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How States Can Incentivize Districts to Do Away with Master's Degree Pay Premiums

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May 2022

Key Points

- Studies have long shown that whether a teacher holds a master's degree barely affects student achievement, yet because of incentives not to drop them, a majority of districts continue to retain pay premiums for master's degrees in their pay schedules.
- States ought to take the lead on creating new incentives that encourage school districts to drop these costly master's degree pay premiums.
- The next time state leaders are planning to raise teacher pay, they ought to gradate the funding each district receives for pay increases according to the degree to which districts take concrete steps to eliminate or phase out master's pay premiums.

Despite compelling evidence that master's degrees don't systematically make teachers more effective for their students, most US school districts provide a pay premium for them. They should stop, the sooner the better, and states should take the lead in pushing them to do so.

Now might seem like a bad time to tackle teacher compensation reforms. After all, public schools are facing huge and pressing challenges: They're reeling from the effects of the COVID-19 pandemic, struggling to figure out how to close the learning gaps caused by the pandemic's school closures, and scrambling to determine how best to allocate the nearly $200 billion they received in federal COVID-19 relief funds.

But it is in fact a perfect time to address this issue. Imagine for a moment that the vast majority of districts decided to spend 6 percent of the $200 billion COVID-19 windfall, about $12 billion, to give annual bonuses to teachers who hold master's degrees. Undoubtedly, such a broad-based move would be met with backlash from parents, teachers without master's degrees, and a public concerned with the prudent use of education funding. Everyone would say that the districts should instead spend this $12 billion in a way that would actually help students, rather than give it only to teachers who hold master's degrees without a compelling rationale.

If this hypothetical seems scandalous, remember that districts have three years to spend federal COVID-19 relief funds. This means spending $12 billion annually for teachers with advanced degrees would climb to a total expenditure of $36 billion, about a fifth of total federal COVID-19 relief for K–12 schools. It's hard to imagine anyone supporting such spending choices.

Districts and states should tackle the master's pay premium now because every year, similar spending choices are made across the country. Public schools already spend that same amount—about $12 billion—on pay bumps for teachers with master's degrees.[1] That means K–12 education spends

the same amount as the unprecedented expenditure of federal COVID-19 relief for public schools on master's pay premiums every 17 years.

A comparison with regular federal expenditures drives home the point. The total spent on master's pay premiums equals about 70 percent of annual federal Title I spending intended to support low-income students. And this occurs each year despite considerable evidence that teachers with master's degrees do not improve student achievement, outside of narrow circumstances.[2]

Education dollars—whether COVID-19 relief funds or predictable annual revenues—should be spent to improve outcomes for students. In this report, we do not attempt to argue that spending on pay premiums for master's degrees is largely wasteful, as study after study has made that case.[3] Instead, we argue that despite the preponderance of evidence against them, the vast majority of districts maintain these pay premiums because the incentives to stop are too weak and those to continue are too strong. State legislatures are best suited to alter the incentives districts face, so we offer a range of possible mechanisms states could use to help districts make lasting positive changes in teacher compensation.

A Question of Incentives: Why It's So Hard for Districts to Make the Right Decision

Why are master's pay premiums so ubiquitous in school districts? The answer is complicated, but it is partially due to the anticipated productivity benefits of advanced degrees, to such premiums enjoying a long track record, and to decades of negotiated bargaining agreements and institutional isomorphism that insulate the norms around these compensation features. However, given the long-established evidence that master's degrees don't move the needle on student outcomes, the more important question is not "Why do districts maintain these master's pay premiums?" but "Why do so many districts continue to make such wasteful investments?"

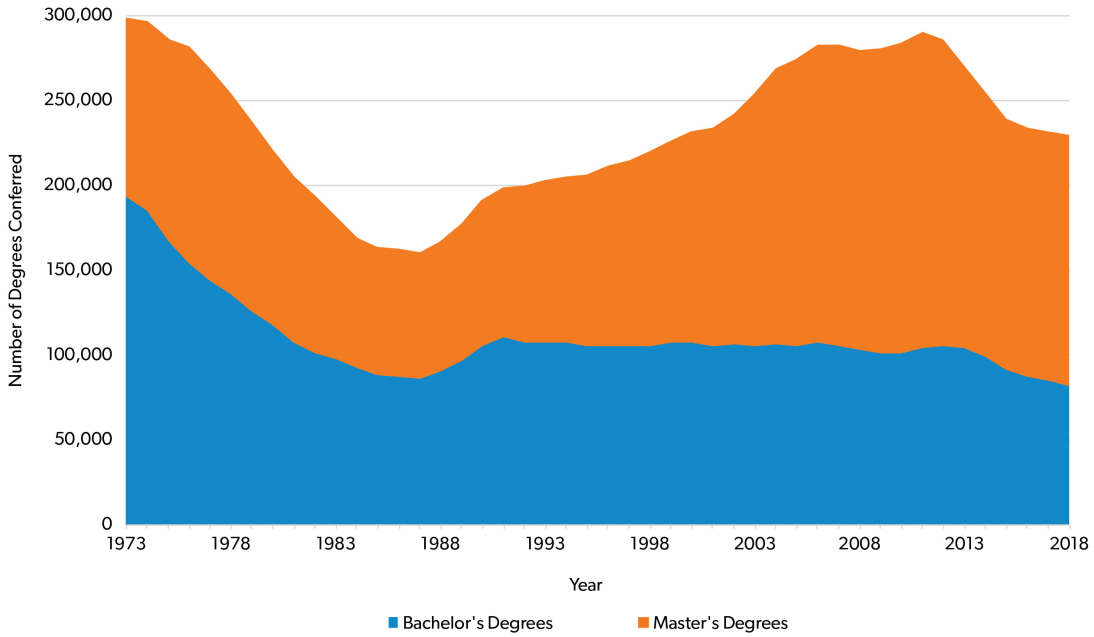
The answer comes down to incentives. Without incentives to enact changes, most districts will maintain the status quo. Although master's degree premiums may waste billions nationally, fail to improve student outcomes, and are an unjustifiable way—to teachers and students—to allocate education dollars, these reasons don't produce incentives salient enough to push school districts into action.[4]

Meanwhile, districts do have strong incentives to leave master's premiums alone. District officials are understandably wary of upsetting teachers or their unions by restructuring pay systems. Teachers like straightforward increases to their pay scales, the most common of which are typically "step-and-lane" structures that boost pay for years of experience and for holding master's and other advanced degrees. Other changes are far less welcome, as seen in teachers' hostile reactions when pension reform is mentioned.[5] Indeed, when North Carolina's legislature abolished the master's pay premium in 2013, teachers and teachers' associations protested, citing fears that the move would de-professionalize teaching or cause educators to move to different states that retained the pay bump.[6]

Teachers have reason to oppose changes to master's degree premiums, depending on how those changes are designed. Most teachers would understandably object to any pay-scale change that would amount to a simple pay cut for many teachers or lower the ceiling on teachers' potential earnings. Teachers who have incurred debt to obtain a master's degree, and all those who expended effort to get the degree, have done so trusting that the pay premium would reward them for it. According to a 2014 report by Matthew Chingos, a teacher in a typical school district must remain in the classroom for nine years to break even on the cost of their master's degree.[7] Any teacher who has earned an advanced degree but not yet reached that break-even point will surely oppose removing master's pay premiums, not only because of losing future pay increases but also because of facing the penalty of taking on master's degree debt, or paying for school out of pocket, only to see the payoff slip away.

Opposition to these changes also comes from outside the ranks of teachers. Schools of education benefit from master's degree incentives because the assured pay premium makes the degrees they offer valuable to teachers, even if they seldom benefit students. According to Preston Cooper's analysis of the return on investment of graduate degrees, those in education typically have a moderate positive return.[8] But for schools of education,

Figure 1. Bachelor's and Master's Education Degrees Conferred: 1973–2018



Source: US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Degrees in Education Conferred by Postsecondary Institutions, by Level of Degree and Sex of Student: Selected Years, 1949–50 through 2017–18," 2021, https://nces.ed.gov/programs/digest/d19/tables/dt19_325.40.asp.

the returns from the master's pay premium are substantial. Indeed, the education master's degree is the second-most-awarded master's degree in the country.[9] Since the late 1990s, education schools have awarded more master's degrees than bachelor's degrees (Figure 1), meaning that master's degrees, insulated by district salary schedules, are education schools' primary products. Any threats to the continuity of master's pay premiums should expect resistance from the ranks of education's educators.

On top of the more generalized opposition to master's pay premium reforms, districts will rightfully expect corporeal opposition from unions or other collective bargaining parties at contract negotiations. District leaders approaching the bargaining table know well that enacting substantive compensation reforms will be a tall task, and many will feel trapped into keeping master's premiums by what they view as an untenable bargaining position. With little to offer in return for what will almost certainly be an unpopular pay-scale adjustment, these leaders will not likely even attempt such a politically toxic negotiation.

Year after year, these incentives result in districts choosing to retain a master's pay premium that collectively invests billions of dollars in a pay differential that does not pay off for students or the public, whose tax dollars districts are spending. Without significant external pressure to change this compilation of incentives, school districts will continue opting for this unfortunate structure.

How States Can Make the Good Option the Easy Option

While districts typically hold the decision-making power to abolish the master's degree pay bump, states are uniquely positioned to change the incentives leading districts to keep these pay premiums. Only state legislators can alter the incentive landscape in ways that could significantly change district leaders' calculations, making the good option to jettison master's pay premiums the easy option. But if state leaders do not alter those incentives, history reveals that little district change will happen.

Before exploring how this might work, note that not all states are starting from the same place on this issue. According to National Council on Teacher Quality data, 15 states have state-determined minimum teacher salary schedules that enshrine a pay premium for those with advanced degrees.[10] For

these states, a first step in undoing these premiums will be state policymakers either removing these requirements entirely or adding flexibility to them that would explicitly free districts to use alternative compensation schemes that avoid the premiums.

Undoubtedly, such changes could be controversial and contested. States can avoid some of the expected opposition by including hold harmless provisions, encouraging gradual but steady changes, and allocating additional funds to districts for teacher pay to ensure this sensible policy change is not simply a pay cut for teachers—or, better still, some combination of these. Whichever path they choose, these states must remove state sanctions for master's premiums, in either statute or guidance, as an obvious first step of the greater challenge of pushing school districts to change their teacher compensation systems.

Seven other states—Florida, Indiana, Louisiana, Michigan, Minnesota, North Carolina, and Utah—provide some form of discouragement for master's pay premiums, according to the National Council on Teacher Quality. For all these except North Carolina, this discouragement includes either limiting how much advanced degrees can influence pay or requiring that influence to be less than that of performance. Only one state, North Carolina, has taken the extraordinary step of removing the pay premium for any new hires. Aside from North Carolina's muscular change—enabled by its uncommon status as a state that directly funds these pay premiums—it is unclear how influential these other states' efforts have been.

If heavy-handed state approaches like North Carolina's are largely impractical to replicate and light-touch discouragement is ineffective, how can states effectively shock districts into difficult changes—particularly given the politically fraught, unpopular nature of the change? The key is to use carrots, not sticks. States can reverse the incentives for districts by offering additional compensation for teachers in exchange for districts removing the master's pay bump. This is bound to be an expensive route. So rather than considering issuing additional funding solely to achieve this change, states should be prepared to leverage the next additional funding increases that they already had planned or that will come in the future by making those increases at least partially contingent on whether districts phase out master's pay premiums or rid them from their pay scales altogether.

Such increases are not as rare as one might expect. For instance, in March 2022 alone, Mississippi's Gov. Tate Reeves signed a pay bump of roughly 10 percent, New Mexico's Gov. Michelle Lujan Grisham signed a base salary increase average of 20 percent, and Florida's Gov. Ron DeSantis announced $800 million in additional funds to raise teachers' starting salaries.[11] In April 2022, Alabama's Gov. Kay Ivey approved raises that range from 4 to 21 percent depending on teachers' experience levels.[12]

The best time to incentivize districts to change master's pay premiums is during sizable increases in teacher pay such as these. Instead of a uniform increase to teacher pay (e.g., of 5 percent), the state could institute a 3 percent increase across the board and provide an additional 1 percent increase for districts willing to take a softer push against the master's pay premium or an additional 2 percent in districts willing to push harder still. (The next section details what these pushes might look like.)

Of course, for states willing to issue 20 percent raises in pay, the opportunities to incentivize change are even greater. If states continue with business-as-usual pay raises, however, and raise teacher pay by a flat percentage across the board, they will only exacerbate existing pay gaps, including making the master's pay gap grow. The degree to which this would happen differs state by state, but the choice solely to raise teacher pay without tying it to district incentives to abandon the master's pay premium will only aggravate the problem.

Using the carrot of additional funding is far more palatable, and thus feasible, than is using a stick, such as funding cuts. If state officials pushed districts to cut master's degree pay premiums, districts and teachers alike would likely revolt. By promising additional funding to all districts, whether or not they adopt the state's preferred pay reforms—but allocating more funding if they do—the state can change districts' incentives. Districts apply this same logic to teachers with master's degrees, except that the target of the funding premium states offer would be justifiable. In doing so, states can make it easier (and politically possible) for districts to choose a better compensation sys-

Table 1. Hard Phaseout Illustrated for Two Teachers with Five Years of Experience

	Original Salary Schedule				Hard Phaseout Salary Schedule			
	Bachelor's Degree-Holders		Master's Degree-Holders		Bachelor's Degree-Holders		Master's Degree-Holders	
Years of Experience	Salary	Step Increase	Salary	Step Increase	Salary	Step Increase	Salary	Step Increase
1	$44,040	—	$50,010	—	$44,040	—	$50,010	—
2	$45,600	$1,650	$52,901	$2,891	$45,600	$1,560	$52,901	$2,891
3	$46,150	$550	$53,920	$1,019	$46,150	$550	$53,920	$1,019
4	$46,270	$120	$53,990	$70	$46,270	$120	$53,990	$70
5	$47,040	$770	$54,440	$450	$47,541	$1,271	$54,308	$0
6	$47,828	$788	$55,698	$1,258	$49,512	$1,971	$54,308	$0
7	$48,616	$788	$56,956	$1,258	$51,483	$1,971	$54,308	$0
8	$49,404	$788	$58,214	$1,258	$53,454	$1,971	$54,308	$0
9	$50,192	$788	$59,472	$1,258	$54,832	$1,378	$54,832	$524
10	$50,980	$788	$60,730	$1,258	$55,817	$985	$55,817	$985
11	$52,069	$1,089	$62,165	$1,435	$57,052	$1,234	$57,052	$1,234
12	$53,158	$1,089	$63,600	$1,435	$58,286	$1,234	$58,286	$1,234

Source: Illustrative data adapted from US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Average Base Salary for Full-Time Teachers in Public Elementary and Secondary Schools, by Highest Degree Earned and Years of Teaching Experience: Selected Years, 1990–91 Through 2017–18," 2021, https://nces.ed.gov/programs/digest/d21/tables/dt21_211.20.asp.

tem that solves the long-term problem of unjustifiable pay premiums.

A crucial selling point to help get districts on board with this plan is that the funding saved from removing or reducing master's pay premiums would not disappear from their budgets but would be reallocated. Eliminated master's pay premium funding could be employed to raise pay across the board, front-load salary schedules to encourage retention, or create pay premiums targeted toward teachers' attributes or performance that reliably benefit students.

In collective bargaining negotiations, dropping or phasing out the master's pay premium may continue to be a difficult issue for districts to win, even with state action. We are not arguing most states can institute a quick fix. States should, however, consider actions to push for progress when they can because that progress has been exceedingly rare so far without state intervention.

Five Approaches to Revise the Master's Degree Premium in Step-and-Lane Pay Schedules

Because jettisoning the master's degree pay premium from step-and-lane salary schedules will be immensely disruptive, states would do well to provide districts flexibility in choosing how aggressively they pursue this change. States must spell out for districts precisely what each approach would entail and the amount of overall funding increases that the state would award for each

Figure 2. Hard Phaseout Illustrated for Two Teachers with Five Years of Experience

Source: Illustrative data adapted from US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Average Base Salary for Full-Time Teachers in Public Elementary and Secondary Schools, by Highest Degree Earned and Years of Teaching Experience: Selected Years, 1990–91 Through 2017–18," 2021, https://nces.ed.gov/programs/digest/d21/tables/dt21_211.20.asp.

approach so districts know exactly what decision they are making when calculating the trade-offs.

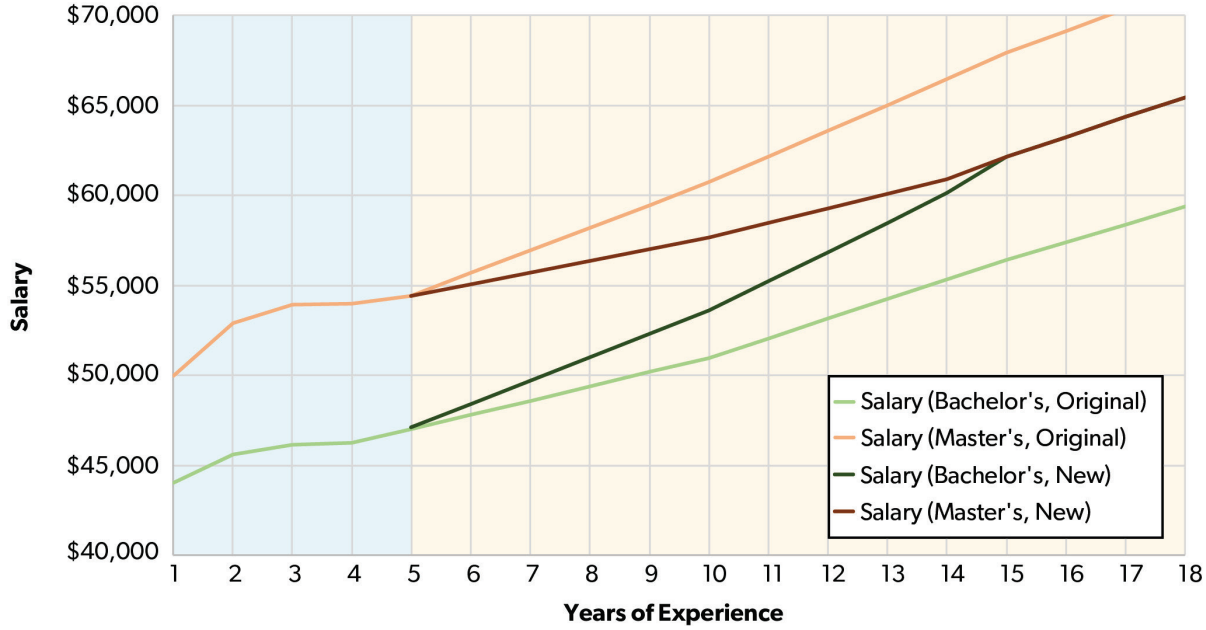
We suggest five approaches states might offer districts to remove the pay premium for master's degrees from their pay scales. Each considers the question of what to do about teachers who already benefit from these incentives and currently receive higher salaries than their peers do, solely because of their master's degrees. We list these options beginning with what might be most effective at reducing the master's pay premium and, relatedly, with what might be the most contentious.

Approach One. The first approach a district could take would be to remove the pay premiums for master's degrees or other advanced degrees from their pay scale and equalize pay across teachers with the same assignments and levels of experience.[13] While this approach would immediately eliminate the master's premium, it is politically absurd. Equalizing all teachers' base compensation as they move onto the new pay structure would amount to a pay raise for many teachers but a pay cut for other teachers. Reducing salaries for a large percentage of teachers would likely engender strong pushback and thus be a political nonstarter, both at the negotiating table within districts and at the statehouse.

Approach Two. The second approach districts could take is a hard phaseout of master's degree pay premiums in the new salary schedule. In such a scenario, educators who have master's degrees or who are in the process of earning one would be held harmless by maintaining their current salary but would be ineligible for any pay raises until comparable teachers receive equal pay to them.

For instance, let's say Teacher A and Teacher B have the same four years of experience, but Teacher A has a master's degree and a base annual salary of $54,000 while Teacher B—with no master's degree—earns $46,000 per year. With a hard phaseout beginning at the fifth year of experience for these teachers, as seen in Table 1, Teacher B's salary (in the Bachelor's column) would increase according to stepped pay increases.[14] Moving forward, these increases would consume all budgeted stepped salary increases and would thus be larger than existing steps. In such a scenario, Teacher A would see no step increases because they are already earning more than Teacher B and their other

Figure 3. Soft Phaseout Illustrated for Two Teachers with Five Years of Experience



Source: Illustrative data adapted from US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Average Base Salary for Full-Time Teachers in Public Elementary and Secondary Schools, by Highest Degree Earned and Years of Teaching Experience: Selected Years, 1990–91 Through 2017–18," 2021, https://nces.ed.gov/programs/digest/d21/tables/dt21_211.20.asp.

peers who have equal experience but no advanced degree.

This would last over the five years it would take for Teacher B's base salary to catch up to Teacher A's static level of pay. After this point, Teacher A's salary would be eligible to increase, as the comparable teacher's salary has "caught up," and future salary step increases would be equal for all teachers with similar experience, duties, and performance. This hard phaseout equalizes base pay as aggressively as possible without reducing the pay of teachers who earned master's while still working to remove the incentive and reward for the master's from the pay scale moving forward (Figure 2).

Approach Three. A third approach involves a softer phaseout of master's degree funding. Similar to the second option, teachers who have master's degrees would not lose their current rate of pay and would not earn raises on the new pay schedule at the same rate as comparable teachers until those comparable teachers' salaries have caught up. Instead of completely freezing pay raises, the district would issue these teachers a percentage of the total budgeted step raise for teachers with the same experience, as shown in Table 2. If that share were half the increase their non-master's-holding peers receive and included all budgeted salary increases, the time to equalize would be just over twice as long (11 years) as the hard phaseout (Figure 3).

In this scenario, Teacher A and Teacher B would again start at the same positions as they had in the previous scenario ($54,000 per year for Teacher A and $46,000 for Teacher B). In the first year of the phaseout—the fifth year of experience for the teachers—Teacher B's salary would increase $839 while Teacher A's would increase half as much, by $419. Despite the smaller increase, Teacher A would still earn $7,300 more than Teacher B. Five years later, Teacher B's salary would be at $53,600, while Teacher A's would increase to only $57,600 (a gain of $5,200 for Teacher B compared to $2,600 for Teacher A). With this differentiated pay raise, it would take 11 years for the two teachers' pays to equalize, after which point both teachers would receive the same pay raises.

Approach Four. Fourth, districts could grandfather the existing step-and-lane pay structure for current teachers with a master's degree and for

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Years of Experience	Salary	Step Increase	Salary	Step Increase	Salary	Step Increase	Salary	Step Increase
1	$44,040	—	$50,010	—	$44,040	—	$50,010	—
2	$45,600	$1,560	$52,901	$2,891	$45,600	$1,560	$52,901	$2,891
3	$46,150	$550	$53,920	$1,019	$46,150	$550	$53,920	$1,019
4	$46,270	$120	$53,990	$70	$46,270	$120	$53,990	$70
5	$47,040	$770	$54,440	$450	$47,109	$839	$54,409	$419
6	$47,828	$788	$55,698	$1,258	$48,410	$1,301	$55,060	$650
7	$48,616	$788	$56,956	$1,258	$49,710	$1,301	$55,710	$650
8	$49,404	$788	$58,214	$1,258	$51,011	$1,301	$56,361	$650
9	$50,192	$788	$59,472	$1,258	$52,312	$1,301	$57,011	$650
10	$50,980	$788	$60,730	$1,258	$53,613	$1,301	$57,661	$650
11	$52,069	$1,089	$62,165	$1,435	$55,242	$1,629	$58,476	$815
12	$53,158	$1,089	$63,600	$1,435	$56,871	$1,629	$59,291	$815
13	$54,247	$1,089	$65,035	$1,435	$58,501	$1,629	$60,105	$815
14	$55,336	$1,089	$66,470	$1,435	$60,130	$1,629	$60,920	$815
15	$56,425	$1,089	$67,905	$1,435	$62,165	$2,035	$62,165	$1,245
16	$57,408	$983	$69,139	$1,234	$63,253	$1,088	$63,253	$1,088
17	$58,391	$983	$70,373	$1,234	$64,342	$1,088	$64,342	$1,088
18	$59,374	$983	$71,607	$1,234	$65,430	$1,088	$65,430	$1,088

Source: Illustrative data adapted from US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Average Base Salary for Full-Time Teachers in Public Elementary and Secondary Schools, by Highest Degree Earned and Years of Teaching Experience: Selected Years, 1990–91 Through 2017–18," 2021, https://nces.ed.gov/programs/digest/d21/tables/dt21_211.20.asp.

those who are actively enrolled in a master's program, then keep a lane for educators who earn master's degrees in the future—but restrict the master's programs that qualify for the pay bump. For instance, a district could continue the master's pay premium for teachers who obtain or possess master's degrees in demonstrably valuable programs or assignments, such as a master's of science for science teachers. Districts could add additional restrictions to the master's programs that qualify

by white-flagging only programs deemed sufficiently rigorous. Districts should set up a process by which teachers can make the case to have a master's program evaluated or reevaluated for inclusion in the restricted master's pay scale.

Unlike the first three scenarios, this would not remove any expected master's pay premiums from any current teachers while still eliminating the incentive for teachers to pursue degrees with no effect on student achievement. However, equity in pay between teachers who currently hold unproductive master's and their non-master's-holding counterparts might not be fully realized under this scenario until the vast majority of current staff retire or leave in 20 years or so.

This option also presents greater challenges to funding. Like the first three approaches, removing the master's pay premium for new hires would slowly yield salary savings over time that districts could use to fund the more targeted salary premiums awarded to teachers who undergo training that actually improves student outcomes. A trade-off of this approach is that leaving some master's degrees, such as science and math, in a higher pay lane reduces the amount of overall money able to be redistributed to teachers, comparatively delivering a loss to the other teachers.

Approach Five. The fifth and last option is for districts to choose not to revise their pay schedule and continue to incentivize teachers to obtain master's degrees that barely affect student performance—in other words, to take the same approach they have been. This may be the easiest choice since it is the same choice many districts have made for years. But with the state providing incentives for removing the master's pay bump, choosing this option would forgo the opportunity to spend money to reward teachers for things that do in fact help students. In the face of state incentives contingent on reducing the master's pay premium, districts' decisions to continue employing this last option would become more difficult, and the fact that this is a choice districts make would become more apparent.

States looking to help districts upend these perverse incentives must note that these changes will work best if the state goes all in on encouraging districts to embrace them. If districts are not in lockstep, there is greater risk that teachers who hold master's degrees will simply move to a district that still rewards them for it. Thus, states might consider making the monetary incentive for districts that do adopt these changes even more disparate from the raise all districts will receive. For example, states could promise a 1 percent raise to all districts but a 5 percent raise to districts that get rid of the master's pay bump.

Additionally, while eliminating the master's pay premium would inherently end wasteful spending baked into the system and allow districts to raise overall teacher pay, states and districts should recognize that solely eliminating the bump will lower the top potential salary teachers could earn. This means the smartest way for districts to tackle this problem would be to not only remove the master's incentive structure but also put a better system of differentiated pay in its place. This could be a pay-for-performance pay structure, a teacher career ladder with differentiated roles, or any number of other proposals that enable teachers who contribute more to their schools to earn higher wages.

The key is to insert something into the master's pay bump void that will do a better job of identifying better-performing teachers than the simple master's proxy did. Otherwise, states and districts may end up in a situation similar to North Carolina's, whose legislature passed a bill in 2013 ending the state-funded master's pay bump but never put a better pay schedule in its place. Now, restoring pay raises for teachers who earn master's degrees is a recurring consideration in the state legislature's budget negotiations and is favored in public opinion, likely because nothing better was put in place.

Key Considerations for Policymakers

As we mentioned at the start, others have enumerated the negative repercussions of leaving master's pay premiums in place, but any policymaker looking to tackle ending these premiums should know the positive advantages of doing so as well. While discussing these in detail is beyond the scope of this report, we highlight a few of the major benefits and obstacles lawmakers should expect.

One major positive outcome of abolishing master's pay premiums is advancing teacher pay equity

in districts. Advantaged schools—those with historically higher academic achievement and relatively fewer historically disadvantaged students—tend, even within districts, to have teachers with higher pay than disadvantaged schools have, resulting in significant differences in per-pupil funding that often fly under the radar. These intradistrict pay gaps are partly attributable to the amount of experience those teachers have and partly due to the advanced degree differential, particularly as advantaged schools have more teachers with a master's degree than disadvantaged schools have.[15] Although it's difficult to address the portion of the funding gap due to differences in experience, targeting the master's degree pay premium is a direct route toward minimizing intradistrict spending differences that often shortchange already disadvantaged students.

Eliminating the master's pay premium could also help make pay more equitable for teachers broadly, though lawmakers should recognize that the equity calculus can be complex. While Hispanic teachers are less likely to hold master's degrees—and thus less likely to reach the highest pay potential for teaching—than other demographic groups are, Black teachers are more likely to hold master's degrees and reach this earning potential.[16] While some lawmakers might be tempted to not address master's pay premiums for fear of affecting race-based salary gaps, it is not reasonable to maintain those premiums solely to safeguard progressive pay differences that some may hold dear, knowing the structures behind them are flawed. Nor is it justifiable—or legal—to maintain those structures specifically because they advantage one group over another. A just and equitable compensation system should have integrity and not be maintained because a particular subgroup benefits from it.

Critics may contest that getting rid of the master's pay premiums will cause teachers with master's degrees to leave for places that still reward them. This is a reasonable possibility but should be balanced against the recruiting advantages of abolishing the master's premium for new teachers and those without advanced degrees, whose compensation could comparatively increase. Likewise, both prospective teachers and current teachers who may have turned away at the prospect of having to earn a master's to max out their salary could find these changes make teaching positions more attractive. The implications for teacher turnover and recruitment should be considered at the state level to provide districts flexibility to implement reforms that do not backfire. On net, there is no simple accounting for changing equilibriums on teacher recruitment and retention.

State legislators should also be wary when critics frame eliminating the master's pay premium as taking away money from teachers. In reality, the broad-stroke proposals above would reallocate dollars and could do so in ways that do not reduce any teacher's pay. Districts can use these dollars saved to reward teachers for what they actually do, not for a credential they hold. And far from de-professionalizing education, as other critics might claim, removing rewards for fruitless master's degrees makes teaching more like other professions, which tend not to reward workers for holding a degree that has little to no impact on their work.

Finally, in response to those who wish to justify master's pay premiums by pointing to the studies on the nonacademic benefits of teachers holding advanced degrees, such as their potential to lower middle school student absentee rates, lawmakers should point to the price tag.[17] These nonacademic benefits may indeed be real and widespread, but at the cost of $12 billion a year, their cost-effectiveness is hard to argue. Even if there are some benefits to teachers holding advanced degrees, the evidence overwhelmingly suggests the cost-benefit equation will not yield positive results.

Conclusion

We have nothing against master's degrees per se (one of us even holds a master's of education) and so have no issue with districts choosing to subsidize master's degrees for teachers, so long as those subsidies make sense. Alternative routes to supporting teachers' advanced training could include paying for tuition and fees for approved programs or even including master's degree premiums for specific programs, degrees, or areas of study that might reliably improve teaching and benefit schools and students. Other means could include

pay-for-performance pay structures that would indirectly benefit teachers who hold master's degrees that improve the teacher's effectiveness. Any novel avenue will likely be superior to the current norm in school districts, if it replaces ossified, blanket, and wasteful compensation structures with ones that are better informed and more coherent.

At the end of the day, the difficulties and nuances districts must take into account when deciding the best route to phase out pay premiums for master's degrees is preferable to the alternative of wasting billions year after year. It's long past time for districts to stop kicking the issue down the road simply because district incentives are squarely against rocking the boat. When the opportunity presents itself, the onus of disrupting this status quo and reversing these incentives lies with those who have the power to shock those incentives: state legislatures. If states are not willing to take action, this wasteful allocation of billions of dollars will likely continue into perpetuity.

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Notes

1. Estimating the average master's pay premium is difficult because one has to account for pay differences across years of experience across thousands of school districts. We arrived at this estimate of $12 billion annually by multiplying the number of teachers with advanced degrees (2,055,716, or 58 percent of public school teachers in the 2017–18 school year) by an estimate of the average base salary differential between teachers with and without advanced degrees identified by the National Council on Teacher Quality ($5,285 in 2019, adjusted to $5,790 for inflation). Multiplying 2,055,716 teachers with advanced degrees by $5,790 per teacher yields $11.9 billion annually.
2. Numerous studies have established there is no evidence that a master's degree makes teachers more effective in the classroom. For one list, see National Council on Teacher Quality, "Smart Money 2.0," July 2021, https://www.nctq.org/publications/Smart-Money-2.0. Other studies have found that holding a master's degree in specific subjects such as math or science, if related to the teacher's area of teaching, can improve students' achievement in that area, for certain grade levels. See Graham Drake, "When More Is Less," National Council on Teacher Quality, July 19, 2018, https://www.nctq.org/blog/When-more-is-less; and Peter Gordon and Jerry Parshall, "Separation of Degrees: State-by-State Analysis of Teacher Compensation for Master's Degrees," Center for American Progress, July 20, 2009, https://www.americanprogress.org/article/separation-of-degrees/.
3. This piece from EducationNC nicely sums up the studies that have been done on this. Analisa Sorrells, "To Restore, or Not to Restore: The Master's Pay Debate in North Carolina," EducationNC, March 7, 2019, https://www.ednc.org/to-restore-or-not-to-restore-the-masters-pay-debate-in-north-carolina/.
4. Some districts, such as Dallas Independent School District and Hillsborough County Public Schools, and states, such as North Carolina, have weighed their long-term interests more heavily than the short-term incentives and removed the master's pay premium from their pay structures. For the most part, though, these places are the exceptions rather than the norm. Kency Nittler, "You Don't Get What You Pay For: Paying Teachers More for Master's Degrees," National Council on Teacher Quality, September 26, 2019, https://www.nctq.org/blog/You-dont-get-what-you-pay-for:-paying-teachers-more-for-masters-degrees.
5. For instance, see these reactions to Kentucky's attempts to reform its teacher pension in Daarel Burnette II and Madeline Will, "Costly Pension Plans Are Fanning the Flames of Teacher Unrest," *Education Week*, April 19, 2018, https://www.edweek.org/teaching-learning/costly-pension-plans-are-fanning-the-flames-of-teacher-unrest/2018/04; and Jessica Duenas, "Kentucky Teacher Responds to Pension Changes: The Teaching Profession Is 'Under Attack,'" Education Week, April 18, 2018, https://www.edweek.org/policy-politics/opinion-kentucky-teacher-responds-to-pension-changes-the-teaching-profession-is-under-attack/2018/04. See also this reaction to Vermont's attempt to reform pensions in Lola Duffort, "'A Gut Punch': Teachers, State Employees Have Their Say on Pension Reform," VTDigger, March 29, 2021, https://vtdigger.org/2021/03/29/a-gut-punch-teachers-state-employees-have-their-say-on-pension-reform/.
6. Sorrells, "To Restore, or Not to Restore."
7. Matthew M. Chingos, "Who Profits from the Master's Degree Pay Bump for Teachers?," Brookings Institution, June 5, 2014, https://www.brookings.edu/research/who-profits-from-the-masters-degree-pay-bump-for-teachers/.

8. Preston Cooper, "Is Grad School Worth It? A Comprehensive Return on Investment Analysis," Foundation for Research on Equal Opportunity, February 24, 2022, https://freopp.org/is-graduate-school-worth-it-a-comprehensive-return-on-investment-analysis-a84644f29f9.

9. Grace Gedye, "Master's of None," *Washington Monthly*, January 12, 2020, https://washingtonmonthly.com/2020/01/12/the-education-masters-degree-scam/.

10. States that have included a master's degree teacher pay premium in state-defined salary schedules include Alabama, Arkansas, Delaware, Georgia, Hawaii, Idaho, Illinois, Kentucky, Mississippi, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, and West Virginia. National Council on Teacher Quality, Performance National Results: State Teacher Policy Database, 2021, https://www.nctq.org/yearbook/national/Performance-96.

11. Giulia Heyward, "In Several States, Teachers Get Their Biggest Raise in Decades," *New York Times*, April 12, 2022, https://www.nytimes.com/2022/04/14/us/teacher-salary-pay-raise.html.

12. Trisha Powell Crain and Ruth Severn Smith, "Alabama Gov. Kay Ivey Approves Largest Education Budget in State History, Historic Teacher Raises," AL.com, April 14, 2022, https://www.al.com/educationlab/2022/04/alabama-gov-kay-ivey-approves-largest-education-budget-in-state-history-historic-teacher-raises.html.

13. From here on, we will use the term "master's degrees" to include all advanced degrees that commonly confer pay premiums in teacher pay scales. The latest national data show 58 percent of teachers have advanced degrees that typically confer a pay increase—49 percent with master's degrees, 7 percent with education specialist degrees, and 1 percent with PhDs. US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Number, Highest Degree, and Years of Teaching Experience of Teachers in Public and Private Elementary and Secondary Schools, by Selected Teacher Characteristics: Selected Years, 1999–2000 through 2017–18," 2020, https://nces.ed.gov/programs/digest/d20/tables/dt20_209.20.asp. We will group these together due to the lack of studies on how holding a degree higher than a master's affects student performance and the low numbers of teachers who hold higher degrees.

14. Tables 1 and 2 contain hypothetical values based on national average teacher compensation data from the National Center for Education Statistics's Digest of Education Statistics. Because of an outlier salary value for master's degree-holders with two years of experience, we substituted an interpolated value. US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Average Base Salary for Full-Time Teachers in Public Elementary and Secondary Schools, by Highest Degree Earned and Years of Teaching Experience: Selected Years, 1990–91 Through 2017–18," 2021, https://nces.ed.gov/programs/digest/d21/tables/dt21_211.20.asp.

15. While 58 percent of all teachers in traditional public and public charter schools had master's or other advanced degrees in 2020, those percentages are uneven across schools. US Department of Education, National Center for Education Statistics, *Digest of Education Statistics*, "Number and Percentage Distribution of Teachers in Traditional Public and Public Charter Elementary and Secondary Schools, by Instructional Level and Selected Teacher and School Characteristics: 2017–18," 2020, https://nces.ed.gov/programs/digest/d20/tables/dt20_209.21.asp. A 2018 Programme for International Student Assessment survey found that only 40 percent of US teachers in disadvantaged schools held at least a master's degree, compared to nearly 70 percent of teachers in advantaged schools. Organisation for Economic Co-Operation and Development, *PISA 2018 Results (Volume II): Where All Students Can Succeed* (Paris, France: OECD Publishing, 2019), https://www.oecd-ilibrary.org/sites/b5fd1b8f-en/1/2/6/index.html?itemId=/content/publication/b5fd1b8f-en&_csp_=8b1d61331755ac2184775658bc8e4cc4&itemIGO=oecd&itemContentType=book#sect-59.

16. These data were found through the authors' calculations of the National Teacher and Principal Survey of public school teachers for the 2017–18 school year. See US Department of Education, National Center for Education Statistics, DataLab, https://nces.ed.gov/datalab/.

17. Helen F. Ladd and Lucy C. Sorensen, *Do Master's Degrees Matter? Advanced Degrees, Career Paths, and the Effectiveness of Teachers*, National Center for Analysis of Longitudinal Data in Education Research, https://caldercenter.org/sites/default/files/WP%20136_0.pdf.