

Roadmap to the State Profile Pages



How to interpret data on the individual state profiles

For each state with a preschool education program, we include one page with a description of the state's program, followed by a page with data on the program's key features, focusing on access, quality, and resources.

The first page for each state begins with two sets of bar graphs. The first set shows percentages of the state's 3-year-olds and 4-year-olds enrolled in the state preschool program. The second set shows the state's spending per child enrolled in the state preschool program. Both sets of bar graphs depict changes in state preschool over time, from fiscal year 2002 (which corresponds to the 2001-2002 school year) through fiscal year 2021 (which corresponds to the 2020-2021 school year). Due to space constraints, not all years can be included. Instead, data is included for the school years ending in 2002, 2005, 2008, 2011, 2014, 2017, 2020, and 2021. Most of the data used for comparison purposes come from NIEER's previous Yearbooks, although spending figures are adjusted for inflation and represent 2021 dollars. In addition, there are some exceptions in cases where states revised data or reported data differently. The percent of children enrolled is calculated using Census estimates of 3- and 4-year-old children in each state. New for the

2020-2021 Yearbook and in response to the impact of COVID-19 on preschool enrollment, there is an additional bar on the spending per child bar graph which shows the state pre-K spending per the estimated full enrollment equivalent. This is an estimate of what spending per child would have been if the program was fully enrolled.

Following the bar graphs is a brief narrative providing information on the main features of the state's program(s). This includes an overview of preschool enrollment, spending and quality; any new developments; details such as the program's history, the types of settings in which state-funded preschool can be offered, and eligibility criteria. In many cases, the narrative also describes unique or particularly interesting aspects of the state's program(s) that may not be highlighted elsewhere in the report, as well as expected changes for the 2021-2022 school year. This year we also included information about the ongoing impacts of the COVID-19 pandemic on state preschool. Some descriptive information in the narratives was originally based on information found in the reports *Seeds of Success* from the Children's Defense Fund and *Quality Counts 2002* from Education Week.

For the 44 states with preschool programs and the District of Columbia, the bottom of the first page of each state profile presents four numbers showing the state's ranking on the following measures:

- The percentage of the state's 4-year-old population enrolled in the state's preschool program (Access Rankings – 4-Year-Olds)
- The percentage of the state's 3-year-old population enrolled in the state's preschool program (Access Rankings – 3-Year-Olds)
- State expenditures per child enrolled in the program (Resources Rankings – State Spending)
- All reported expenditures per child enrolled in the program, including local and federal spending as well as state spending (Resources Rankings – All Reported Spending).

This year, due to the COVID-19 pandemic's impact on state pre-K enrollment, the two spending rankings are based on the estimate of spending per full enrollment equivalent (FEE). Federal COVID-19 relief funding used for preschool is also included in the State expenditure per child calculation this year.

The All Reported Spending ranking often provides a more complete picture of preschool spending in states using local and federal funding sources than the State Spending ranking alone. Because states vary in their ability to report spending from these other sources, however, this ranking is imperfect and sometimes underestimates total spending.

The bottom of the first page of each state profile (including Guam) also presents a box indicating the total number of quality standards benchmarks met.

California, Connecticut, Hawaii, Iowa, Louisiana, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, Oregon, Pennsylvania, and Washington each have more than one distinct preschool education initiative. Therefore, information is presented slightly differently for these states and is explained on their individual profiles.

State profile pages are also given for the six states that did not fund preschool education programs in the 2020-2021 school year. For these states, the table of quality standards is omitted. These profiles do report enrollment data for special education and federally funded Head Start, however. In addition, data on per-child spending for K-12 education and federal Head Start are included. State-funded Head Start spending and enrollment are also provided for no-program states. Profile pages are also included for five U.S. territories that do not offer "state-funded" preschool (American Samoa, Commonwealth of the Northern Mariana Islands, Palau, Puerto Rico, and the Virgin Islands). For these five territories, a narrative is provided, as is information about Head Start and special education.

The following sections provide an overview of information contained in the data tables on the state profile pages and explain why these elements are important. Data in the tables are for the 2020-2021 school year except where noted.

ACCESS

The Access data table begins with the total state preschool enrollment, which is the number of children of all ages enrolled at a specific point in time. Following that is the percentage of school districts (or other local education authorities, such as counties or parishes) providing state-funded preschool programs. This information shows the extent of the initiative's geographic coverage. Next, the table shows what, if any, income requirement is used in determining eligibility for the program.

Data on the minimum hours of operation (hours per day and days per week) and operating schedule (academic or full calendar year) are shown as additional measures of access because working parents may find it difficult to get their children to and from programs that operate only a few hours a day or week. The amount of time children participate in a preschool program also matters for other reasons, such as influencing the program's effects on children's development and learning.

The Access data table also shows enrollment of 3- and 4-year-old children in two federally funded programs: preschool special education and Head Start. The Head Start enrollment total includes children in the American Indian/Alaskan Native and Migrant & Seasonal Head Start programs where applicable. The final item in the table reports how many children ages 3 and 4 years old are participating in Head Start through state supplemental funds.

Two Access pie charts illustrate the percentages of the state's 3- and 4-year-olds enrolled in the state-funded preschool program(s), special education, and Head Start. The remaining children are categorized as enrolled in "Other/None." These children may be enrolled in another type of private or publicly funded program (e.g., state-subsidized child care) or may not be attending a center-based program at all. We calculated an unduplicated count for special education enrollment in order to more accurately represent the percentage of children served in the state. The special education percentage in the pie chart represents children who are in special education but not enrolled in Head Start or state preschool programs. We also calculated an unduplicated count for Head Start enrollment in order to avoid double counting Head Start children enrolled in state-funded preschool. For the states that were able to report this information, the Head Start percentage does not include children also enrolled in state-funded preschool.

QUALITY

State policies in critical areas related to quality are shown in the Quality Standards Checklist table. For each policy area, states receive a checkmark when their policy meets or exceeds the related benchmark standard. The first column in the Quality Standards Checklist table lists the policy that is being evaluated. The second column presents information about each state program's requirements regarding each policy. The third column lists the benchmark for each policy — that is, the rigor of the state requirement needed to meet the benchmark. The fourth column depicts whether the state preschool program's requirements met the benchmark. A box at the bottom of the fourth column displays the total number of benchmarks met by the state program.

The Quality Standards Checklist represents a set of minimum criteria, established by state policy, needed to ensure the effectiveness of preschool education programs, especially when serving children who are at-risk for school failure. Although the checklist is not intended to be an exhaustive inventory of all the features of a high-quality program, each of these research-based standards is essential for setting the groundwork for high-quality experiences for children. Meeting all 10 standards does not necessarily guarantee that a program is of high quality, but no state's prekindergarten policies should be considered fully satisfactory unless all 10 benchmarks are met. Although programs may routinely engage in practices meeting criteria for quality standards, credit is given only when the practices are explicitly required in state policy.

Judgment inevitably plays a role in setting specific benchmarks based on evidence, as research rarely is completely definitive. We have given more weight to the risk of losing substantial benefits by setting benchmarks too low than to the risk of unnecessarily raising costs by setting benchmarks too high, because research has found the benefits of high-quality programs to be substantially greater than the costs. In other words, there is more to lose when programs are weak or ineffective. Nevertheless, the original benchmarks were still conceived as minimum standards. The current benchmarks raise the bar somewhat.

Based on advances in research during more than a decade and a half since establishing the original quality standards benchmarks, we have created the current set, which debuted in the 2016 *Yearbook*. These shift the focus somewhat from policies regarding classroom structure toward policies that shape classroom processes associated with positive child developmental outcomes.¹ Specifically, the current benchmarks introduce one new quality standards benchmark and make substantial changes or enhancements to three others. Below, we explain each benchmark, along with the evidence and reasoning behind it.

We also describe the criteria used to assess whether state policies meet each benchmark:

Benchmark 1. Early Learning and Development Standards (ELDS). A state’s ELDS specify a program’s goals. Clear and appropriate expectations for learning and development across multiple domains are an essential starting place for quality.² States should have comprehensive ELDS covering all areas identified as fundamental by the National Education Goals Panel³ — children’s physical well-being and motor development, social/emotional development, approaches toward learning, language development, and cognition and general knowledge. Neglecting any of these development domains could weaken both short- and long-term effectiveness.⁴

To meet the benchmark, ELDS should be comprehensive and specific to preschool-aged children and vertically aligned with state standards for younger and older children so that children’s experiences at each stage build on what has gone before.⁵ ELDS also should be aligned with any required child assessments, and sensitive to children’s diverse cultural and language backgrounds.⁶ Finally, the state must provide some support for those charged with implementing the ELDS so they understand them, such as professional development and additional resources.

Benchmark 2. Curriculum supports. A strong curriculum that is well-implemented increases support for learning and development broadly, and includes specificity regarding key domains of language, literacy, mathematics, and social-emotional development.⁷ To meet the benchmark for curriculum support, states must provide guidance or an approval process for selecting curricula, and support for curriculum implementation, such as training or ongoing technical assistance to facilitate adequate implementation of the curriculum.

Benchmark 3. Teacher degree. To meet the benchmark, state policy must require lead teachers in every classroom to have at least a bachelor’s degree. This follows recommendations from multiple studies by the Institute of Medicine (IOM) and National Research Council (NRC) of the National Academy of Science recommending that preschool teachers have a BA with specialized knowledge and training in early childhood education.⁸ Their conclusions are supported by an analysis of what teachers are expected to know and do in order to be highly effective. Also, a comprehensive review finds that teachers with higher educational levels generally provide higher quality educational environments for young children.⁹

Much of the research has approached the question of teacher degree requirements incorrectly by assuming that teacher qualifications and other program features act independently, are unconstrained by regulation, and are independent of unmeasured contexts that affect outcomes.¹⁰ When multiple program features are interdependent, benchmarking is a more appropriate approach for identifying the features associated with success.¹³ We found no examples of programs that have produced large persistent gains in achievement without well-qualified teachers.



It also follows that teacher qualifications should not be expected to have an effect in isolation. Compensation must be adequate to attract and retain strong teachers, regardless of qualifications requirements.¹⁴ We have not made this part of the benchmark due to the difficulty of ascertaining exactly what “adequate compensation” is for each state — but that does not lessen its importance.

Benchmark 4. Teacher specialized training. Institute of Medicine/National Research Council reports have also emphasized that preschool lead teachers should have specialized preparation that includes knowledge of learning, development, and pedagogy specific to preschool-age children.¹⁵ To meet the benchmark, policy must require specialized training in early childhood education and/or child development. We recognize that early childhood teacher preparation programs are variable. States may wish to consider supports to improve programs offered by their state institutions of higher education and alignment with the state ELDS.¹⁶

Benchmark 5. Assistant teacher degree. All members of a teaching team benefit from preservice preparation. The Child Development Associate (CDA) credential was developed as the entry-level qualification for the field.¹⁷ Other certifications or coursework can provide similar preparation. There has been limited research specific to the qualifications of assistant teachers, but evidence indicates that assistant teacher qualifications are associated with teaching quality. To meet the benchmark, policy must require that assistant teachers hold a CDA or have equivalent preparation based on coursework.¹²

Benchmark 6. Staff professional development. To meet this benchmark both teachers and assistant teachers must be required to have at least 15 hours of annual in-service training. In addition, some professional development must be provided through coaching or similar ongoing classroom-embedded support. Lead and assistant teachers are also required to have annual written individualized professional development plans. Research indicates regular professional learning, including coaching, supports teaching practices related to high-quality experiences for children.¹⁶ Individualized professional development focused on helping teachers improve in their own classrooms has been found more effective than traditional workshops and general professional development.¹⁷ Good teachers actively engage in learning and regular professional development, and there is some evidence for a 15-hour threshold.¹⁸

Benchmarks 7 and 8. Maximum class size (20) and staff-child ratio (1:10). These two benchmarks are addressed together as they are highly linked in policy and practice. To meet benchmark 7, class size should be limited to at most 20 children. To meet benchmark 8, classes should be permitted to have no more than 10 children per classroom teaching staff member. Small class size and corresponding teacher-child ratios characterize the most effective programs, even though many studies find weak or no association between these features and effectiveness.¹⁹ Yet, it seems clear that smaller classes and fewer children per teacher enable teachers to interact with each child more frequently, to work with smaller groups, and offer each child more individualized attention, which results in better outcomes. The smaller the class, the easier it is for a teacher to develop a good understanding of each child’s interests, needs, and capabilities.

What may be the best designed large-scale randomized trial of class size for young children to date found substantive and lasting impacts on achievement and educational success for smaller class sizes in kindergarten.²⁰ Subsequent efforts to reproduce these results through policy changes elsewhere have been far less successful. Again, we note that key policies regarding program features are not independent of other policies, context, and implementation.

A staff-child ratio of 1:10 is lower than in programs found to have the largest persistent effects, but it is generally accepted by professional opinion. A recent meta-analysis suggests an even lower threshold, below 1 to 7.5 (class size of 15), would be better, and that finding is consistent with experimental evidence for kindergarten.²¹ On the other hand, at least one program has produced large short-term gains with a maximum class size of 22 and 1:11 staff to child ratio, just outside the benchmarks.²²

Benchmark 9. Screenings and referrals. To meet the benchmark, policies should require that preschool programs ensure children receive vision and hearing screenings and at least one additional health screening; as well as referrals when needed.²³ This benchmark recognizes that children’s overall well-being and educational success involve not only cognitive development but also physical and mental health.²⁴ This quality standards benchmark no longer assesses provision of support services. Nearly all state-funded pre-K programs have some requirement for parent engagement and support, and we could not set an evidence-based benchmark that differentiated among them based on effectiveness.

Benchmark 10. This benchmark focuses on state requirements regarding a Continuous Quality Improvement System (CQIS). This reflects a shift in focus from compliance to state support for continuous improvement. An effective CQIS operates at local and state levels to ensure that information is gathered regularly on processes and outcomes, and that this information is used to guide program improvement. To meet this benchmark, policy must at a minimum require that (1) data on classroom quality is systematically collected, and (2) local programs and the state both use information from the CQIS to help improve policy or practice. The use of a cycle of planning, observation, and feedback has characterized highly effective programs.²⁵

The original Quality Standards Checklist required that programs should provide at least one meal per day. While nutritious meals are important, this requirement has been removed from the Checklist because whether a program met the requirement was largely determined by whether the program operated for a half day or full school day.



RESOURCES

The table in the Resources section provides the following information: total state spending for the state preschool program; whether a local match, monetary or in-kind, is required; amount of state Head Start spending; state spending per child enrolled in the program; and all reported (local, state, and federal) spending per child enrolled in the program. These measures show various views of the resources dedicated to state preschool programs, which allows for a more complete picture of a state's commitment to preschool education. For example, a state's total spending may appear low, but may prove to be high relative to the number of children enrolled. On the other hand, a state with a high total funding level may have a low per-pupil spending level if it enrolls a large number of children. In some states, local communities contribute substantial additional funds to state preschool education by using local funding sources or by leveraging federal funding sources. In such cases, the figure that includes all reported spending is the best gauge of the level of available resources, to the extent that information about local and locally allocated federal spending is available.

The bar chart in the Resources section compares per-child spending in state-funded preschool programs to federal Head Start and K-12 per-child spending. Head Start per-child spending for the 2020-2021 year includes funding only for 3- and 4-year-olds served. Past years' figures have unintentionally included funds for Early Head Start, which made per-child amounts seem artificially higher (although this has been corrected for the past several years). Different colors indicate the different funding sources (local, state, and federal). Separate colors are used to indicate any TANF funds or federal COVID-19 relief funds that a state directs toward its preschool initiative. While TANF and COVID-19 relief funds are federal dollars, it is the state's decision to devote these funds to preschool education, as opposed to other purposes. Data on the amounts of local and federal preschool funds are included in the bar chart when available.

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Guide to State Profiles

ACCESS

Total state pre-K enrollment.....	Number of children of all ages in state pre-K program
School districts that offer state program	Percentage of school districts in state where program is offered
Income requirement	Maximum family income for program eligibility
Minimum hours of operation.....	Minimum hours per day and days per week program operates
Operating schedule.....	Annual schedule of operation (school/academic year or full calendar year)
Special education enrollment, ages 3 and 4	Number of 3- and 4-year-olds served by the Preschool Grants Program of the Individuals with Disabilities Education Act
Federally funded Head Start enrollment, ages 3 and 4	Number of slots for 3- and 4-year-olds in Head Start funded with federal money
State-funded Head Start enrollment, ages 3 and 4.....	Number of slots for 3- and 4-year-olds in Head Start funded with state money

QUALITY STANDARDS CHECKLIST

POLICY

STATE PRE-K REQUIREMENT

Early learning & development standards	Comprehensive, aligned with state infant & toddler and K-3 or college & career ready standards, aligned with child assessments, supported, and culturally sensitive
Curriculum supports.....	Approval process for selecting curricula and supports in place for curriculum implementation
Teacher degree.....	Lead teacher must have a BA, at minimum
Teacher specialized training	Lead teacher must have specialized training in a pre-K area
Assistant teacher degree.....	Assistant teacher must have a CDA or equivalent, at minimum
Staff professional development.....	Teacher and assistant teacher must receive at least 15 hours/year of in-service professional development and training, individualized annual professional development plans, and coaching
Maximum class size	Maximum number of children per classroom must be 20 or fewer
Staff-child ratio	Lowest acceptable ratio of staff to children in classroom (e.g., maximum number of students per teacher) must be 1:10 or better
Screening & referral.....	Screenings and referrals for vision, hearing, and health must be required
Continuous quality improvement system	Systematic structured observations of classroom quality and information collected is used for classroom/program improvement at the state and local levels

RESOURCES

Total state pre-K spending	Total state funds spent on state pre-K program
Local match required?.....	Whether state requires local providers to match state monetary contributions to program
State Head Start spending	Total state funds spent to supplement Head Start program
State spending per child enrolled	Amount of state funds spent per child participating in pre-K program
All reported spending per child enrolled	Amount of all reported funds (local, state, and federal) spent per child participating in pre-K program

GLOSSARY OF ABBREVIATIONS

AA	Associate of Arts	FEE	Full enrollment equivalent
ACF	Administration for Children and Families	FPL	Federal Poverty Level
AEPS	Assessment, Evaluation, and Programming System for Infants and Children	FRPL	Free or reduced-price lunch
ARP	American Rescue Plan	FTE	Full-time Equivalent
ASQ-3/ ASQ-SE	Ages & Stages Questionnaires, Third Edition/Ages & Stages Questionnaires - Social Emotional	FY	Fiscal Year
B–	Denotes that the age range covered by a teaching license begins at birth (e.g., B–3 = birth–grade 3)	GED	General Equivalency Diploma
BA	Bachelor of Arts	GEERS	Governor’s Emergency Education Relief Fund
BMI	Body Mass Index	HdSt	Head Start
BS	Bachelor of Science	HSD	High School Diploma
CACFP	Child and Adult Care Food Program	IDEA	Individuals with Disabilities Education Act
CARES	Coronavirus Aid, Relief, and Economic Security Act	IEP	Individualized Education Plan
CBO	Community-Based Organization	IFSP	Individualized Family Service Plan
CCDF	Child Care and Development Fund	IOM	Institute of Medicine
CD	Child Development	ITERS	Infant/Toddler Environment Rating Scale
CDA	Child Development Associate credential	K	Kindergarten
CLASS	Classroom Assessment Scoring System	KEA/KRA	Kindergarten Entry Assessment/Kindergarten Readiness Assessment
COR	HighScope Child Observation Record	KIDS	Kindergarten Individual Development Survey
CQIS	Continuous Quality Improvement System	LEA	Local Education Agency
CRRSA	Coronavirus Response and Relief Supplemental Appropriations Act	MA	Master of Arts
DIAL	Developmental Indicators for the Assessment of Learning	myIGDis	My Individual Growth and Development Indicators
DIBELS	Dynamic Indicators of Basic Early Literacy Skills	N–	Denotes that the age range covered by a teaching license begins at nursery (e.g., N–3 = nursery–grade 3)
DLL	Dual Language Learner	NA	Not Applicable
DOE	Department of Education	NAEYC	National Association for the Education of Young Children
DRA	Developmental Reading Assessment	NCLB	No Child Left Behind
DRDP	Desired Results Developmental Profile	PALS	Phonological Awareness Literacy Screening
DSC	Developing Skills Checklist	P–	Denotes that the age range covered by a teaching license begins at preschool (e.g., P–4 = preschool–grade 4)
EC	Early Childhood	PEG	Preschool Expansion Grant
ECE	Early Childhood Education	PD	Professional Development
ECERS-3	Early Childhood Environment Rating Scale-Third Edition	PDG	Preschool Development Grant
ECERS-R	Early Childhood Environment Rating Scale-Revised	PDG B–5	Preschool Development Grant Birth through Five
ECSE/ ECE Sp Ed	Early Childhood Special Education	PIR	Program Information Report (Head Start)
Ed.D	Doctor of Education Degree	PPVT	Peabody Picture Vocabulary Test
Ed.S	Educational Specialist Degree	Pre-K	Prekindergarten
EE	Elementary Education	QRIS	Quality Rating and Improvement System
ELDS	Early Learning and Development Standards	RTT	Race to the Top
ELL	English Language Learner	RTT-ELC	Race to the Top - Early Learning Challenge
ELLCO	Early Language and Literacy Classroom Observation	SEA	State Education Agency
ELS	Early Learning Standards	SMI	State Median Income
ESSER	Elementary and Secondary School Emergency Relief Fund	SpEd	Special Education
EPSDT	Early Periodic Screening, Diagnosis, and Treatment	TANF	Temporary Assistance to Needy Families
ERS	Environmental Rating Scale	T.E.A.C.H.	Teacher Education and Compensation Helps (T.E.A.C.H. Early Childhood Project)
ESL	English as a Second Language	TS GOLD	Teaching Strategies GOLD
FCCERS	Family Child Care Environment Rating Scale	USDA	United States Department of Agriculture
		WSS	Work Sampling System