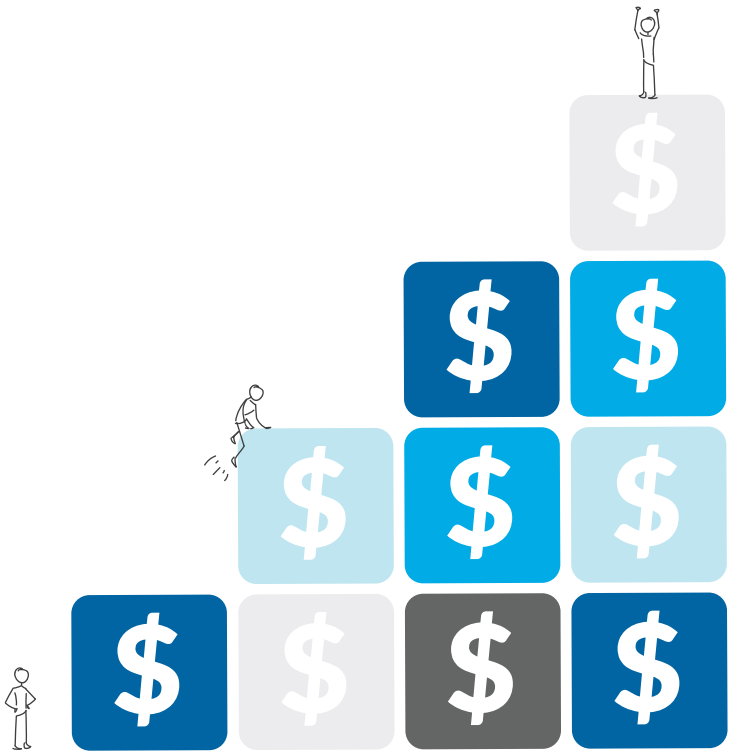
Dollars and Sense

Federal Investments in Our Educator Workforce



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About *Dollars and Sense*

This report is part of a suite of materials created by *Prepared To Teach* and WestEd during our shared research effort, the Sustainability Project.[1] The work explores sustainability challenges in teacher preparation—and, importantly, promising practices to overcome those challenges (see **Appendix A** for more about the project).

All the reports are available on the ***Prepared To Teach*** website, preparedtoteach.org/resources. In addition, associated resources and tools, including guidance documents, budget calculators, and presentation materials, can be accessed there. All *Prepared To Teach* materials are licensed under the Creative Commons license **CC BY-NC-SA**; we hope they prove useful to our colleagues everywhere. •

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TABLE OF CONTENTS

"The Pay and Dignity They Deserve:" Valuing Teachers and Teaching

In other systems, teachers are less burned out, retention is higher, compensation is more fair.
—National leader in teacher preparation support

Framing the Dollars and Sense Report

When the Sustainability Project was conceived, the research team wanted to create a set of resources that would be as broadly applicable as possible.[i] We hoped to learn from those with an interest in sustainability principles for high-quality teacher preparation, so we reached out to leaders across more than 120 professional, philanthropic, district, state, and higher education organizations to invite them to inform the project with ideas for us to consider.

They did.

In the end, what we call our national thought partner group included over 80 participants from nearly as many organizations. They hailed from 17 states and the District of Columbia, sharing their perspectives as educational leaders and practitioners. They informed the framing of the project's reports, recommended people with whom we should connect to learn about sustainability efforts, reviewed materials, and supported dissemination. Their input influenced this report on systems challenges in teacher preparation in particular, with their words framing each section of the document.

While we were engaging these conversations, then-candidate Biden was pledging to "[s]upport our educators by giving them the pay and dignity they deserve."[2] These concepts—financial supports and dignity—capture the tenor of comments from our thought partner group. They were uniform and passionate in their calls for the project to acknowledge a root cause behind the challenges of establishing systems of high-quality teacher preparation: the nation's need to value teaching. Pre-service teacher preparation is—or at least should be—intertwined with in-service teaching. Thus, our thought partners argued, it just "makes sense" to frame this report within broader educational issues.

A "Moment in Time" Opportunity

Thought partners repeatedly surfaced a need to reframe public discourse about education in ways that can honor the profession—with "dignity."[3] Without such reframing, it will be difficult to shift investments towards supports and respect for teaching.

There are several signs of hope that these shifts can occur. For example, in 2018 and 2019, even in the face of teachers' strikes, which created painful disruptions for the communities that their schools serve, the public still supported teachers' efforts to increase their pay and improve their working conditions. Today, 78% of the public think teachers are paid too little and more than half would personally accept higher taxes to change that reality.[4]

A longstanding analysis of the nation's devaluing of teachers also may be losing its relevance. Nearly everyone in the country has had what researchers call an "apprenticeship of observation." Because they

[i] See **Appendix A** for more about the Sustainability Project and the suite of reports and resources associated with the research.

went through school, they think they know what it takes to be a teacher; because they sat in classrooms, they think teaching is not a very demanding job.[5] COVID-19 appears to have changed that perception. The pandemic brought challenges to parents everywhere through school closures and online education, raising awareness of the profound responsibilities that teachers have. Almost immediately when schools began to close, social media exploded with parents' newfound appreciations for teachers, calling them out as heroes and advocating for raises.[6]

In addition, we may be seeing a growing consensus that embraces a view of teachers as professionals, more aligned with countries like Finland and Singapore whose educational systems are widely admired.[7] In this vision, teaching professionals have a sense of shared membership and ethics and individuals are charged to apply their knowledge of the field, as appropriate, in local contexts.[8] A very different vision of teaching has held sway in public discourse since the 1980s in the US, one that promoted accountability to uniform external expectations as the way to establish credibility for teachers.[9] As a result of this focus on external accountability and testing, it has been commonplace in the US for those with no experience in education to influence and even lead the highest levels of educational policy, unlike in other similarly situated nations.[10] Evidence exists, though, that the prominence of testing may be waning, including testing opt-out movements, revision of teacher accountability requirements, and widespread acceptance of dropping testing requirements for entry to college.[11]

Finally, an emerging consensus from research in the learning sciences and its relevance to equity has begun to affirm the kinds of perspectives and practices that educators have long embraced. When students construct knowledge, they do so not based on rote or repetitious learning of facts; knowledge accrues when each individual's biology, experiences, relationships, and social constructs converge. Teachers must be able to create culturally responsive and sustaining social environments that facilitate the neural experiences that help the particular students they serve to construct knowledge.[12] Increasingly, this knowledge base has been used to reframe the narrative around education, establishing the need to seriously re-evaluate how teaching should be understood. As recently noted in a *Phi Delta Kappan* article envisioning post-pandemic schooling,

> [I]f we took seriously a robust science of learning, we would view teaching not as a set of scripted "best practices" and instrumentalist approaches, but as a work that is both principled (based on specific methods) and improvisational, requiring [teachers] to know how to adapt their instruction to the students before them. This would require us to respect teachers as human development professionals (i.e., professionals tasked with cultivating human life and society) who must be provided with the support, materials, and compensation needed to prepare for and engage in this complicated and intellectually challenging work.[13]

The field is ready to embrace shifts that will make teacher preparation more uniformly strong, sustainable, and equitably accessible, as reports in this series demonstrate (see **Appendix A**). As one thought partner noted, we are living in "a moment in time" that could allow us to realize the kinds of changes in teacher preparation that other nations embraced decades ago.[14] This report offers a plan that would ensure all new teachers are qualified to succeed in the important work they are charged to accomplish. By reframing teacher preparation as an integral part of the broader educational system, we hope readers and policymakers will agree that it makes "dollars and sense" to invest in the value of teachers and teaching, beginning with teacher preparation.

Investment Needs: Teacher Preparation Programs and Candidates

When rigor and quality increase, it becomes more expensive.
—University leader

While many tangible and intangible factors play into schools' successes, teachers are, in the end, essential. Strong early childhood experiences, safe environments, supportive homes and communities, adequate resources to provide a range of learning and developmental opportunities, productive school-community connections, and good leadership—all of these make positive differences in our educational system. But without well-prepared teachers who can work with colleagues to create the kinds of environments students need to thrive, none of these—not even all of them together—can support students' learning and development to achieve the nation's educational goals.

For most students, their teachers account for the most significant portion of time they spend interacting with adults during the school year. Who those teachers are and what they understand about human development matters. The human brain does not learn in isolation; it is part of an ecosystem that includes individuals' social-emotional well-being, which, in turn, is impacted by the supports and safety of the surrounding environment.[15] In schools, teachers—both as individuals and as collaborative team members—are a driving force in creating strong learning environments and supporting individual students on their learning journeys.[16]

The challenge across the nation is that entry into teaching does not ensure all new teachers are prepared to succeed in this complex work. In teaching, there is a two-tiered system of entry—one pathway that requires hundreds of hours of study and clinical practice, including supervised practice teaching before taking on the responsibilities of the job, and another pathway that allows anyone with a bachelor's degree and a test score to walk into a paid position with virtually no preparation.[17] The latter pathway is popular: Tens of thousands are enrolled in fast-track preparation programs that require virtually no clinical practice before someone is hired to essentially learn on the job.[18] On average, teachers certified through these fast-track programs are less effective at supporting student learning, and they leave teaching more quickly than their traditionally prepared counterparts.[19] These pathways also attract more candidates from historically underrepresented backgrounds in teaching—but they leave the field even more quickly than their white counterparts from similar pathways, effectively squandering the nation's efforts to recruit candidates of color.[20] The result is a revolving door of novice, less effective teachers in schools that disproportionately serve students of color and those from low-income backgrounds, compounding inequities through year after year of inadequate opportunities to learn.[21] As we detail in ***The Residency Revolution***, sub-par routes into teaching cost taxpayer billions of dollars each year, and their long-term detrimental impacts on student outcomes are incalculable.[22]

We know how to stop these destructive cycles. Funded teacher residencies, where aspiring teachers work alongside an accomplished teacher for a year, have proved effective across the nation in strengthening new teachers' capacities, improving retention, increasing the diversity of the teaching force, and addressing districts' hiring needs.[23] When residencies are funded, candidates from underrepresented, culturally rich and diverse backgrounds can enter teaching. To date, competitive grants have provided a handful of teacher preparation programs with the resources to retool programs in partnership with P-12

schools and to support candidates financially. Such sources are limited and difficult to secure, making these quality pathways scarce. This report proposes a more universal solution to our teacher quality and retention challenges by establishing federal incentives to states to help their preparation pathways redesign themselves into strong residencies and provide permanent resources for candidates that make it possible for them to afford entering the profession through residencies. Together, these two investments can address barriers to quality teacher preparation throughout the country.

Resources for Program Design and Delivery

It's difficult for programs to partner with multiple districts. They have to tailor the program to every district. It is really resource intensive.
—Education researcher

Support staff are being reduced, and administrators of preparation programs have to play multiple roles without compensation. At a certain point, they can't do more with less.
—State and national standards organization leader

Developing new, stronger teacher preparation partnership models that meet P-12 school needs requires initial investments. To get new work off the ground, partnerships must develop shared expectations, redesign and align curriculum, and create new recruitment efforts. Once developed, these stronger programs have recurring costs for delivery, just as prior programs did, but often with additional demands on both P-12 and preparation program partners' time to ensure quality (See Table 1). Some recurring resource needs can be funded through existing budgets by redesigning staffing and program structures, as other cases in this series demonstrate.[24]

Table 1: Sample Initial and Recurring Investments for Program Shifts

Initial Investments	Recurring Investments
Developing the partnership	Mentor supports—stipends and/or time
Restructuring programs	Increased time for ongoing partnership work
Retooling curriculum	Time for faculty collaboration around integration
Revamping recruitment and admissions	Dedicated field-based supervisors/liaisons
Providing mentor learning opportunities	Planning time and learning opportunities to integrate mentors more deeply into programs

The degree to which existing dollars can fund recurring costs of newly redesigned programs is linked to the degree in which new programs are conceptualized as part of existing preparation offerings instead of being designed as separate pilot programs. Stand-alone pilot programs require funding for basic infrastructure needs, which are duplicative of costs that are currently embedded in existing programs. As a result, they are more expensive and difficult to sustain once grant funding ends.[25] As the nation begins to invest in widespread supports for the transformation of teacher preparation programs, residencies should build in recurring costs by braiding existing preparation program costs into new program designs.

Resources for Candidates

Many people cannot afford to leave their current jobs and benefits to complete student teaching. They need to work and have health care.
—University faculty

Of all the parts of the system needing resources, funding for teacher candidates is the most pressing. Currently, there is no systemic funding stream built into either P-12 or teacher preparation programs to support aspiring teachers through their clinical practice experiences.[26] The hours required to learn to teach should preclude candidates from working, but most people can't afford to live without income. As a result, candidates take on crushing debt or work on top of their clinical practice and studies, undermining their ability to focus on their learning.

As we detail in our companion report, ***The Affordability Imperative***, candidates need the time and space to focus, reflect, study, and practice while they are learning to teach.[27] But financial demands can get in the way of learning, from basic living expenses and family responsibilities to student loan debt. Our report ***#MoreLearningLessDebt*** documents that aspiring teachers face financial anxieties around debt and living expenses, more than half work at least 20 hours a week, and they do not have enough time for self-care. [28]

With these financial realities, it is not surprising that aspiring teachers jump at the economic incentives to enter the profession through fast-track routes that provide a salary and benefits but do not set them up for success in their work. Unfortunately, on-the-job learning burdens that underprepared teachers carry with them into the classroom don't solely rest with them. Every day, students experience substandard learning, and the lifelong impact of low-quality learning limits their opportunities and future earnings.[29] Taxpayers, too, realize fewer returns on their educational investments, and the nation as a whole loses trillions over the lives of students who are taught by underprepared teachers.[30] It is in everyone's interest to create a different set of incentives by supporting aspiring teachers so they can be fully prepared before they enter the classroom. •

A Practical Solution: Federally Funded Residency Stipends

It will take political will and investment in a high-quality teacher workforce.
—Thought partner

With COVID-19, it's now clear that teachers are essential workers. How can we articulate and fund a unified workforce development effort?
—Philanthropic leader

Designing new, fiscally responsible funding streams to support residency candidates during their clinical practice would create enduring positive shifts in the nation's educational ecosystem if dollars were designed to incentivize specific shifts not only in a few programs, but also across states' teacher preparation systems. The result would not simply be more affordable preparation. Candidates from underrepresented backgrounds would take their rightful roles as a major portion of the teaching force; teacher turnover would diminish; and teacher shortages would come under control, with qualified teachers filling open positions. Instruction and learning would also improve, diminishing disparate student outcomes. All these results would serve communities well and be in the nation's best interests.

The federal government is well positioned to invest resources in teacher education. Although our constitutional structure designates states with authority over their educational systems, the federal government provides supports to bolster state needs—and states would require more dollars for the systemic retooling of teacher preparation. In addition, the federal government invests billions of dollars in direct support to individuals to prepare for careers through workforce development dollars if the investments align with national priorities.[31] Investing in residents during their preparation would align with these efforts.

To encourage states and localities to shift policies and practices towards priorities, the federal government often uses competitive grants. In education, the Race to the Top (RttT) initiative was a particularly powerful example of the potential for how funding could incentivize major shifts in education. In that program, the promise of hundreds of millions of federal dollars to grant-winning applicants incentivized states to consider and, in many cases, adopt new education policies. At first, the rush towards voluntary education policy shifts across states with radically different political orientations seemed promising. Over time, though, RttT has been seen as having backfired for reasons that, in hindsight, seem obvious. For one, the chosen policy levers of accountability and standards were always contested; coupled with high-stakes testing, they became toxic. Many states also did not have the capacity to implement their plans, even if they did win a grant; if they did not win a grant, they suddenly found they had created new, unfunded mandates. Critiques of the over-reach of the federal government played a role, too, hampering local implementation efforts to develop a sense of ownership in the work.[32]

Three key cautionary lessons from RttT inform this proposal for a large infusion of funds into states' education efforts. First, it is not designed as a competitive grant. Every child in America should be taught by a teacher who is well prepared; living in a state that did not win a competition should not disadvantage our nation's youth. Instead, the dollars would be available to all states that opt to engage in the transformation of their teacher preparation systems. Second, requirements for accessing dollars,

as outlined below, would ensure that the states have control over their educational choices. Finally, as with many workforce training dollars, funds would largely flow to individuals enrolled in quality programs rather than to the states, avoiding the ramping up of large systems to administer the funds that either require ongoing supports or must be dismantled once grants end.

The design principles of this initiative would directly address individuals' financial barriers for entry into teaching, which drive down teacher quality, limit teacher diversity, and increase teacher turnover. A federal investment supporting aspiring teachers' living expenses during preparation would increase enrollment in programs—a shared desire and need across every state, district, and quality preparation program. Linking access to those funds with state and programmatic commitments to create high-quality residency partnerships that reallocate existing roles and dollars for sustainability would spur locally designed, state-supported transformations in teacher preparation that are linked to school improvement and district hiring needs.

A Viable, Equitable Funding Model: Giving States Access to High-Impact Residency Stipend Dollars[33]

The number of graduates from teacher preparation programs across the 50 states varies dramatically, from fewer than 200 in Alaska to more than 20,000 in Texas.[34] These numbers are a reasonable, if imperfect, proxy for understanding states' teacher hiring needs, offering an estimate of the investment needed to provide all states equitable access to resident funding on a proportional basis.

Costs for a federal program to fund resident stipends would depend on the size of the stipend for each resident and on assumptions for the scale of the effort. For the sake of understanding upper bounds of the costs, with an express intention to strengthen the nation's capacity to attract candidates from underrepresented backgrounds into teaching, this model assumes a robust stipend level of $30,000 per resident. (See **Appendix B** for state-level analyses and for cost estimates using different stipend values and adjusting for cost of living).

The scale of the effort would need to start in phases. Partnerships would need time to design their residencies and not every state and program would be ready to launch in the same timeframe. For the purposes of cost modeling, we have divided the initiative into the four phases of piloting, launching, growing, and stabilizing the work. Costs are grouped by those phases and represent annual maximum estimates for each phase, assuming evenly spaced rollout across every state. Phase 1 assumes stipend supports for a quarter of current graduates across every state. Once the goal of 25% of program graduates has been reached, which might take several years in some locations and be easier to accomplish within a year or two in others, states would move into Phase 2. Then, funding would be provided for up to 50% of states' annual hiring needs, which are, on average, larger than the numbers of individuals who graduate from preparation programs. By Phase 3, when graduates from Phase 1 are in teaching positions, districts would have begun to see initial declines in turnover, reducing the numbers of total new teachers needed and allowing the program to scale to 75% of a state's remaining total hiring needs.[35] Phase 4 represents full-scale implementation, with a much-reduced number of needed hires as a result of stronger retention. While well-designed residencies could reduce attrition by up to two-thirds,[36] this modeling assumes a more modest 50% reduction, which would mean that all future residents could be funded at a very reasonable annual federal investment of $3.9 billion a year, ensuring every new teacher would be well prepared and fully qualified to teach (see Table 2).

Table 2: Projections for Annual Anticipated Costs for $30,000 Resident Stipends

	Phase	Number of candidates funded[a]	Federal Investment
25% of current graduates 52,505 program completers from 2017-18[b]	1	38,126	$ 1,144,000,000
50% of need Approx. 260,000 per year for public schools[c]	2	130,000	$ 3,900,000,000
75% of remaining need Current annual hiring for public schools, less retention from residency graduates to date[d]	3	165,000	$ 4,950,000,000
100% of projected annual need Reduction of attrition by half through funded residencies	4	130,000	$ 3,900,000,000

[a] See **Appendix A** for state-by-state numbers of candidates, cost-of-living indices, and calculations for annual stipend levels of $20,000, $30,000, and $40,000 for smaller numbers of candidates.
[b] Total number of completers across all US programs, including alternative routes, in the 2017-18 school year. These numbers would not, by definition, include fast-track program teachers who have not completed their preparation but who currently are employed as teachers of record. US Department of Education. "Title II Data Files." US Department of Education, 2019. https://title2.ed.gov/Public/Report/DataFiles/DataFiles.aspx?p=5_01.
[c] "Digest of Education Statistics, 2018" (National Center for Education Statistics), accessed November 23, 2020, https://nces.ed.gov/programs/digest/d18/tables/dt18_208.20.asp.
[d] The assumption here is retention of 80% of Phase 1 graduates.

Although the direct investment in residents is the most substantive cost center for this proposal, the work of transforming teacher preparation programs into strong, aligned partnerships with local school districts takes time and supports. Both states and localities will need to manage and support change, requiring human resources and technical assistance. We would propose a $1,200,000 grant per state in Phase 1 to support the transformation work, with an additional $1,200,000 for each increment of 1000 residents that would be supported by the federal program. We estimate the transformation supports would require an additional $100,000,000.

For those in the field of education, who are accustomed to tightly constrained budgets, the cost of such a program might seem too high to consider. We do not think so. This initiative would be an investment, not a cost. Strong, diverse teachers are, in an economic sense, drivers of the economy. Of course, teachers and those they serve don't normally think about themselves in this sense (nor does the project team). Yet the economic reality is that replacing just 10% of the least efficacious teachers—who are disproportionately those with substandard credentials[37]—with well-prepared individuals would add trillions to the future economy, even by conservative estimates.[38] Those who graduate from high school who may not have graduated without the supports that high-quality teachers provide would each add a quarter of a million dollars to the economy over their lifetimes.[39] The investment in quality preparation pays off.

What's more, the sticker price, even at the generous stipend level of $30,000, is not prohibitive for the federal government. By way of cost comparisons, the US currently budgets $25 billion for NASA, $10 billion for Head Start, $37 billion in direct individual subsidy payments to farmers, and $21 billion for building maintenance and construction for the Department of Defense.[40] Even at the most expensive point of this plan, an investment of $5 billion is well below those levels. And these investments would have direct returns to every community in the nation, unlike many other large federal discretionary expenditures.

The Quality Model: Establishing Goals that Incentivize Shifts in Teacher Preparation

Federal dollars would only be available to aspiring teachers in states that agree to design and deliver a comprehensive plan in four required quality areas. In this way, dollars not only would incentivize important systems shifts that states want to pursue, but also would only fund individuals to attend programs certified to meet strong residency standards. States would have flexibility to meet quality bars in ways that account for the wide variation in educational contexts and needs.

1 **Meeting program quality standards.**
Core to the long-term, systemic benefits of this program would be ensuring that dollars only flow to aspiring teachers who are in high-quality residency programs. A national commission of thought partners, such as those who informed this report, would be able to articulate meaningful quality standards that would be met with wide acceptability. At a minimum, programs would need to be partnered and articulated with P-12 schools and districts, provide a full year of clinical practice to ensure candidates understand the complexities of how people learn, know their content and specialty areas for their certifications, and master culturally sustaining pedagogy to support the social, emotional, and intellectual development of students from a wide array of backgrounds. States should be offered guidance on what program quality standards might look like, and they would document in their plans how they would ensure that recipients of federal dollars are enrolled in high-quality residencies.

2 **Right-sizing stipends and committing to sustainability.**
States should be incentivized to devise plans that help residencies move towards sustainable living wages for candidates—for example, targeting stipend levels close to paraprofessional or other educator salaries. States and localities could augment—but not supplant—federal resident support dollars by redesigning staffing patterns for some resident roles, such as substitute teaching, tutoring, and teacher aides. Staffing redesign would need to continue to meet program quality standards so that residents' learning in such roles is supported and the work does not compromise broader learning goals for the residency. As documented across the "3 Rs" cases in this series (see **Appendix A**), these kinds of shifts are relatively easy to make, can improve P-12 learning, and can readily link to learning outcomes that preparation programs support through field experiences.

Restructuring for program sustainability could include a matching fund requirement set at 20% to 30% of the local full-time equivalent of substitute teachers' daily pay rates, since every district in the nation uses substitute teachers and residents can, with planning, occasionally engage in such roles in ways that enhance their learning (see ***Simple Shifts*** for examples). In addition, states should be required to outline longer-term sustainability plans that braid human resources across P-12 and preparation programs, redirect investments of school improvement dollars into residencies, and re-invest cost savings from longer-term reductions in teacher turnover. Resource shifts can include redirection of federal Title I dollars, state education formula dollars, and human resource restructuring in teacher preparation programs to bring more supports to residency preparation

sites (see ***The Residency Revolution***). Finally, programs should be supported to find cost-savings for candidates, including strengthening candidates' financial aid literacy and access to existing funding streams, such as work study and state workforce development funds (see ***The Affordability Imperative***).

3 **Prioritizing certification needs for high impact.**
Without an express requirement that states design their plans to meet their most pressing teacher quality and equity needs, the federal stipend dollars could potentially benefit individuals who intend to teach in areas that already have a strong teacher pool. If that were to occur, the federal dollars might be welcomed, but they would not help transform states' education systems. Accordingly, state plans should be required to make a case for where the resident investment would have the strongest likelihood of addressing equity gaps in the state.

4 **Promoting learning and diffusion of innovations**.
While supporting a state's graduates through high-quality residencies has the potential to promote change across an entire state, the localized and isolated natures of both districts and institutions of higher education often work against the state-level goals of achieving more coherent and universal improvements across the system. States should be required to plan for a robust learning network that can inform future improvements and help diffuse the innovations programs inspire throughout the state's teacher preparation system.

Our experience over the course of five years of working with and learning from teacher preparation programs and their district partners across nearly half the states in the nation has convinced us that educators are ready to develop these new pathways for future teachers. They simply need the incentives for their candidates to enroll in higher-quality options and supports to design locally adaptive and responsive models. This proposal would provide what they need to transform their partnerships to best serve today's P-12 students. •

Money Talks

While the Sustainability Project focused on pre-service financial sustainability, thought partners linked in-service professional devaluation with pre-service realities. Teacher pay, in particular, was a critical part of the equation of respecting the profession for our project informants. That focus is understandable. For example, geographies that historically have had low salaries for teachers offer little in the way of financial incentive for becoming and staying a teacher. Across the 16 Southern Regional Education Board (SREB) states, average take-home pay for a teacher with 15 years of experience is less than $35,000.[41] The issue is not just regional, though. Across the nation today, teachers earn 19% less than other college educated workers—a gap that as recently as 1996 used to be less than a third of that, at 6%.[42]

One common argument about the difficulty of paying teachers more is that the sector is too large to afford pay increases. Two other sectors offer instructive counterpoints. Both nursing and the military employ huge numbers of individuals—3.8 million registered nurses and 1.3 million active duty military members and another 800,000 military reservists, compared to 3.1 million teachers.[43] Average registered nurse salaries are over $77,000, including registered nurses who only have associates' degrees, while average teachers' salaries are $64,000.[44] Members of the military with comparable education to teachers generally enter as officers, and while median salaries are not readily available, detailed pay scales indicate that relatively early career officers earn around $64,000 per year.[45]

Both nursing and the military also have other kinds of incentives to signal the value of those who serve in these fields. Nursing has multiple pathways for professional and pay advancement, meaning that over time, nurses regularly earn six-figure salaries—a rarity in education.[46] The military offers free healthcare and geographically adjusted tax-free housing and basic subsistence allowances that can add another $20,000 to $40,000 a year to household budgets, along with additional supports that create powerful tax benefits for those serving.[47]

Teachers have no such monetary signals about their importance. The devaluation of teachers as the experts of their own work helps explain why the United States spends dramatically lower proportions of its educational budgets on teachers' salaries—54% compared to other Organisation for Economic Co-operation and Development (OECD) nations' 63%. Our budgets also flow more personnel dollars—27%—to non-teaching roles, almost twice the OECD average. [48]

Similarly, the idea that aspiring teachers can and should be expected to engage in complex clinical practice without any pay, even as they are providing instructional supports in their schools, is a profound signal of disinterest, at best, in those who are committing to teaching. Both because of the initial mindset about the profession it signals and for the material realities it can afford for candidates from underrepresented backgrounds, funding for aspiring teachers must be the centerpiece for any systemic approach to improving preparation—indeed, for improving education writ large.[49] Underprepared teachers face challenges in the classroom, find themselves lacking efficacy, leave the profession, and destabilize schools and communities when their positions are once again filled by individuals who lack the kind of preparation that residency programs provide. We can and must stop this vicious cycle and craft a virtuous one.

Preparation programs cannot create residencies that require a year of unpaid teaching and expect candidates to line up to enroll. Every state in the nation needs stipends so aspiring teachers can learn to teach well. A well-designed stipend program could be the cornerstone to incentivize the positive

changes needed in teacher preparation and attract strong candidates from diverse backgrounds into a profession—like any other—that values their knowledge and skills enough to support their development. With a well-designed federal plan to invest in residencies nationwide, the nation could soon realize the promise of improved educational opportunities for all students and rebuild its faith in teachers and teaching. It is a "moment in time" that has, as we hope we have shown, a viable path forward to a future vision for our educational system that would be widely embraced. •

Appendix A: About the Sustainability Project

The Sustainability Project team, composed of WestEd and *Prepared To Teach* worked for the past year to create this suite of resources associated with our work on sustainability in quality teacher preparation. In this joint effort, WestEd brought valuable thought partnership and quantitative research expertise and *Prepared To Teach* leveraged its five years' worth of work leading sustainability efforts across the nation.

While *Prepared To Teach* is known for a focus on creating more sustainably funded teacher residency partnerships, where candidates work alongside an accomplished teacher of record for a year, these reports are not focused specifically on residencies. Here, we highlight a range of clinically rich teacher preparation models that have found ways to be more sustainable. For this reason, we generally use the terms "teacher candidate" and "aspiring teacher" to describe those learning to teach, reserving the terms "resident" "and "residency" for when programs describe themselves as residencies and meet basic definitional requirements of being yearlong and not using teacher-of-record, fast-track approaches. As we hope our suite of resources affirms, there are a variety of different ways that strong programs can be thoughtfully and sustainably designed.

In addition to this report, the project includes five other reports and a set of web-based analytic tools and guidance documents:

- Three case studies on what *Prepared To Teach* calls the "3 Rs" of sustainable teacher preparation":
    - Reallocation: ***Simple Shifts: Paying Aspiring Teachers with Existing Resources***
    - Reduction: ***The Affordability Imperative: Creating Equitable Access to Quality Teacher Preparation***
    - (Re)Investment: ***The Residency Revolution: Funding High-Quality Teacher Preparation***
- ***Going Further Together: Building Ownership and Engagement for Sustainable, Quality Teacher Preparation:*** a case study on ways to build the kind of ownership and engagement that can create the public and political will needed to have a sustainable system of high-quality teacher preparation.
- ***Beyond Tuition, Costs of Teacher Preparation: Descriptive Analytics from the Aspiring Teachers' Financial Burden Survey:*** analyses of income sources, expenses, debt, and work realities from *Prepared To Teach*'s national survey of teacher candidates.
- Release of a **suite of web-based, user-friendly resources** including university and district budgeting tools, communications supports to share the ideas from the project with audiences new to the ideas, and guidance documents that can support partnerships as they engage different aspects of sustainability for their programs.

What We Mean by "High-Quality" Teacher Preparation

Although our purpose in this project was not to define or assess teacher preparation quality, we recognize that sustainability efforts must have an associated value proposition: Growing a stronger, more diverse, better prepared, and more supported educator workforce.

Many frameworks for quality teacher preparation exist, developed by different groups for different purposes. This project was supported to research teacher preparation sustainability as part of in a ***specific set of quality principles***. The nation also has two accrediting bodies with standards for teacher preparation—***AAQEP*** and ***CAEP***—while individual certification subject areas have their own professional frameworks. What's more, each of the 50 states articulates its expectations for programs, and programs themselves define their own visions for quality.

Teacher preparation quality frameworks share many features, even as aspects of how to define and measure quality remain contested. For *Prepared To Teach*, we conceptualize quality around four non-negotiable tenets that should be present in addition to commonly accepted principles, such as continuous improvement and alignment with standards:

1. High-quality programs focus on equity for candidates. Equitable access for all aspiring teachers, from every background, is a centerpiece of program designs, with concerted efforts to develop pathways for candidates of color. Programs ensure a quality, supported experience for all candidates, with dedicated efforts to improve experiences for candidates from underrepresented populations.

2. High-quality programs focus on equity for P-12 students. Unless programs elevate the need for aspiring teachers to be aware of and to know how to work against institutional racism and other systemic inequities, not every P-12 student will have access to a good education. Quality programs provide both curricular study and clinical practice experiences that develop teachers who can disrupt inequities and help all students thrive.

3. High-quality programs are based in research on learning and development and its applications to teaching.[50] Teachers must be able to form deep, caring relationships that help students construct knowledge. Quality programs embrace the need to engage candidates deeply in content knowledge and pedagogy that support authentic learning, and they do so within a framework of human development centered in culturally responsive and sustaining approaches to teaching and learning.

4. High-quality programs integrate extended clinical practice experiences with coursework. Learning to teach well requires both study and application, and no one can master the complexities of teaching well enough to lead a classroom without opportunities to put theory into practice. Quality programs work in deep partnership with schools and districts to design learning opportunities with mutual benefits for candidates and P-12 students in mind and ensure that graduates are ready for the complex work of being a teacher.

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Any insights that resonate, we know these colleagues influenced; any imperfect presentations or interpretations are our own.

Some of those who supported this work have been able to share their names publicly; we are honored to name them below. Others could not sign on, but regardless of whether their names are printed, we acknowledge and thank them. Even more importantly, all those who participated demonstrate a deep commitment to education. For that, also, we thank them—even more.

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Appendix B: State-by-State Completers, Cost of Living Index, and Costs for Varying Stipend and Population Assumptions

State	Program Completers, AY 2017-18	Cost of Living Index	$20,000 stipend, all completers	$30,000 stipend, all completers	$40,000 stipend, all completers	$40,000 stipend for 1/4 of completers
Alabama	2,391	0.894	$ 42,751,080	$ 64,126,620	$ 85,502,160	$ 21,375,540
Alaska	185	1.28	$ 4,736,000	$ 7,104,000	$ 9,472,000	$ 2,368,000
Arizona	5,344	1.013	$ 108,269,440	$ 162,404,160	$ 216,538,880	$ 54,134,720
Arkansas	1,739	0.878	$ 30,536,840	$ 45,805,260	$ 61,073,680	$ 15,268,420
California	12,603	1.385	$ 349,103,100	$ 523,654,650	$ 698,206,200	$ 174,551,550
Colorado	2,543	1.05	$ 53,403,000	$ 80,104,500	$ 106,806,000	$ 26,701,500
Connecticut	1,475	1.251	$ 36,904,500	$ 55,356,750	$ 73,809,000	$ 18,452,250
Delaware	437	1.079	$ 9,430,460	$ 14,145,690	$ 18,860,920	$ 4,715,230
District of Columbia	821	1.611	$ 26,452,620	$ 39,678,930	$ 52,905,240	$ 13,226,310
Florida	5,392	0.99	$ 106,761,600	$ 160,142,400	$ 213,523,200	$ 53,380,800
Georgia	3,807	0.894	$ 68,069,160	$ 102,103,740	$ 136,138,320	$ 34,034,580
Hawaii	546	1.963	$ 21,435,960	$ 32,153,940	$ 42,871,920	$ 10,717,980
Idaho	1,213	0.941	$ 22,828,660	$ 34,242,990	$ 45,657,320	$ 11,414,330
Illinois	4,219	0.958	$ 80,836,040	$ 121,254,060	$ 161,672,080	$ 40,418,020
Indiana	3,105	0.904	$ 56,138,400	$ 84,207,600	$ 112,276,800	$ 28,069,200
Iowa	1,944	0.921	$ 35,808,480	$ 53,712,720	$ 71,616,960	$ 17,904,240
Kansas	1,902	0.879	$ 33,437,160	$ 50,155,740	$ 66,874,320	$ 16,718,580
Kentucky	2,407	0.938	$ 45,155,320	$ 67,732,980	$ 90,310,640	$ 22,577,660
Louisiana	2,106	0.934	$ 39,340,080	$ 59,010,120	$ 78,680,160	$ 19,670,040
Maine	417	1.162	$ 9,691,080	$ 14,536,620	$ 19,382,160	$ 4,845,540
Maryland	2,092	1.281	$ 53,597,040	$ 80,395,560	$ 107,194,080	$ 26,798,520
Massachusetts	4,035	1.326	$ 107,008,200	$ 160,512,300	$ 214,016,400	$ 53,504,100
Michigan	2,511	0.909	$ 45,649,980	$ 68,474,970	$ 91,299,960	$ 22,824,990
Minnesota	3,154	1.012	$ 63,836,960	$ 95,755,440	$ 127,673,920	$ 31,918,480
Mississippi	1,583	0.848	$ 26,847,680	$ 40,271,520	$ 53,695,360	$ 13,423,840
Missouri	3,386	0.889	$ 60,203,080	$ 90,304,620	$ 120,406,160	$ 30,101,540
Montana	566	0.988	$ 11,184,160	$ 16,776,240	$ 22,368,320	$ 5,592,080
Nebraska	1,361	0.926	$ 25,205,720	$ 37,808,580	$ 50,411,440	$ 12,602,860
Nevada	773	1.089	$ 16,835,940	$ 25,253,910	$ 33,671,880	$ 8,417,970
New Hampshire	703	1.082	$ 15,212,920	$ 22,819,380	$ 30,425,840	$ 7,606,460
New Jersey	3,366	1.182	$ 79,572,240	$ 119,358,360	$ 159,144,480	$ 39,786,120
New Mexico	733	0.896	$ 13,135,360	$ 19,703,040	$ 26,270,720	$ 6,567,680
New York	13,326	1.337	$ 356,337,240	$ 534,505,860	$ 712,674,480	$ 178,168,620
North Carolina	4,222	0.956	$ 80,724,640	$ 121,086,960	$ 161,449,280	$ 40,362,320
North Dakota	637	0.97	$ 12,357,800	$ 18,536,700	$ 24,715,600	$ 6,178,900
Ohio	4,563	0.929	$ 84,780,540	$ 127,170,810	$ 169,561,080	$ 42,390,270
Oklahoma	1,314	0.868	$ 22,811,040	$ 34,216,560	$ 45,622,080	$ 11,405,520
Oregon	1,645	1.346	$ 44,283,400	$ 66,425,100	$ 88,566,800	$ 22,141,700
Pennsylvania	5,821	1.019	$ 118,631,980	$ 177,947,970	$ 237,263,960	$ 59,315,990
Puerto Rico	1,426	1.002	$ 28,577,040	$ 42,865,560	$ 57,154,080	$ 14,288,520
Rhode Island	582	1.194	$ 13,898,160	$ 20,847,240	$ 27,796,320	$ 6,949,080
South Carolina	2,106	0.958	$ 40,350,960	$ 60,526,440	$ 80,701,920	$ 20,175,480
South Dakota	653	0.97	$ 12,668,200	$ 19,002,300	$ 25,336,400	$ 6,334,100
Tennessee	2,803	0.902	$ 50,566,120	$ 75,849,180	$ 101,132,240	$ 25,283,060
Texas	21,622	0.923	$ 399,142,120	$ 598,713,180	$ 798,284,240	$ 199,571,060
Utah	2,133	0.973	$ 41,508,180	$ 62,262,270	$ 83,016,360	$ 20,754,090
Vermont	500	1.16	$ 11,600,000	$ 17,400,000	$ 23,200,000	$ 5,800,000
Virginia	3,208	1.016	$ 65,186,560	$ 97,779,840	$ 130,373,120	$ 32,593,280
Washington	3,020	1.113	$ 67,225,200	$ 100,837,800	$ 134,450,400	$ 33,612,600
West Virginia	994	0.921	$ 18,309,480	$ 27,464,220	$ 36,618,960	$ 9,154,740
Wisconsin	2,830	0.963	$ 54,505,800	$ 81,758,700	$ 109,011,600	$ 27,252,900
Wyoming	241	0.954	$ 4,598,280	$ 6,897,420	$ 9,196,560	$ 2,299,140
TOTAL	152,505		$ 3,227,441,000	$ 4,841,161,500	$ 6,454,882,000	$ 1,613,720,500

Endnotes

[1] In addition to web-based tools and resources available on the *Prepared To Teach* website, the project produced the following reports: Karen DeMoss, "Dollars and Sense: Removing Systemic Barriers to Sustainable, Quality Teacher Preparation" (New York: Bank Street College of Education, *Pre-pared To Teach*, May 2021); Maria Salciccioli et al., "Going Further Together: Building Ownership and Engagement for Sustainable, Quality Teacher Preparation" (New York: Bank Street College of Education, *Prepared To Teach*, May 2021); Hannah Dennis and Karen DeMoss, "Simple Shifts: Creating Paid Roles to Support Aspiring Teachers" (New York: Bank Street College of Education, *Prepared To Teach*, April 2021); Hannah Dennis, Karen DeMoss, and Divya Mansukhani, "The Affordability Imperative: Creating Equitable Access to Quality Teacher Preparation" (New York: Bank Street College of Education, *Prepared To Teach*, April 2021); Hannah Dennis and Karen DeMoss, "The Residency Revolution: Funding High-Quality Teacher Preparation" (New York: Bank Street College of Education, *Prepared To Teach*, April 2021); "Beyond Tuition, Costs of Teacher Preparation: Descriptive Analytics from The Aspiring Teachers' Financial Burden Survey" (New York: Bank Street College of Education, *Prepared To Teach*, May 2021).

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[33] The assumptions embedded in this model are intended to be a starting point for conversation, not an actual implementation proposal. Whatever ultimate formula and assumptions would be adopted should occur with feedback loops from all 50 states' education departments and should consider preparation programs'

input to ensure designs will result in the intended outcomes for the investment.

[34] Calculations here also include Washington, DC and Puerto Rico. Texas numbers are particularly large because the state houses the nation's largest online, fast-track program. For comparison, California and New York graduate roughly 13,000 new teachers per year.

[35] See Appendix 2 in Karen DeMoss, "Following the Money: Exploring Residency Funding through the Lens of Economics" (New York: Bank Street College of Education, Prepared To Teach, April 2018), https://educate.bankstreet.edu/faculty-staff/16/ for details of retention assumptions.

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