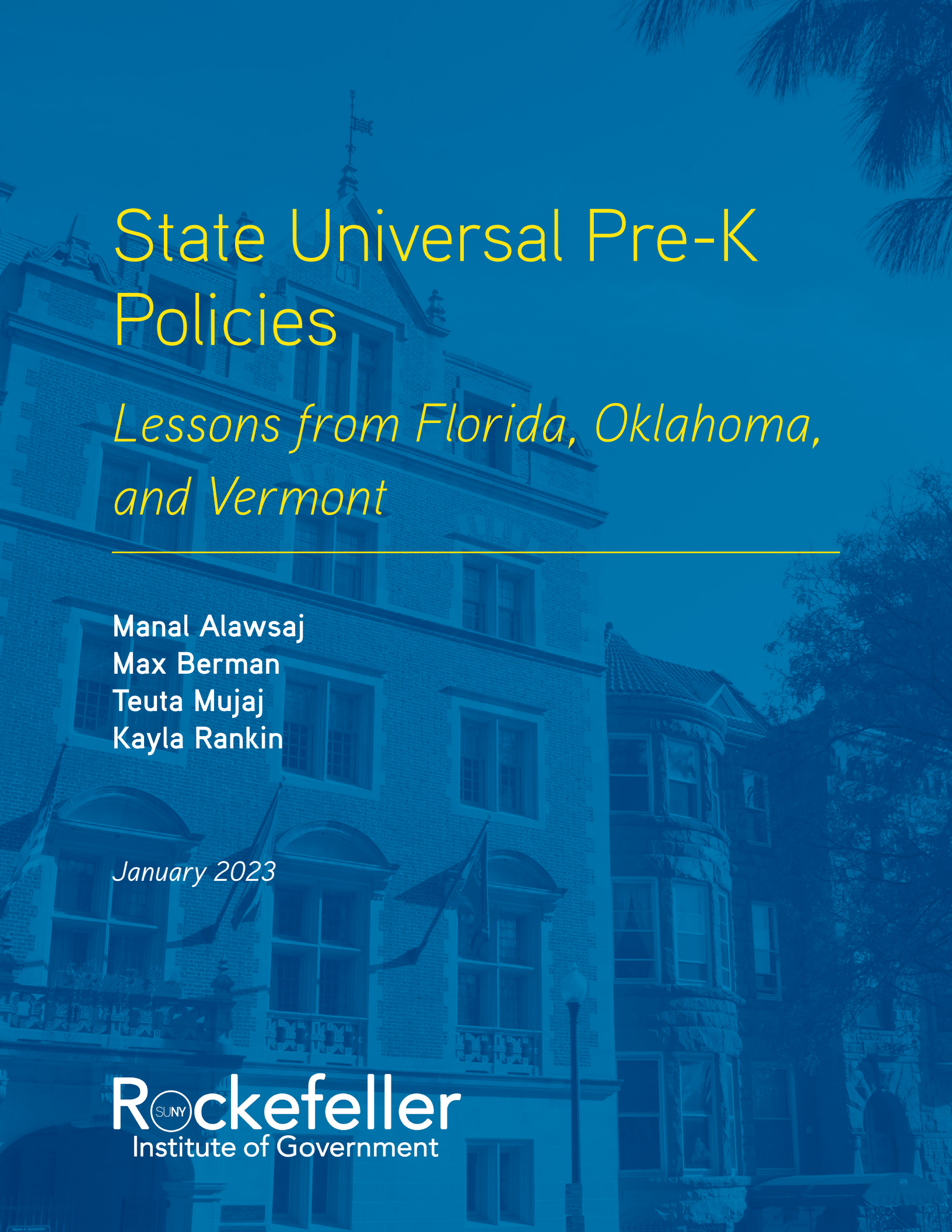

State Universal Pre-K Policies

Lessons from Florida, Oklahoma, and Vermont

Manal Alawsaj
Max Berman
Teuta Mujaj
Kayla Rankin

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Rockefeller Institute of Government

ABOUT THE AUTHORS

Manal Alawsaj, Max Berman, Teuta Mujaj, and Kayla Rankin were research interns at the Rockefeller Institute of Government's Center for Law & Policy Solutions.

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Research has demonstrated the wide-ranging and positive benefits from high-quality publicly-funded prekindergarten education. Yet, access for families with young children remains uneven, with significant gaps across geography, income, race, and ethnicity. Over the last few decades, many states have worked to broaden access to prekindergarten education (pre-K), but only three states—Oklahoma, Florida, and Vermont—have implemented statewide universal pre-K programs. Prekindergarten education is an important component of the broader array of early childhood education (ECE) options that is intended to prepare children ages three to four years old (and some five-year-olds) for the transition into kindergarten. ECE more broadly includes the education of children from birth to eight years old,[1] and provides children with activities and experiences meant to aid and enrich their development and growth, whether through a play-based approach or a more academic curriculum.

For the purposes of this research, we use a specific definition of universal when referring to universal pre-K programs (UPK). Universal, here, means that the program is offered to families in the state regardless of income and has been implemented across all school districts. These UPK programs are offered to all families in the state on a voluntary basis, meaning that students are not required to enroll. The first state to establish a program that meets these criteria is Oklahoma, which created its universal pre-K program in 1998.[2] A handful of other states offer support for pre-K education statewide, but individual districts may elect not to participate and therefore we do not consider the program to be universal. Other states offer pre-K programming on a means-tested basis, meaning that families must meet income or other criteria to participate.

As referenced, just three states have established such UPK programs, but there is still a great deal of variance across these programs. These include half-day and full-day programs that are offered through either public and/or private schools depending

on the state. UPK programs have specific classroom curriculum and staff training requirements, but these can vary substantially by state. In this report, we consider the three case studies of state universal pre-K programs—Oklahoma, Florida, and Vermont. In doing so, we outline the development, structure, and implementation of each state's UPK program and analyze the relative accessibility, quality, funding, and impacts of their programs. In analyzing these case studies, we consider how they can be instructive for other states as they seek to expand and improve pre-K policies and programs, in particular, for policymakers in New York State as they continue to work to expand access to pre-K and move the state towards more universal access.

History and Impacts of Early Childhood Education in the United States

Early childhood education in the United States extends back much further than the quarter century since the emergence of state-level UPK programs. The 1941 Defense Public Works Law, popularly known as the **Lanham Act**, enacted provisions for a wide range of public services related to housing, water, sewers, and schools. This included funding for the establishment of childcare programs for children aged birth to 12 to support mothers entering the workforce in the context of national production efforts pertaining to World War II. The Lanham Act was the federal government's first initiative to provide significantly subsidized early childhood education or childcare.[3] Between 1943 and 1946, the Lanham Act allocated more than $1 billion (in 2012 USD) towards the construction and operation of daycare facilities in 635 communities, teacher training and compensation, and meals. The facilities often operated for 12 hours a day, six days a week, with a recommended 10:1 student-teacher ratio—though the availability of teachers and quality of education was much lower in certain areas. In total, the centers served 600,000 children between 1943 and 1946.[4] This provision of childcare helped enable an unprecedented number of women to enter the workforce, and for every $100 spent, the Lanham Act "decreased the high school dropout rate by 1.8 percentage points and increased the college completion rate by 1.9 percentage points."[5] It also increased the future earnings of children in the program by, on average, 1.8 percent per year, with greater effect on those from lower-income households (there appeared to be little to no impact for those from higher-income households.). There appeared to be little to no impact for those from higher-income households.[6]

In the 1960s, the **HighScope Perry Preschool Project** sought to further identify both the short- and long-term effects of a high-quality preschool education program on low-income children through a longitudinal study. The study considered 123 low-income African American children between the ages of three and four in the Ypsilanti, Michigan school district at high risk of school failure. Of the students in the study, 58 were assigned to a high-quality preschool program and the remaining 65 were assigned to the control group, which did not receive preschool. The High/Scope program, which ran from 1962-67, provided daily 2.5-hour sessions as well as weekly 1.5-hour home visits. The classroom curriculum was modeled on building independent problem-solving and decision-making skills and was delivered by certified public

school teachers holding at least a bachelor's degree.[7] Both groups' data were collected annually from ages three to 11 and again at ages 14, 15,[8] 19,[9] 27, and 40.[10]

The follow-up data on the students have reflected that those in the treatment group achieved higher levels of educational attainment, with 71 percent graduating from high school or receiving their GED compared with 54 percent from the control group. This effect was even more pronounced for girls completing the program who graduated at a rate of 84 percent compared to 35 percent. Those in the treatment group earned more money (with 29 percent earning over $2,000 per month versus 7 percent of those in the control group), were less likely to be convicted of a crimes (7 percent versus 35 percent),[11] and had lower utilization of social service programs, among other measures. In 1993, researchers studying the students at age 27, concluded that while the cost of the program was higher than other existing programs (like Head Start, discussed below) was at that time, the long-term financial benefits to the public far exceeded the costs.[12]

The **Head Start Program** began in 1965 as part of President Lyndon B. Johnson's "war on poverty."[13] At first, it was an eight-week demonstration, with the purpose of helping children between birth and five years old from low-income families prepare for school. The federal Head Start Program has since expanded to become the nation's most recognized and broadly implemented public early education program. It has served over 36 million children since its establishment. From the beginning, the program provided not only early education, but nutritional and health services, as well as socio-emotional resources. Today, it is implemented nationwide through 1,600 agencies and serves over 1 million children annually. The program includes Early Head Start for ages zero to three, and the Head Start program for ages four to five, and provides both home-based and center-based options for families. For four-to-five-year-olds in center-based care, the class size is capped at 20 children with a teacher and teaching assistant or two teachers. As of 2021, center-based Head Start programs must provide 1,020 annual hours of planned class programming over the course of at least eight months per year.

In terms of impacts, there have been many studies assessing the impacts and effectiveness of the Head Start program. Generally speaking, there appear to be modest, but positive, statistically significant impacts that are uneven across race and ethnicity. For comparison to prekindergarten programs, a 2010 report on Head Start's impacts by the Department of Health and Human Services concluded that "the benefits of access to Head Start at age four are largely absent by 1st grade."[14] It is important to note that this finding of waning academic impacts or "fade-out"[15] is not uncommon to prekindergarten or early childhood education research, and does not mean—as has been more recently documented—that long-term benefits do not reappear or "persist,"[16, 17] as will be discussed below. Moreover, recent studies of longer-term impacts have pointed towards a reciprocal relationship between early (pre-K) and later (elementary school and beyond) educational investments. That relationship and the "cumulative nature of skill development [...] may explain some disparate results on the effects of Head Start."[18] They also point to the importance of sustained investments throughout a child's education in order to realize the potential of early childhood education.

In 1972, the **Abecedarian Project** was established in Chapel Hill, North Carolina. Similar to the Perry Project, the Abecedarian Project provided childcare and high-quality preschool for zero-to-five-year-old "at-risk" children, most of whom were African American. The families were divided into two groups. One group received the "Abecedarian Approach," which was centered on language priority, conversational reading, enriched caregiving, and learning games. Children in the program were provided full day care year round, with low teacher-to-child ratios, ranging from 1:3 for babies to 1:6 for five-year-olds.[19] The control group did not participate in the educational program, but did receive free diapers and formula and could choose to utilize any other preschool or childcare services in the community. Like the Perry Project, the children participating in the program were followed in a longitudinal study through adulthood, with assessments at age 5,[20] 8,[21] 12,[22] 15,[23] 21,[24] 30,[25] and mid-30s.[26] These assessments have demonstrated positive short- and long-term impacts that include higher math and reading scores in elementary school and through high school, lower levels of grade retention (being held back a grade), higher educational attainment, a greater likelihood of collegegoing or having a skilled job, and a greater likelihood of delaying parenthood and having better health outcomes. It also included indirect impacts to their parents, who were more likely to themselves finish high school and have higher earnings. Given these direct and indirect impacts, the study determined that "for every dollar spent on the program, taxpayers saved $2.50 as a result of higher incomes, less need for educational and governmental services, and reduced health care costs."[27]

In the 1990s, the **Boston public school system** established a pre-K program. Placement in the program was determined by a lottery, which allowed researchers to compare outcomes for children that were and were not chosen in the lottery.[28] By looking at a large cohort of students in a public school prekindergarten program over a longer period of time, researchers in Boston were able to fill gaps left by the research on Head Start programs, which showed some fade-out of impacts over time, and the Perry and Abecedarian projects, which studied small cohorts of mean-tested students in specialized programs, researchers in Boston were able to look at a large cohort of students in a public school prekindergarten program and do so over a longer time period. While academic gains as measured by standardized test scores were not apparent as with earlier studies of Head Start, studies of the Boston lottery demonstrated impacts that included lower rates of school disciplinary measures and incarceration, higher rates of SAT test taking and college attendance, and higher incomes.[29] These outcomes emphasized the need to consider those longer-term and non-test-based measures of impact in evaluating the effectiveness of early childhood education programs.

Beyond studies of pre-K programs highlighted above, there are also a number of studies of elementary education that have been critical in informing the development of pre-K standards and approaches. One such important study examined the impact of class size on educational outcomes. In 1985, the Tennessee STAR (Student Teacher Achievement Ratio) study was authorized by the state legislature and then Governor Lamar Alexander to consider the effectiveness of reduced class size and student-to-teacher ratios. The study included around 6,500 students across 330 classrooms and

80 schools over a period of four years, kindergarten through third grade. They also conducted a subsequent phase of research in the Lasting Benefits Study beginning in 1989.[30] While the Tennessee STAR study did not include prekindergarten, it represents a landmark piece of early childhood education research. The study compared student outcomes from classrooms with 13 to 17 kids, to those from classrooms with 22 to 25 students, and to classrooms of 22 to 25 students where an aide accompanied the teacher.

Student outcomes were assessed primarily based on standardized reading and math test scores. The results indicated that decreasing the average class size increased test performance and that those gains persisted over time even as students were reincorporated into larger/regular class sizes. Students in the study that were placed in larger classes with an aid showed gains in test scores through third grade, but those gains did not persist over time as they did for students in smaller classes.[31, 32]

Taken together, the development of public policies, programs, and research conducted on publicly-funded early childhood education and pre-K over the course of the 20th century in the United States paved the way for the state universal pre-K policies that followed. The research on existing programs and policies, as reflected above, demonstrated the positive academic and socioeconomic impacts of high quality pre-K education, both targeted and universal, even as those impacts were uneven over time and across individual characteristics. What is less clear is how those findings might translate to larger-scale and universal programs of varying quality and characteristics.

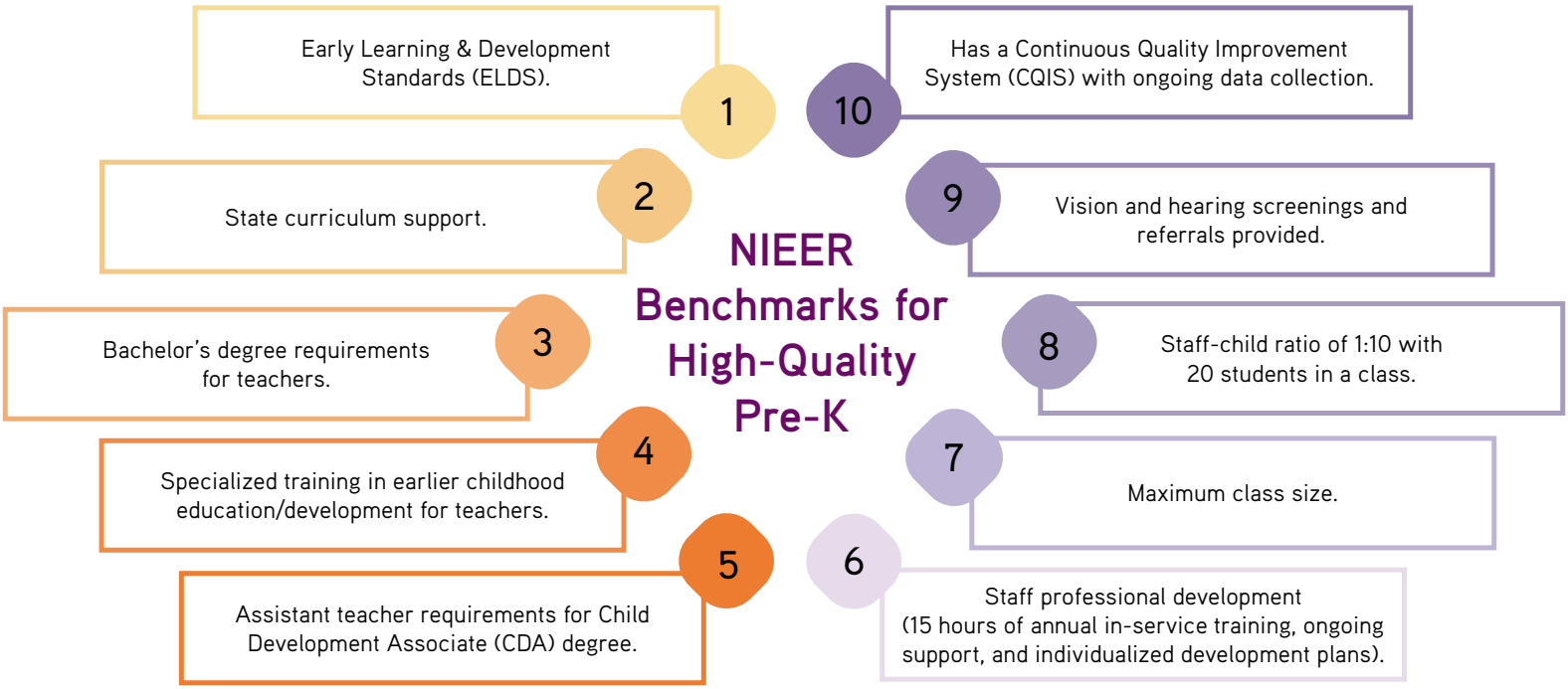
A Review of Universal Prekindergarten Programs

In our research, Oklahoma, Florida, and Vermont's state universal prekindergarten programs were assessed based on four critical characteristics: accessibility, funding, quality, and impact of their programs. In this section, we first provide an overview of each state's program and then discuss these characteristics across all of the cases.

Accessibility was calculated by the number and percentage of eligible students enrolled. For this study, we considered the 2019-20 school year data. While 2020-21 data are available, there are a number of anomalies, most likely due to the COVID-19 pandemic, which may have impacted enrollment and availability of programs for the 2020-21 academic year.

Funding was measured in terms of total funding and per student funding based on 2021 reported spending. Funding was compared to in-state funding per student for Head Start programs and kindergarten to twelfth grade.

Quality was assessed using the ten quality benchmarks designed by the National Institute of Early Education Research (NIEER):[33]



Impact of the program was considered using publically available assessments of each state's system, with a particular look at retention rates and third grade reading and math scores. Unfortunately, because Vermont´s program is newer, longer-term data required for comparison are not yet available.

As noted above, there is research that has shown that after third grade, the effect of pre-K is no longer seen in test scores (the "fade-out" effect). However, the broader literature on early childhood education suggests positive effects tend to reappear later in school and life as measured through graduation rates, college attendance, involvement in the justice systems, and broader life skills and achievements. We therefore recognize that there are other measures of impact that are non-scholastic and more longitudinal, as discussed above. Future research should take these into consideration as the literature on these state programs continues to develop.

Case Study: Oklahoma

In the 1990s, a loophole existed in Oklahoma's funding formula for kindergarten. Schools received the same amount of money for running a half-day program as a full-day program, so some programs developed two half-day programs and began to fill excess spots with four-year-olds. Efforts were made in the late 1990s to close the loophole but advocates from the education policy and business communities used the findings from the natural experiment and other pre-K programs to demonstrate the value created through pre-K programs.[34] The advocacy effort helped convince legislators that rather than closing the loophole the state should expand its existing prekindergarten program. The state's existing pre-K program had been available to students qualifying for the federal Head Start program. Legislation was passed in 1998 that expanded access, and Oklahoma became the first state to provide universal statewide prekindergarten for all four-year-olds.

Oklahoma's pre-K programs have class sizes of up to 20 students, a 10:1 student-to-teacher ratio, and lead teachers are required to have a bachelor's degree and be certified in early childhood education.[35] All school districts across the state provide either half-day or full-day pre-K programs for four-year-olds whose birthday is on or before September 1. Programs must use the Oklahoma Standards for Accreditation and the Oklahoma Academic Standards as a guide for how the program should run.

Participation in the program has been high. In 2019-20, 42,683 four-year-olds were enrolled in a prekindergarten program. For 2020, this meant that 70 percent of children that age were enrolled in a public pre-K program, while an additional 10 percent were enrolled in Head Start. In recent years, the state has also begun expanding access for three-year-olds to enroll in pre-K through the Oklahoma Early Childhood Program. In 2017, there were no three-year-olds were enrolled. In 2020, 5 percent of three-year-olds were enrolled in pre-K. In total, the state spent $178,522,508 million on pre-K in 2021, or $4,643 per student. Total spending per student in pre-K was $10,215 with local and federal contributions included, compared to $8,556 per student in a federally funded Head Start program in the state, and $11,862 per student in K-12 grades, including local and federal contributions. Of that amount, the state reported that it spent $4,609 per student, while local and federal contributions comprised the remainder.[36]

OKLAHOMA UNIVERSAL PRE-K

Four-Year-Olds Enrolled

70%

Three-Year-Olds Enrolled

5%

State Funding per Student

$4,643

Student-Teacher Ratio

10:1

Case Study: Florida

During the 1990s, Florida had two early childhood development programs: the Prekindergarten Early Intervention Program (PKEI) and Florida First Start. PKEI was available to students from low-income households aged three to four years old and provided a full-day program to administer services.[37] Florida First Start was likewise meant for low-income families but was targeted to children from birth to three years old, and was a home visitation program. Both programs, while targeting different age groups in different ways, were generally serving the same population of students that had been deemed high-risk for developmental disabilities or delays.

In 1999, the state's Commission of Education released a report recommending a single system for early childhood development and education that was "coherent" and "coordinated" with the intention of synchronizing the quality, content, and overall structure of the programs.[38] Later that year, the Florida Legislature passed the School Readiness Act, which integrated the existing services into a single program. Then, in 2002, a ballot initiative to establish free universal pre-K to the state's four-year-olds was passed by 59 percent of voters.[39] As a result, the Florida Universal Prekindergarten Amendment was passed by the state legislature with the implementation deadline. Consequently, the Voluntary Prekindergarten Program (VPK) was created and signed into law in January 2005.[40]

Under VPK, there are three "umbrella" programs. The three programs offered are the VPK School-Year Program, the VPK Summer Program, and the Specialized Instructional Services Program.[41] The Specialized Instructional Services Program is meant for four-year-olds with special needs and is provided through nontraditional classroom settings based on each student's individualized education plan. It is distinct from the other two programs in terms of who the program serves and has its own

program specifications. The school-year and summer programs serve the remaining general population of children in the state and have more comparable features.

The school-year program offers class sizes of 20 or fewer students and provides 540 instructional hours, while the summer program has classes of 12 or fewer students and provides 300 instructional hours. Likewise, the maximum student-to-teacher ratios are 20:1 in the school year, and 12:1 in the summer.[42] Teacher qualifications differ as well, with the summer program requiring a bachelor's degree in any field, while the school-year program requires a child development associate's degree (CDA). Both programs are for four-year-olds born on or before September 1 of the current year. Families with children born between February 2 and September 1 have the option to postpone enrolling their four-year-old until the following year when their child is five. No three-year-olds can enroll.[43]

Any care facility can apply to the state to be part of the VPK program and be funded by the state. Facilities include over 6,000 private daycares and schools and public care centers, such as schools, and religious-affiliated providers. The provision of VPK has relied heavily on private-based programs in the state. In 2012, it was estimated that 64 percent of centers are private, 19 percent are public, and 16 percent are faith-based.[44]

Each provider can create their own policies and procedures, but they must all follow the state mandated VPK guidelines. These guidelines include areas such as curriculum, physical facilities requirements, requirements for teachers to be employed under VPK, and others. These guidelines are explained in detail within the Voluntary Prekindergarten Provider Contracts all providers must sign, effectively agreeing to adhere to all requirements.[45] When approved, facilities receive funding from the state, which keeps the program free for all families regardless of income. These facilities are supervised by the 30 Early Learning Coalition offices across the state under the Florida Division of Early Learning.[46] The program served 72 percent of all four-year-olds and 0 percent of all three-year-olds, for a reported total of 166,726 students in 2020.

In 2021, the state spent $302,505,878 on universal pre-K, $2,222 on a per student basis. Unlike other states, Florida did not report the total spending per student for pre-K, which would include federal and local contributions. Federal Head Start funding for three- and four-year-olds in Florida was $9,965 per student, which served 8 percent of all four-year-olds and 6 percent of all three-year-olds, or 32,255 students that year.[47, 48] Florida, as a state, spends less per student than the other two states with universal pre-K when it comes to state spending. This current rate is a decrease from $3,224 per pupil in 2008, which was the highest the state has ever budgeted for the VPK program. More recently, in 2022, the state legislature approved an increase in the state's base student allocation and teacher pay for pre-K, raising state funding by a reported $935 per student.[49] However, without knowing the local and federal contributions to per student pre-K funding in the state, it is difficult to draw any definitive comparisons about overall funding with the other states.

FLORIDA UNIVERSAL PRE-K

Four-Year-Olds Enrolled

72%

Three-Year-Olds Enrolled

0%

State Funding per Student

$2,222

Student-Teacher Ratio

20:1

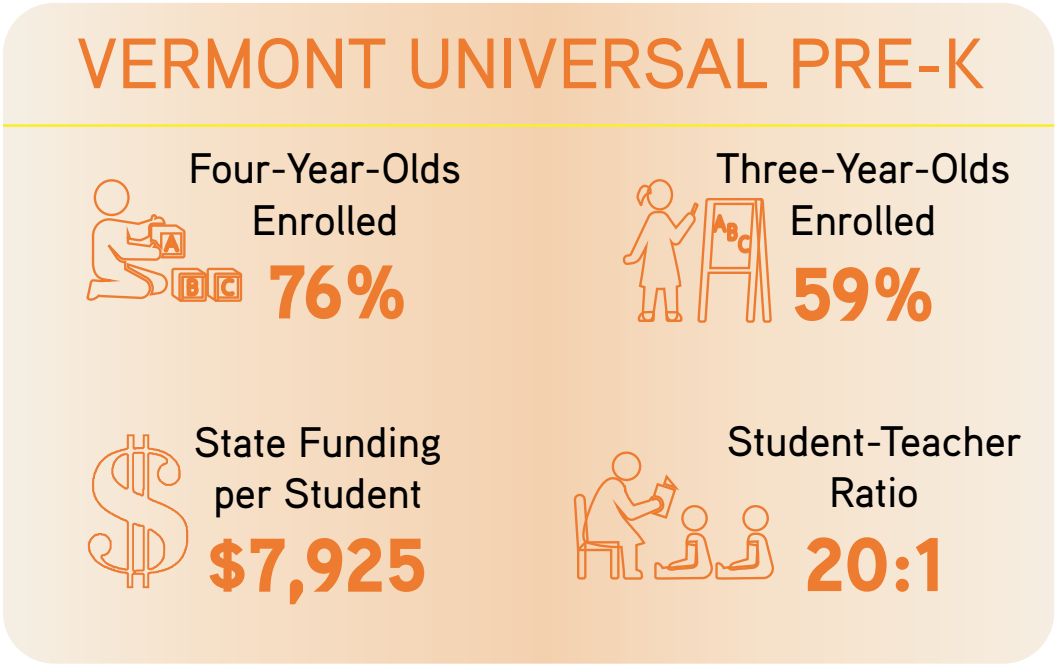
Case Study: Vermont

The Vermont Early Education Initiative began in 1987 as a competitive grant for education programs for three-to-five-year-olds that met certain income and other criteria. This program worked alongside other means-tested federally-funded programs. Over time, the state expanded programming, funding, and requirements for pre-K. In 1991, the state required districts to offer ECE services for children with disabilities, and in 1997, through the passage of Act 60, districts had the option of providing pre-K for three- and four-year-olds.[50] Then, in 2014, the Vermont State Legislature passed and then Governor Peter Shumlin signed Act 166, establishing a state-funded universal prekindergarten program.[51] The program is open to all three- and four-year-olds, as well as some five-year-olds (those not previously enrolled in a kindergarten program). The program provides both a public option for families provided by each district, as well as a private option.

The state sets requirements for a school to be included in the universal pre-K program, including classroom time thresholds, specialized education offerings, etc. Some key requirements to be a state-recognized program and receive funding include that a program must be open for at least 10 hours of education per week for 35 weeks in a year (350 mandatory instructional hours).[52] Teachers are required to be licensed with a bachelor's degree in early childhood education or an associate's degree for non-public teachers. The maximum class size requirement for this age group is 20 students, with a 20:1 maximum student-to-teacher ratio. Additionally, the state has a voucher program in which students already accepted into a private preschool program can be reimbursed for tuition of up to 10 hours per week for 35 weeks a year, but families are responsible for covering the cost of additional hours or weeks.[53]

Vermont's program is highly utilized with 59 percent of three-year-olds and 76 percent of four-year-olds enrolled in 2020, up from 39 percent of three-year-olds and 57 percent of four-year-olds in 2014. In total, however, just 8,594 students were enrolled.[54] The state spent $52,259,825 on pre-K in 2021, amounting to $7,925 per student in 2021—a nearly 22 percent increase from 2014, the last year before universal pre-K, in which the state spent $6,507 per student. In total, per student spending for pre-K with state, local, and federal contributions was $8,811. Comparatively, the state received $16,105 per student in Head Start funding and spent $24,046 per student in K-12 when including local and federal contributions.[55]

Consulting group Wilder Research considered the potential "return on investment" for taxpayers and students in expanding preschool in Vermont.[56] According to the report, the broader society would receive $3.08 for every child for every dollar spent on the program. The report found that each child in pre-K would result in an additional $52,000 in lifetime benefits to society (from future earnings and taxes to reduced healthcare costs and retention-related K-12 expenditures), and that Vermont's government would receive 19 percent of the long-term earnings benefits.



Analysis

Accessibility

All of the states considered here with universal pre-K programs have a relatively high percent of four-year-old enrollment, though the number of absolute students they serve varies widely, as does three-year-old enrollment. Oklahoma serves 70 percent of four-year-olds in the state and 5 percent of three-year-olds, representing roughly 40,000 students in total. Florida, the third most populous state, had the highest absolute number of students enrolled in pre-K at 166,726, representing 72 percent of four-year-olds, though its state programs currently do not serve three-year-olds. And

Vermont had the highest percent enrollment rate for four-year-olds at 76 percent, as well as the highest enrollment when including three- and four-year-olds at 68 percent, though it also had the lowest absolute enrollment of the states considered here at just 8,094. Only the District of Columbia has higher enrollment at 84 percent for four-year-olds (DC's program was not included in this analysis because it is not a state).

Funding

Vermont provided the highest levels of state spending per pre-K student among the states at $7,925, though due to its population, the overall spending is significantly lower than the other states. The state of Oklahoma spent 59 percent of what Vermont did on a per student basis, at $4,643. The state of Florida spent $2,222 per student, the equivalent of 28 percent of Vermont's allocation and 48 percent of Oklahoma's. Because of the larger population, however, the state of Florida spent roughly one and a half times what Oklahoma did in total on pre-K—roughly $300 million versus $200 million in 2020–21.

Funding for education is traditionally provided by the local, state, and federal government. The distribution of the funding burden is not uniform across all states. For example, in Florida, the state provides 39 percent of K-12 school revenues with 40 percent raised locally through public tax revenues. Conversely, 90 percent of Vermont's K-12 school revenues are provided by the state with no revenues generated locally.[57] In Oklahoma and Vermont, state spending on pre-K was supplemented by local contributions and federal programs, which brought total spending per student to $10,215 and $8,881 respectively. Data on local and federal contributions in Florida was not available so the total spending per student is unknown.

TABLE 1. **State Enrollment and Spending on Pre-K**

State	Percent Enrollment—4-Year-Olds, 2020	Rank for Percent Enrollment—4-Year-Olds Access, 2020	State Funding Per Student, 2021 (does not include local or federal contributions)	Head Start Funding Per Student, 2021
District of Columbia*	84%	1st	$18,431	$16,708
Vermont	76%	2nd	$7,925	$16,105
Wisconsin**	72%	3rd	$3,539	$10,973
Florida	72%	4th	$2,222	$9,965
Oklahoma	70%	5th	$4,643	$8,556
Georgia***	59%	6th	$5,432	$9,579

* The District of Columbia has UPK but it is not a state, so it cannot be considered a state UPK program.

** Wisconsin requires that all districts that offer pre-K to be universal but it does not require all districts to offer pre-K, so it is not a statewide universal program.

*** Not all school districts in Georgia provide pre-K and students are not guaranteed a spot in a pre-K program.

SOURCE: National Institute for Early Education Research, https://nieer.org/.

Quality

In terms of the quality of each program, Oklahoma ranked the highest, fulfilling nine of the 10 NIEER benchmarks. The only benchmark Oklahoma missed was with respect to assistant teacher degree requirements. Oklahoma requires a high school degree rather than a child development associate's degree (CDA) for assistant teachers.[58] Florida, on the other hand, met just two of the 10 benchmarks for quality: early learning and development standards and maximum class size. The state did not meet benchmarks that included having a student to teacher/staff ratio of 10:1, a bachelor's degree requirement for teachers, 15 or more hours of professional development for staff, or vision and hearing screenings for students. Vermont met seven of the 10 quality benchmarks. It does not have a bachelor's degree requirement for all teachers (as private school teachers are only required to have an associate's degree) or an associate's degree requirement for assistant teachers (as they are only required to have a high school degree), nor does it have a minimum of 15 hours professional development. However, like Oklahoma, it satisfies most of the benchmarks.

Impact

In regard to impact, there have been multiple studies that have shown the positive outcomes of Oklahoma´s pre-K program. Researchers from Georgetown University conducted a longitudinal case study in Tulsa, Oklahoma.[59] They not only found more immediate but persistent positive impacts. Early impacts were reflected in greater student preparedness upon entry to kindergarten with regard to reading, writing, and math,[60] as well as cognition, motor skills, and broader language development.[61] They also found an 8 percent gain in third grade reading scores and a 14 percent gain in third grade math scores.[62] Students that attended pre-K not only performed better on standardized exams, they were 26 percent less likely to have been held back a grade level, 6 percent more likely to enroll in honors courses,[63] and there was a small statistical increase in ACT scores across the state following the program's implementation.[64]

Studies of Florida's VPK program have reflected that its impacts on students after kindergarten often diminish. A study analyzing retention rates for Florida students from preschool to third grade found retention rates (the number of students who repeated kindergarten) from kindergarten to first grade were lower for students who were enrolled in the pre-K program compared to students who were not in any form of preschool. However, this trend did not continue; retention rates after first grade were found to be the same among students who were in pre-K and those who were not.[65, 66] Researchers have also looked at the impacts of the Florida pre-K program on third grade reading and math tests. Scores in large suburban district showed no statistically significant differences between students previously enrolled in UPK and students who were not enrolled in a UPK program.[67] These findings reflect the fade-out effects seen in other research over the medium term for students, which does not necessarily indicate a lack of long-term impacts; however they also reflect a relatively less positive impact when compared to the same outcomes in Oklahoma.

Given that the universal pre-K program in Vermont is just eight years old, there isn't yet a substantial body of research showing the short-term let alone the long-term results of its pre-K expansion. When looking at the program's impact on retention rates and test scores, the results initially appear to be modest but remain unclear. Retention rates in the state have remained steady at roughly 2 percent both before and after introduction of universal pre-K.[68] With respect to testing, 2019 was the first year a cohort under the universal pre-K policy was eligible for examinations at the third grade level. Testing in subsequent years were disrupted by the COVID-19 pandemic with the 2020 tests cancelled and 2021 scores impacted by COVID-19-related learning disruptions.

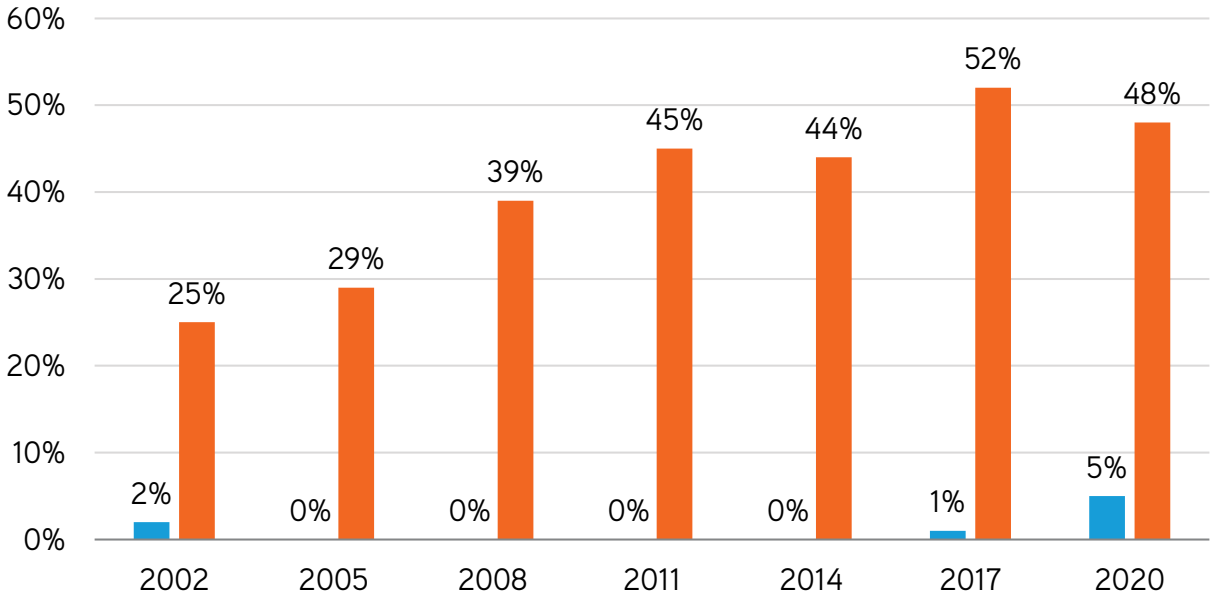
Under Act 11, the Vermont State Legislature commissioned a report on the results of the UPK program, which was published in 2019, five years into the program.[69] The report's authors measured the success by conducting surveys on families in the program and utilizing data reported by the individual schools across the state. The survey results reflected that out of one to five stars (one being the lowest and five being the highest rated) that 96 percent of the 8,594 students were in four- or five-star rated programs and over half were in five-star programs. They also found that public and private programs were utilized evenly, with 51 percent of students in public programs and 49 percent in private programs. Additionally, in terms of access, 77 percent of parents reported finding it somewhat or very easy to enroll their child in a preschool program, and 47 percent of respondents said that without free pre-K, they would have sent their child to school for fewer hours or none at all.[70] But there were also some shortcomings noted, as some programs were not fully prepared for the transition to universal admissions, with insufficient preparation for new needs such as more classes and more students requiring IEPs. To better understand the impact of UPK on test scores in Vermont, researchers will need more years of data and to be able to look at longer-term and nonacademic outcomes of universal pre-K.

Looking at New York State Pre-K Policy

New York State does not have a statewide universal preschool program by this report's definition, because it is not available in every district in the state. As of 2020, 71 percent of districts offered pre-K through roughly 600 state administered programs across the state.[71] Despite not having a universal program, New York State serves more pre-K students than most other states—with the exceptions of California, Florida, and Texas. In 2020, 48 percent of the state's four-year-olds and 5 percent of the state's three-year-olds were enrolled in public pre-K programs offered by the state.

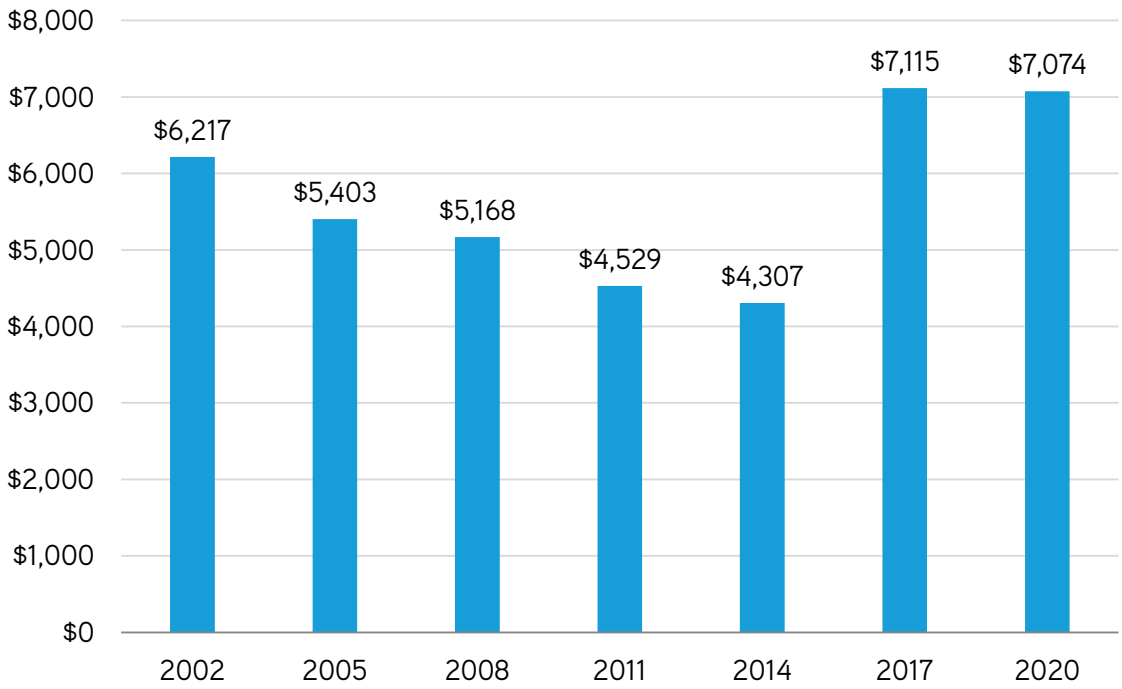
New York first offered pre-K in 1966 through a half-day Experimental Pre-K (EPK) program made available to disadvantaged three- and four-year-olds. The program eventually became the Targeted Pre-K program (TPK) in 1994. In 1997, the state legislature passed a package of reforms referred to as Learning, Achieving and Developing by Directing Education Resources (or LADDER), which outlined a phased-in approach to establishing a half-day universal prekindergarten program over the course of four years. The program began in academic year 1998–99 and served 18,176

FIGURE 1. **Percent of New York State Pre-K Enrollment, 2002–20**



SOURCE: "The State of Preschool Yearbook 2021: New York" National Institute of Early Educational Research, 2022, https://nieer.org/wp-content/uploads/2022/04/New_York_YB2021.pdf.

FIGURE 2. **New York State Spending per Child Enrolled, 2002–20**



SOURCE: "The State of Preschool Yearbook 2021: New York" National Institute of Early Educational Research, 2022, https://nieer.org/wp-content/uploads/2022/04/New_York_YB2021.pdf.

students. At junctures, state funding has increased resulting in expanded access and increased enrollment–most notably, in 1998–99, 2007–08,[72] and 2013–14.[73]

In 2006–07, the TPK program merged with the universal pre-K program and in 2007-08, the state increased its allocation and adopted a new funding formula for the state's universal pre-K.[74] The expanded funding helped the program grow from serving 62,929 students in 2006–07, to 92,173 students in 2007–08.[75] In 2013–14, another funding increase distributed $300 million to New York City and $40 million to districts in the rest of the state for the creation of pre-K programs. An additional $25 million in competitive grants enabled the expansion of half-day programs to full-day programs. These investments increased state pre-K enrollment from 98,910 students in 2013–14, to 120,069 students in 2015–16.[76]

New York's state-funded pre-K programs operate five days per week for a minimum of 2.5 hours a day for 180 days per year.[77] In 2021, New York State spent an average of $7,036 per student, making it comparable to Vermont ($7,925). New York's Head Start Programs spent $12,233 per student in 2019–20.[78]

New York's pre-K program allows a maximum class size of 20 and requires a staff-to-child ratio requirement of 1:9. The state requires pre-K teachers to hold a bachelor's degree and a teacher specialization certificate in early childhood education. New York's pre-K program met seven of the 10 quality criteria benchmarks under NIEER. Those it does not meet included the assistant teaching degree requirement, having a data-based quality improvement system, and having at least 15 hours of annual professional development for staff.

In 2019–20, New York served roughly 120,000 students, representing 48 percent of four-year-olds, with an additional 6 percent of students enrolled in Head Start, and another 6 percent enrolled in special education programs. The state also saw the more recent, if nascent, growth of three-year-old programs, which went from 0 percent enrollment in 2014 to 5 percent enrollment in 2020. As of 2020, 71 percent of districts offered pre-K through roughly 600 state administered programs across the state.[79] As referenced above, despite not having a universal program, New York State serves more pre-K students than most other states—with the exceptions of California, Florida, and Texas. However, New York had a significantly lower percent enrollment of four-year-olds in pre-K than the states offering statewide UPK at 48 percent and 5 percent of three-year-olds.

Part of the continued expansion of pre-K in New York included $105,000,000 in funding to support pre-K in 2021–22, $90 million of which was prioritized for districts that have not yet received state UPK funding for four-year-old programs, and $15 million of which was to support the expansion of full-day four-year-old programs.[80]

Conclusions

The provision of high-quality early childhood education in general and prekindergarten in particular can play an important role in achieving greater educational equity, socioeconomic benefits for students and their families, and economic benefits more broadly. While Oklahoma, Florida, and Vermont all have publicly-funded universal pre-K programs, each of these state programs have varying requirements, funding, reach widely different numbers of students, and have demonstrated different potential degrees of impact.

Oklahoma cannot only be recognized to have the oldest state universal pre-K program but to have a relatively good quality pre-K program. Programs in the state have comparable funding per students to Head Start and K-12 students in the state, and research has demonstrated both positive short-term and persistent impacts for students that are enrolled in public pre-K programs. Florida's program does not have nearly as many of the quality characteristics as the other two programs and spends far less per student as a state, though overall spending with local and federal contributions is unclear. However, it also serves far more students—more than three times the number of students than the other two state programs combined. Vermont, by comparison serves the least number of students and spends the most per student as a state, though Oklahoma's overall spending with local and federal contributions was greater. While the impacts of this more recently established program remain less clear, Vermont met the most quality benchmarks of the states considered, has the highest percent enrollment among the programs, and is considered to be very accessible by the families it serves.

New York cannot be compared in exactly the same manner because it does not offer universal pre-K for all students in all districts in the state. However, New York's existing program still serves a relatively large populations of students—one of the largest in the country—that is more akin to Florida's scale of program, while maintaining many of the quality benchmarks met by Oklahoma and Vermont. As New York continues to work to expand access to pre-K, parents and policymakers will need to consider how many programs offer full-day pre-K versus half-day, how to continue to ensure beneficial student-to-teacher ratios and teacher quality as workforce needs expand, and how to better incentivize and support new districts to establish pre-K programs. Further research into the long-term impacts of existing universal programs along with the characteristics that most drive certain outcomes can continue to inform those decisions.

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