Roadmap to the State Profile Pages

How to interpret data on the individual state profiles

For each state with a prekindergarten initiative, 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 shows percentages of the state's 3-year-olds and 4-year-olds enrolled in the state pre-K program. The second set shows the state's spending per child enrolled in the state preschool initiative. 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 2010 (which corresponds to the 2009-2010 school year). Most of the data used for comparison purposes come from NIEER's previous *Yearbooks*, although spending figures are adjusted for inflation and represent 2010 dollars. In addition, there are some exceptions in cases where states revised data or reported data differently. In such cases, we adjusted data to ensure comparability across program years. For the 2009-2010 school year, the state per-child spending bar graph also includes funding from the American Recovery and Reinvestment Act (ARRA) for three states—California, Florida, and Massachusetts—that received funds and were able to report the amount.

Following the bar graphs is a brief narrative providing information on the main features of the state's initiative(s). This includes details such as the initiative's history, the types of settings in which state-funded preschool can be offered, and enrollment eligibility criteria. In many cases, the narrative also describes unique or particularly interesting aspects of the state initiatives that may not be highlighted elsewhere in the report, as well as relevant new developments in the 2009-2010 school year and expected changes for the 2010-2011 school year. For the 2009-2010 school year, states were asked about evaluations that were conducted on their pre-K programs. For states that conducted evaluations, it is briefly described in the narrative with more detailed information provided in Appendix A. 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 40 states with preschool programs, 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).

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

Iowa, Kansas, Louisiana, New Jersey, Pennsylvania, South Carolina, Vermont, and Wisconsin 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.

For the 2009-2010 school year, data were included on the Public Charter School Pre-K Program in the District of Columbia. However, this program is profiled separately from the District's other preschool initiative as it has different standards and requirements. Therefore information is presented similarly to states that have more than one prekindergarten initiative. While its profile contains the same elements of a state profile page, the District of Columbia does not receive any rankings as one district is not comparable to an entire state.

State profile pages are also given for the 10 states that did not fund preschool education initiatives in the 2009-2010 school year. For most of these states, the space for the narrative of the state's initiative is left blank, and the table of quality standards is omitted for all 10 states. However, these profiles report enrollment data for special education and federally funded Head Start. In addition, data on per-child spending for K–12 education and federal Head Start are included. When applicable, state-funded Head Start spending and enrollment are also provided for no-program states.

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 2009-2010 program year except where noted.

ACCESS

The Access data table begins with total state program enrollment, which is the number of children enrolled at a specific point in time. Following that is the percentage of school districts (or in some cases counties, communities, or parishes) providing state-funded prekindergarten 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 hours of operation (hours per day and days per week) and operating schedule (academic or 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. 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 besides the state prekindergarten initiative: preschool special education and Head Start. The Head Start enrollment total includes children in the American Indian/Alaskan Native and migrant regions. The final item in the table reports how many children ages 3 and 4 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 initiative(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. For the 2010 *Yearbook*, we calculated an unduplicated count for special education enrollment in order to more accurately represent the number 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. The Head Start percentage also includes any children supported by state contributions to the federal Head Start program.

QUALITY STANDARDS CHECKLIST

State policies in 10 critical areas related to quality are shown in the Quality Standards Checklist table. For each area, states receive a checkmark when their policy meets or exceeds the related benchmark standard. On the right side of the page, a box displays the total number of benchmarks met by the state.

The Quality Standards Checklist represents a set of minimum criteria needed to ensure the effectiveness of preschool education programs, especially when serving children at risk for school failure. However, the checklist is not intended as an exhaustive inventory of all the features of a high-quality program, although each of these standards is essential. While meeting all 10 standards does not necessarily guarantee that a program is of high quality, no state's prekindergarten policies should be considered satisfactory unless all 10 benchmarks are met.

The limitations of research are such that judgment inevitably plays a role in setting specific benchmarks based on evidence. Studies find that the potential benefits from strong preschool education programs are such that the monetary investment in pre-K is returned seven to 17 times.[1] Therefore, we gave more weight to the risk of losing substantial benefits by setting benefits too low than to the risk of raising costs by setting benchmarks too high. Costs of many preschool programs are currently quite low; thus, benchmarks steer closer to the characteristics of programs demonstrated to produce reasonably large educational benefits for children in randomized trials and the strongest quasi-experimental studies (e.g., High/Scope Perry Preschool and Chicago Child-Parent Centers) and farther from the characteristics of programs found in rigorous studies to have weak effects.[2]

Of the 10 standards we use to gauge the quality of state-funded preschool programs, four involve teacher credentials and training. State preschool policies are evaluated based on whether programs require teachers to have a bachelor's degree;[3] whether they require teachers to have specialization in preschool education;[3] whether they require assistant teachers to have at least a Child Development Associate (CDA) or equivalent credential;[4] and whether they require teachers to have at least 15 hours of annual in-service training.[5] Teacher qualifications receive this emphasis in our checklist because research shows this area to be crucial in determining program quality. Better education and training for teachers can improve the interaction between children and teachers, which in turn affects children's learning.

Class size and staff-child ratios are also emphasized in the Quality Standards Checklist, with the expectation that states will limit class sizes to 20 children at the most[6] and have no more than 10 children per teacher.[7] With smaller classes and fewer children per teacher, children have greater opportunities for interaction with adults and can receive more individualized attention, resulting in a higher quality program.

1 Reynolds, A., Temple, J., Robertson, D., & Mann, E. (2002). Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Centers. *Education Evaluation and Policy Analysis, 24*, 267-303. Belfield, C., Nores, M., Barnett, S., & Schweinhart, L. (2006). The High/Scope Perry Preschool Program: Cost-benefit analysis using data from the age-40 follow-up. *Journal of Human Resources, 41*(1), 162-190.

2 Temple, J., & Reynolds, A. (2007). Benefits and costs of investments in preschool education: Evidence from the Child-Parent Centers and related programs. *Economics of Education Review, 26*, 126-144. Barnett, W.S., & Belfield, C. (2006). Early childhood development and social mobility. *Future of Children, 16*(2), 73-98.

3 Based on a review of the evidence, a committee of the National Research Council recommended that preschool teachers have a BA with specialization in early childhood education. Bowman, B.T., Donovan, M.S., & Burns, M.S. (Eds.). (2001). *Eager to learn: Educating our preschoolers.* Washington, DC: National Academy Press. Burchinal, M.R., Cryer, D., Clifford, R.M., & Howes, C. (2002). Caregiver training and classroom quality in child care centers. *Applied Developmental Science, 6*, 2-11. Barnett, W.S. (2003). Better teachers, better preschools: Student achievement linked to teacher qualifications. *Preschool Policy Matters, 2.* New Brunswick, NJ: National Institute for Early Education Research. Whitebook, M., Howes, C., & Phillips, D. (1989). *Who cares? Child care teachers and the quality of care in America* (Final report on the National Child Care Staffing Study). Oakland, CA: Child Care Employee Project.

4 Preschool classrooms typically are taught by a team of a teacher and an assistant. Research focusing specifically on the qualifications of assistant teachers is rare, but the available evidence points to a relationship between assistant teacher qualifications and teaching quality. There is much evidence on the educational importance of the qualifications of teaching staff generally. Bowman, Donovan, & Burns (2001). Burchinal, Cryer, Clifford, & Howes (2002). Barnett (2003). Whitebook, Howes, & Phillips (1989). The CDA has been recommended to prepare assistant teachers who are beginning a career path to become teachers rather than permanent assistants. Kagan, S.L., & Cohen, N.E. (1997). *Not by chance: Creating an early care and education system for America's children* [Abridged report]. New Haven, CT: Bush Center in Child Development and Social Policy, Yale University.

5 Good teachers are actively engaged in their continuing professional development. Bowman, Donovan, & Burns (2001). Frede, E.C. (1998). Preschool program quality in programs for children in poverty. In W.S. Barnett & S.S. Boocock (Eds.). (1998). *Early care and education for children in poverty: Promises, programs, and long-term results* (pp. 77-98). Albany, NY: SUNY Press. Whitebook, Howes, & Phillips (1989) found that teachers receiving more than 15 hours of training were more appropriate, positive, and engaged with children in their teaching practices.

6 The importance of class size has been demonstrated for both preschool and kindergarten. A class size of 20 children is larger than the class size shown in many programs to produce large gains for disadvantaged children. Barnett, W.S. (1998). Long-term effects on cognitive development and school success. In W.S. Barnett & S.S. Boocock (Eds.). (1998). *Early care and education for children in poverty: Promises, programs, and long-term results* (pp. 11-44). Albany, NY: SUNY Press. Bowman, Donovan, & Burns (2001). Finn, J.D. (2002). Class-size reduction in grades K-3. In A. Molnar (Ed.). (2002). *School reform proposals: The research evidence* (pp. 27-48). Greenwich, CT: Information Age Publishing. Frede (1998). NICHD Early Child Care Research Network (1999). Child outcomes when child care center classes meet recommended standards for quality. *American Journal of Public Health, 89*, 1072-1077. National Association for the Education of Young Children (2005). *NAEYC early childhood program standards and accreditation criteria*. Washington, DC: Author.

7 A large literature establishes linkages between staff-child ratio, program quality, and child outcomes. A ratio of 1:10 is smaller than in programs that have demonstrated large gains for disadvantaged children and is the lowest (fewest number of teachers per child) generally accepted by professional opinion. Barnett (1998). Bowman, Donovan, & Burns (2001). Frede (1998). NICHD Early Child Care Research Network (1999). National Association for the Education of Young Children (2005).

Early learning standards are also critical to quality[8] as they offer programs guidance and ensure that they cover the full range of areas essential to children's learning and development. States should have comprehensive early learning standards covering all areas identified as fundamental by the National Education Goals Panel[9]—children's physical well-being and motor development, social/emotional development, approaches toward learning, language development, and cognition and general knowledge. These standards should be state requirements or actively promoted for use in state-funded preschool education classrooms and should be specifically tailored to the learning of preschool-age children so that it is appropriate for their level of development.

The Quality Standards Checklist also addresses the comprehensive services that preschool education programs should be expected to offer. Programs should provide at least one meal;[10] vision, hearing, and health screenings and referrals;[11] and additional parent involvement opportunities, such as parent conferences, or support services, such as parent education.[12] These items are included because children's overall well-being and success in school involves not only their cognitive development but also their physical and social/emotional health. For the 2010 *Yearbook*, the benchmark for vision, hearing, and health screenings and referrals was modified slightly. State policies that include one of a number of criteria (height/weight/BMI, blood pressure, immunizations, psychosocial/behavioral, and full physical exam) are given credit as requiring health screenings and referrals, as opposed to the past when states were not asked to report the specific components making up health screening and referrals.

It is important to note that the Quality Standards Checklist focuses on state preschool policy requirements rather than actual practice. A state with good policies may have some programs that fail to comply with these policies; conversely, a state with weak policies may have many programs that exceed state minimum standards. While evaluating implementation of standards is outside the scope of this report, the checklist does include an indicator of whether states are taking steps to monitor programs' implementation of the quality standards. Policies requiring strong state quality standards are essential, but it is also necessary to have a means of ascertaining that individual pre-K programs meet those standards.[13] Through the examination of program practices, monitoring helps to enforce the standards and ensure high-quality education in state-funded preschool programs.

[8] Current practice too frequently underestimates children's capabilities to learn during the preschool years. Clear and appropriate expectations for learning and development across all domains are essential to an educationally effective preschool program. Bowman, Donovan, & Burns (2001). Frede (1998). Kendall, J.S. (2003). Setting standards in early childhood education. *Educational Leadership, 60*(7), 64-68.

[9] National Education Goals Panel (1991). *The Goal 1 Technical Planning Subgroup report on school readiness.* Washington, DC: Author.

[10] Good nutrition contributes to healthy brain development and children's learning. Shonkoff, J.P., & Phillips, D.A. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development.* Washington, DC: National Academy Press.

[11] For some children, preschool provides the first opportunity to detect vision, hearing, and health problems that may impair a child's learning and development. This opportunity should not be missed. Meisels, S.J., & Atkins-Burnett, S. (2000). The elements of early childhood assessment. In J.P. Shonkoff & S.J. Meisels (Eds.). (2000). *Handbook of early childhood intervention* (pp. 231-257). New York: Cambridge University Press.

[12] Families are the primary source of support for child development, and the most effective programs have partnered with parents. Bowman, Donovan, & Burns (2001). Frede (1998).

[13] Monitoring of program quality and external accountability for pre-K are essential components of program standards. Bowman, Donovan, & Burns (2001).

RESOURCES

The table in the Resources section provides the following information: total state spending for the state preschool initiative; whether a local match is required; amount of state Head Start spending (if applicable); 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 allocated to prekindergarten, 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. 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 preschool per-child spending to federal Head Start and K–12 per-child spending. Different colors indicate the different funding sources (local, state, and federal). Separate colors are used to indicate any TANF and/or ARRA funds that a state directs toward its preschool education initiative. While TANF and ARRA 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 prekindergarten funds are included in the bar chart when available.

Guide to State Profiles

ACCESS

Total state program enrollment ..... Number of children in state pre-K program

School districts that offer state program ..... Percentage of school districts in state where program is offered (may include programs not provided by district itself)

Income requirement ..... Maximum family income for participants

Hours of operation ..... Hours per day and days per week programs operate

Operating schedule ..... Annual schedule of operation (academic year or calendar year)

Special education enrollment ..... 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 ..... Number of slots for 3- and 4-year-olds in Head Start funded with federal money

State-funded Head Start enrollment ..... 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 standards ..... National Education Goals Panel content areas covered by state learning standards for preschool-age children must be comprehensive

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

Teacher in-service ..... Teacher must receive at least 15 hours/year of in-service professional development and training

Maximum class size ..... Maximum number of children per classroom must be 20 or fewer
- 3-year-olds
- 4-year-olds

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
- 3-year-olds
- 4-year-olds

Screening/referral and support services ..... Screenings and referrals for vision, hearing, and health* must be required; at least one additional support service must be provided to families

Meals ..... At least one meal must be required daily

Monitoring ..... Site visits must be used to demonstrate ongoing adherence to state program standards

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 and amount of any required match

State Head Start spending (when applicable) ..... 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 spent per child participating in pre-K program

* Required health screenings and referrals must include at least one of the following: height/weight/BMI, blood pressure, immunizations, psychosocial/behavioral, or full physical exam.

GLOSSARY OF ABBREVIATIONS

AA	Associate of Arts
ACF	Administration for Children and Families
AEPS(i)	Assessment, Evaluation, and Programming System for Infants and Children (interactive)
ARRA	American Recovery and Reinvestment Act
ASQ(SE)	Ages and Stages Questionnaires (Social-Emotional)
AYP	Adequate Yearly Progress (No Child Left Behind)
B–	Denotes that the age range covered by a teaching license begins at birth (e.g., B–4 = birth–grade 4)
BA	Bachelor of Arts
BMI	Body Mass Index
BRI	Basic Reading Inventory
BS	Bachelor of Science
CACFP	Child and Adult Care Food Program
CBO	Community-Based Organization
CC	Child Care
CCDF	Child Care and Development Fund
CD	Child Development
CDA	Child Development Associate credential
CEU	Continuing Education Unit
CLASS	Classroom Assessment Scoring System
COR	HighScope Child Observation Record
DIAL	Developmental Indicators for the Assessment of Learning
DIBELS	Dynamic Indicators of Basic Early Literacy Skills
DOE	Department of Education
DRA	Developmental Reading Assessment
DSC	Developing Skills Checklist
EC	Early Childhood
ECE	Early Childhood Education
ECERS(-R)	Early Childhood Environment Rating Scale (-Revised)
ECSE	Early Childhood Special Education
ECHOS	Early Childhood Observation System
Ed.D	Doctor of Education Degree
Ed.S	Educational Specialist Degree
EE	Elementary Education
ELAS	Early Learning Assessment System
ELL	English Language Learner
ELLCO	Early Language and Literacy Classroom Observation
ELS	Early Learning Standards
EOWPVT	Expressive One-Word Picture Vocabulary Test
EPSDT	Early Periodic Screening, Diagnosis, and Treatment
ESL	English as a Second Language
EVT	Expressive Vocabulary Test
FPL	Federal Poverty Level
FTE	Full-time Equivalent
FY	Fiscal Year
GED	General Equivalency Diploma
GGG	Get It, Got It, Go
HdSt	Head Start
HSD	High School Diploma
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Plan
IFSP	Individualized Family Service Plan
K	Kindergarten
LEA	Local Education Agency
LELA	Language and Emerging Literacy Assessment
MA	Master of Arts
MOE	Maintenance of Effort
N–	Denotes that the age range covered by a teaching license begins at nursery (e.g., N–4 = nursery–grade 4)
NA	Not Applicable
NAEYC	National Association for the Education of Young Children
NCLB	No Child Left Behind
NEGP	National Education Goals Panel
NSBP/NSLP	National School Breakfast/Lunch Program
NSLP	National School Lunch Program
PALS	Phonological Awareness Literacy Screening
PAT	Phonological Awareness Test
P–	Denotes that the age range covered by a teaching license begins at preschool (e.g., P–4 = preschool–grade 4)
PIR	Program Information Report (Head Start)
PPVT	Peabody Picture Vocabulary Test
Pre-K	Prekindergarten
QRIS	Quality Rating and Improvement System
SMI	State Median Income
SpEd	Special Education
TANF	Temporary Assistance to Needy Families
T.E.A.C.H.	Teacher Education and Compensation Helps (T.E.A.C.H. Early Childhood® Project)
USDA	United States Department of Agriculture