitting at a rate 92% higher (Russell et al., 2010). However, correlations appear to diminish with the inclusion of other factors.

Paid Planning Time

Many child care teachers lack time built into their schedule to plan, often doing this work on their own time; paid planning time is more prevalent within the K-12 sectors (King et al., 2015). While research acknowledges the importance of planning time for reflection and preparation

(King et al., 2015), little rigorous evidence supports its effects on turnover. Survey findings emphasize the importance of planning time. Teachers who exited their jobs have cited insufficient planning time highly in their reasoning (King et al., 2015). In a random sample of Wisconsin teachers, given nine options, 47% ranked more planning time as the first- or second-best way to support student learning, the highest-ranked option of the group ("Business and Education," 2014). Interviews with 26 early childhood teachers identified frustrations regarding the number of duties and lack of support, including planning time. They disclose that these factors impacted their teaching confidence and retention decisions (Schaack et al., 2022).

While studies on K-12 education show some association between common planning time and reduced school changes, the evidence remains inconclusive regarding its impact on leaving the profession altogether (Kang & Berliner, 2012; Ronfeldt & McQueen, 2017). A 2006 study in North Carolina found that planning time did not significantly predict intended turnover for elementary school teachers. Spending several hours working outside of the work day was associated with an 8.2 percentage point increase in intentions to leave. However, neither time spent outside working nor planning time is related significantly to actual turnover (Ladd, 2011).

The emphasis that child care teachers have placed on paid planning time is notable; however, the lack of rigorous and consistent evidence leads to skepticism about the relationship between paid planning time and turnover. Research further disentangling the relationship between planning time and turnover would help in clarifying this dynamic.

In-Site Support

Poor well-being and job dissatisfaction are associated with higher turnover among educators (McMullen et al., 2020). The first few years of teaching can be especially challenging for educators (Renbarger & Davis, 2019). These challenges likely contribute to first-year child care teachers being the most likely to leave their sites (Bassok & Weisner, 2022). These factors suggest the importance of offering support to this group of educators from leadership and more veteran teachers.

Professional Development for Teachers

Eighteen percent of child care teachers reported that there were too few professional development opportunities ("2023 Virginia," 2024). This smaller share of those reporting too little of this resource may be due to the resources for professional development on the Virginia Department of Education's website, some resources free of cost ("Training and Professional," n.d.). However, these resources do not focus on a specific subset of professional development, mentoring programs. Mentoring can offer a certain level of emotional and individualized career support as well as collaboration that differentiates these relationships (Dahlberg & Bryars-Winston, 2019).

Setting average levels of self-efficacy and barriers to professional development, not having a mentor is associated with a 3.6% decrease in job satisfaction (Renbarger & Davis, 2019). Additionally, a propensity-score approach in Chicago Public Schools finds that teachers with high-quality mentoring express higher levels of organizational commitment, associated with decreased turnover. In schools with stronger leadership, they find an increase of 1.68 points out of 10 in organizational commitment. However, this relationship weakens for schools with less effective leadership and mentoring (Hong et al., 2019). This study demonstrates the important influence of site leadership and mentoring quality on program effectiveness. Generally, mentoring programs appear to have positive impacts on teachers and retention; however, there have been notable exceptions (Ingersoll & Strong, 2011). Contrasting studies highlight the importance of recognizing a level of uncertainty in the relationship between teacher turnover and professional development.

Professional Development for Leadership

While much professional development focuses on teachers, resources also exist to support center leadership. Research in the K-12 sector highlights a substantial relationship between school leadership perceptions and effectiveness and teacher turnover. A Texas study, without controls, revealed that dissatisfaction with directors' management increased the likelihood of considering quitting by 87% among early educators (Russell et al., 2010). While perceptions of administrators did not directly predict teachers' intentions to stay for two more years, viewing directors as skilled coordinators correlated with longer tenure (Russell et al., 2010). Teachers with poor administrator support were twice as likely to leave, and a standard deviation increase in administrative assessment ratings predicted a 44% decrease in the likelihood of transferring (Carver-Thomas & Darling-Hammond, 2019; Boyd et al., 2011). In broader K-12 contexts, a study found an 11% decrease in teacher turnover for each standard deviation increase in principal effectiveness (Grissom, 2011).

Causal claims cannot be made from these studies. However, the consistent relationship underscores the pivotal role of school leadership in teacher turnover. 81% of Virginia child care teachers reported satisfaction with their interactions with site leaders (“2023 Virginia,” 2024). This result demonstrates promising views of teachers on their site leaders. However, it does not provide direct information about management practices or effectiveness, or the reasons why 19% do not report being satisfied. Casual evidence finds that professional development for leadership leads to somewhat inconsistent and modest positive on teacher turnover (Herrmann et al., 2019; Jacob et al., 2015; Steinberg & Yang, 2022).

Conclusion

Among the interventions considered, increasing compensation as the most evidence-backed approach to reducing teacher turnover in child care sites. While other benefits such as paid time off, paid planning time, and health insurance show some promise, their impact on teacher turnover requires further rigorous research within the child care context. Despite limited evidence, paid time off appears most promising in improving teacher retention rates. Finally, mentoring and professional development for leadership have more consistent research within the education field, suggesting that they could positively impact turnover and other related factors. While compensation remains key for addressing teacher turnover, exploring other interventions such as paid time off, mentoring, and professional development for leadership could offer additional ways to improve teacher retention.

Client Context

This report was crafted to provide insights for future decisions within the Virginia Department of Education (VDOE). Rebecca Ullrich, the Director of the Office of Early Childhood Access and Enrollment within the VDOE, oversees the funding decisions for the Child Care Subsidy Program ("Contact VDOE," 2024). Given the Office's involvement in the Child Care Subsidy Program (CCSP), it is particularly concerned with addressing teacher turnover among subsidized child care sites.

("Virginia Department of Education," n.d.).

The Virginia Department of Education, along with its partners, has dedicated significant efforts towards increasing teacher retention and reducing staffing shortages. ***After reviewing potential factors contributing to teacher turnover in the literature and considering current VDOE projects such as retention bonuses and an assistant fast-tracking program ("Early Educator," n.d.; "Ready Regions," n.d.), this report focuses its investigation on three potential alternatives: paid time off, professional development for leadership, and mentoring.***

The VDOE is also updating its cost estimation model, which helps determine funding for the Child Care Subsidy Program. The federal government funds the subsidy through the Child Care Development Block Grant. The VDOE reports to the U.S. Office of the Administration for Children & Families, requiring approval for cost estimation plans and rates (Friedman, 2024). Additionally, the Virginia legislature and governor review CCSP funding biennially as a part of the budget cycle. The VDOE presents its plan for the CCSP, subject to acceptance, revisions, or rejection (Miller-Bains, personal communications, 2023). In their two-year plan to the federal government, which they will submit in the summer of 2024, the VDOE intends to focus on adjusting salaries (Ullrich, personal communications, 2024).

This context means that the non-salary alternatives I am evaluating paid time off, professional development for leadership, and mentoring programs would likely not occur within the next two years. In the future, however, these alternatives could be rolled out through a grant program or modifications to their cost estimation model. These two approaches offer distinct advantages and disadvantages. Changes to the cost-estimation model involve a relatively straightforward process, with little additional administrative lift from the VDOE and child care sites. However, grant programs can have a more targeted impact because sites would be required to use funds toward the intended alternative.

Approaches

Changes to the Cost Estimation Model and Child Care Subsidy

One potential approach involves adjusting the cost estimation model used for the Child Care Subsidy Program (CCSP) in Virginia. This adjustment could coincide with the 2026-2028 Virginia budgetary process ("Virginia State Budget," 2024). It would involve approval from both the federal government and state legislature. The actual implementation of this plan would require minimal intervention. The Office of Early Childhood Access and Enrollment already conducts biannual cost-estimation plan updates. After calculating the costs of the proposed alternative, the Office could integrate it into their model. The model aggregates various cost inputs to determine the regional per-child cost ("Estimating," 2023). Then, the Virginia Department of Social Services (VDSS) distributes, through their website, no-strings-attached funds to child care sites based on a percentage of the calculated costs ("Becoming," n.d.; "Paying," n.d.). While providers have different contexts in terms of location, size, and hours of operation, the model operates on average costs of quality. Therefore, the alternatives only include one level of benefit/program intensity.

Creation of a Grant Program

Another approach under consideration is establishing a quality improvement grant aimed at addressing teacher turnover for child care sites across Virginia. This adjustment could coincide with the 2026-2028 Virginia budgetary process or be pursued through outside funding opportunities ("Virginia State Budget," 2024). Unless the VDOE decides to partner with another department or organization, responsibilities would include the creation of eligibility criteria, promoting the grant, managing the application process, selecting recipients, distributing funding, and monitoring and auditing organizations ("Grants 101," n.d.). Developing a grant program would likely require more effort from the VDOE and increased oversight of the output and outcomes of different alternatives with grant recipients.

Alternatives

Paid Time Off

Research suggests that implementing a paid time off (PTO) policy, particularly paid sick leave (PSL), could mitigate turnover rates among child care workers. A difference-in-difference approach with controls, comparing labor market changes in states that passed paid sick leave (PSL) to changes in states that did not, found higher employment rates and labor market participation across sectors in states that passed PSL laws. During the pandemic, women were 4.3 percentage points more likely to be employed in the states with paid sick leave; they predict this dampened the effects of the pandemic by 33% (Shinall, 2022). Sick leave was likely more salient during the pandemic, so we must be careful generalizing to non-pandemic times. Another study using propensity score matching and controls for individual and employment characteristics found that workers with PSL were 25% less likely to leave their jobs (Hill, 2013). Finally, an evaluation of Seattle's PSL requirement (one-hour PSL per 30-40 hours worked) found a 4.7 percent decrease in turnover for low-income workers in smaller firms compared to their synthetic control group but not their difference-in-difference. They also did not find an overall effect of this policy; however, this population of workers is likely the most relevant to Virginia's child care workforce (Wething, 2021).

In Virginia, public school teachers receive ten days of paid sick leave per year ("8VAC20-460-10," 1980). Adopting a similar system in child care would better align child care sites with public education. Currently, the cost estimation model also provides ten days of paid time off (PTO) ("Estimating," 2023). However, the context of child care providers differs. While the K-12 school year is 180 days ("Table 1.1," 2020), child care sites can operate throughout the year. This context would justify an additional day of PTO in the Virginia child care sector (See Appendix B).

Changes to the Cost Estimation Model

After changing the cost estimation model, the payments to sites would include an additional day of paid time for employees for unspecified purposes. This alternative would leave decisions about the division of sick leave and vacation days to providers.

Creation of a Grant Program

Annually, child care sites could apply to receive reimbursement grants for one additional day of PTO for each employee. This approach would involve more direct interaction between child care providers and the Virginia Department of Education or one of its partners through the application process and the distribution of funds.

Professional Development for Leadership

Two randomized experiments yielded mixed results regarding the impact of principal professional development on teacher turnover. In rural Michigan, the Balanced Leadership program showed a marginal 5 percentage point decrease in teacher turnover, but improvements in school climate were reported only by principals, not teachers (Jacob et al., 2015). Meanwhile, a study of elementary schools in five states found a modest 4 percentage point decrease in turnover only in the first year with no significant impact on climate (Herrmann et al., 2019). Finally, examining a required mentoring program in Pennsylvania, while no average effect on turnover was found, years two and three witnessed an 18% decrease (Steinberg & Yang, 2022). Overall, evidence suggests a positive, albeit inconsistent, impact of principal professional development on teacher turnover but not on school climate. Varied outcomes may result from differences in program quality and population characteristics. In the elementary school trial, leadership practices did not improve (Herrmann et al., 2019).

Virginia uses the Classroom Assessment Scoring System (CLASS) to provide feedback and assess quality at Virginia publicly funded child care sites ("Local CLASS," 2023). Several studies have linked higher CLASS scores with improved learning outcomes. Additionally, teachers who received coaching or training on CLASS show improved teacher-child interactions ("Proving CLASS," n.d.). Local CLASS observations occur twice annually and support educators in improving their teacher-child interactions. Site leaders may conduct these observations, and there is general observer training as well as training for leaders specifically ("Local CLASS," 2023; "Products," n.d.). In the spring of 2023, 76% of site leadership reports attending a CLASS training. While a substantial majority, it also highlights the potential for increased engagement among site leadership. Survey results demonstrate a modest increase (5 percentage points) in teachers reporting there is insufficient professional development about CLASS compared to professional development generally. Additionally, teachers generally perceive CLASS positively: 78% viewing it as a good measure of quality, 56% reporting children learn more in sites with higher ratings, and 77% sharing that it improves their practices ("2023 Virginia," 2024). These results suggest that site leadership with more training and competence in CLASS could better assist teachers.

Changes to the Cost Estimation Model

After changing the cost estimation model, the payments to sites would include the average costs of receiving CLASS training as well as the costs associated with getting a substitute.

Creation of a Grant Program

It would function similarly to a scholarship program. Sites could apply to have CLASS training and substitute fees covered through a reimbursement program. This approach would involve more direct interaction between child care providers and the VDOE or one of its partners through the application process and the distribution of funds.

Mentoring

The evidence from K-12 suggests that mentoring programs tend to predict lower levels of turnover. A representative sample of K-12 teachers, with teacher and school-level controls, found that mentorship predicted a 52.25% decrease in the odds of teacher turnover in the first year, although this result became insignificant by the fifth year (Ronfeldt & McQueen, 2017). Similarly, another study using controls found a marginal decrease (30%) in teacher turnover associated with having a mentor (Smith & Ingersoll, 2004). However, a randomized control trial on teacher mentoring found no effect on teacher turnover (Glazerman et al., 2010), raising concerns about the effectiveness of mentoring interventions.

Virginia public schools require that new teachers receive mentoring support from a trained, experienced teacher. Districts decide on the stipend mentors receive for this service ("National Council on Teacher Quality," 2015). Virginia also provides resources for mentoring best practices ("Mentoring VA," n.d.; "Mentor Programs," n.d.) and collaborates with several organizations to support new teachers, including REACH Virginia and the JMU Virginia New Teacher Support Program ("About Reach," n.d.; "Virginia New," 2023). However, this mentoring requirement and support framework do not currently extend to the child care sector.

Changes to the Cost Estimation Model

After changing the cost estimation model, the payments to sites would include the average costs of implementing an internal program. Sites could also use these funds to outsource programming.

Creation of a Grant Program

Child care sites could apply to receive funds to implement a mentoring program, submitting plans for internal or outsourced programming. This approach would involve more direct interaction between child care providers and the VDOE or one of its partners through the application process and the distribution of funds.

Criteria

Criteria 1: Cost-effectiveness

Cost-effectiveness analysis involves comparing the costs associated with a per unit change in effectiveness towards an objective. This analysis results in a ratio of dollar cost per unit change (Fermanich, 2021). The objective of the proposed alternatives is to reduce teacher turnover; a percent decrease in teacher turnover represents a one-unit change. To determine this, this report relies on the literature for each alternative, selecting the most applicable sources in terms of measuring the outcome of interest (percent decrease in teacher turnover). Then, this report chooses the middle estimate from the literature to represent effectiveness. Relying only on these estimates may exclude relevant research and contributes to the uncertainty of estimates. Each estimate reflects a per-teacher, per-year estimate, assuming a linear effect of alternatives and a conservative interpretation of insignificant results as equaling zero.

For changes to the cost-estimation model, this report assumes an implementation rate of 45.31% due to differing numbers of Child Care Subsidy eligible children at sites (See Appendix B for calculations). Costs primarily utilize the Virginia Department of Education estimates of wages for child care workers based on elementary school averages. For programming costs, when applicable, listed prices on websites and cost estimations in the K-12 space are used. The analysis includes a 4% increase in grant program costs based on the Office of Elementary and Secondary Education cap for direct and indirect administrative costs for grant programs ("Administrative Cost Cap," 2018). For changes to the cost estimation model, it is assumed that any administrative costs would have already been incurred through the biannual changes. For the grant and cost estimation model, final costs are reduced by 85% for the maximum reimbursement rate (Ullrich, personal communication, 2023).

This analysis excludes sites in the lowest quintile of the number of subsidy-children enrolled from calculations because they serve relatively few eligible children, resulting in less funding allocated to those sites. Additionally, family day homes are excluded from calculations. Although subsidy funds would also benefit these programs, it is difficult to assess potential effects on turnover rates. This report does not attempt to address this change in cost-effectiveness. Finally, discount future costs are not discounted due to the uncertainty of the implementation timeline.

Criteria 2: Administrative Feasibility

Administrative feasibility considers the capacity and capability of implementers, employees in the VDOE and child care sites, to implement a program (Caputo, 2014). While evidence backing an alternative is important, it does not guarantee that the implementation of a change or that a program will reduce teacher turnover. More complex alternatives may not be feasible due to limitations in time and resources of the VDOE and child care sites. In evaluating administrative feasibility, the focus is on the level of VDOE involvement and the demands on child care sites. For child care sites, the impact of staffing shortages on implementation will hold the most weight as alternatives cannot be implemented without adequate personnel and time (Bassok & Weisner, 2023). Administrative feasibility does not appear to significantly differ for alternatives across the two approaches (changes to the cost estimation model and grant programs). Thus, the first step is to first determine the most feasible approach, and then, assess the alternatives.

Criteria 3: Fundability

For any new initiative, securing funding is crucial. Costs, as calculated in the cost-effectiveness section, influence this criterion. While the most cost-effective alternative would be ideal, due to limitations in acquiring funding, the total price also needs consideration. Lower-cost options are more fundable. Additionally, the likelihood of obtaining this funding is closely linked to the current trends and priorities within Virginia's K-12 educational landscape. Alternatives that align with previously funded projects have a higher chance of receiving financial support, following state efforts to anchor child care salaries to K-12 education (Lovejoy, 2023). On the other hand, projects that diverge from or surpass policies in K-12 education may struggle to secure financial support. Furthermore, projects that offer extra benefits beyond their primary goals could have a stronger case for funding. This analysis considers that this approach to funding decisions applies to the Virginia budgetary process as well as external funding organizations.

Cost-effectiveness Evaluations

(See Appendix B for Calculations)

Paid Time Off

This report relies on salary data and administrative cost cap information to calculate the cost of paid time off (PTO) for teachers ("Administrative Cost Cap," 2018; Ullrich, personal communications, 2023). It costs $184.07 per teacher to adjust the cost estimation model to include an additional day of PTO. Meanwhile, including administrative costs for the grant approach increases the cost to $191.44 per teacher. In terms of effectiveness, the grant approach predicts a 2.78% reduction in teacher turnover associated with an additional day of PTO. After including a 45.31% implementation rate, adjusting the cost estimation model predicts a 1.26% decrease in teacher turnover with an additional day of PTO.

The cost effectiveness ratio for adjusting the cost estimation model is $146.15 per teacher to achieve a 1% decrease in turnover. The grant approach has a smaller ratio of $68.86 per teacher for the same effect. Still, there is a level of uncertainty with these estimates because existing evidence supporting PTO's impact on reduced job turnover exists outside the K-12 and child care sectors, leading to generalizability concerns for Virginia's child care centers.

Professional Development for Leadership

This report assesses the costs of professional development for leadership by examining the prices of CLASS programs, the number of teachers per site, and salary data, along with administrative cost caps ("Administrative Cost Cap," 2018; Ullrich, personal communications, 2023). This estimation may skew high because it accounts for the opportunity cost of leadership not being present at sites.

The average per-teacher cost of adjusting the cost estimation model to include leadership participating in CLASS programming is $241.18. The grant approach, after factoring in administrative costs, has an average per-teacher cost of leadership participating in CLASS programming of $250.82. In terms of effectiveness, the grant approach predicts a 1.67% decrease in teacher turnover associated with leadership participating in CLASS programming. After including a 45.31% implementation rate, adjusting the cost estimation model predicts a 0.76% decrease in teacher turnover associated with leadership participating in CLASS programming.

The cost effectiveness ratio for adjusting the cost estimation model is $318.76 per teacher to achieve a 1% decrease in turnover. The grant approach has a smaller ratio of $150.19 per teacher for the same effect. The studies that informed this analysis did occur in the K-12 sector; however, they may have had higher intensity than some CLASS programming, leading to some concerns about applying these findings to the Virginia child care sector.

Mentoring

This report assesses the costs of teacher mentorship by incorporating salary data, training time, administrative cost caps, and compensation recommendations for teachers ("Administrative Cost Cap," 2018; Ullrich, personal communications, 2023; Whitebook et al., 1994). It costs $1724.60 per teacher to adjust the cost estimation model to incorporate in-house mentoring. In contrast, funding mentoring programs through a grant cost approximately $1,793.58 per teacher. In terms of effectiveness, the grant approach predicts a 26.12% decrease in teacher turnover associated with mentor program participation. After including a 45.31% implementation rate, the cost estimation model approach predicts a 11.83% decrease in teacher turnover associated with in-house mentoring.

The cost effectiveness ratio for adjusting the cost estimation model is $145.73 per teacher to achieve a 1% decrease in turnover. The grant approach has a smaller ratio of $68.67 per teacher for the same effect. For this analysis, cost estimates may be less accurate due to limited pricing information, leading to some uncertainty about mentoring costs.

Conclusion

In evaluating the cost-effectiveness of the proposed alternatives, the paid time off grant and mentoring grant emerge as the most cost-efficient options. The two options costs approximately $68 for a 1% decrease in turnover. Across the options, the grant approach outperforms adjustments to the cost estimation model. Overall, these findings underscore the efficiency of grant-based approaches in addressing teacher turnover challenges. Still, it is important to note limitations across estimates, concerning the uncertainty of costs and the generalizability of findings to Virginia's child care.

Approaches	Alternatives	Cost-effectiveness
Cost Estimation Model	Paid Time Off	$ 146.15
	Professional Development for Leadership	$ 318.76
	Mentoring Program	$ 145.73
Grant Program	Paid Time Off	$ 68.86
	Professional Development for Leadership	$ 150.19
	Mentoring Program	$ 68.67

Administrative Feasibility Evaluations: Approaches

Cost Estimation Model

Incorporating different alternatives into the VDOE's cost estimation model has a high level of administrative feasibility. Necessary adjustments would likely involve minor modifications to the current cost estimation numbers. The distribution of funds by the Virginia Department of Health and Human Services to sites contributes to the administrative ease for the VDOE. Additionally, there are not requirements for how sites allocate funds ("Becoming," n.d.; "Estimating," 2023). This lack of specificity minimizes the likelihood of additional monitoring burdens, making the cost estimation model an administratively feasible option.

While child care sites have expressed concerns with the Child Care Subsidy Program (Doromal et al., 2023), utilizing additional fudning would not necessarily burden sites with additional administrative complexities. However, site leadership would need to navigate trade-offs in efficiently utilizing the block of funds; therefore, ***this approach has a medium to high feasibility for sites.***

Grant Programs

The administrative feasibility of the grant program at the VDOE level is assessed as medium due to its involvement, either in the grant process or in partnerships with external organizations. If the VDOE did not partner with outside organizations, its responsibilities would include the creation of eligibility criteria, promoting the grant, managing the application process, selecting recipients, distributing funding, and monitoring and auditing organizations ("Grants 101," n.d.) While partnerships could allow the VDOE to share these responsibilities, they would still need to coordinate with any partner to ensure the success of the program. The VDOE benefits from well-established collaborations, particularly with the Virginia Early Childhood Foundation. Because they have worked together before, communication and processes would likely be simpler ("Early Educator," n.d.). Grant distribution through Ready Region connections further streamlines the process ("Ready Regions," n.d.). However, uncertainty exists regarding the willingness of the Virginia Early Childhood Foundation to collaborate in the future, adding an element of unpredictability to administrative feasibility.

Grant applications introduce an additional administrative step for site administrators, requiring time and knowledge. While child care sites may still have challenges with the process, familiarity with procedures could mitigate potential issues in grant application and management. Given that the grant targets Child Care Subsidy Sites, which already have experience reporting to and receiving funding from the government, ***the administrative feasibility remains at a medium level.***

Administrative Feasibility Evaluations: Alternatives

Paid Time Off

The administrative feasibility of implementing more Paid Time Off (PTO) in child care sites is assessed as medium**,** with potential challenges stemming from high vacancy levels (Bassok & Weisner, 2023). Sites with lower vacancies may be more likely to give teachers an additional day of paid time off because they have more staffing flexibility. This outcome could cause the alternative to not effectively target sites with the highest turnover rates. Despite this concern, because a one day increase per year is a modest change to paid time off, it could be more feasible for sites to implement.

Professional Development for Leaders

The administrative feasibility of offering professional development for leaders in child care sites is rated as medium. Similar concerns about the availability of staffing and whether the alternative could target sites with higher turnover levels impact this alternative. Many courses occur during the weekday, making director participation challenging. However, the availability of courses with different time commitments (one to three days) and an asynchronous option may provide some flexibility for directors, increasing the feasibility of the alternative (Products," n.d.).

Mentoring Program

The administrative feasibility for mentoring programs in child care sites scores is rated as low. This alternative faces similar issues due to staffing shortages (Bassok & Weisner, 2023). However, the quality of mentoring programs is important (Hong et al., 2019), which requires time. Because it would likely require a greater time commitment from sites and teachers, it would be more challenging to implement. Moreover, child care sites tend to have a less experienced workforce ("2023 Virginia," 2024). Therefore, sites may struggle with a limited availability of more veteran teachers. Sites also have the option to use the funds to outsource mentoring program, but organization like REACH focus on K-12 mentoring ("About Reach," n.d.). Therefore, many sites may face challenges implementing either in-house or outsourced programming.

Conclusion

	Approaches	
Administrative Feasibility	**Cost Estimation Model**	**Grant Program**
	High	**Medium**

	Alternatives		
Administrative Feasibility	**Paid Time Off**	**Professional Development for Leadership**	**Mentoring Program**
	Medium	**Medium**	**Low**

Approaches	Alternatives	Administrative Feasibility
Cost Estimation Model	**Paid Time Off**	**Medium to High**
	Professional Development for Leadership	**Medium to High**
	Mentoring Program	**Medium**
Grant Program	**Paid Time Off**	**Medium**
	Professional Development for Leadership	**Medium**
	Mentoring Program	**Low to Medium**

Based on these matrices, changes to the cost-estimation model for both paid time off and professional development for leaders emerge as the most administratively feasible options. Changing the cost estimation model involves little additional burden on VDOE staff, making it a more feasible approach. For child care sites, staffing shortages negatively impact the administrative feasibility of all the alternatives to some extent. However, because paid time off and CLASS programming involve less time spent away from general duties, they are more feasible. On the other hand, requiring sites to either have internal mentoring programming, under staffing shortages, or outsource to a relatively underdeveloped space in child care is less feasible.

Fundability Evaluations

Paid Time Off

Using the cost estimation model approach, paid time off ranks high on fundability. This change is relatively low cost ($184.07 per teacher). The current model offers 10 days of paid time off total. This number is equivalent to the number of paid sick leave required for Virginia K-12 teachers ("8VAC20-460-10," 1980). However, comparing hours worked makes a one-day increase more in line with K-12 (See Appendix B). Additionally, most larger districts in the K-12 space offer more than 10 days of leave, including large counties within Virginia (Moored, 2012). ***Meanwhile, a grant program to offer one additional day of paid time off ranks low on fundability.*** Virginia politicians and potential funders would likely view a one-day increase in paid time off as an insufficient reason to create a new grant program. States have previously offered reimbursement grants for paid time off. However, this occurred during the pandemic, where PTO likely held more salience for leaders, and operated on a larger scale than one day per employee ("Using Federal Funds," 2022). Creating a grant with a larger number of days off may be more attractive for funders. However, given that that would exceed the precedent in K-12, it would be unlikely to receive funding.

Professional Development for Leaders

Funding professional development for leadership costs approximately 35% more than paid time off, the least expensive option, suggesting that it is relatively less feasible in this aspect. However, CLASS is a proven rating system ("Proving CLASS," n.d.), making finding funding sources more likely. Additionally, Virginia's early childhood quality rating system uses CLASS observers, and Virginia has subsidized courses for site leaders to conduct these observations (Ullrich, personal communications, 2024). Finally, the grant program ranks slightly higher due the additional flexibility of finding other funding sources beyond the state government. Because the VDOE has funded a similar program before, ***a grant program for professional development for leaders ranks medium to high, and the cost-estimation model approach ranks medium on fundability.***

Mentoring Programs

Funding for mentoring programs costs almost 10 times the amount for paid time off, the least expensive option, suggesting that it is substantially less feasible in this aspect. However, Virginia law requires that all public K-12 teachers receive mentoring and has in the past offered funding support ("Mentor Programs," n.d.). While this does not necessarily translate to action in the child care sector, it does represent an area in which child care does not keep up with the

K-12. Finally, a grant program ranks slightly higher due the additional flexibility of finding other funding sources beyond the state government. ***Considering, first, the high costs and then, mentoring requirements in K-12, a grant program for mentoring ranks medium, and the cost-estimation model approach ranks low to medium on fundability.***

Conclusion

Approaches	Alternatives	Fundability
Cost Estimation Model	Paid Time Off	High
	Professional Development for Leadership	Medium
	Mentoring Program	Low to Medium
Grant Program	Paid Time Off	Low
	Professional Development for Leadership	Medium to High
	Mentoring Program	Medium

Based on this matrix, adding an additional day of paid time off to the cost-estimation model emerges as the most fundable option. This alternative is relatively low cost and follows K-12 standards in Virginia for time off per hours worked. Still, professional development for leaders ranks well on fundability across the two approaches. Despite being more expensive, similar programs by the VDOE make it more feasible. Finally, mentoring programs, although significantly costlier and thus less feasible, still has the potential for funding due to existing K-12 requirements.

Recommendation

Outcomes Matrix

Approaches	Alternatives	Cost-effectiveness	Administrative Feasibility	Fundability
Cost Estimation Model	Paid Time Off	$ 146.15	Medium to High	High
	Professional Development for Leadership	$ 318.76	Medium to High	Medium
	Mentoring Program	$ 145.73	Medium	Low to Medium
Grant Program	Paid Time Off	$ 68.86	Medium	Low
	Professional Development for Leadership	$ 150.19	Medium	Medium to High
	Mentoring Program	$ 68.67	Low to Medium	Medium

Recommendation & Tradeoffs

First, this report recommends that the VDOE include an additional day of paid time off in future cost estimation models. This option ranks the highest when considering both administrative feasibility and fundability. While it does not have the best cost-effectiveness, the two options with lower cost-effectiveness ratios: grant programs for paid time off and mentoring, have low scores for either administrative feasibility or fundability. These low scores mean they will likely receive more resistance to approval and successful implementation. The chosen alternative can attribute its overall high scores in part to being a relatively small change. However, one day of paid time off can address only a small portion of the teacher turnover issue. Moreover, it would likely be unfeasible to expand paid time off much further than an additional day, as it would overtake the amounts in the K-12 sector ("8VAC20-460-10,"1980).

Because of the limitations of the first alternative, this report also recommends implementing a grant program for professional development for leadership. It is the only other option without low scores for either fundability or administrative feasibility. This recommendation also prioritizes higher administrative feasibility and fundability over a lower cost-effectiveness ratio. However, the implementation timeline of these recommendations is uncertain. Therefore, the VDOE should consider the current context and times to evaluate whether administrative feasibility and fundability for more cost-effective options have changed.

Implementation

Recommendation 1: Additional Day of Paid Time Off Added to the Cost Estimation Model

The processes for implementing an additional day of paid time off into the cost estimation model falls into two main categories: the approval process and the implementation process. The VDOE needs approval from both the Virginia state and federal governments to fund the Child Care Subsidy Program.

The Approval Process

The VDOE makes budgetary requests for the 2026 and 2027 fiscal years before the governor proposes a budget in December of 2025 ("How Does," 2024). If included in the governor's budget, the VDOE's proposed budget could still change within the House and Senate Finance Subcommittees on Education ("How Does," 2024; "List of Committees," 2024). The potential for changes throughout the process highlights the importance of continued VDOE involvement. On the federal level, the VDOE must submit a proposal in January of 2026 for pre-approval. They make changes based on comments by the Administration for Children & Families. Then in July of 2026, they submit a finalized version for official approval by the federal government (Friedman, 2024). If the model receives approval, the Virginia Department of Social Services (VDSS) distributes, through their website, funds to sites based on a percentage of the calculated costs ("Paying," n.d.). Then, child care sites choose how to use this information for their financial decisions.

The Implementation Process

Communication to sites about changes in PTO allocations as well as actual take-up of advice by child care sites are the two most likely areas of potential implementation failure. It seems likely that there will be some level of communication breakdown between the VDOE's guidance for financing high quality child care and the understanding that site leaders have about these changes. To ease this process, in the Summer of 2026, after the approval process, the VDOE could create a simplified document about the changes to the model for their website as well as for the VDSS website. Still, even if sites are aware of the changes made to the model, they still might choose to utilize the funds in different ways. The cost-effectiveness model captures this likely possibility, assuming that as the number of child care subsidy eligible students increases, the likelihood of take-up would also increase (See Appendix B). This calculation relies on the assumption that receiving more funds from the subsidy program will give child care sites greater ability to make proposed changes.

Recommendation 2: Grant Program for Professional Development for Leadership

The processes for implementing a grant program for leadership falls under three main categories: the creation process, the approval/funding process, and the implementation process.

The Creation Process

The Office of Early Childhood Quality and Workforce utilizes CLASS observers for their quality rating system ("Local Class," 2023). Therefore, the Offices of Early Childhood Access and Enrollment as well as Quality and Workforce would work together to develop the grant program. Site leaders could apply to have CLASS observer and/or coach training and fees associated with missing days covered through a reimbursement program (See Appendix B for different options). Additionally, the VDOE would likely consult with the Virginia Early Childhood Foundation (VECF) during the creation process. This consolation is recommended because of the significant role they may play in implementing the grant and because of the VECF's familiarity with implementing programs ("Ready Region," n.d.).

The Approval Process

This recommendation has a less set timeline due to uncertainty about when the VDOE might pursue a grant program. In a very similar process to the cost estimation model, the VDOE could create a new grant program through incorporation into the 2026 Virginia budget. Because this grant program would be a larger request than an additional day of paid time off, more involvement from the VDOE would likely be necessary.

There is also the possibility of receiving funds from other sources. The VDOE does not have plans currently for a new grant program to reduce teacher turnover. Therefore, this section focuses on potential sources of funding rather than specific funding opportunities. Some key funders of child care initiatives that the VDOE could examine include:

- The Administration for Children and Families ("Grants," n.d.)
- The David and Lucile Packard Foundation
- Bill and Melinda Gates Foundation
- W.K. Kellogg Foundation
- Ford Foundations
- Heising-Simons Foundation
- The J.B. and M.K. Pritzker Family Foundation
- Buffett Early Childhood Fund
- Irving Harris Foundation
- Atlas Family Foundation ("Grants for," n.d.).

The Implementation and Assessment Process

If the recommendation receives funding, the VDOE would likely partner with the Virginia Early Childhood Foundation. The VDOE has partnered with this organization to implement several child care programs, including retention bonuses and assistant teacher fast tracking,

through the Ready Regions in Virginia ("Early Educator," n.d.; "Ready Regions," n.d.). The already established pathways to distribute funds eases some administrative lift. Moreover, if the VDOE decides to look for alternative funding sources beyond the government, they would need to partner with an outside organization due to restrictions to accepting funding from outside sources (Miller-Bains, personal communications, 2024).

If the VDOE decides to partner with another organization on this program, they would have less involvement in the implementation of the program. However, some potential concerns would be who applies for the grant as well as issues with timely reimbursement payments. It is possible that overwhelmed child care sites, those that likely need the most support, would have less knowledge of and time to apply for a grant. This challenge highlights the importance of distributing information about the grant through Ready Region channels as well as creating a relatively simple grant application for leadership. The VDOE could help in drafting communication and grant forms. Meanwhile, to ensure timely reimbursements, the VDOE and VECF could work together to create a payment timeline and predict potential issues based on experience with previous grant programs. Finally, the targeted aspect of grant programs creates the opportunity to measure effectiveness. The VDOE should consider utilizing its research partnerships, for example with the University of Virginia ("2023 Virginia," 2024), to measure effectiveness of the grant program in reducing teacher turnover and other potentially relevant quality factors.

Conclusion

To address high teacher turnover in Virginia's child care sector, this report recommends the incorporation of an additional paid time off day in the cost estimation model, and the creation of a grant program focused on professional development for leadership. The Virginia Department of Education would play a critical role in ensuring successful implementation. Both recommendations necessitate working with the various levels of government, child care centers, and outside organizations. Therefore, effective communication and collaboration among these groups are crucial to ensure that relationships found in the literature translate to improved teacher turnover rates and in turn, better outcomes for children.

Appendix A

Child Care Wages as a Share of K-12 Salaries	
K-12 Teacher Average in FY 2023:	$68,308 (Coons, 2024).
Child Care Lead Teacher Average in 2023:	$16.17/hour (“2023 Virginia,” 2024).
Child Care Average Hours Worked per Year:	1600 hour/year (Ullrich, personal communications, 2024).
Calculation:	($16.17*1600)/$68,308 = 37.87%

Appendix B

Cost-effectiveness Analysis (See Here for More Detailed Calculations)

Cost-effectiveness

Cost Estimation Model					
	Costs	**Effectiveness**	**Utilization Rate**	**Adjusted Effectiveness**	**Cost-effectiveness**
Day of PTO	$184.07	2.78%	45.31%	1.259510204	$146.15
PD for Leadership	$241.18	1.67%	45.31%	0.7566122449	$318.76
Mentoring	$1,724.60	26.12%	45.31%	11.83395918	$145.73

Grant					
	Costs	**Effectiveness**	**Admin. Cap**	**Adjusted Costs**	**Cost-effectiveness**
Day of PTO	$184.07	2.78%	0.04	$191.44	$68.86
PD for Leadership	$241.18	1.67%	0.04	$250.82	$1919
Mentoring	$1,724.60	26.12%	0.04	$1,793.58	$68.67

Costs

Assumption 1:	If K-12 teachers in Virginia work 8 hours/per day 180 days a year, they work approximately 1444 hours per year ("Table 1.1," 2020).
Assumption 2:	Set lead teacher salaries at 86.9% of Elementary salaries (Ullrich, personal communications, 2024), and adjust each ladder position up and down as 13.1%.
Assumption 3:	Set child care worker hours a year as 1600 and average centers have 11.6 workers (Ullrich, personal communications, 2024).
Assumption 4:	Training mentors will take approximately 10 hours ("Asynch. Modules," n.d.).
Assumption 5:	Mentor compensation as 3% of total salary (Whitebook et al., 1994).
Assumption 6:	The administrative cost cap is 4% ("Administrative Cost," 2018).

Paid Time Off

Wage information	
Substitutes	$ 216.56
Sick Leave in K-12	
Days of Leave	10
Hours of Leave	80
Leave per Hours Worked	0.06
Leave in Child Care	
Adjusted Days of Leave	11.1
Number of Hours of Leave	88.6
Leave per Hours Worked	0.06
Comparison to Cost Estimation Model	
Difference in Days	1
Total Cost	
Per teacher costs, per year costs	$ 216.56
85% of Total Cost to Represent the Payment Rate	
Per teacher costs, per year costs	$ 184.07

Wage Information (per 8 hours)	
CEM Director Salary	$369.52
CEM Assistant Director	$328.84
Program Cost	
CLASS Primer for Leaders (online) ("A Class," 2024)	$40.00
CLASS Second Edition (1 day) ("Summary - Class 2nd," 2024)	$275.00
Infant and Toddler CLASS Observ. Training (3 days) ("Invitee Information," 2024a)	$1,550.00
Pre-K CLASS 2008 Observation Training (2 days) ("Invitee Information," 2024b)	$775.00
Total Cost for Directors	
CLASS Primer for Leaders (online) ("A Class," 2024)	$40.00
CLASS Second Edition (1 day) ("Summary - Class 2nd," 2024)	$1,383.57
Infant and Toddler CLASS Observ. Training (3 days) ("Invitee Information," 2024a)	$2,658.57
Pre-K CLASS 2008 Observation Training (2 days) ("Invitee Information," 2024b)	$1,514.05
Total Cost for Assistants	
CLASS Primer for Leaders (online) ("A Class," 2024)	$40.00
CLASS Second Edition (1 day) ("Summary - Class 2nd," 2024)	$1,712.41
Infant and Toddler CLASS Observ Training (3 days) ("Invitee Information," 2024a)	$3,645.09
Pre-K CLASS 2008 Observation Training (2 days) ("Invitee Information," 2024b)	$2,171.73
Cost per Site	
CLASS Primer for Leaders (online) ("A Class," 2024)	$ 80.00
CLASS Second Edition (1 day) ("Class 2nd," 2024)	$3,095.98
Infant and Toddler CLASS Observ Training (3 days) ("Invitee Information," 2024a)	$6,303.66
Pre-K CLASS 2008 Observation Training (2 days) ("Invitee Information," 2024b)	$3,685.77
Average Cost per Site	
Per site costs, per year costs	$3,291.35
Average per Teacher Cost (11.6 Teachers)	
Per teacher costs, per year costs	$283.74
85% of Total Costs to Represent the Payment Rate	
Per teacher costs, per year costs	$241.18

Mentoring

Wage information (per year)	
CEM Lead Teacher Salary	$58,608.00
Substitute Wage	$27.07
Training Costs	
10 Hours of Training	$270.70
Mentor Compensation	
3% of Salary	$1,758.24
Total Costs	
Per teacher costs, per year costs	$2,028.94
85% of Total Costs to Represent the Payment Rate	
Per teacher costs, per year costs	$1,724.60

Effectiveness

Effectiveness	Calculations
2.78% reduction in turnover (Hill, 2013).	$\frac{0.25}{9}$
1.67% reduction in turnover (Herrmann et al., 2019).	$\frac{0.0 + 0.0 + 0.5}{3}$
26.12% reduction in turnover (Ronfeldt & McQueen, 2017).	$\frac{0.4541 + 0.5908 + 0.0 + 0.0}{4}$

Utilization Adjustments

Assumption 1:	Because a goal is to help improve quality for eligible children, those serving in the fifth quintile will not be included in impact analysis.

Percent of children with Child Care Subsidies	Impact Assumptions	Utilization of Alternatives Assumption
Child Care Centers (Bassok et al., 2022).		
80%	8%	
60%	10%	
40%	15%	
20%	19%	
0%	49%	
Averages		
Child Care Centers (Bassok et al., 2022).		
80%	16%	13.061%
60%	20%	12.245%
40%	31%	12.245%
20%	39%	7.755%
Average Utilization Rate		
		45.306%

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