

Report to Congressional Requesters

September 2004

# PREKINDERGARTEN

Four Selected States Expanded Access by Relying on Schools and Existing Providers of Early Education and Care to Provide Services





Highlights of GAO-04-852, a report to congressional requesters

### Why GAO Did This Study

For nearly 40 years, the federal government has played a role in providing early childhood development programs for children of low-income families through Head Start and other programs. Since 1980, the number of states with preschool programs has also significantly increased. While most of these programs have targeted children at risk of school failure, more recently, interest has grown in expanding these limited programs because of the growing concern about children's readiness for school and subsequent achievement. It has also been fueled by new research on early brain development that suggests the importance of early education and by the high rate of mothers in the workforce and their need for early childhood services. In this context, questions have arisen about how the various programs are coordinated and what lessons have been learned from broadbased state preschool efforts.

This work focused on four states that have expanded their preschool programs to serve more children. In these states, GAO addressed (1) how prekindergarten programs were designed and funded, (2) the potential implications of these program features for children's participation and other programs that serve four year-olds, and (3) the outcome data that have been collected on participating children and families. To gather this information, GAO conducted site visits in four states—Georgia, New Jersey, New York, and Oklahoma.

www.gao.gov/cgi-bin/getrpt?GAO-04-852.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Mamie Shaul at (202) 512-7215 or shaulm@gao.gov.

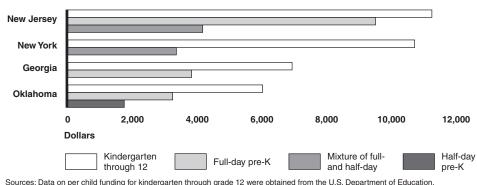
## **PREKINDERGARTEN**

## Four Selected States Expanded Access by Relying on Schools and Existing Providers of Early Education and Care to Provide Services

#### What GAO Found

The expanded prekindergarten programs in Georgia, Oklahoma, New York, and New Jersey had some similarities in their design features. For instance, programs were offered at no direct cost to parents, regardless of family income, and each state incorporated some level of collaboration with community-based providers such as Head Start and large child care facilities. Some key differences in their design features also existed. For example, Georgia and Oklahoma had statewide programs providing prekindergarten services to over half of their four-year olds, while New York's and New Jersey's programs were more geographically targeted. States and school districts also varied in offering full- or half-day prekindergarten programs. States also varied in teacher qualifications, the percentage of prekindergarten children served by community-based providers, funding methods, and in the amount of funding per child.

#### State Per Child Funding for Prekindergarten Programs and Kindergarten through Grade 12



Sources: Data on per child runding for kindergarren tirrough grade 12 were obtained from the U.S. Department of Education, National Center for Education Statistics; data on per child funding for state prekindergarten programs were obtained from the Georgia Department of Early Care and Learning, and the state departments of education in New Jersey, New York, and Oklahoma.

Some program features had potential implications for the participation of children and for early childhood programs. For example, none of the four states required providers to transport all children to and from prekindergarten, and many children were enrolled in half-day programs, which officials believed might have limited the participation of children from low-income and working families. Collaborations between programs and community-based organizations generally permitted rapid program expansion and were viewed as beneficial to early childhood programs. Finally, we found few data to determine the impact of state prekindergarten expansion on the availability or prices of child care.

While some data were available on outcomes for children who participated in prekindergarten programs, less was known about their impacts on families. For example, a study in Oklahoma showed that children who participated made significant gains on several school readiness measures relative to a comparison group of unenrolled children. However, none of the four states had measured effects on families, such as parents' work effort.

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#### **Abbreviations**

CBO	community-based organization
CCDF	Child Care and Development Fund
ECPA	early childhood program aid
HHS	U.S. Department of Health and Human Services
LEA	local education agencies
NIEER	National Institute for Early Education Research
SEA	state education agencies
TANF	Temporary Assistance for Needy Families
TPK	targeted prekindergarten
UPK	universal prekindergarten

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## United States Government Accountability Office Washington, DC 20548

September 9, 2004

The Honorable Edward M. Kennedy Ranking Minority Member Committee on Health, Education, Labor, and Pensions United States Senate

The Honorable Christopher J. Dodd Ranking Minority Member Subcommittee on Children and Families Committee on Health, Education, Labor, and Pensions United States Senate

The Honorable Jack Reed United States Senate

For nearly 40 years, the federal government has played a role in providing early childhood development programs for children of low-income families through Head Start and other programs. Prior to 1970, only a few states had prekindergarten programs, and these were mostly available to a small number of children and targeted specific populations such as disadvantaged children, those at risk of school failure, or those with special needs. More recently, there has been interest in expanding these limited prekindergarten programs because of the growing concern about children's readiness for school and subsequent achievement. This interest has also been fueled by advances in early brain development research that suggest the importance of early education and by the high rate of mothers in the workforce and their need for early childhood services. During the 2001-02 school year, about 40 states enrolled approximately 700,000 of the nation's 7.8 million three- and four-year-olds in prekindergarten programs, and spent over \$2.4 billion to finance these programs. A few of these states have invested significant resources to expand enrollments of prekindergarten programs beyond targeted populations. They have also used federal funds such as Title I of the Elementary and Secondary Education Act, as amended by the No Child Left Behind Act of 2001, and Individuals with Disabilities Education Act to support prekindergarten programs, and have implemented these programs in a variety of settings such as child care centers and Head Start agencies, as well as public schools.

Given the level of investment and the variety of preschool programs currently receiving federal and state support, there is concern about whether these programs are well coordinated and that lessons from implementing broadly based state programs are documented. Accordingly, you asked that we review programs in selected states that expanded their prekindergarten efforts. This report presents information on (1) how state prekindergarten programs were designed and funded in these states, (2) the potential implications of these program features for children's participation and for other programs that serve four-year-olds, and (3) the outcome data that have been collected on participating children and families.

To determine how prekindergarten programs were designed, we reviewed program information and interviewed state officials, local education program officials, as well as numerous Head Start grantees and directors of large child care facilities, during site visits to four states (Georgia, New Jersey, New York, and Oklahoma). These states were selected, in part, because they were among a small subset of states that had expanded their prekindergarten programs and aimed to serve all four-year-olds whose parents wanted them to attend, regardless of family income. We also considered states that had well-established prekindergarten programs. Because New Jersey had two major preschool programs, including the court-ordered Abbott program that was implemented in New Jersey's 30 highest-poverty school districts, we report on a total of five prekindergarten programs in four states.

To identify potential implications of the design of state prekindergarten programs, we interviewed (1) state and local education agency officials; (2) providers of prekindergarten services at community-based organizations; and (3) federal, state, and local Head Start program staff. We also reviewed selected data on child care availability in these states and the nation. We assessed the data for reliability and reasonableness and found them to be sufficiently reliable for the purposes of this report. To determine what outcome data have been collected on participating children and families, we interviewed state and local education agency officials in each of the four states we visited, contacted researchers, and reviewed two studies—a study of a school district in Oklahoma and one statewide study in Georgia. We assessed the methodologies used in these studies and determined that the methodologies were of sufficient quality for use in discussion of most study findings, and we limited our discussion to these findings. (App. I contains a more detailed discussion of our scope and methodology.) We conducted our work between October 2003 and

August 2004 in accordance with generally accepted government auditing standards.

## Results in Brief

The four states we visited had developed expanded prekindergarten programs that varied in design features and funding. The four states' program features were similar in that each offered services at no direct costs to parents and emphasized preparing children for school and preventing failure in early grades. They also afforded the option of collaboration with community-based providers. We found significant differences in other aspects of the programs, such as geographic coverage, requirements for teachers, and extent of reliance on community-based providers of early childhood education. For example, Georgia had a statewide program that was implemented in all of its school districts, while New Jersey targeted its two prekindergarten programs in highpoverty areas—covering about 24 percent of its school districts. Teacher qualifications also varied among the four states. Requirements for lead teachers ranged from an associate's degree to a bachelor's degree with certification in early childhood education. In providing their prekindergarten programs, states and school districts also differed in the degree and type of collaborations they established with community-based providers such as Head Start and private child care centers. In terms of funding, the four states relied primarily on state resources but differed in funding methods and amounts per child. For example, New York financed its program using general revenues, while Georgia relied on proceeds from a state lottery. With regard to funding levels, New Jersey had the highest funding per child for its Abbott prekindergarten—over \$9,500 compared with less than \$4,200 for each of the other programs during the 2002-03 school year. All four states generally used relatively small amounts of federal funds, such as those from Title I or the Individuals with Disabilities Education Act, to support their prekindergarten programs.

Some design features of state prekindergarten programs had potential implications for children and early childhood programs in the four states we visited. For example, both local officials and providers told us that the lack of transportation and half-day programs may have affected participation in prekindergarten programs for children of low-income and working families. None of the four states we visited required prekindergarten providers to transport all participating children. Regarding the implications of state prekindergarten programs for other early childhood program providers, three of the five programs served most prekindergarten children through community-based organizations such as Head Start and child care centers. State and local officials and community-based providers told us that collaborations were beneficial to their

programs, but they also identified some challenges. In terms of benefits, some states used collaborations to quickly expand their prekindergarten programs by using existing age-appropriate facilities. In addition, collaborations increased access to school district resources for some community-based organizations. Some Head Start grantees received state funds to provide prekindergarten services, while other grantees told us they had begun serving more three-year-olds to offset the loss of four-yearolds who participated in state prekindergarten programs elsewhere, which potentially increased the number of poor children with 2 years of preschool education. At the same time, challenges remained for some states and school districts—including the lack of expertise in arranging formal contracts and maintaining effective collaborations with community-based providers. Little empirical data were available to determine the degree to which these broad-based state prekindergarten programs affected the availability of and prices for child care, and the anecdotal evidence we collected was mixed.

Some data have been collected on outcomes for participating children, but little is known about outcomes for their families. In the school districts we visited, we found that assessments of children's development were incorporated in the curriculum and used to provide information to parents. We also found two studies that provided information about the educational outcomes of state prekindergarten programs in Oklahoma and Georgia. A study conducted by Georgetown University collected data on prekindergarten children in the Tulsa, Oklahoma, school district and found that children who participated in the Tulsa program had significantly higher scores on several school readiness measures than similar children in the comparison group, who did not participate in the Tulsa prekindergarten program. A second study, conducted by Georgia State University on Georgia's prekindergarten program, reported that children who participated in the state program made significant gains on several school readiness measures, including language and problem solving, as did children in Head Start and those enrolled in private prekindergarten programs. None of the four states we visited reported collecting information regarding the impact of their programs on families with respect to issues such as workforce participation.

## Background

The growth in state prekindergarten programs has occurred for various reasons, but three frequently cited reasons are (1) evidence of the importance of early childhood to later development, (2) the high rate of labor force participation by mothers of young children, and (3) increased concern over school readiness and subsequent achievement. Much has

been discovered about children's ability to learn more at an earlier age than previously believed. The early childhood years are commonly portrayed as formative. Between the first day of life and the first day of kindergarten, development proceeds at a pace exceeding that of any subsequent stage of life. Children from birth to age five engage in making sense of the world on many levels: language, human interactions, counting and quantification, spatial reasoning, physical causality, problem solving, and categorization.<sup>1</sup>

Since the 1960s, the percentage of women in the labor force has increased dramatically. In 1960, about 36 percent of women participated in the labor force, and by 2000 this figure had increased to 58 percent. Moreover, in 2003, about 69 percent of women with children aged three to five (but none younger) were in the labor force. This high rate of participation of women in the labor force has resulted in more children enrolled in preschool programs of varying quality and pressure being placed on schools to provide before- and after-school programs.

To improve educational achievement for all children and reduce failure in lower grades, many states and school districts are placing a greater emphasis on the school readiness of younger children. For nearly a quarter century, many states have developed or expanded their investment in prekindergarten programs to increase the likelihood of children's success in school. Prior to 1970 only 7 states funded preschool programs, and by 1988, 28 states had programs and total spending was \$190 million;² such programs generally targeted economically and educationally disadvantaged children. While most state-sponsored prekindergarten programs continue to serve such children, a few states are in the process of expanding their programs to include all four-year-olds, regardless of family income. According to the National Institute for Early Education Research (NIEER), 40 states (and Washington, D.C.) had some form of state-sponsored prekindergarten program in the 2001-02 school year and

<sup>&</sup>lt;sup>1</sup>National Research Council and Institute of Medicine. 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*, Committee on Integrating the Science of Early Childhood Development. Jack P. Shonkoff and Deborah A. Phillips, eds. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press.

<sup>&</sup>lt;sup>2</sup>Mitchell, Anne W. 2001. "Education for All Young Children: The Role of States and the Federal Government in Promoting Prekindergarten and Kindergarten." Working paper series, Early Childhood Policy Research. The Foundation for Child Development. New York, New York.

enrolled over 700,000 children, mostly four-year-olds.<sup>3</sup> While states spent more than \$2.4 billion for prekindergarten during the 2001-02 school year, 10 states accounted for over 80 percent of this amount.

Generally, prekindergarten programs aimed to serve four-year-olds, but according to NIEER estimates, most states served less than one-fifth of all their four-year-olds (see fig. 1). NIEER estimated that about 80 percent of children served by state prekindergarten programs were four-year-olds. During the 2001-02 school year, only two states (Georgia and Oklahoma) enrolled more than 50 percent of their four-year-olds in a state-sponsored prekindergarten program. Ten states (Alaska, Idaho, Indiana, Mississippi, Montana, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming) had not initiated prekindergarten programs.

<sup>&</sup>lt;sup>3</sup>NIEER, a unit of Rutgers University, supports early childhood education policy through research. In the recent NIEER report *The State of Preschool: 2003 State Preschool Yearbook*, enrollment and spending data were based on 38 states providing information.

<sup>&</sup>lt;sup>4</sup>NIEER estimated enrollment by age categories when states did not provide data separately for three- and four-year-olds.

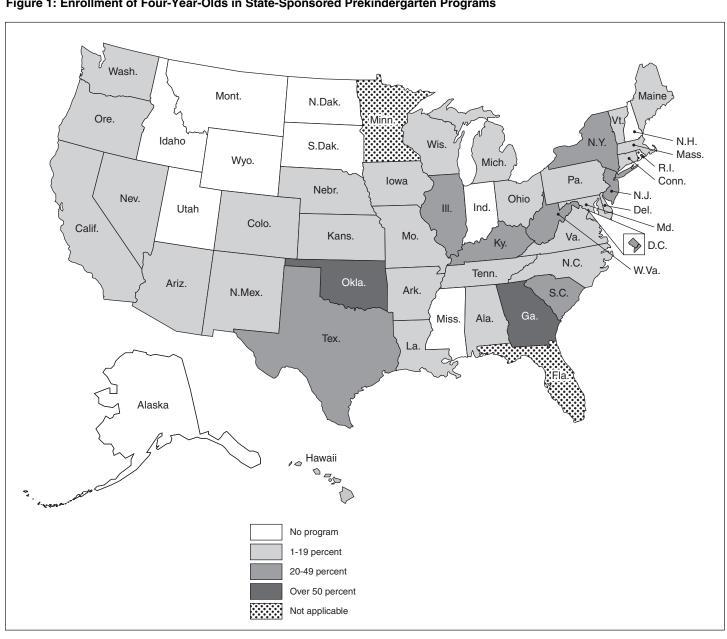


Figure 1: Enrollment of Four-Year-Olds in State-Sponsored Prekindergarten Programs

Source: NIEER, The State of Preschool, 2003 State Preschool Yearbook.

Note: NIEER estimated enrollments by age categories when states did not provide data separately for three- and four-year-olds. NIEER did not report enrollments of state prekindergarten programs in Florida, Minnesota, and Rhode Island.

The NIEER study also reported on characteristics describing the quality of states' prekindergarten programs. Table 1 provides information on NIEER's findings related to certain program characteristics, benchmarks, and the number of state programs meeting the benchmarks that NIEER associated with quality prekindergarten programs.

Table 1: State Prekindergarten Program Characteristics, Benchmarks, and Number of State Programs Meeting the Benchmarks

Program characteristics <sup>a</sup>	Benchmarks <sup>a</sup>	Number of state programs <sup>b</sup>
Class size	20 children or fewer	32
Family support services	At least one family support service including parent conferences or adult education, referral to social services for families, or information relating to nutrition.	32
Staff-child ratio	1:10 or better	31
Teacher qualifications	Bachelor's degree for lead teachers	22
Comprehensive curriculum standards	Developed specifically for prekindergarten and cover the domains of language/literacy, mathematics, science, social/emotional skills, cognitive development, health and physical development, and social studies.	12

Source: NIEER. The State of Preschool. 2003 State Preschool Yearbook.

<sup>a</sup>NIEER identified 10 program characteristics and developed benchmarks for each of the characteristics. The other program characteristics were teacher specialized training requirements, assistant teacher degree requirements, teacher in-service requirements, screening/referral requirements, and meal requirements.

<sup>b</sup>Based on NIEER's summary of quality standards for a total of 44 programs, including some states with more than one prekindergarten program, and Washington, D.C.

Among the 10 largest state prekindergarten programs, most met the benchmarks for class size, family support services, staff-child ratio, and teacher qualifications, and they were equally divided with respect to comprehensive curriculum standards.

State-sponsored prekindergarten programs are expanding alongside existing programs for young children, including Head Start, Title I, and private child care programs. Head Start is a targeted program that mostly serves children from low-income families. <sup>5</sup> Head Start, administered at the

<sup>&</sup>lt;sup>5</sup>Created in 1965, Head Start is the largest federal program that supports early childhood education and was designed to help break the cycle of poverty by providing comprehensive educational, social, health, nutritional, and psychological services to low-income children.

federal level by the Department of Health and Human Services (HHS), is implemented in local communities through grantees. These grantees include community action agencies, school systems, for-profit and nonprofit organizations, other government agencies, and tribal governments or associations. The Department of Health and Human Services reported that Head Start served just over 900,000 children nationwide during the 2003 fiscal year, and most were aged three and four; Head Start was funded at about \$6.7 billion, or about \$7,366 per child.

In addition to administering Head Start, the federal government also provides some limited support for early education programs through Title I. Administered by the Department of Education (Education), Title I is the single largest federal investment for elementary and secondary education. Its primary purpose is to help local education agencies and schools improve the teaching and learning of children who are failing, or are most at risk of failing, to meet challenging academic standards. In support of that goal, Education reported that Title I was funded at about \$11.7 billion during the 2003 fiscal year. Nearly 15 million students were supported by Title I funds, and of these, about 2 percent (an estimated 313,000) were enrolled in prekindergarten programs during the 1999-2000 school year.

The Child Care and Development Fund (CCDF) is the principal federal program that supports child care for low-income families. CCDF is administered by HHS, and each state receives an annual allocation that is used to subsidize the child care expenses of low-income families with children generally under age 13. CCDF subsidies can be used to obtain child care from various types of providers, including child care centers

<sup>&</sup>lt;sup>6</sup>Education also funds two other smaller early childhood education-related initiatives. The Even Start program was designed to improve family literacy and educational opportunities. The program is generally targeted to parents who are not enrolled in school and their children through age seven, who lack a high school diploma or its equivalent; the basic skills necessary to function in society; or are unable to speak, read, or write English. In program year 2000, Even Start served about 31,600 families and 41,600 children; in 2002, Even Start was funded at \$250 million. Early Reading First is a competitive grant program to support local efforts to enhance the early language, literacy, and prereading development of preschool age children, particularly those from low-income families, through strategies and professional development that are based on scientifically based reading research. In fiscal year 2003, nearly \$75 million was awarded to 30 grantees.

<sup>&</sup>lt;sup>7</sup>GAO, *Title I Preschool Education: More Children Served, but Gauging Effect on School Readiness Difficult, GAO/HEHS-00-171* (Washington, D.C.: September 20, 2000) provides the most recent survey data available we identified.

and family homes. In fiscal year 2002, CCDF was appropriated nearly \$5 billion, and HHS reported that about 1.8 million children received subsidies in an average month. As a condition of receiving CCDF funds, states must conduct biennial surveys of child care providers, which are considered by states when establishing reimbursement rates for providers serving subsidized children. In addition to information regarding the fees charged by providers for child care services, such surveys may provide states with information about the type of child care they provide, qualifications of the staff, the age groups of the children they serve, and where they are located.

Four Selected States Varied In the Design and Funding of their Expanded Prekindergarten Programs The four states we visited varied in the design features and funding of their prekindergarten programs. Programs shared similar features such as voluntary enrollment of children at no direct cost to their parents, but differed in others. In addition, all five state programs permitted collaboration with community-based providers. States varied in features such as the teacher requirements for their prekindergarten programs. States and school districts also differed in the degree and type of collaborations they established with community-based agencies. Finally, while states relied primarily on state resources, they reported some differences in funding mechanisms and per child funding levels.

Selected States Designed Expanded Prekindergarten Programs to Enroll Children Voluntarily at No Direct Cost to Parents, but Differed in Geographic Breadth and Other Key Features In the four states visited—Georgia, New Jersey, New York, and Oklahoma—we found some similarities in prekindergarten programs. Over the last few years, all four states had expanded their state-sponsored prekindergarten programs and, as reported by NIEER in February 2004, were among only nine states and Washington, D.C., that provided prekindergarten services to more than 20 percent of their four-year-olds. All four states' prekindergarten programs were provided at no direct cost to parents—regardless of family income—and were offered on a voluntary basis; children's enrollment was not mandatory. In addition, each program emphasized preparation for school and incorporated the delivery of

<sup>&</sup>lt;sup>8</sup>Child care centers typically provide for 12 or more children in a nonresidential facility; family homes generally provide child care for a small group of children in a provider's home.

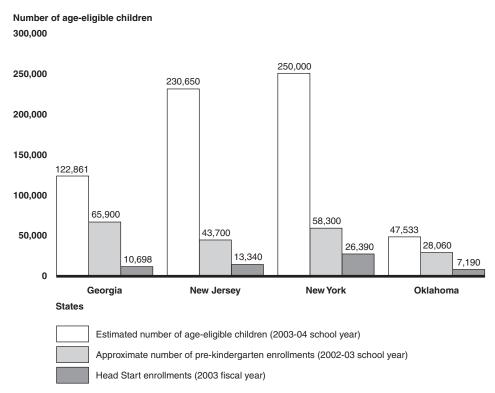
<sup>&</sup>lt;sup>9</sup>New York has two prekindergarten programs: the targeted prekindergarten (TPK) and the universal prekindergarten (UPK). During the 2002-03 school year, the TPK program served about 5 percent of the state's four-year-olds. This report focuses only on the state's UPK initiative that served about 23 percent of the state's four-year-olds.

prekindergarten services by community-based organizations as well as schools. None of the states required that all providers offer transportation services, although some providers did, and one state offered reimbursement for some children when this occurred. Figure 2 shows the estimated number of age-eligible children in the state, and the number of age-eligible children participating in prekindergarten and Head Start programs in the four states we visited.

<sup>&</sup>lt;sup>10</sup>As a result of a state supreme court decision, the Abbott school districts were required to provide transportation to children, if needed.

<sup>&</sup>lt;sup>11</sup>The numbers of children who participated in state-sponsored prekindergarten and Head Start are not mutually exclusive, that is, an unknown number of children participated in both programs. Participation data for Head Start refer to funded enrollment levels.

Figure 2: Estimated Number of Age-Eligible Children, Prekindergarten Enrollments, and Head Start Enrollments in the Four States



Sources: Estimates on numbers of age-eligible children statewide and prekindergarten enrollments obtained from the Georgia Department of Early Care and Learning, the state Departments of Education in New Jersey, New York, and Oklahoma; Head Start data from the U.S. Department of Health and Human Services, Head Start Bureau, Washington, D.C., and refer to funded enrollment; actual enrollment may differ.

Note: With the exception of New Jersey, this analysis is based on four-year-olds. In New Jersey, three- and four-year-olds were eligible in some districts. Also, New York's prekindergarten program enrollment does not include children participating in the targeted prekindergarten program.

The states we visited differed in the extent of geographic coverage and participation in prekindergarten programs. Three of the four states—Georgia, New York, and Oklahoma—aimed to provide prekindergarten programs to all four-year-olds in the state whose parents wanted them to attend. While none of these states provided prekindergarten to all four-year-olds, Oklahoma and Georgia had the most widespread programs. During the 2003-04 school year, Oklahoma provided prekindergarten in 509 of its 541 school districts to about 63 percent of its four-year-olds; Georgia provided prekindergarten in all of its 181 school districts and to about 55 percent of its four-year-olds. New York initially implemented much of its universal prekindergarten program in school districts located

in the five largest cities in the state—Buffalo, New York City, Rochester, Syracuse, and Yonkers. During the 2003-04 school year, about 80 percent of the participating children attended prekindergarten in one of these five cities. Overall, New York's prekindergarten program was offered in 190 of its 680 school districts. In New Jersey's Abbott program, the state was court ordered to provide prekindergarten to all three- and four-year-olds who resided in the state's 30 highest-poverty school districts. In addition, 102 non-Abbott early childhood program aid (ECPA) school districts in high-poverty areas received funds for prekindergarten programs. Combined, these two programs provided prekindergarten in 132 of 539 (24 percent) school districts in New Jersey. Table 2 provides information on the extent of geographic coverage and percentage of age-eligible children participating in prekindergarten programs in the four states we visited.

Table 2: Number of School Districts Statewide, Number of School Districts with State Prekindergarten Programs, and Percentage of Age-Eligible Children Participating in Five State Prekindergarten Programs during the 2003-04 School Year

State	Number of school districts statewide	Number of school districts with state prekindergarten	Percentage of age- eligible children participating in prekindergarten
Georgia	Statewide 181	programs 181	55
New Jersey (Abbott districts)	539	30	73
New Jersey (non-Abbott ECPA)	539	102	57
New York <sup>b</sup>	680	190	28
Oklahoma	541	509	63

Source: Information was obtained from the Georgia Department of Early Care and Learning and the state departments of education in New Jersey, New York, and Oklahoma.

<sup>a</sup>Percentage of age-eligible children participating in prekindergarten was calculated by dividing the number of children in prekindergarten by the number of children residing in eligible school districts. In Georgia and Oklahoma, all school districts were eligible for the state prekindergarten program. In New York, 224 of the state's 680 school districts were eligible for UPK funds. In New Jersey, 30 school districts were eligible for the Abbott program. In addition, 102 non-Abbott high-poverty school districts in New Jersey were eligible for non-Abbott ECPA prekindergarten programs.

<sup>b</sup>This table does not include four-year-olds served in New York's targeted prekindergarten program, which served about 5 percent of the state's four-year-olds.

The state-sponsored prekindergarten programs also differed in some of their key design features. For example, the length of the program, in terms of hours per day, ranged from 2.5 hours to 6.5 hours per day among the four states. Full-day prekindergarten was provided in Georgia and New Jersey's Abbott prekindergarten programs. The other three prekindergarten programs—New Jersey's non-Abbott ECPA, New York, and Oklahoma—allowed school districts to determine whether to offer full-day or half-day programs.

The states also varied in their requirements for lead teachers, and two of the five state programs (New Jersey's Abbott and Oklahoma) required teachers to be certified in early childhood education. In New Jersey's non-Abbott ECPA program, prekindergarten teachers could also hold certification in elementary education. Beginning with the 2004-05 school year, New York's state program required that all prekindergarten teachers be certified, but certification could be in an area other than early childhood education. In Georgia, lead teachers were required to hold at least a technical diploma or degree, associate's degree, or Montessori diploma. However, most lead teachers had at least a four-year-college degree. As of May 2004, the Georgia Department of Early Care and Learning reported that about 58 percent of its prekindergarten teachers were certified in early childhood or elementary education and 21 percent

<sup>&</sup>lt;sup>12</sup>The Georgia Department of Early Care and Learning also offered a resource coordination grant program that was available to eligible prekindergarten providers on a competitive basis so that they could provide supportive services to children and their families in addition to educational services. The key focus of the resource coordinator was to involve parents in their child's educational development process by, among other things, helping parents obtain needed health services for their child and attending informational and child development seminars. Resource coordinators may also help parents obtain community resources such as information regarding the General Educational Development (GED) test, employment counseling, and access to literacy classes. These grants were made available to grantees to provide services to at-risk (category one) children and families. Category one is defined as those children who participated in one of the following programs: food stamps, Supplemental Security Income (SSI), Medicaid, Temporary Assistance for Needy Families (TANF), PeachCare for Kids, as well as those that were eligible for free and reduced-price lunch. For the 2003-04 school year, over \$18 million in resource coordination grants was awarded, as of January 8, 2004.

<sup>&</sup>lt;sup>13</sup>Certification in New Jersey's Abbott program, for example, requires that teachers possess a preschool through grade 3 (P-3) endorsement. To qualify for a P-3 endorsement, candidates must possess, at a minimum, a bachelor's degree, a 2.5 grade point average, pass a state test when identified, and complete a state-approved preparation program at one of the state's colleges or universities. As of June 2004, New Jersey officials estimated that about 93 percent of the teachers in the Abbott school districts have met the certification requirement.

held four-year education-related or other degrees with some additional training in early childhood education or development. Combined, about 79 percent of the lead teachers in Georgia had at least a four-year education-related college degree.  $^{14}$ 

States and school districts established collaborations with communitybased organizations differently and often relied on them extensively to provide prekindergarten services to children. For example, Georgia had a centralized program and the state's Department of Early Care and Learning was directly responsible for establishing collaborations with community-based organizations such as child care centers and U.S. military bases. In contrast, in the other three states we visited, local school districts had responsibility for establishing collaborations. In New York, the state required that school districts use at least 10 percent of their universal prekindergarten grant funds to serve children in communitybased organizations, but statewide over 60 percent of four-year-olds were participating in community-based prekindergarten programs during the 2002-03 school year. The extent of collaborations varied between the two prekindergarten programs in New Jersey during the 2003-04 school year. In the Abbott school districts, the state was ordered by the New Jersey Supreme Court to provide full-day prekindergarten for all three- and fouryear-olds; over 70 percent of these children were served by communitybased providers. <sup>15</sup> In contrast, in New Jersey's non-Abbott ECPA school districts, only about 11 percent of the children received prekindergarten from community-based providers. While state officials in Oklahoma were supportive of collaborations, local school district officials determined the role of community-based providers in their prekindergarten programs. In Oklahoma, most children were enrolled in prekindergarten programs in

 $<sup>^{14}\!\</sup>text{Of}$  the remaining lead teachers in Georgia, about 21 percent held technical or other degrees.

<sup>&</sup>lt;sup>15</sup>In May 1998 the New Jersey Supreme Court mandated that children aged three and four living in the 30 highest-poverty school districts in the state receive a high-quality preschool education. The New Jersey Department of Education funds a 6-hour, 180-day prekindergarten program, and the New Jersey Department of Human Services funds a wraparound program that provides daily before- and after-care and a summer program. In total, the full-day, full-year program is available to eligible children for 10 hours per day, 245 days per year. The New Jersey Department of Education reported that during the 2002-03 school year, the Abbott program enrolled nearly 36,500 children at a cost of about \$347 million for prekindergarten. An official of the New Jersey Department of Human Services also reported that about \$103 million was spent for the wraparound services during the 2003 fiscal year. In addition, school districts can opt to have a 3-hour-per-day program for 20 days over the summer break. This program would also be funded by the state Department of Education.

public school buildings; the state did not know how many local school districts collaborated with community-based organizations or the number of children participating in them. These and other key differences in the design and implementation of state prekindergarten programs are identified in table 3.

Table 3: Variation in Selected Features of Five State Prekindergarten Programs

Program feature	Georgia	New Jersey (Abbott)	New Jersey (non-Abbott ECPA)	New York	Oklahoma
Role of school districts and community-based organizations (CBOs)	School districts and CBOs enter into contract with the Georgia Department of Early Care and Learning to provide prekindergarten	School districts must provide prekindergarten and contract with CBOs wherever feasible using a state model contract	School districts must provide some level of prekindergarten services and have option of establishing contracts with CBOs	Participating school districts must use 10% of UPK grant funds to serve children in CBOs	Participating school districts have option to contract with CBOs
Maximum class size	20	15	No required maximum	20	20
Hours per day	6.5 hours	6 hours	Minimum of 2.75 hours or 6 hours at school district option	Minimum of 2.5 hours or 5 hours at school district option	Minimum of 2.5 hours or 6 hours at school district option
Percentage of children in half-day programs	0	0	88	83	56
Curriculum	Sites used state- approved curricula	Determined locally	Determined locally	Determined locally	Determined locally based on state guidelines
Content standards	Statewide standards	Statewide standards	Statewide standards	Statewide standards	Determined locally based on state guidelines
Lead teacher qualifications	Early childhood- related certification or credential <sup>a</sup>	Certification in early childhood education <sup>b</sup>	Certification in early childhood or elementary education <sup>c</sup>	Teacher certification <sup>d</sup>	Certification in early childhood education <sup>e</sup>
Estimate for percentage of prekindergarten children served in CBOs	57 percent	71 percent	11 percent	63 percent	Largely school- based; percentage in CBOs unknown

Source: Information on program features was obtained from the Georgia Department of Early Care and Learning and the state departments of education in New Jersey, New York, and Oklahoma.

<sup>a</sup>Georgia provides a variety of ways to meet the certification or credentialing requirements, such as certification in early childhood or elementary education; four-year-college degree in certain education fields or four-year degree in psychology or social work with additional studies in early childhood education or care; a technical institute diploma/degree in early childhood education or care; associate degree in early childhood education; or a Montessori diploma.

State Funding Structure, Levels, and Stability Varied, and States Used Little Federal Funding All four states relied primarily on state resources but differed in other aspects of funding such as amounts per child, funding methods, and the extent to which these methods and amounts provided for financially stable programs. During the 2002-03 school year, enrollments and state spending for prekindergarten services varied widely among the five state programs. Based on data we collected from the states, spending ranged from approximately \$347 million for prekindergarten services in the 30 Abbott school districts in New Jersey to about \$30 million for the 102 non-Abbott ECPA school districts in New Jersey. Table 4 provides information on the primary methods of program funding, estimated number of participating children, and estimated state spending among the five programs during the 2002-03 school year.

Table 4: Primary Method of Program Funding, Estimated Number of Children Participating, and Estimated State Spending for Prekindergarten Programs during the 2002-03 School Year

State programs	Primary method of program funding	Estimated number of children participating	Estimated state spending for prekindergarten programs (dollars in millions)
New Jersey – Abbott	General revenues: school funding formula <sup>a</sup>	36,500	\$347
Georgia	Lottery proceeds	65,900	\$252
New York	General revenues: annual appropriation	58,300	\$195.4
Oklahoma	General revenues: school funding formula	28,060	\$66.4
New Jersey-non- Abbott ECPA	General revenues: school funding formula	7,200	\$30

Source: Information was obtained from the Georgia Department of Early Care and Learning and the state departments of education in New Jersey, New York, and Oklahoma.

<sup>&</sup>lt;sup>b</sup>By September 2004, a bachelor's degree plus a state-approved preparation program.

<sup>&#</sup>x27;Bachelor's degree plus certification in early childhood or elementary education.

<sup>&</sup>lt;sup>d</sup>Beginning in the 2004-05 school year, a bachelor's degree plus must pass two state teacher examinations (liberal arts and sciences test and assessment of teaching skills).

<sup>&</sup>lt;sup>e</sup>Bachelor's degree plus must pass general education, professional teaching, and early childhood tests.

<sup>&</sup>lt;sup>a</sup>In addition to receiving formula-driven funding, Abbott school districts also receive preschool expansion aid. This aid is derived from the state's general revenues and is provided to the Abbott districts to support the required full-day program for three- and four-year-olds.

Per child expenditures for full-day and half-day prekindergarten varied across the four states we visited and were consistently less than the state's per pupil expenditures for kindergarten through grade 12. New Jersey's Abbott districts had the highest funding per child for full-day prekindergarten, relative to kindergarten through grade 12 funding. <sup>16</sup> In the remaining states, funding for full-day prekindergarten was much less than the level of funding per child in kindergarten through grade 12. See figure 3 for comparisons of per child expenditures for prekindergarten and kindergarten through grade 12 in the four states we visited.

<sup>&</sup>lt;sup>16</sup>While New Jersey's Abbott prekindergarten program per child funding was more than double the other state programs, certain aspects of the program contributed to the increased costs. For example, one feature (maximum class size) increased program cost by roughly 25 percent by limiting enrollment to 15 children. The New Jersey Department of Education also initiated a number of activities to improve program quality. For example, during the 2002-03 school year, the state provided a year-long training program for 105 master teachers who, in turn, mentored and coached over 4,000 classroom teachers and assistant teachers in the Abbott school districts. The New Jersey Department of Education also recommended that the Abbott school districts employ one family worker for every 45 students. Family workers are to meet regularly with teachers and families to identify specific concerns or needs, assist in locating resources in the community, and support families in utilizing these resources.

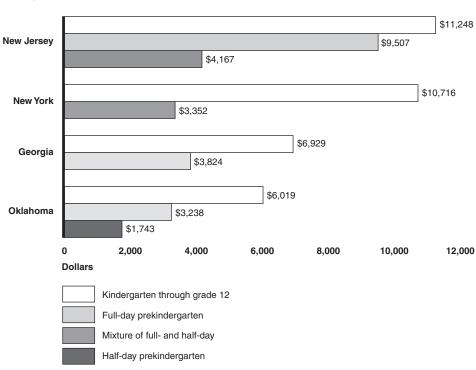


Figure 3: State Per Child Funding for Prekindergarten Programs and Kindergarten through Grade 12

Sources: Data on per child funding for kindergarten through grade 12 were obtained from the U.S. Department of Education, National Center for Education Statistics; data on per child funding for state prekindergarten programs were obtained from the Georgia Department of Early Care and Learning, and the state departments of education in New Jersey, New York, and Oklahoma.

Note: State per child funding for prekindergarten programs was for the 2002-03 school year, and kindergarten through grade 12 expenditures were for the 2000-01 school year.

Apart from New Jersey's Abbott and Georgia's prekindergarten programs, the other state programs we examined were largely half-day. New Jersey's non-Abbott ECPA program, New York, and Oklahoma permitted local school districts to operate half-day prekindergarten. However, these states differed in how they funded their half- and full-day programs. School districts in New Jersey's non-Abbott ECPA program and New York received the same amount per child whether they operated half-day or full-day programs, and about 80 percent of the children attended half-day prekindergarten in each of the two programs. In Oklahoma, local school districts received about \$1,743 per child (54 percent of the full-day rate), and over half of the four-year-olds participating in the state's prekindergarten program were enrolled in half-day programs during the 2002-03 school year.

The four states varied in how they funded their state-sponsored prekindergarten programs, and officials in two states told us that the financial outlook of their programs was stable. According to two New Jersey state officials, because of the state supreme court decision and subsequent court order, New Jersey was committed to providing a quality prekindergarten program to all three- and four-year-olds who lived in the Abbott school districts. In addition, funding for both New Jersey's Abbott and non-Abbott ECPA prekindergarten programs was part of the school funding formula. Oklahoma supported prekindergarten through the funding formula, as it did for other school grades, and state officials told us they believed that funding for the program was stable.

However, funding for prekindergarten in the other two states may be more uncertain. For example, funding levels for New York's state-sponsored prekindergarten had increased somewhat for the past 3 years but were insufficient to allow the state to implement a universal prekindergarten program available to all four-year-olds by the 2001-02 school year as planned. During the same period, New York financed its program from general revenue funds as a line item in the budget, and in 2003, the program was targeted for elimination because of state fiscal shortfalls. While avoiding elimination, limited increases in funding have restricted the state's ability to expand the program over the past several years. Most eligible districts participated in the program. However, about two-thirds of the school districts were not eligible for the state-sponsored prekindergarten program during the 2002-03 school year.

Georgia has historically relied on the state lottery to fund its prekindergarten program. When the lottery was initially created, its proceeds were set aside for three programs, including state-sponsored prekindergarten. Currently, lottery funds are used to support prekindergarten and a program to provide academic scholarships for eligible high school graduates. However, over time, a greater percentage of the lottery funds has been designated for the college scholarship program than for prekindergarten. Additionally, lotteries recently began in two neighboring states, and officials we interviewed were concerned that Georgia's lottery proceeds may level off. State officials told us that lottery funds may be insufficient to entirely support the prekindergarten program by 2007, and the state has begun to look at stop gap measures to protect lottery funding if needed in the future.

The four states reported using small amounts of federal funds to support their prekindergarten programs; these amounts were generally small relative to state funding levels. For example, two states—Georgia and

Oklahoma—used some prekindergarten monies to meet their CCDF matching or maintenance-of-effort requirements.<sup>17</sup> In fiscal year 2002, Georgia used about \$2.4 million in lottery funds for CCDF state matching and maintenance-of-effort, which represented about 1 percent of the state funding for prekindergarten. These funds were used for extended day (before- and after-school) for Temporary Assistance for Needy Families (TANF) eligible children participating in prekindergarten. Oklahoma used about \$2.1 million of its prekindergarten funds to meet CCDF maintenance-of-effort requirements, which represented about 3 percent of the state funding for prekindergarten. In fiscal year 2002, New York transferred \$61.3 million from the TANF program to the state prekindergarten program, but this was done for only one year. 18 None of the other states used TANF funds to support the expansion of their prekindergarten programs. While state officials told us that Title I, Individuals with Disabilities Education Act, and Head Start program funds were also used at the local level to support prekindergarten, they did not know the exact amounts from these other federal sources.

<sup>&</sup>lt;sup>17</sup>States receive CCDF funds from potentially four funding streams. Each state's annual federal allocation consists of separate discretionary, mandatory, and matching funds. A state does not have to obligate or spend any state funds to receive the discretionary and mandatory funds. However, to receive federal matching funds—and thus its full CCDF allocation—a state must maintain its program spending at a specified level, referred to as a state's maintenance of effort, and spend additional state funds above that level.

<sup>&</sup>lt;sup>18</sup>TANF, a block grant to states, provides temporary assistance to needy families. In general, able-bodied TANF recipients, who receive cash assistance, must participate in work or work-related activities after receiving assistance for a maximum of 24 months, and there is a 5-year lifetime limit on federal assistance. Beyond work, work-related activities include education and training; job search; and participation in community service. States may also use a portion of TANF funds for child care services.

Some Program
Features Had
Potential Implications
for Children's
Participation and
Other Early
Childhood Programs

Some prekindergarten design features had implications for children's participation and early childhood programs in the four states we visited. For example, both local officials and providers told us that transportation and program hours may have affected access to prekindergarten programs for children of low-income and working families. State and local officials, along with community-based providers and Head Start grantees, told us that collaborations were beneficial to their programs and had allowed rapid expansion of state prekindergarten. However, some challenges remained, such as the efforts needed to establish and maintain effective collaborations. Finally, few empirical data were available to quantify the effect of expanding state prekindergarten programs on the availability and prices for child care, and the anecdotal evidence we collected was mixed.

Transportation and Program Hours May Have Implications for Participation Program features, which varied across states and school districts, may have affected participation, particularly for children of low-income and working families. None of the four states required prekindergarten providers to transport all participating children. Officials in some school districts told us that the lack of transportation may have decreased the participation of children from low-income and working families, and 10 of the 12 school districts we visited did not provide transportation to and from prekindergarten for all participating children. Some school district officials primarily cited insufficient funding as a reason for not providing transportation services. For example, in one Oklahoma school district, children did not necessarily attend prekindergarten classes at their neighborhood school; consequently, the district would have incurred additional costs to transport children to their designated school. One official in a rural school district we visited in New York told us that more children from low-income and working families would have participated in prekindergarten if transportation were provided. However, costs prohibited the district from offering such services. However, officials in the urban school district we visited in New York did not view the lack of transportation as a barrier to participation, as the prekindergarten programs were generally available in proximity to children's homes or parents' jobs. In Georgia, the Department of Early Care and Learning offered additional funding to providers who opted to transport eligible children to and from the prekindergarten program. <sup>19</sup> In May 2004, the Georgia Department of Early Care and Learning paid for the

<sup>&</sup>lt;sup>19</sup>Transportation reimbursements were available for category one children.

transportation of 13,152 children. In New Jersey, the Abbott school districts were required to provide transportation when needed.

In Oklahoma, where the majority of the participating children attended half-day prekindergarten programs, school district officials told us that the length of the school day affected participation. In all three school districts we visited, local officials told us that shortened program hours may have hindered the participation of children of low-income and working families. Officials from one Oklahoma school district told us that the combination of a half-day program coupled with the lack of transportation to and from the prekindergarten program reduced the participation of children from low-income and working families. In that district, approximately 45 percent of the district's elementary school population was eligible for free and reduced price lunch during the 2003-04 school year, but only 29 percent of the children enrolled in prekindergarten were eligible for free and reduced price lunch, indicating lower participation of children from low-income families. Similarly, in another Oklahoma school district, while about 84 percent of the district's student population was eligible for free and reduced price lunch, 60 percent of children who participated in prekindergarten were eligible for free and reduced price lunch. However, officials in two Oklahoma school districts told us that certain factors discouraged them from offering full-day programs; for example, they were able to serve twice as many children with half-day programs, rather than full-day programs, using the same resources (classrooms and teachers). Additionally, one of these officials told us that it would be difficult to implement full-day prekindergarten while the school district only offered a half-day kindergarten program.

Finally, some school district officials told us that the location of the program could also affect the participation of children of working families. In particular, half-day programs without transportation could be more appealing to low-income and working families if they were offered in a child care center where the child could receive care for the duration of the work day. One urban school district we visited primarily offered half-day prekindergarten classes. However, the school district officials told us that the prekindergarten classes were sometimes offered in conjunction with other programs at the same location. A district official and child care providers in this school district told us that this arrangement met the needs of low-income and working families as children would receive a full day of care. Officials and child care providers in this school district told us that in order to offer a full day of care, some child care providers supplemented the state-sponsored prekindergarten program with other

monies, including Head Start funding, CCDF subsidies, and parent payments.

State and Local Officials and Community-Based Providers Said Collaborations Were Beneficial to Their Programs, but They Also Identified Some Challenges

Although state and local officials, as well as staff of community-based organizations, told us that collaborations were beneficial, some challenges remained. Officials in all four states we visited told us that such collaborations allowed them to serve more children, and three of the five programs served most prekindergarten children in community-based organizations such as Head Start and child care centers. In Georgia, New Jersey, and New York, officials reported that they made extensive use of collaborations because they wanted to implement the prekindergarten programs quickly and schools were often at capacity. In New Jersey, the state supreme court ordered the state to provide full-day kindergarten as well as full-day preschool for three- and four-year-olds in the 30 Abbott school districts. To implement the court order, the districts turned to community-based organizations to accommodate the influx of children. In New York, school districts were only required to use at least 10 percent of their universal prekindergarten grant funds to serve children in community-based organizations. Two school districts we visited in New York served the majority of participating children in community-based organizations (66 and 100 percent). However, in Oklahoma, where school districts had been experiencing declining enrollment, collaborations with community-based organizations were less prevalent, as districts were able to accommodate prekindergarten children in public schools. Officials from most of the school districts we visited that did use collaborations told us that the collaborations allowed them to take advantage of the existing early child care and education infrastructure, such as buildings, equipment, and assistant teachers to increase program capacity and reduce program costs.

Child care providers who partnered with state prekindergarten programs generally had favorable experiences with collaborations as well. Specifically, providers mentioned increased enrollment, improved quality of programs, and increased access to school district resources as benefits of their partnerships. Some providers who collaborated with the state prekindergarten programs in Georgia, New Jersey, and New York told us that they expanded their centers to serve more children of all ages—as some parents enrolled the younger siblings of their prekindergarten children in the same child care center. In addition, child care providers in all four states told us that the overall quality of care had improved as a result of collaborating with the state prekindergarten program. Some providers attributed the improved quality to various factors, including a

greater focus on learning, the presence of credentialed teachers, and higher standards for the children. Finally, some child care providers who collaborated with state-sponsored prekindergarten programs told us that the partnership allowed them increased access to school district resources such as professional development and materials such as new computers for the classrooms.

Head Start grantees also told us that collaborations were beneficial to their programs. For example, in Georgia and New York, some Head Start grantees who provided prekindergarten services stated they were better able to serve children by leveraging state prekindergarten and Head Start funds. These grantees told us they were able to expand program hours and enrich the learning environment while still providing Head Start's services, including establishing family partnerships. In Georgia, Head Start grantees served 3,654 children, or just over 5 percent of the children enrolled in the program during the 2004 fiscal year. In New York, Head Start provided about 345 classrooms of prekindergarten—representing about 9 percent of the total number of prekindergarten classrooms. Two Head Start grantees told us that since the state prekindergarten program served four-year-olds they began serving more three-year-olds. As a result, children from low-income families could participate in 2 full years of preschool.

While collaborations generally benefited early childhood programs, some challenges existed in establishing and maintaining partnerships between state-sponsored prekindergarten programs and community-based organizations. State and school district officials told us that establishing and maintaining collaborations took effort, required expertise, and involved increased monitoring and technical assistance, including financial guidance. For example, while one school district we visited had a staff person responsible for establishing and maintaining collaborations, another school district did not have such an expert and was unsure about how to develop partnerships or arrange the formal contracts needed to collaborate.

<sup>&</sup>lt;sup>20</sup>The Head Start program performance standards on family partnerships provide minimum requirements for grantees in areas such as family goal setting; accessing community services and resources; parent involvement in child development and education; parent involvement in health, nutrition, and mental health education; and parent involvement in shared decision making and community advocacy.

Child care providers also mentioned certain challenges such as insufficient or uncertain funding. For example, in New York and Georgia, where per child funding to community-based organizations had remained fairly level for at least the past 3 years, some child care providers told us that the per child funding was insufficient and they had to use other funding sources to support the collaboration. In addition, we found that challenges existed in establishing the collaborations with Head Start in all four states. In both Oklahoma and New York, there was no formal mechanism, such as a statewide contract to facilitate collaboration between school districts and Head Start grantees, and the two programs sometimes coexisted in the same community without the benefit of shared resources. Two of the three school districts we visited in Oklahoma did not collaborate with Head Start; the third served about 9 percent of its prekindergarten children through collaborations with Head Start grantees. Challenges in establishing collaborations with Head Start also remained in New Jersey.<sup>21</sup> In 2003, New Jersey's Department of Education and Department of Human Services developed plans for including Head Start grantees as partners in providing prekindergarten in the Abbott districts over the following 3 years. However, many challenges remained to achieving this goal including agreement on appropriate per child funding levels, as well as challenges in aligning curricula and other coordination issues.

Few Data Available to Determine the Impact of State Prekindergarten Programs on Availability and Prices of Child Care

While some community-based providers were initially apprehensive about the potential impact of the widespread availability of states' prekindergarten programs on the market for child care, we found few data to support this concern. In the states we visited, neither state officials nor the child care provider community had data regarding the effects of expanded prekindergarten programs on the availability and prices of child care. The available data were limited to child care market rate surveys, which were conducted by states to obtain information needed to set reimbursement rates for child care, and data collected every 5 years by the Census of Service Industries on the number of tax filings by child day care

<sup>&</sup>lt;sup>21</sup>In 2000, the New Jersey supreme court approved the use of community providers such as Head Start as part of the Abbott preschool program whenever practical. <u>Abbott v. Burke</u>, 748 A.2d 82 (N.J. 2000). Two years later, the court discussed the problems encountered in coordinating the two programs, including differing teacher qualifications, differing program standards, and the costs associated with bringing Head Start up to state standards. The court concluded that "districts should utilize Head Start providers unless they are not able and willing to comply with Abbott preschool standards or unless the cost of doing so is demonstrably more expensive than other high-quality alternatives." <u>Abbott Ex. El. Abbott v. Burke</u>, 790 A.2d 842 at 853 (N.J. 2002).

providers. Market rate surveys provided relatively recent data on prices, but generally did not include sufficient data to isolate any effects of prekindergarten and were not always collected in a comparable or reliable form before and after prekindergarten expansion. In contrast, the state level data currently available from the Census of Service Industries were collected in a consistent fashion over time and across states, but were available only for the period through 1997, just 2 years after significant growth in the prekindergarten program in Georgia, the oldest expanded program of the five we studied.<sup>22</sup> The data indicate that the number of small child care providers per 1,000 preschoolers in Georgia and the nation as a whole followed similar growth trends from 1987 to 1997, the years of available data. Further, in the same time period, the number of child care centers per 1,000 preschoolers and the number of employees paid by these centers increased in both Georgia and the nation (where prekindergarten services were generally less available than in Georgia). However, this does not prove that the expansion of prekindergarten programs had no effect on the number of child care providers. For example, perhaps the number of providers would have increased even more had prekindergarten programs not been expanded.

The anecdotal evidence regarding the effects of prekindergarten programs on the market for child care was mixed. For example, representatives of the child care community mentioned some positive effects on the market for child care, including the increased availability and accessibility of highquality child care and early education for children from low-income families. However, some child care providers in Georgia, New Jersey, and Oklahoma told us that state programs had adverse effects on the business of child care, but they were unable to provide us with supporting documentation. According to child care providers, the care of three- and four-year-olds was less costly than the care of infants and toddlers, and the revenue generated from caring for the older children subsidized the care of younger children and made up a significant portion of their revenues. Child care providers also said that the enrollment of four-year-olds in state prekindergarten programs could result in child care centers raising prices to compensate for the loss of such revenues or even going out of business. In addition, some child care providers in Georgia told us that because state program funding did not cover the costs of operating prekindergarten,

 $<sup>^{22}</sup>$ Georgia's program was initially a targeted program. It expanded in the early years (1992-1995) but remained targeted. In the 1995-96 school year, the program became available to children regardless of family income. At this time, the program went from enrolling 15,000 children to enrolling 44,000 children. The program has grown steadily since.

some centers had raised the rates for other services such as extended day care.

However, any potential effects of prekindergarten on the price and availability of child care may have been mitigated by certain design aspects of the programs in the states we visited. For example, while the majority of prekindergarten children in Oklahoma were served in public school settings, the potential effects on the child care market may have been mitigated because most children were in half-day prekindergarten programs and some needed child care before and after the program. In Oklahoma, the state Department of Human Services also provided a fullday reimbursement for CCDF-eligible children who used child care for more than 4 hours a day. As a result, the state's half-day program appeared to have minimal impact on child care providers. In New Jersey's Abbott districts and Georgia, which had full-day prekindergarten, the classes were often situated in community-based organizations. Consequently, many four-year-olds who attended these programs remained in communitybased settings, and child care providers maintained their enrollment of four-year-olds. Furthermore, in the Abbott districts, the New Jersey Department of Human Services provided additional funds to cover 4 hours of child care, beyond the 6 hour educational program. As a result, some child care centers were reimbursed for providing services for up to 10 hours per day.

## Some Data Have Been Collected on Outcomes for Participating Children

Some data have been collected on outcomes for participating children, but little is known about outcomes for their families. In all the school districts we visited, prekindergarten teachers routinely assessed children and provided parents with information about their child's progress during the school year. However, the states did not collect and analyze these assessment data. We found two studies that provided information about the educational outcomes of state prekindergarten programs on children in Oklahoma and Georgia. One study focused on the Tulsa School District and found that children who participated in the Tulsa prekindergarten program had significantly higher scores on several school readiness measures than children who did not participate in the program. A second

<sup>&</sup>lt;sup>23</sup>William T. Gormley, Jr., and Ted Gayer, *Promoting School Readiness in Oklahoma: An Evaluation of Tulsa's Pre-k Program*, Public Policy Institute, Georgetown University, Washington, D.C., 2003; Gary T. Henry and others, *Report of the Findings from the Early Childhood Study: 2001-02*, Andrew Young School of Policy Studies, Georgia State University, August 2003.

study analyzed statewide data regarding Georgia's prekindergarten program and reported that children who participated in one of three programs studied (Georgia's prekindergarten program, Head Start, and private preschools) generally made significant gains on developmental skills during the prekindergarten year. None of the four states we visited reported collecting information regarding the impact of their programs on families. State officials told us that prekindergarten programs increased choices for families, but none reported knowing whether the prekindergarten program had any effect on parents' work efforts.

Teachers Regularly Assessed Children's Progress, although States Did Not Systematically Collect These Data In general, teachers assessed the progress of the children's development in the course of teaching prekindergarten using developmentally appropriate assessments. We found that the types of assessments varied across prekindergarten providers, and some providers used multiple types of assessments. For example, assessments included checklists that rated the child's progress on various developmental objectives, observational records, as well as portfolio assessments, which consisted of a collection of the child's work and projects that showed the child's progress throughout the school year. In general, such assessments were used to inform the teacher and provide information to parents during the school year. None of the states required a particular assessment of children's outcomes.<sup>24</sup>

State officials acknowledged the importance of collecting and analyzing student outcome data. However, such analysis had not been systematically conducted on a statewide basis in any of the four states we visited. The outcome data that the teachers had were not necessarily in a form conducive to collection and analysis by the states. Officials offered various reasons for not collecting outcome data. In New York, officials told us that there was no funding for large-scale data collection efforts and they were awaiting the results of this year's fourth grade state test to analyze the potential long-term effects of their prekindergarten program, since some of these fourth graders had participated in the prekindergarten program as four-year-olds. In New Jersey, state officials told us that they planned to perform a program evaluation including children's outcomes after the program had matured. In Oklahoma, state officials told us that they did not

<sup>&</sup>lt;sup>24</sup>Officials in Georgia reported that the Department of Early Care and Learning was in the process of developing and piloting a standard assessment process for all prekindergarten children.

collect outcome data for all children in the state, but limited information regarding program outcomes was available in two school districts. For example, we found that one school district we visited in Oklahoma had collected and analyzed data on the outcomes of 22 children over a 1-year period, 11 of whom participated in the district's prekindergarten program.

Two Studies Provided Some Information about the Outcomes for Children Who Participated in State Prekindergarten Programs

Two recent studies provided some information on outcomes for children in two state prekindergarten programs. A study conducted by researchers at Georgetown University analyzed the short-term effects of prekindergarten on children in the Tulsa public schools and found positive effects of the Tulsa program. In particular, the study found that children who participated in the Tulsa prekindergarten program had higher scores on both cognitive knowledge and language measures, and on measures of motor skills, than did similar children who did not participate. Additionally, the Tulsa study found that impacts tended to be larger for African American and Hispanic children, and that there was little impact for white children, although the authors discussed certain ceiling effects that may have made it difficult to detect any impacts for white children as a whole.<sup>25</sup> The study also found that children who qualified for the full free lunch program showed greater benefits than the population as a whole, and benefits were larger for children from low-income families who participated in full-day programs than those participating in half-day programs.

The second study, sponsored in part by the Georgia Department of Early Care and Learning and conducted by Georgia State University, also found progress among children who participated in the Georgia prekindergarten program during the 2001-02 school year. The study compared the progress of children in three early education settings: private preschool, Georgia's state prekindergarten program, and Head Start. <sup>26</sup> Children participating in the three programs performed at different levels upon entering the programs. The study reported that at the beginning of prekindergarten, children enrolled in Head Start demonstrated less mastery of certain skills than did children in the Georgia prekindergarten program, who, in turn,

<sup>&</sup>lt;sup>25</sup>Ceiling effects can occur when children pretest at or near the highest possible score on a given assessment. In such cases, if the same assessment is used as a post-test, it is difficult to measure any gains children have made.

<sup>&</sup>lt;sup>26</sup>The study did not include a comparison group of children who did not attend any preschool program.

scored lower than children in private preschools. The study found that children in all three programs made significant gains over the course of 1 year, though in general, the gains made by the prekindergarten children were not significantly different from the gains made by the other two groups of children. By the end of prekindergarten, or at the beginning of the kindergarten year, the relative rankings of the children from the different programs had not changed. The researchers also matched children with similar backgrounds to compare the effectiveness of Head Start and Georgia's state prekindergarten program. When comparing the language, communication, problem-solving, and basic mastery skill scores for the matched samples of children, researchers noted one case—basic skill mastery—in which the gap between scores of the state prekindergarten children and the Head Start children widened to a statistically significant level at the end of the prekindergarten year.

## Concluding Observations

Citing benefits of prekindergarten, many states have made an investment in the early education of young children, especially four-year-olds. Georgia, New Jersey, New York, and Oklahoma have taken steps to expand early educational opportunities for preschoolers. These four states offer different approaches for consideration by other states that are considering whether to expand the scope of their prekindergarten programs. Given that states have limited resources, an opportunity exists to engage community-based providers such as Head Start grantees and other early education and care providers in the coordinated delivery of additional prekindergarten services. Collaborations between school districts and community-based organizations facilitate the coordination of child care and early learning for preschoolers and can provide additional classroom capacity. At the same time, these partnerships can help allay fears among child care providers that prekindergarten programs would supplant the need for community-based services.

It is also important to acknowledge the trade-offs of certain program features. For example, while programs with limited hours may accommodate a higher number of children within the same facility and may be less likely to affect existing child care providers, they may create barriers to participation for children of working families and show smaller effects in school readiness of children. Also, prekindergarten programs may benefit by collaborating with existing programs to maximize the efficient use of limited state and federal education resources. However, such arrangements may make it necessary for states and school districts to invest resources to facilitate such coordination. Perhaps the biggest trade-off that states face is whether the benefits of an expanded

prekindergarten program outweigh those of one that is more targeted. Targeted programs have the advantage of giving more intensive services to eligible children who may benefit most from prekindergarten, but such programs exclude some children who might also benefit. Additional information on outcomes for children in the most intensive programs, particularly relative to children who do not receive comparable services, may be helpful to other states considering varied types of prekindergarten services, as would data on the benefits of half-day programs relative to full-day programs.

## **Agency Comments**

The Departments of Health and Human Services and Education were provided a draft of this report for review and comment. The Department of Health and Human Services commented that given the discussions surrounding the "state option" proposals being held during Head Start reauthorization, our report is informative. Education's Executive Secretariat stated that the department appreciated the opportunity to review the draft but was not going to provide agency comments. Both agencies provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the Secretary of Health and Human Services, the Secretary of Education, relevant congressional committees, and other interested parties. Please contact me on (202) 512-7215 if you or your staff have any questions about this report. In addition, the report will be available at no charge on GAO's Web site at http://www.gao.gov. Other GAO contacts and staff acknowledgments are listed in appendix III.

Marnie S. Shaul, Director Education, Workforce,

and Income Security Issues

## Appendix I: Scope and Methodology

In conducting our review, we obtained and analyzed information from the federal Departments of Education and Health and Human Services, state agencies, and local education agencies (LEA). We visited four states, and in each state we interviewed staff from state agencies and LEAs, and generally included one urban, one suburban, and one rural school district in each state—for a total of 12 school districts. We also interviewed early childhood education and child care policy experts and reviewed selected current literature on state-sponsored prekindergarten programs.

For our fieldwork, we considered states that (1) had expanded programs and aimed to serve all children whose families wanted them to attend, (2) served large numbers of children in their prekindergarten programs, and (3) had well-established programs. We attempted to include varied program models and gave some priority to states that had studied their efforts.

To determine how states designed their prekindergarten programs, we interviewed state and local education officials and officials of 13 community-based organizations who were direct providers of state prekindergarten services. We also reviewed documents related to states' prekindergarten programs, including state laws, general program information, state data on program participation and costs, curriculum guides, content standards, and contracts governing collaborations with community-based organizations. We obtained information to describe the state-sponsored prekindergarten programs and reviewed the data for reasonableness. We assessed reliability of specific information, including estimates of age-eligible children and program expenditures, by interviewing state officials in all four states about their data reliability assessment processes. On the basis of this information, we concluded that the data were sufficiently reliable for the purposes of this report. In addition, we performed a detailed review of the methodology of a National Institute for Early Education Research report and found it to be sufficient for descriptive purposes. The data that were used for background purposes were not independently verified.

To determine the potential implications of prekindergarten on other programs that serve four-year-olds, we interviewed state child care

<sup>&</sup>lt;sup>1</sup>In New Jersey, New York, and Oklahoma, we collected information and interviewed officials from the state education agencies (SEA); in Georgia, we collected information and interviewed officials from the Department of Early Care and Learning, which administered the prekindergarten program.

administrators, state and local Head Start association directors, coordinators and program staff, as well as staff of local child care centers. We also met with national and state representatives of the National Child Care Association (an association of managers and owners of child care centers) and related organizations, as well as state and local staff of child care resource and referral offices. We also reviewed selected national and state data on child care availability and prices. Finally, we interviewed state officials regarding federal funds, including Title I of the Elementary and Secondary Education Act, Temporary Assistance for Needy Families, Individuals with Disabilities Education Act, and the Child Care and Development Block Grant. We did not review the expenses of providers of state prekindergarten services to ascertain the extent, if any, to which federal funds or other revenues may have subsidized provision of prekindergarten.

To determine what is known about the impacts of prekindergarten programs on children and families in the states visited, we interviewed state and local education officials and local policy experts. We also identified two studies on children's outcomes that met our selection criteria: studies that (1) analyzed student achievement and (2) compared prekindergarten children with a control or comparison group of children who did not attend the state-sponsored prekindergarten programs.<sup>2</sup> To collect information systematically, we developed a data collection instrument and examined each study to assess the adequacy of the samples and measures employed, the reasonableness and rigor of the statistical techniques used to analyze them, and the validity of the results and conclusions that were drawn from the analyses. A social scientist read and coded the documentation for each study. A second social scientist reviewed each completed data collection instrument and the relevant documentation to verify the accuracy of every coded item. We found these two studies to be sufficiently reliable and rigorous to include in our report.

<sup>&</sup>lt;sup>2</sup>We identified a third study, the Rochester Early Childhood Assessment Partnership 2002-2003 Annual Report, but did not review the study because it did not include comparison groups and thus could not isolate the potential effects of New York's universal prekindergarten program on the children who attended.

Appendix I: Scope and Methodology

We did not identify any studies that assessed the impact of these prekindergarten programs on working families such as workforce participation.

We conducted our work between October 2003 and August 2004 in accordance with generally accepted government auditing standards.

# Appendix II: GAO Contacts and Staff Acknowledgments

GAO Contacts	Betty Ward-Zukerman, (202) 512-2732, WardZukermanB@gao.gov, or Tim Hall, (202) 512-7192, hallt@gao.gov
Staff Acknowledgments	The following people also made important contributions to this report: Nagla'a El-Hodiri, Shana Wallace, Alison Martin, Jean McSween, Barbara Hills, Susan Bernstein, Amy Buck, and Daniel Schwimer.

## Related GAO Products

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Title I Preschool Education: More Children Served, but Gauging Effect on School Readiness Difficult. GAO-00-171. Washington, D.C.: September 20, 2000.

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