The Wage Gap Persists:

Teachers, Pensions, and Women in the Workforce

Kirsten Schmitz and Chad Aldeman March 2018





Table of Contents

Acknowledgements	i
Introduction	1
How Teacher Pensions Work.	4
Women's Labor Market Opportunities and Today's Teacher Workforce	7
Objectives and Methods	1C
Results	12
Conclusion	17
Appendix	19
Endnotes	20

Acknowledgements

Thanks to all who offered generous feedback on earlier drafts of this paper, in particular Robert Fellner, Maria Fitzpatrick, Tamara Hiler, Sandi Jacobs, and Emily Liner. Thanks as well to Andy Rotherham, Tanya Paperny, and Max Marchitello.

Thanks also to Super Copy Editors and Five Line Creative for copy editing and graphic design support, respectively.

The Laura and John Arnold Foundation provided funding for this paper. The views and analysis are the responsibility of the authors alone.

About the Authors

Kirsten Schmitz is an analyst on the Policy and Thought Leadership team at Bellwether Education Partners. She can be reached at kirsten.schmitz@bellwethereducation.org.

Chad Aldeman is a principal on the Policy and Thought Leadership team at Bellwether Education Partners. He can be reached at chad.aldeman@bellwethereducation.org.



About TeacherPensions.org

Teacherpensions.org provides high-quality information and analysis to help stakeholders—especially teachers and policymakers—understand the teacher pension issue and the trade-offs among various options for reform. We believe there is a need for additional analysis of and communication about teacher pensions—an issue that has not yet gained sufficient traction nationally, despite its seriousness and immediacy. We aim to make the issues around teacher pensions more accessible and relevant to the general public, more compelling to policymakers, and more understandable for current teachers.

Teacherpensions.org focuses on questions affecting public policy choices; it is not personal or institutional investment advice. You should consult a qualified financial professional before making consequential financial decisions.



About Bellwether Education Partners

Teacherpensions.org is a project of Bellwether Education Partners, a national, nonpartisan nonprofit of more than 50 professionals dedicated to helping education organizations become more effective in their work and achieve dramatic results, especially for the most underserved students. To do so, we work in the public, private, and nonprofit sectors and provide a unique combination of exceptional thinking, talent, and hands-on strategic support.

Introduction

Statewide defined benefit pension plans, which today serve 90 percent of public school teachers, were originally justified on the grounds that pension plans were ideally suited to the needs of long-term female employees. Teachers, in particular, needed something extra for retirement because they suffered from years of low pay and, at the time many state pension plans were created, women teachers were not allowed to marry or form families. The ones who remained as teachers often had little in the way of other assets on which they could depend, and pension plans were originally intended to protect "old maids" who never married but who served for many years as public servants.

Today's teacher pension plans are not aligned to the opportunities available to women nor to the modern realities of retirement.

The plans were designed accordingly. They had all-or-nothing provisions such that a 19-year veteran got nothing, but a 20-year veteran earned a comfortable, although certainly not lucrative, retirement. Over time, teacher pension plans have improved somewhat, but they are still heavily tilted toward long-term employees. This back-loaded structure now aligns neither with the opportunities available to women nor to the modern realities of retirement.

Today, three out of four teachers in the United States are women. Pension interest groups argue that because women tend to prefer less risky types of investments and live longer in retirement, pensions are uniquely designed to support the needs of women. These arguments have a kernel of truth to them. Because women have a longer life expectancy than men, the guaranteed annual benefits of a pension may provide more long-term financial certainty than other forms of retirement savings. And when it comes to investment strategies, some surveys show that women tend to prioritize financial certainty, whereas men tend to prioritize maximizing returns. Women are also more likely than men to use professionally managed accounts rather than a "do-ityourself" method.1

Because pension formulas are based on two variables that favor men—salary and longevity pensions can exacerbate existing gender inequities.

But there's a risk of taking this too far, and there are reasons that pensions are not particularly great for women. Because pension formulas are based on two variables that favor men—salary and longevity—pensions can exacerbate existing gender inequities. For one, women are more likely to step in and out of the workforce or move to accommodate spouses. Due to the way pension benefits accumulate, the plans reward longevity at the expense of people who only work for three or 10 or even 15 years. Two,

because pension plans pay out higher benefits to higher-paid workers, the biggest winners of statewide "teacher" pension systems tend to be men, not women, because highly paid school administrators, who are disproportionately male, out-earn classroom teachers enrolled in the same plans. And three, the salary issue is further exacerbated in the 23 states that include the female-dominated teaching workforce with other types of public-sector employees that tend to be male-dominated.

Finally, the pro-pension arguments only apply to workers who actually receive pensions. This is an important distinction. Only about half of all new teachers stay long enough to qualify for a pension at all, and less than one in five remain for their entire career. Nationally, there are about 4 million public school teachers, making teaching the largest professional occupation in the country for men and women. Yet state public policies leave far too many of the women (and men) who enter the teaching profession without adequate retirement benefits.

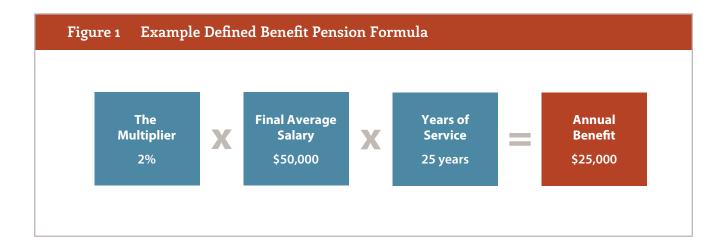
We set out to explore whether pensions are indeed uniquely designed to support the needs of women by examining a data set of Nevada retirees. We found the following:

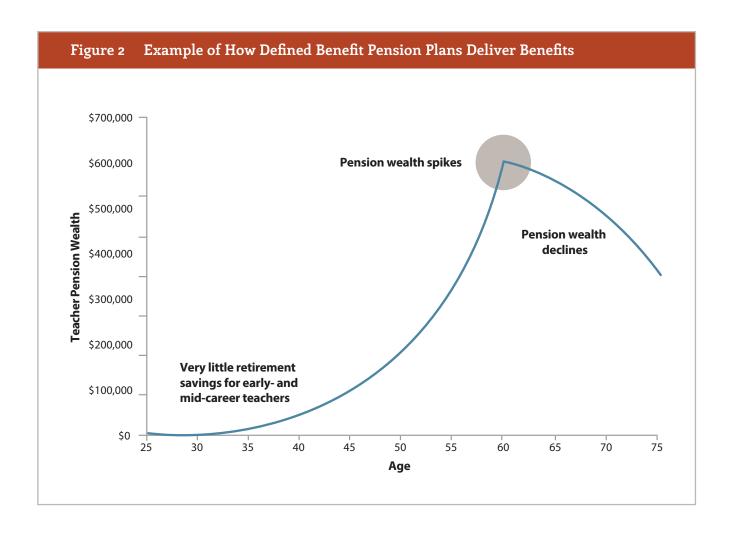
- 1. Nevada educators, who are overwhelmingly women, lose out by being in the same pension plan as non-educators. The educators in our data set had lower salaries, and thus lower pension benefits, than their peers working in other branches of state or local government. Yet all these workers are in the same pension plan, forcing school districts and educators to help subsidize the cost of non-educators. On average, newly retired educators draw pensions that are worth \$4,000 less per year than their non-educator peers. On a cumulative basis paid out over their lifetimes, Nevada's educators will collect benefits that are, on average, worth \$88,000 less than non-educators.
- 2. Even among educators, Nevada's female retirees worked slightly longer and retired slightly later than their male counterparts.
- 3. Women's extra longevity, on average, makes up for some of the salary gaps, but they'll have to suffer from years of lower salaries and lower pensions to make up the difference. In fact, after adjusting for the time value of money, a typical Nevada female teacher must live past 82 to finally catch up to her male colleagues.

While this study is based on data from Nevada, there are implications well beyond the state's borders. Every state lumps the female-dominated teaching profession in with male-dominated administrators, and Nevada is one of the 23 states that also lump the female-dominated teaching profession in with male-dominated non-educators. The structure of defined benefit pension plans exacerbates these differences and does little to address large gender disparities in salary and roles. Examining the teachers' years of experience, salaries, and pension benefits shown in this Nevada data set indicates that traditional pension systems do not benefit all women universally, and, in fact, they leave many without secure retirement savings.

How Teacher Pensions Work

About 90 percent of teachers are enrolled in state-sponsored defined benefit retirement systems.² While the exact formulas vary by state, they all rely on years of service, final average salary, and a benefit multiplier. In the hypothetical but typical example below, in a state with a 2 percent multiplier, a teacher with 25 years of experience and a final salary of \$50,000 would earn an annual benefit of \$25,000. Figure 1 shows how pension plans work mathematically.





These salary-tied formulas translate into a back-loaded, regressive structure where benefits are low for many years until, as workers near their normal retirement age, their pension wealth accelerates rapidly. Again, while the actual formulas vary state to state, Figure 2 presents a typical accrual pattern.3

Early on and up until the midpoint of her career, a worker's retirement savings increase only marginally year over year. In fact, in the median state, teachers must work for a minimum of 24 years before their lifetime pension benefits are worth more than their own contributions plus interest.4 Once they reach that point, though, their benefits accrue more rapidly. The majority of teachers, both men and women, do not benefit from the existing structure. They subsidize the more generous retirement benefits of a small group of long-serving veterans.

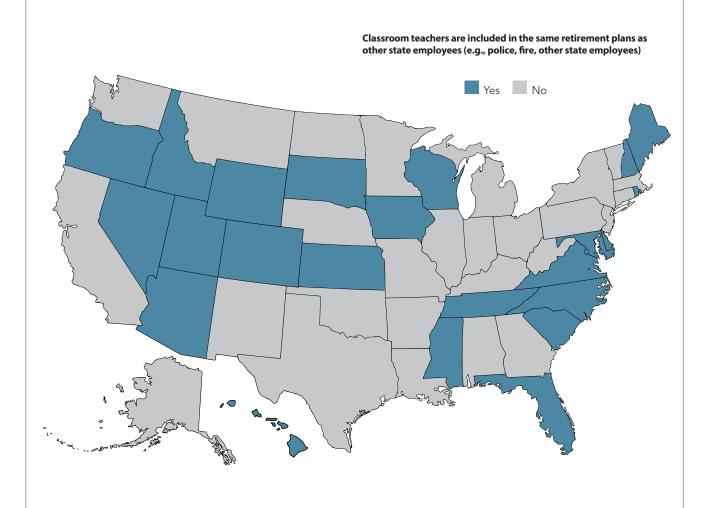
Because defined benefit pension plans guarantee payments for life, their value is a function of the worker's eventual lifespan. Today, life expectancies are much longer, making pensions potentially more valuable. In 1901, the average life expectancy for a female was only 48 years. If she was lucky enough to make it to age 65, she could be expected to live an additional 12.2 years.⁵ In 2010, the average life expectancy for a female was 81 years, and a 65-year-old female could expect to live an additional 20.5 years. Feachers, in particular, have benefited from this increase, especially because states were actively lowering the normal retirement ages for teachers for the last part of the 20th century.⁷ These teachers were simultaneously benefiting from earlier retirements and longer life spans. These changes were even more advantageous to women.

Women's Labor Market Opportunities and Today's Teacher Workforce

Women's labor market opportunities have expanded substantially over the last 100 years. A century ago, teaching was one of few opportunities for educated women to earn money outside the home. Between 1964 and 2000, labor-force participation among young women doubled, while the fraction of young women with a four-year degree tripled.8 As professional opportunities opened up for college-educated women in the wake of World War II, the Equal Pay Act, and Title IX, teaching was no longer one of few career paths available to new graduates. Women had options, and researchers found the odds that a woman at the top of her high school class would become a teacher fell from almost 20 percent to under 4 percent from 1964 to 1992.9 Teaching remains a predominantly female profession, but it no longer employs the majority of young women who are employed.

With only a few exceptions, states enroll all educators—teachers, principals, and superintendents—into one state pension plan, and it's usually named the "teacher" plan. In addition, 21 states, including Nevada, lump educators, who are numerically dominated by female teachers, in with other types of state or local government workers. Figure 3 shows the breakdown of which states include teachers with other workers in one retirement system. If the other groups of workers included in those systems have higher salaries or less turnover than the teaching profession, that will necessarily create winners and losers among the different groups of workers and thus by gender as well.

Teachers Are Frequently Enrolled in Retirement Plans That Include Figure 3 Other Types of Workers



Note:

CT: Those employed as a teacher or professional staff member by the Commission for Higher Education in one of Connecticut's public universities, colleges, or technical colleges, may elect to participate in the Teachers' Retirement System, the State Employees' Retirement System, or an alternate retirement program.

ID: Members of the Indiana Teachers' Retirement Fund (TRF) include teachers in a public school corporation, certain INPRS employees, and some employees in charter schools, innovation schools, turnaround schools, and public universities.

MD: Maryland teachers are included in the plan with state and municipal employees, but not police or fire fighters.

VA: Virginia offers an optional defined contribution plan for school superintendents.

The predominantly female teacher workforce might be paying into the same system but getting far less in return.

Those cross-subsidies are unique to the way defined benefit pension plans work. Because pension plans are calculated for all employees in the plan, employers pay the same contribution rate, regardless of the size of the benefits received by their particular employees. 10 That is, schools might pay the same rate as the state government, even if state government workers have higher salaries and lower turnover, and thus earn higher benefits from

the system. The predominantly female teacher workforce might be paying into the same system—but getting far less in return. And unlike a progressive system like Social Security, which awards lower-paid workers with proportionately higher retirement benefits, defined benefit pension systems like the ones run for teachers are regressive, and they include no such protections for lower-income workers. Our analysis used a publicly available data set on retirees in Nevada, a state that includes classroom teachers alongside all other state workers, to examine the extent of these cross-subsidies and whether they fall along gender lines.

Objectives and Methods

Forty-three percent of new Nevada educators will leave before vesting, and even vested teachers can choose to withdraw their contributions rather than wait for a pension.

As discussed above, pension formulas multiply salary and years of experience to calculate a worker's pension benefit. States also include a multiplier factor (Nevada's is currently 2.5 percent) to determine an annual benefit. Because both salary and years of experience can vary dramatically among workers, inequities in these two basic variables can also drive inequities in pension earnings. This has been welldocumented in the pension literature,¹¹ but ours is the first analysis that we're aware of that specifically looks at the gender dynamics of these inequities.

To examine this question, we used a publicly available data set on all retirees of the Public Employees' Retirement System of Nevada (NVPERS). For our purposes, we examined gender, age, years of service, and annual pension amount. Although the original data set included all living retirees, we focused our analysis on employees who retired between 2010 and 2015 and who had reached at least five years of service by the time they retired. We also removed beneficiaries receiving pensions due to being a spouse or a child of a deceased pensioner.¹² This left us with a total sample of 18,554 retired workers: 8,151 who retired from working for a public K-12 school district, and 10,392 who worked for some other state or local government division.

Notably, the data do not include those who withdraw early. According to the Nevada pension plan's assumptions on withdrawal rates, 43 percent of new Nevada educators will leave before vesting, and even vested teachers can choose to withdraw their contributions rather than wait for a pension.¹³ Although we would have preferred to look at all teachers regardless of how long they stayed and whether they qualified for a pension, our data at least allowed us to look at gender dynamics among retirees.

Results

Unfortunately, Nevada educators lose out by being in the same pension plan as non-educators.

In Tables 1 through 3, we examine the average salaries, years of service, and retirement ages for educators and non-educators by gender. Of the 8,151 educators in our sample, 5,750, or 71 percent of them, are female. In Nevada, as is true nationally, educators are disproportionately female.

Unfortunately, Nevada educators lose out by being in the same pension plan as noneducators. 14 As Table 1 shows, among all Nevada retirees, educators earned final average salaries that were an average of 15 percent (almost \$7,000 per year) less than their peers working in non-educator roles. Male educators slightly out-earn their female counterparts, making \$680 more per year. The gender gap is greater outside of education; in non-educator roles, men earn \$5,176 (10 percent) more than women.

Tables 2 and 3 look at the same retirees but focus on years of experience and age at retirement. As discussed above, years of experience is one of the variables included in traditional pension plans, and, in Nevada, one extra year of service is worth an additional 2.5 percent of the worker's final salary, paid out in annual pension payments for life. Similarly, how old someone is matters in terms of how long they might be able to draw that pension. If a worker retires at an older age, that means they'll have fewer years to enjoy in retirement. As the tables show, educators in Nevada retire with about the same years of experience, but they retire one year later. It's beyond the scope of this study to answer why that is, but female educators in particular had the highest average retirement age, with roughly the same number of working years.

 Table 1
 Nevada Public Employee Salary by Worker Group

Group of Workers	Group Size	Average Salary Among Recent Retirees*
Male educators	2,401	\$40,304
Female educators	5,750	\$39,624
All educators	8,151	\$39,825
Male non-educators	4,513	\$49,730
Female non-educators	5,879	\$44,554
All non-educators	10,392	\$46,802
All retirees	18,543	\$43,735

^{*} Average FAS of indicated group

 Table 2
 Nevada Public Employee Average Years of Service by Worker Group

Group of Workers	Group Size	Average Years of Service Among Recent Retirees
Male educators	2,401	17.6
Female educators	5,750	18
All educators	8,151	17.8
Male non-educators	4,513	18.1
Female non-educators	5,879	17.6
All non-educators	10,392	17.8
All retirees	18,543	17.8

Table 3 Nevada Public Employee Average Years of Service by Worker Group

Group of Workers	Group Size	Average Retirement Age Among Recent Retirees
Male educators	2,401	61.4
Female educators	5,750	61.7
All educators	8,151	61.5
Male non-educators	4,513	60.5
Female non-educators	5,879	60.2
All non-educators	10,392	60.3
All retirees	18,543	60.8

Table 4 is our attempt to put it all together. First, it shows the average annual pension broken down by the same groups as before. Although female educator retirees qualify for annual pensions worth slightly more than those of male educators, both groups trail noneducators. On average, educators are drawing pensions that are worth \$4,000 less per year than their non-educator peers.

Next, this table also considers how long someone might reasonably expect to receive these benefits; that is, for how many years will they collect their benefits? Nevada publishes a table estimating an individual's "expected years of life remaining" based on their age and gender. This

On a cumulative basis paid out over their lifetimes, Nevada's educators will collect benefits that are, on average, worth \$88,000 less than non-educators. is where females start to do a little better. Nevada expects that a 60-year-old female will live an additional 25.4 years, compared with 22.4 for men.

But this is also where teachers really fall behind. Not only do they have lower annual pension amounts, but also they have fewer years to collect benefits. On a cumulative basis paid out over their lifetimes. Nevada's educators will collect benefits that are, on average, worth \$88,000 less than non-educators.

Table 4 Nevada Public Employee Average Pension, Expected Years of Retirement, and Expected Pension Value by Work Group

Group of Workers	Average Pension	Expected Years of Retirement*	Expected Pension Value (2015 dollars)**
Male educators	\$28,858	21	\$434,772
Female educators	\$29,012	23.7	\$469,075
All educators	\$28,967	N/A	N/A
Male non-educators	\$35,595	21.9	\$549,920
Female non-educators	\$31,316	25.2	\$535,658
All non-educators	\$33,174	N/A	N/A
All retirees	\$31,325	N/A	N/A

^{*} Average life expectancy minus average retirement age from page 86 of Nevada's 2016 Comprehensive Annual Financial Report: https://www.nvpers.org/public/publications/FY16CAFR.pdf.

It's important to note, when looking at these numbers, that pension payouts are not lump sums. Retirees receive payments over time. These numbers are averages, and they require people to keep living to collect these benefits. Moreover, the pension payments presented in Table 4 are not adjusted for inflation. So, for example, it may not offer much solace to a practicing teacher in Nevada earning less money year in and year out than her male colleagues that she will eventually get more in pension benefits, but only if she outlasts those men by collecting a pension in her 80s and 90s. To be blunt, women on average will eventually earn more in pension benefits than men, as long as they don't die first.

Two other points are worth noting. First, men have relatively normal distributions of salary, while women are more bimodal. That means men have fewer extremes in terms of pension "winners" and "losers," whereas there are more extreme examples of women winners and losers. This is true among all state employees and among educators.

^{**} Numbers reflect an annual .66 percent COLA, per NVPERS current plan, and a conservative 4 percent discount rate.

Second, there's a large number of educators who are clearly responding to the back-end incentives embedded within Nevada's pension system. Nevada allows educators with 30 years of experience to retire at any age, and, consequently, there's a large group of retirees with exactly 30 years of experience. While researchers have found these sorts of rules in defined benefit pension plans can encourage some teachers to stay in the profession—there's a large financial incentive for a 29-year veteran to make it to 30 years—they also have the effect of pushing out experienced veterans who would otherwise continue teaching.¹⁵ On balance, researchers have found the "push" effect to be much larger than the "pull" incentive, and that trend is also showing up in the Nevada data.

Conclusions

Pensions work well for some women but not all. Our greatest takeaway is that there's more to examine.

While further analysis is needed, there are a few baseline actions Nevada can take to better support its teachers in retirement. These include:

- 1. Ensuring all teachers have Social Security coverage
- 2. Creating a portable retirement plan
- 3. Prioritizing the financial stability of their existing plan

We know, first and foremost, that female teachers lose out by being lumped into state plans with other state employees. While we see Nevada's plan working for some women, it's disingenuous to say that it, and others like it, uniformly benefits all. In Nevada's case, female teachers included in general state plans end up subsidizing the retirement of higher-paid male state employees. Nevada's female retirees worked longer and retired later than their male counterparts.

Women's longevity makes up for some of the gap, but only if they stick it out with years of lower salary first. Essentially, existing pension plans ask women to gamble on their own life expectancy. If you live into your 80s or 90s, your pension might be worth more than that of your male counterparts. But in the meantime, women have spent the bulk of their working years earning less than their male peers.¹⁶

Women's longevity makes up for some of the gap, but only if they stick it out with years of lower salary first. Essentially, existing pension plans ask women to gamble on their own life expectancy.

There are limits to our analysis. Our data set does not capture the 43 percent of Nevada teachers who are projected to withdraw before they vest in the state's plan. Ideally, we'd have data for all Nevada teachers, regardless of tenure. Additionally, we'd like to examine how the gender inequities captured play out across lines of race. We know that women of color are, on average, paid less than their white peers. 17 Our data set does not include information on teachers' race, keeping us from teasing out any race-based inequities.

Finally, future research should look into how these discrepancies play out across state lines. Different states have unique teacher workforces, as well as their own public retirement systems, with varying levels of funding and Social Security coverage.

At their origin, teacher pensions were intended to support the needs of women. And for some women, they still work very well. But due to the way pensions are structured in Nevada and many other states, those plans also amplify salary-based pay gaps between men and women and educators and non-educators.

Appendix

We used a publicly available data set logging information on the final average salaries, years of experience, annual pension benefits, and gender of pensioners in the Nevada Public Employee Retirement System. We limited our analysis to examine recent retirees: those who began collecting their pension benefits from 2010 to 2015. Our data do not include those who left the classroom prior to Nevada's five-year vesting requirement or those who decided to withdraw their contributions rather than wait to collect a benefit. That is, those captured in our analysis are at least receiving a minimum pension benefit. Based on our estimates using state data, only 57.1 percent of Nevada teachers will vest. That means our analysis is, by default, examining a pool of retirees who benefit more than many of their peers.

We made minor cuts to clean the data, including removing non-owner recipients (or those who were collecting pension benefits as designated beneficiaries), those who were deceased, and those who reentered the workforce after retiring. We also ran multiple analyses to account for all state employees, K-12 education employees, and police and fire department employees.

Endnotes

- Georgette Jasen, "Male Investors vs. Female Investors," Wall Street Journal, May 3, 2015, https://www.wsj.com/articles/male-investors-vs-female-investors-how-do-they-compare-1430709406.
- ² It's important to note that, in 15 states (including Nevada), some or all teachers lack Social Security coverage. This makes workers even more dependent on state pension plans delivering sufficient retirement benefits.
- ³ Cory Koedel, Michael Podgursky, and Shishan Shi, "Teacher Pension Systems, the Composition of the Teaching Workforce, and Teacher Quality," *Journal of Policy Analysis and Management* 32, no. 3 (2013): 574–596.
- 4 Chad Aldeman and Richard W. Johnson, "Negative Returns: How State Pensions Shortchange Teachers," TeacherPensions.org (website), September 2015, https://www.teacherpensions.org/resource/negative-returns-how-state-pensions-shortchange-teachers
- ⁵ James W. Glover, *United States Life Tables 1890, 1901, 1910, and 1901–1910*, Department of Commerce, Bureau of the Census, 1921, https://www.cdc.gov/nchs/data/lifetables/life1890-1910.pdf.
- ⁶ Elizabeth Arias, Melonie Heron and Jiaquan Xu, "United States Life Tables, 2013," National Vital Statistics Reports 66, no. 3 (April 11, 2017), https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_o3.pdf.
- Leslie Kan and Chad Aldeman, "Eating Their Young," TeacherPensions.org (website), July 7, 2015, https://www.teacherpensions.org/resource/eating-their-young.
- Sean P. Corcoran, William N. Evans, and Robert M. Schwab, "Women, the Labor Market, and the Declining Relative Quality of Teachers," Journal of Policy Analysis and Management 23, no. 3 (2004): 449–470, http://faculty.smu.edu/millimet/classes/eco7321/papers/corcoran%20et%20al%20o1.pdf.
- 9 Sean P. Corcoran, William N. Evans, and Robert S. Schwab, "Changing Labor Market Opportunities for Women and the Quality of Teachers 1857–1992," National Bureau of Economic Research (NBER.org), September 2002, http://www.nber.org/papers/w9180.pdf.
- The reverse could be true as well: Teachers may be enrolled in more generous pension plans because they are lumped in with other types of workers. That sort of political calculation is beyond the scope of this study, however, which looks merely at the cross-subsidies of different types of workers within the same overall plan.
- Ben Backes, Dan Goldhaber, Cyrus Grout, Cory Koedel, Shawn Ni, Michael Podgursky, P. Brett Xiang, and Zeyu Xu, "Benefit or Burden? On the Intergenerational Inequity of Teacher Pension plans," Educational Researcher 45, no. 6 (2016): 367–377.
- While there may be interesting gender dynamics from looking at beneficiaries, for this study we chose to focus exclusively on workers.
- "How Many Teachers Benefit from State Pension Systems, by State" (graph), from Chad Aldeman and Kelly Robson, "Why Most Teachers Get a Bad Deal on Pensions," EducationNext.org (website), May 16, 2017, http://educationnext.org/how-many-teachers-benefit-from-state-pension-systems-by-state-interactive/.
- 14 It's possible that there are other benefits to teachers being in the same pension plan as other workers, such as political considerations or plan design aspects. However, those are outside the scope of this study, which focuses entirely on the various benefits delivered within the Nevada plan as it exists.
- ¹⁵ Cory Koedel and P. Brett Xiang, "Pension Enhancements and the Retention of Public Employees," *SAGE* 70, no. 2 (March 1, 2017): 519–551, http://journals.sagepub.com/doi/abs/10.1177/0019793916650452; Kevin E. Cahill, Michael D. Giandrea, Andrew Dyke, and John Tapogna, *Pension Generosity in Oregon and Its Impact on the K12 Workforce (Working Paper 488)*, US Bureau of Labor Statistics, April 2016, https://www.bls.gov/osmr/pdf/ec160030.pdf.
- ¹⁶ Emily Liner, "A Dollar Short: What's Holding Women Back from Equal Pay?" ThirdWay.org (website), last modified September 13, 2017, http://www.thirdway.org/report/a-dollar-short-whats-holding-women-back-from-equal-pay.
- ⁷⁷ Catherine Hill, "The Simple Truth about the Gender Pay Gap," (Washington, DC: American Association of University Women, 2015).

© 2018 Bellwether Education Partners

- This report carries a Creative Commons license, which permits noncommercial re-use of content when proper attribution is provided. This means you are free to copy, display and distribute this work, or include content from this report in derivative works, under the following conditions:
- Attribution. You must clearly attribute the work to Bellwether Education Partners, and provide a link back to the publication at http://bellwethereducation.org/.
- Noncommercial. You may not use this work for commercial purposes without explicit prior permission from Bellwether Education Partners.
- Share Alike. If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.

For the full legal code of this Creative Commons license, please visit www.creativecommons.org. If you have any questions about citing or reusing Bellwether Education Partners content, please contact us.