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Established in 1999, the Center for the Study of Child Care Employment (CSCCE) is focused on achieving comprehensive public investments that enable the early childhood workforce to deliver high-quality care and education for all children. To achieve this goal, CSCCE conducts research and policy analysis about the characteristics of those who care for and educate young children and examines policy solutions aimed at improving how our nation prepares, supports, and rewards these early educators to ensure young children's optimal development. CSCCE also works directly with policymakers and a range of national, state, and local organizations to assess policy proposals and provide technical assistance on implementing sound early care and education workforce policy.

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About Teacher Compensation Parity Policies and State-Funded Pre-K Programs

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Introduction

Although the phrase *compensation parity policy* for preschool teachers may seem clear at first, the term is used in a variety of ways and refers to a range of different policies. All of these policies seek to improve the financial rewards for teaching preschool relative to teaching older children, but they differ in how far they go toward true equality. Policies vary in precisely what is covered by “parity.” Is it total compensation, including retirement and health benefits, or just salary? Does it apply to starting pay only, or do pre-K teachers also move up the same salary schedule with experience? Is equal pay or compensation for the same hours, or do pre-K teachers work longer hours or more days per year for the same pay? Finally, are pre-K teachers compensated equally for additional responsibilities and do they have the same opportunities for on-the-job professional development and other work-life or career benefits? In practice, exactly what is included under compensation parity policy varies greatly state by state.

In this paper, we employ a framework that distinguishes between full compensation parity and other forms of compensation improvement, which are commonly labeled parity but are subtly different. We follow the approach to categorizing parity as developed and explained in detail by Whitebook and McLean.¹ For simplicity, we distinguish between three levels, or tiers, of compensation improvement: parity, partial parity, and sub-parity. Moreover, we identify three components of parity: salary, benefits, and payment for professional responsibilities (see **Table 1**).

Components of Compensation				
Type of Compensation Improvement	Salary		Benefits	Payment for Professional Responsibilities ³
	Starting Salary	Salary Schedule ²		
Parity (defined as equivalent)	Same, prorated for day length and number	Same, prorated for day length and number	Same package, same options for coverage for health, retirement, and vacation/holiday/sick leave	Same menu of supports and dosage for non-child contact responsibilities (e.g., planning time, professional development days)
Partial Parity (defined as equivalent for select components)	Same, prorated for day length and number	Not same or absent	Equivalent options for some benefits, but not full package of benefits	Equivalent options for some supports, but not full menu of supports
Sub-Parity (defined as similar but not equivalent)	Same, not prorated	Same, not prorated or not same/absent	Same package of benefits, not equivalent value	Same menu of supports, not equivalent value
Alternative Forms of Compensation Improvement	Strategies that improve pre-K compensation in order to close the gap with teachers of older children but fall well short of parity. In theory, compensation improvement strategies could also set goals higher than earnings of K-12 teachers in public schools, though in practice this is rare. ⁴			

Source: Whitebook, M. & McLean, C. (2017). In Pursuit of Pre-K Parity: A Proposed Framework for Understanding and Advancing Policy and Practice. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley and New Brunswick, NJ: The National Institute for Early Education Research.

Note that our focus is on state policies that seek to require the compensation of preschool teachers, particularly for those in state-funded pre-K, to be equivalent to that of their counterparts teaching slightly older children in public elementary schools. Sometimes the early childhood field also uses the term “parity” to refer to equalization of pay and benefits within state-funded pre-K programs between teachers in public schools and those in private organizations. This understanding of parity is a subset

of the problem that we address and an aspect that we detail in examining state policies. We have not included pay parity for teachers in other private preschool programs, not even those receiving public funds for child care or Head Start, as no state has a stand-alone pay parity policy for such private programs.

This paper also sets out to provide insight into the current efficacy of parity policy. In practice, a number of states have some form of parity policy, generally focused on salary. Although these states' salary parity policies differ in aims and scope, we find clear associations between having a state parity policy and pre-K teacher pay.

The State Pre-K Policy Context for Compensation Parity

Early care and education is a complex patchwork of public and private programs funded primarily by families and government. About 3.9 million children—48 percent of three- and four-year-olds—attend classroom programs, and 57 percent of those children attend public programs. To these we can add another 600,000 five-year-olds too young for kindergarten for a total of 4.5 million in preschools with roughly 2.6 million in public programs.⁵ Public programs include the federally funded Head Start program, state-funded pre-K, preschool special education, and local public school programs that are not part of a state-funded pre-K program. This report focuses on teachers in pre-K programs supported by state and local governments, including preschool special education, which serve about 1.8 million children. The vast majority of these state and local programs employ mixed delivery systems of public school and private providers.

The mixed delivery systems used to provide state-funded pre-K in most states are a major contributor to the pay parity problem. Although the majority of children in state pre-K programs are in public schools, the vast majority of states serve at least some children via private providers (including Head Start grantees). This distinction is important because many states only apply parity policy to teachers working in public programs. Government already sets the salaries of public employees, but it can be viewed as more intrusive when it seeks to set salary policies for private sector employees, even when those programs receive public funding. In addition, pre-K programs operated by local government within a mixed delivery model sometimes have resources that are not available to private providers in the same public state pre-K system. For example, if a program operates in a public school, then in addition to state funds, the program can draw on local funds or “in-kind” resources in the form of administration and other support services. Public school facilities typically will be funded out of a different budget (for example, a state or local bond issue) not available to private organizations. Although private organizations might have some access to philanthropic funds or in-kind support from a larger multi-service agency, they do not have the ability to generate revenue in the same way as a local school district. Finally, pre-K teachers in the public schools (including preschool special education teachers who tend to be paid on par with their K-12 counterparts) are more likely to be covered by collective bargaining (union) agreements that treat them equally with other public school teachers.

Consider the following examples. In Arkansas, a large share of the financial outlay for state-funded pre-K is in the form of facilities, administrators, and support staff paid for by the local public schools. These resources are not made available to private providers delivering state pre-K. This situation creates an obvious differential in the funding available to pay teachers in the programs. In Iowa, pre-K teachers in the public schools who are covered by collective bargaining are paid fairly similarly to K-12 teachers, while their counterparts in the private sector providing state pre-K are paid nearly \$20,000 a year less.⁶ While most state pre-K programs are served in public settings, a significant number of states, including the very large states of California, Florida, Georgia, New York, and Pennsylvania, have large shares of their students in private settings. **Table 2** presents this information for all the states.

Table 2: Enrollment in State- and Locally Funded Pre-K by Setting, 2013–2014 School Year

	State-funded, in public schools	State-funded, in private settings	Locally funded and special education, in public schools	Total Enrolled
Alabama	22%	15%	63%	13,250
Alaska*	5%	0%	95%	6,051
Arizona*	10%	18%	73%	23,076
Arkansas	68%	28%	4%	19,970
California	65%	35%	0%	131,047
Colorado*	65%	0%	35%	32,264
Conneticut	13%	25%	62%	23,637
Delaware	10%	20%	70%	2,799
District of Columbia	97%	3%	0%	11,383
Florida	16%	70%	14%	198,028
Georgia	34%	40%	27%	103,508
Hawaii**	0%	0%	0%	0
Idaho	0%	0%	100%	2,957
Illonois	74%	8%	18%	77,847
Indiana	0%	0%	100%	16,058
Iowa	33%	38%	29%	34,534
Kansas*	36%	6%	58%	19,891
Kentucky	49%	0%	51%	18,487
Louisiana	50%	4%	46%	34,350
Maine	85%	0%	15%	5,832
Maryland	86%	0%	14%	34,236
Massachussetts	16%	16%	68%	35,454
Michigan	52%	10%	38%	48,109
Minnisota	0%	6%	94%	29,053
Mississippi	0%	0%	100%	6,695
Missouri	12%	1%	87%	27,269
Montana	0%	0%	100%	1,186
New England	87%	0%	13%	10,218
Nevada	24%	1%	76%	5,773
New Hampshire	0%	0%	100%	3,824
New Jersey	36%	34%	30%	73,683
New Mexico	34%	28%	38%	12,349
New York	43%	49%	7%	106,265
North Carolina	20%	39%	41%	38,340
North Dakota	0%	0%	100%	2,205
Ohio	12%	6%	81%	38,731
Oklahoma*	87%	0%	13%	43,986

Table 2, con't: Enrollment in State- and Locally Funded Pre-K by Setting, 2013–2014 School Year

	State-funded, in public schools	State-funded, in private settings	Locally funded and special education, in public schools	Total Enrolled
Oregon	0%	84%	16%	7,734
Pennsylvania*	37%	56%	6%	26,201
Rhode Island	0%	8%	92%	2,636
South Carolina	64%	6%	30%	39,231
South Dakota	0%	0%	100%	3,550
Tennessee*	69%	0%	31%	26,947
Texas*	85%	0%	15%	250,819
Utah	0%	0%	100%	12,789
Vermont*	51%	39%	10%	6,868
Virginia	50%	3%	47%	34,281
Washington	14%	20%	66%	23,255
West Virginia*	92%	0%	8%	14,314
Wisconsin	86%	0%	14%	51,605
Wyoming	0%	0%	100%	617
United States	48%	23%	29%	1,793,193

*Breakdown between public and private state-funded enrollment estimated given incomplete data reported by state.

**HI has a state-funded program that started during the 2014–2015 school year.

Sources: State enrollment data from Barnett et al. (2015). The State of Preschool 2014: State Preschool Yearbook. New Brunswick, NJ: National Institute for Early Education Research. Local enrollment data adapted from U.S. Department of Education, Office for Civil Rights (2016). Civil Rights Data Collection (CRDC) for the 2013–14 School Year [Data file]. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/docs/crdc-2013-14.html>.

The mixed state and local governance structure of public education also complicates the preschool pay parity landscape. Some states' school districts, as distinct from the state, mandate salary parity in the schools that provide state pre-K. For example, Louisiana and Virginia do not require pay parity, but local school districts have parity policies. However, the parity landscape is made more complex because some local governments have created their own programs separate from or "within" state pre-K that operate with higher standards and may require teacher pay parity. For example, the state of Washington funds the Early Childhood Education and Assistance Program, in which there is no parity policy for teacher pay. Seattle, however, has created its own Seattle Preschool Program (SPP) in parallel, and teachers working in the SPP are paid on par with Seattle public school teachers.

Which States Have Pre-K Teacher Compensation Parity Policies?

In 2015, NIEER collected data on state policies regarding teacher compensation parity policy for lead and assistant pre-K teachers. Using the Compensation Parity Framework (**Table 1**), the tables displayed below sort state-funded pre-K programs by tier of compensation (parity, partial parity, and sub-parity) and by component (salary, benefits, and payment for professional responsibilities). We provide two separate compensation parity tables, one for lead teachers (**Table 3**) and one for assistant teachers (**Table 4**), as policies regarding parity for lead teachers do not necessarily extend to assistants. We also provide a table (**Table 5**) that lists the states and pre-K programs (26 in all) that have no stated compensation parity policies.

Table 3: Using the Compensation Parity Framework to Sort Programs with Parity Policies for Lead Teachers

Lead Teachers	Salary	Benefits	Payment for Professional Responsibilities
Parity		AL*	
		GA*	
	HI	HI	
	IA Statewide Voluntary Preschool Program*	IA Statewide Voluntary Preschool Program*	IA Statewide Voluntary Preschool Program*
	KY*	KY*	KY*
		LA Picard LA4 Early Childhood Program*	LA Picard LA4 Early Childhood Program*
	MD	MD	MD
	MS [^]	MS*	
	MO [^]	MO	MO
	NV*	NV*	NV*
	NJ Former Abbott	NJ Former Abbott*	NJ Former Abbott*
	NJ Early Launch to Learning Initiative	NJ Early Launch to Learning Initiative*	NJ Early Launch to Learning Initiative*
	NJ Early Childhood Program Aid*	NJ Early Childhood Program Aid*	NJ Early Childhood Program Aid*
	NM*	NM*	NM*
	NC*	NC*	NC
	OK	OK	OK
		RI*	
		SC Child Development Education Program*	
		SC EIA Child Development Program	
	TN	TN	TN
TX*			
WV	WV		
Partial Parity			WV
Sub-Parity	GA [^]		
	LA Non-Public Schools Early Childhood Development Program*		
	LA Picard LA4 Early Childhood Program*		
	RI*		
	VA*		

*Public only

[^]Prorating policy not reported

Table 4: Using the Compensation Parity Framework to Sort Programs with Parity Policies for Assistant Teachers

Assistant Teachers	Salary	Benefits	Payment for Professional Responsibilities
Parity		AL*	
		GA*	
		HI	
		IA Statewide Voluntary Preschool Program*	
		MD	MD
	MS*^	MS*	
		MO	MO
	NV*	NV*	
	NJ Former Abbott	NJ Former Abbott*	NJ Former Abbott*
	NJ Early Launch to Learning Initiative	NJ Early Launch to Learning Initiative*	NJ Early Launch to Learning Initiative*
	NJ Early Childhood Program Aid*	NJ Early Childhood Program Aid*	NJ Early Childhood Program Aid*
	NM*	NM*	NM*
	NC*	NC*	NC
		OK	
		RI*	
		SC Child Development Education Program*	
		SC EIA Child Development Program	
	TN	TN	TN
WV			
Partial Parity			
Sub-Parity	GA^		
	LA Picard LA4 Early Childhood Program*		

*Public only

^Prorating policy not reported

Table 5: States or Programs with No Stated Compensation Parity Policies

AK	IL	NE
AZ	IN	NY
AR	IA Shared Visions	OH
CA	KS	OR
CO	LA 8(g) Student Enhancement Block Grant	PA
CT	ME	VT
DE	MA	WA
DC	MI	WI
FL	MN	

A fact evident from **Tables 3** and **4** is that very few state-funded pre-K programs have compensation parity across all three compensation components for lead and assistant teachers. Only six programs fit this categorization for all teachers: three New Jersey programs (Former Abbott, Early Launch to Learning Initiative, Early Childhood Program Aid), New Mexico PreK, the North Carolina Pre-Kindergarten Program, and Tennessee Voluntary Pre-K. For all of these programs, some components of compensation parity are extended only to teachers in public settings (including Tennessee as it only serves children in public schools). This fact is important given the number of state pre-K teachers working in private provider organizations. When state compensation policies apply only to teachers in public settings, teachers in private settings are unlikely to receive the same levels of compensation for the same work.

Looking at lead teachers alone, six other programs—Iowa Statewide Voluntary Preschool Program, the Kentucky Preschool Program, the Maryland Prekindergarten Program, the Missouri Preschool Program, the Nevada State Prekindergarten Program, and the Oklahoma Early Childhood Four-Year-Old Program—provide full compensation parity across all three components. Of this group, Missouri and Oklahoma do not stipulate parity by setting. In Oklahoma, all teachers are employees of the public schools, even if they work in nonpublic settings, so there is no need to stipulate an extension of parity. Setting has only a minor practical impact in Missouri, as only 197 of 4,259 students enrolled during the 2014–2015 school year were in nonpublic settings, inclusive of Head Start, private preschools, and nonprofit agencies.

Looking beyond full compensation parity, many programs and states have some mix of parity policies. With regard to salary, five programs have what we consider sub-parity for salary: Georgia, LA Non-Public Schools Early Childhood Development Program, LA Picard LA4 Early Childhood Program, Rhode Island, and Virginia. Georgia is considered at sub-parity because its parity policy is only for starting salaries. The other four programs are considered at sub-parity because they do not prorate salary based on hours worked. For two of these programs—Georgia and LA Picard LA4 Early Childhood Program—salary sub-parity is extended to assistant teachers.

With regard to benefits parity, 21 states and programs are at parity. Outside of Alabama’s First Class Pre-K program, all of these programs also have some level of salary parity. An interesting finding is that more of these programs extend benefits parity to assistant teachers. Of the 21 programs with benefits parity, 18 programs extend this parity policy to assistants.

With regard to payment for professional responsibilities, the crowd thins out somewhat. Thirteen programs are at parity, one program (West Virginia Universal Pre-K) is at partial parity (planning time only), and eight of these programs extend parity policy to assistant teachers.

Understanding the Impacts of Pre-K Teacher Salary Parity Policy

In this section of the report, we take a deeper dive into the dynamics of salary parity policy alone and its relationship to the actual salaries pre-K teachers receive. As **Tables 3** and **4** show, there are 21 state programs with lead teacher salary parity policies. We present evidence on differences between state pre-K programs that have parity policies and those that do not, finding that:

- When there is a salary parity policy, teacher salary is higher—both in terms of pay relative to kindergarten teacher pay and adjusted for the cost of living in that state.
- Although the difference is not statistically significant, programs with salary parity policies have higher quality standards generally. Since this is not a sample, but all current programs, this result is at least suggestive.
- This higher quality is not at the expense of coverage. In other words, paying more for teachers did not lead to lower access or enrollment.
- Salary parity policies show, or even require, a commitment to investing more in pre-K. Spending per pupil for pre-K relative to K-12 and state spending on pre-K relative to total state government spending are higher in parity states.
- The impact of financing is complicated. Utilizing a school funding formula does not necessarily lead to salary parity policies. However, school funding formulas are associated with higher pay for pre-K teachers.

Before presenting the data for this analysis, what follows are explanations of the data and various metrics. **Tables 6** and **7** present six measures that we use to compare parity policies. These measures fall into four broad categories: pre-K salary, program quality, spending per pupil, and effort in terms of spending and enrollment. Explanations of these measures follow.

We have two indicators of pre-K salary:

- Median Pre-K Annual Earnings, Adjusted for Relative Prices. This measure takes Bureau of Labor Statistics (BLS) 2015 data on median earnings for preschool teachers, excluding special education, in public and private schools and adjusts it by dividing the earnings by the Bureau of Economic Analysis (BEA) Index of Regional Price Parity.⁷ According to the BLS, in 2015 there were 74,240 preschool teachers in schools, 33 percent of whom were in private settings and 67 percent of whom were in public settings.⁸ This indicator provides earnings data adjusted for relative costs, giving more comparable earnings data across states, but it must be recognized that many of these teachers are not part of state pre-K, which will weaken the association with state pre-K policy on pay parity.
- Ratio of Pre-K/K Earnings (BLS). This ratio of median earnings for pre-K teachers in public and private schools to earnings of kindergarten teachers in public and private schools, all excluding special education, is also based on BLS data for 2015. According to the BLS, there were 150,940 kindergarten teachers in public and private schools, 13 percent of whom were in private settings and 87 percent of whom were in public settings.⁹ This indicator reveals how parity policies, in practice, impact pre-K teacher earnings relative to kindergarten teacher earnings.

We have one indicator of quality:

- The number of NIEER Benchmarks Met (out of 10). The checklist of 10 benchmarks for minimal pre-K quality standards, as collected by NIEER, is not an index, but the number of benchmarks met is a (very) rough indicator of state policy emphasis on program quality. These data are for the 2014–2015 school year.

We have one measure of spending per pupil:

- Ratio of Pre-K/K-12 Spending Per Pupil. State pre-K spending per pupil is gathered by NIEER in our State of Preschool survey. K-12 spending per pupil is taken from the Census Bureau's Public School System Finances data.¹⁰ The purpose of this ratio is to look at how parity impacts investment per pupil. These data are for the 2014–2015 school year.

We have two measures of effort:

- State Spending on Pre-K/Total State Spending compares state spending to total state government expenditure, as reported by the National Association of State Budget Officers (NASBO).¹¹ This indicator of state effort in spending on pre-K can be compared between programs that have parity and those that do not. The data is for fiscal year 2015.
- Share of 4's Population Enrolled in State Pre-K is used here to see if parity policies impact coverage. The data is for the 2014–2015 school year.¹²

Table 6: Measures of Salary, Program Quality, Spending per Pupil, and Effort for State Pre-K Programs with Salary Parity Policies

	Median Pre-K Annual Earnings (BLS)	Average Pre-K Annual Earnings in Public Setting (NIEER)	Median Pre-K Annual Earning (BLS), Adjusted for Relative Prices	Ratio of Pre-K / K Earnings (BLS)	NIEER Benchmarks Met (out of 10)	Ratio of Pre-K / K-12 Spending Per Pupil	State Spending on Pre-K / Total State Spending	Share of 4's Population Enrolled in State Pre-K
<i>Programs with share of 4-year-olds enrolled greater than 5% of population</i>								
Iowa	\$34,870		\$38,616	0.70	6.1	0.34	0.50%	61.1%
Kentucky	\$45,910	\$55,117	\$51,526	0.88	9.0	0.82	0.37%	25.8%
Louisiana	\$45,650		\$50,055	0.96	9.0	0.43	0.26%	32.0%
Maryland	\$44,410	\$44,000	\$40,045	0.79	8.0	0.59	0.38%	36.2%
New Jersey	\$57,710		\$50,402	0.94	8.9	0.68	1.57%	28.6%
New Mexico	\$45,650		\$48,053	0.86	8.0	0.49	0.32%	30.0%
North Carolina	\$36,830		\$40,164	0.92	10.0	0.92	0.41%	21.5%
Oklahoma	\$36,860	\$37,278	\$41,001	0.95	8.0	0.99	1.01%	74.8%
Tennessee	\$40,610		\$44,823	0.85	9.0	0.77	0.45%	19.3%
Texas	\$52,570		\$54,364	1.03	2.0	0.42	1.14%	47.8%
Virginia	\$45,550		\$44,223	0.80	6.0	0.54	0.19%	17.9%
West Virginia	\$44,360	\$42,502	\$50,181	0.93	10.0	0.81	0.49%	68.0%
mean			\$46,121	0.88	7.8	0.65	0.59%	38.6%
median			\$46,438	0.90	8.5	0.63	0.43%	31.0%

<i>Programs with share of 4-year-olds enrolled less than 5% of population</i>								
Hawaii	\$34,060	\$58,573	\$29,312	0.77	9.0	0.62	0.03%	2.1%
Mississippi	\$34,650	\$39,000	\$39,919	0.87	N/A	0.43	0.03%	4.1%
Missouri	\$33,580		\$37,646	0.75	8.0	0.33	0.08%	3.9%
Nevada	\$48,170	\$43,000	\$49,053	0.99	7.0	0.41	0.05%	3.0%
Rhode Island	\$39,140	\$52,000	\$39,898	0.56	10.0	0.65	0.05%	2.8%

Table 7: Measures of Salary, Program Quality, Spending per Pupil, and Effort for State Pre-K programs Without Salary Parity Policies

	Median Pre-K Annual Earnings (BLS)	Average Pre-K Annual Earnings in Public Settings (NIEER)	Median Pre-K Annual Earning (BLS), Adjusted for Relative Prices	Ratio of Pre-K / K Earnings (BLS)	NIEER Benchmarks Met (out of 10)	Ratio of Pre-K / K-12 Spending Per Pupil	State Spending on Pre-K / Total State Spending	Share of 4's Population Enrolled in State Pre-K
<i>Programs with share of 4-year-olds enrolled greater than 5% of population</i>								
Alabama	\$26,900	\$38,000	\$30,673	0.56	10.0	0.74	0.26%	12.0%
Arizona	\$39,580		\$40,762	0.98	3.0	0.45	0.20%	5.5%
Arkansas	\$40,620		\$46,423	0.89	9.0	0.45	0.63%	38.5%
California	\$38,920		\$34,657	0.61	4.0	0.57	0.39%	17.5%
Colorado	\$44,560		\$43,601	0.96	6.0	0.35	0.22%	23.3%
Connecticut	\$50,300	\$53,045	\$46,359	0.71	6.0	0.57	0.55%	23.1%
Delaware	\$34,820		\$34,339	0.59	9.0	0.51	0.08%	7.5%
District of Columbia	\$55,730	\$50,000	\$47,349	1.07	8.0	0.95	0.08%	86.3%
Florida	\$35,660		\$36,093	0.78	3.0	0.26	0.77%	76.5%
Georgia	\$34,410	\$38,500	\$37,443	0.64	8.0	0.42	1.02%	58.8%
Illinois	\$36,360		\$36,000	0.75	8.0	0.29	0.46%	27.0%
Kansas	\$42,050		\$46,311	0.94	7.0	0.22	0.16%	20.0%
Maine	\$39,830		\$40,768	0.80	5.0	0.47	0.27%	36.2%
Massachusetts	\$53,980	\$58,046	\$50,308	0.80	6.0	0.26	0.03%	7.3%
Michigan	\$30,880	\$34,740	\$32,781	0.59	8.0	0.58	0.77%	32.0%
Nebraska	\$47,540		\$52,530	0.99	7.0	0.49	0.41%	30.5%
New York	\$49,620		\$43,036	0.83	7.0	0.32	0.78%	48.7%
Oregon	\$34,240		\$34,691	0.60	9.0	0.87	0.30%	10.0%
Pennsylvania	\$35,440		\$35,943	0.69	6.8	0.41	0.31%	12.0%
South Carolina	\$48,040	\$49,425	\$53,083	0.94	6.4	0.21	0.40%	46.8%
Vermont	\$39,230		\$39,152	0.74	4.0	0.15	0.52%	83.9%
Washington	\$34,200	\$33,422	\$33,140	0.62	9.0	0.81	0.29%	8.0%
Wisconsin	\$40,440		\$43,531	0.83	7.9	0.54	0.54%	63.8%
mean			\$40,825	0.78	6.8	0.47	0.41%	33.7%
median			\$41,311	0.78	7.0	0.45	0.39%	27.0%

Programs with share of 4-year-olds enrolled less than 5% of population

Alaska	\$55,910		\$52,745	0.84	10.0	0.34	0.02%	3.1%
Indiana	\$34,810		\$38,085	0.77	N/A	0.30	0.01%	0.5%
Minnesota	\$39,270		\$40,236	0.74	9.0	0.68	0.04%	1.0%
Ohio	\$33,680		\$37,589	0.64	4.0	0.35	0.09%	4.8%

Before discussing the results of our analysis, a couple of points need to be made. For the purpose of analyzing the impact of salary parity, we look here only at programs that serve 5 percent or more of the state's four-year-old population (this categorization is broken down in **Tables 6** and **7**), eliminating from the analysis states where the vast majority of teachers of young children are employed outside the state program, thus mitigating the impact of parity policy. Also, we do not classify Georgia's pre-K program as a parity program, as its policy only pertains to starting salary. For the sake of this analysis, we are looking at data by state and not by program. Where a state has more than one program, accounting for different policies across programs presents a difficulty. This issue arose in only two states, Iowa and Louisiana, both of which are listed as parity states. In Louisiana, there are three programs, two of which (Cecil J. Picard LA4 Early Childhood Program and the Non-Public Schools Early Childhood Development Program) have salary parity. The third program, the 8(g) Student Enhancement Block Program, has no parity policy, but since this program accounts for only 11 percent of state pre-K enrollment in Louisiana, we counted Louisiana as having salary parity. As for Iowa, there are two programs: Shared Visions and the Statewide Voluntary Preschool Program. The former program has no salary parity policy, while the latter does and also accounts for 93 percent of state pre-K enrollment in Iowa. Therefore, we counted Iowa as having salary parity.

On our list of 44 states with state-funded pre-K, which includes the District of Columbia, there are 17 with salary parity policies and 27 without. Of the 17 programs with parity policies, 12 met our standard of at least 5 percent of the state's four-year-old population being served. Of the 27 states without parity, 23 met this standard. Thus, we have compared a group of 12 parity programs with a group of 23 non-parity programs.

Table 8 presents our summary of findings on the impact of parity on earnings, quality, investment effort, and coverage. For all six of our indicators, states with parity appear to outperform states without parity. For three of the six indicators—median pre-K annual earnings adjusted for relative prices, the ratio of pre-K to kindergarten earnings, and the ratio of pre-K to kindergarten spending per pupil—the differences are statistically significant. These findings indicate salary parity policies are associated with higher real salaries for preschool teachers relative to those of kindergarten teachers as well as overall spending per pupil. The average adjusted earnings for preschool teachers in states with parity is \$46,121, which is 13 percent higher than the median \$40,825 adjusted earnings of preschool in states without parity. Also, the average state with parity policy pays pre-K teachers 88 percent (0.88) of kindergarten teachers' earnings as compared to 78 percent (0.78) of kindergarten pay in states without parity policies.

Looking at quality, states with salary parity policies perform better, albeit the difference is not statistically significant. The average number of benchmarks met by a parity state is 7.8, which is 1.0 point higher than the average non-parity state.

States with parity policies also have greater investment efforts, as indicated by our two measures of spending. The ratio of pre-K to kindergarten spending per pupil is higher for salary parity states—0.65 versus 0.47. The share of state expenditure going to pre-K in states with salary parity is higher (0.59% versus 0.41%) than in those without, albeit not statistically significant.

Table 8: Significantly Higher Levels of Salary and Spending per Pupil for Programs with Salary Parity Versus Programs Without Parity

	Median Pre-K Annual Earning (BLS), Adjusted for Relative Prices	Ratio of Pre-K / K Earnings (BLS)	NIEER Benchmarks Met (out of 10)	Ratio of Pre-K / K-12 Spending Per Pupil	State Spending on Pre-K / Total State Spending	Share of 4's Population Enrolled in State Pre-K
Parity, Mean	\$46,121	0.88	7.8	0.65	0.59%	39%
No Parity, Mean	\$40,825	0.78	6.8	0.47	0.41%	34%
Mean Difference, Parity - No Parity	\$5,296	0.11	1.0	0.18	0.18%	5%
Mean Ratio, Parity: No Parity	1.13	1.14	1.15	1.37	1.44	1.14
P-Value, 2-Tailed T-Test of Means with Unequal Variance	0.02	0.02	0.21	0.03	0.20	0.53

Parity, Median	\$46,438	0.90	8.5	0.63	0.43%	31%
No Parity, Median	\$40,762	0.78	7.0	0.45	0.39%	27%
Median Difference, Parity - No Parity	\$5,676	0.12	1.5	0.18	0.04%	4%
Median Ratio, Parity: No Parity	1.14	1.15	1.21	1.40	1.09	1.15

Program Counts:	
Parity	12
No Parity	23

Note: Highlighted cells are statistically significant at $p < .05$.

An interesting result is that the effort parity programs expend to generate greater quality does not come at the expense of coverage. The average state with salary parity enrolled 39 percent of four-year-olds, which was five percentage points higher than average enrollment in non-parity states. Given this result is not statistically significant, the most we can say is that higher earnings for teachers do not come at the expense of coverage.

Financing and Salary Parity Policy

Tables 9 through **11** provide more information on parity and non-parity states, including how state pre-K programs are financed and how that relates to salary parity policy. **Tables 9** and **10** show which programs are financed using school funding formulas, whether funding is capped, and whether spending targets at-risk populations. One interesting finding is that being financed by a school financing formula does not mean a parity policy is in place. We find 10 programs in all that are financed with state school financing formulas and cover at least 5 percent of the state population. Of that group, five have parity policies and five do not.

Table 9: State Programs with Salary Parity

	Share of 4's Population Enrolled in State Pre-K	Share Pre-K Teachers with BA+	Benefits Same as K-12?	Financing Capped?	Targeted Enrollment?	K-12 School Funding Formula?
Iowa	61.1%	99%	No	No	No	Yes
Kentucky	25.8%	100%	Yes	No	Yes	Yes
Louisiana	32.0%	100%	No	Yes	Yes	No
Maryland	36.2%	100%	No	No	Yes	No
New Jersey	28.6%	100%	Yes	No	Yes	No
New Mexico	30.0%	83%	No	Yes	No	No
North Carolina	21.5%	100%	Yes	No	Yes	No
Oklahoma	74.8%	100%	Yes	No	No	Yes
Tennessee	19.3%	100%	No	Yes	Yes	No
Texas	47.8%	100%	No	No	Yes	Yes
Virginia	17.9%	97%	No	No	No	No
West Virginia	68.0%	N/A	No	No	No	Yes

Note: Five out of 12 are financed using the state's K-12 school funding formula.

Table 10: State Programs Without Salary Parity

	Share of 4's Population Enrolled in State Pre-K	Share Pre-K Teachers with BA+	Benefits Same as K-12?	Financing Capped?	Targeted Enrollment?	K-12 School Funding Formula?
Alabama	12.0%	100%	No	Yes	No	No
Arizona	5.5%	67%	No	No	Yes	No
Arkansas	38.5%	N/A	No	Yes	Yes	No
California	17.5%	N/A	No	Yes	Yes	No
Colorado	23.3%	N/A	No	Yes	Yes	Yes
Connecticut	23.1%	72%	No	No	Yes	No
Delaware	7.5%	N/A	No	Yes	Yes	No
District of Columbia	86.3%	90%	No	No	No	Yes
Florida	76.5%	13%	No	No	No	No
Georgia	58.8%	98%	No	Yes	No	No
Illinois	27.0%	N/A	No	Yes	No	No
Kansas	20.0%	N/A	No	Yes	Yes	No
Maine	36.2%	100%	No	No	No	Yes
Massachusetts	7.3%	N/A	No	No	No	No
Michigan	32.0%	99%	No	No	Yes	No
Nebraska	30.5%	0%	No	Yes	Yes	No
New York	48.7%	N/A	No	No	No	No
Oregon	10.0%	65%	No	Yes	Yes	No
Pennsylvania	12.0%	N/A	No	Yes	Yes	No

Table 10, con't: State Programs Without Salary Parity

	Share of 4's Population Enrolled in State Pre-K	Share Pre-K Teachers with BA+	Benefits Same as K-12?	Financing Capped?	Targeted Enrollment?	K-12 School Funding Formula?
Vermont	83.9%	N/A	No	No	No	Yes
Washington	8.0%	N/A	No	Yes	Yes	No
Wisconsin	63.8%	100%	No	No	No	Yes

Note: Five out of 23 are financed using the state's K-12 school funding formula.

A finding of note is that for states that do not have parity policies, there is some evidence that school financing formulas appear to be supportive of earnings. Yet, because of unbalanced populations and variance, the differences are not statistically significant. This data is shown in **Table 11**, where the non-parity programs that serve 5 percent or more of the state's four-year-old population are broken down into a group of five programs using school funding formulas and a group of 18 with other sources of financing, mostly block grants. The data show that the mean adjusted earnings of the school financing formula states is \$42,880, which is 7 percent higher than the mean earnings for the non-formula group (\$40,254). The formula group has a ratio of median pre-K to kindergarten earnings of 88 percent (0.88), which is 13 percentage points higher than the median ratio of the non-formula group (0.75) and right in line with the mean reported in **Table 6** for parity policy states. However, it is interesting to note that in terms of the NIEER quality benchmark and state spending metrics, the non-parity, school funding formula programs actually underperformed their other non-parity peers. This finding suggests that having an explicit parity policy may be a lynchpin for quality and overall investment.

Table 11: Programs Without Salary Parity: Comparing Measures of Salary, Program Quality, Spending per Pupil, and Effort Based on Whether or Not the Program Was Financed Using the K-12 School Funding Formula (K-12 SFF)

	Median Pre-K Annual Earning (BLS), Adjusted for Relative Prices	Ratio of Pre-K / K Earnings (BLS)	NIEER Benchmarks Met (out of 10)	Ratio of Pre-K / K-12 Spending Per Pupil	State Spending on Pre-K / Total State Spending	Share of 4's Population Enrolled in State Pre-K
No Parity, with K-12 SFF	\$42,880	0.88	6.2	0.49	0.33%	59%
No Parity, no K-12 SFF	\$40,254	0.75	7.0	0.47	0.43%	27%
Mean Difference, SFF - no SFF	\$2,626	0.13	-0.8	0.02	-0.11%	32%
Mean Ratio, SFF : No SFF	1.07	1.17	0.88	1.05	0.75	2.19
P-Value, 2-Tailed T-Test of Means with Unequal Variance	0.25	0.11	0.40	0.88	0.35	0.06

Program Counts:

SFF	5
No SFF	18

Conclusion

In this paper, we provide insight into the current landscape and efficacy of compensation parity policy in state-funded pre-K. Special focus is placed on what policies states employ to require that compensation of preschool teachers to be equivalent to that of their counterparts teaching slightly older children in public elementary schools. In order to categorize different parity policies, we have utilized a compensation parity framework that distinguishes between full compensation parity and other forms of compensation improvement, as well as by components of compensation (salary, benefits, and payment for professional responsibilities). Based on this framework, we find only four states (New Jersey, New Mexico, North Carolina, and Tennessee) have full compensation parity for lead and assistant teachers across all three components of compensation. Even for these states, some policies are extended only to teachers working in public settings, which is a significant distinction given the number of teachers employed in the public system, yet working in private settings. Six other states (Iowa, Kentucky, Maryland, Missouri, Nevada, and Oklahoma) provide full compensation parity but only for lead teachers. For a number of other states, there is a mix of policies with regard to level of compensation improvement and component of compensation. In addition, a large number of states—24 in all, which is more than half of the 44 states running pre-K programs—report having no compensation parity policies.

With regard to the efficacy of parity policy, we have provided an analysis of pre-K teacher salary, program quality, spending, and coverage with respect to salary parity policy. We find evidence that the inclusion of salary parity policy is associated with higher salaries for preschool teachers and higher spending per pupil. Quality and state spending on pre-K are also higher in states with salary parity policies, but these differences are not statistically significant. Moreover, we see no evidence that salary parity and the associated higher earnings for pre-K teachers comes at the expense of coverage, as the share of the four-year-old population enrolled in states with salary parity policy is statistically level with that of states without parity policy.

Endnotes

¹ Whitebook, M. & McLean, C. (2017). *In Pursuit of Pre-K Parity: A Proposed Framework for Understanding and Advancing Policy and Practice*. Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley and New Brunswick, NJ: the National Institute for Early Education Research.

² Defined as a scale with clearly differentiated salary increments based on qualifications and years of experience, which provides guidance for salary increases over time.

³ Defined as non-child contact time to complete professional responsibilities, such as planning, professional sharing, and reporting, as well as paid time for professional development.

⁴ For example, in San Antonio, see Lantigua-Williams, J. (2016, March 8). How San Antonio is Navigating the Tricky Politics of Pre-K. *The Atlantic*. Retrieved from <http://www.theatlantic.com/education/archive/2016/03/san-antonio-pre-k/472821/>.

⁵ U.S. Department of Commerce, Bureau of the Census (2016). Table 3: Nursery and Primary School Enrollment of People 3 to 6 Years Old, by Control of School, Attendance Status, Age, Race, Hispanic Origin, Mother's Labor Force Status and Education, and Family Income: October 2015. Retrieved from <http://www.census.gov/hhes/school/data/cps/2015/tables.html>.

⁶ Barnett, W.S., Carolan, M.E., Squires, J.H., Clarke Brown, K., & Horowitz, M. (2015). *The State of Preschool 2014: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.

⁷ U.S. Bureau of Economic Analysis (2016). Real Personal Income from states and Metropolitan Areas, 2014. Table 3. Regional Price Parities by State, 2014. Washington, DC: Bureau of Economic Analysis.

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¹⁰ U.S. Department of Commerce, Bureau of the Census. (2016). *Public Education Finances: 2014*. Washington, D.C.: U.S. Government Printing Office.

¹¹ National Association of State Budget Officers (2016). *State Expenditure Report: Examining fiscal 2014-2016 state spending*. Washington, DC: National Association of State Budget Officers.

¹² Barnett, W.S., Friedman-Krauss, A.H., Gomez, R.E., Horowitz, M., Weisenfeld, G.G., & Squires, J.H. (2016). *The State of Preschool 2015: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research.



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