

Diversity and Directions in State Pre-kindergarten Programs



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Abstract

THE POTENTIAL EFFICACY of high quality pre-kindergarten (pre-k) programs for improving children's school readiness has led many states to consider sponsoring pre-k programs under the auspices of public education. In deciding to implement pre-k programs, states are faced with policy issues related to program finances, eligibility, and location. Once committed to offering pre-k, states must also decide program standards especially with regard to ratios and group size, teaching staff, curriculum, and program duration. This report summarizes results of a survey of state pre-k programs, addresses policy and program choices, and provides a picture of the exceptionally diverse nature of state-funded pre-kindergarten.

Diversity and Directions in State Pre-kindergarten Programs

PUBLIC SCHOOLS in the U.S. are expanding their involvement in the education of children less than 5 years of age. Currently, the majority of the states offer some form of pre-kindergarten programming, principally for 3- and 4-year olds, although these programs are all relatively new and most states serve only a small fraction of the population of eligible children. The first early education programs in America were not part of the public school system. Beginning in the mid-1800s, children aged 3-6 were served in private “kindergartens” based on Friedrich Froebel’s philosophy. The first public school kindergarten was opened in St. Louis in 1873 and by the early 1900s many states and communities had incorporated the last year of kindergarten—the 5-year-old year—as a transition year to formal education in public schools (Ross, 1976). Now, states are concerned about 3- and 4-year olds.

As 5-year-olds were incorporated into public school kindergartens (although kindergarten is not yet offered statewide in 9 states), a wide array of private services developed to care for children under the age of 5, before they entered school. It is still true that most families who want pre-school services for 3- and 4-year-olds arrange for them in the private marketplace of preschool or child care, or if they are low-income, in Head Start. The type and quality of these early childhood programs vary considerably (CQO Study Team, 1995) and the costs often consume a significant portion of a family’s disposable income, particularly for working class families (Helburn & Bergmann, 2002). In the last two decades, public schools have gradually become more involved in the education of this age group. In fact, a recent national survey of kindergarten teachers indicated that nearly half of public elementary schools now house a program for children younger than age 5 (Pianta & Cox, 2002).

Pre-k and public education. The prospect of improving the school readiness of at-risk children lies at the heart of most state efforts in early childhood education. Public pre-k programs

that are school related often supplement existing federally funded programs, such as Title 1 and Individuals with Disabilities Education Act (IDEA) programs. Many schools use some or all of their Title 1 funds, targeted to help children at risk for school failure, to operate pre-k classes. School systems are required by law to provide free, appropriate, public education to preschool-aged children with disabilities. In addition, many school systems are the delegate agency for Head Start and thus operate classes for 3- and 4-year children from low-income families. With federal funds not meeting the entire need, the addition of state funds to these existing programs was the next logical step for many states. Establishing entirely new pre-k programs has been another option chosen by other states.

Whether federally or state-funded, pre-k programs are found in school buildings and in non-school settings. Often, the funds for pre-k classes come through the state department of education, but some of the classrooms are housed in community based early learning centers. Generally, the state department of education imposes some standards on these classrooms that are more rigorous than the state's childcare regulations.

Reliable estimates of the number of children served in pre-k classes funded by the states are hard to obtain because many programs have multiple funding streams and services are provided in a variety of venues in addition to public schools. Obtaining counts that are meaningful across states is challenging because states use different definitions of "pre-k." Using the variety of data sources available in 1998, Clifford, Early, and Hills (1999) estimated that nearly a million pre-k children were in programs physically located in a school building. These programs included Head Start, Title 1, programs for children with disabilities, and local and state pre-k initiatives. Assuming most of these children were 4 years old, one in seven 4-year-olds attended a school-based early education program in the mid-1990s. Children served in public pre-k programs not housed in schools were not included in this estimate.

In the definition of “state-funded pre-kindergarten” used in the present study, we include classroom based pre-k programs for 3- and 4-year-olds that receive state funding and are linked in some way to the education system, including programs administered by public schools or community agencies and housed in schools or community buildings. As noted above, the blending of funds to support school-related pre-k programs results in databases that cannot be used to determine accurately how many children are being served in which types of settings.

Although many states are already implementing pre-k programs, some states’ programs are still on the drawing boards and others are in a pilot phase and planning for expansion. States that are further along in development of pre-k programs have encountered numerous challenges, including questions about eligibility, administrative arrangements, and costs. Before states can begin serving children, they must also address questions related to standards for curriculum and staffing, length of the school day and year, and the range of services to be offered to augment the educational activities. For states that have moved from program development to implementation and expansion, these decisions were made with little external guidance or empirical data on which to base decisions. States that are in the early phases of pre-k program development may benefit from the study of the decisions made by states with more mature programs.

To facilitate policy-related discussions and decisions across states, this report presents information from a 50-state survey conducted in the year 2000 to summarize the progress of states toward expanding pre-k programs related to public schools and describe variations in policy-level decisions across states. In doing so, it not only describes the nation’s status with respect to serving 3- and 4-year-olds in public pre-kindergarten, but also summarizes the ways states have addressed key policy issues in the implementation of state-funded pre-k. In the sections below, we delineate several of these policy issues.

Policy Decisions: Eligibility, Access, Location, and Finances

Eligibility: Targeted vs. Universal. When children enter kindergarten, substantial differences already exist in children's skills based on race and ethnicity, factors strongly associated with poverty (Lee & Burkam, 2002). Preschool programs often arise as a response of school districts to the needs of economically disadvantaged and children of immigrants who enter school with limited competence in the English language. High quality pre-k programs are expected to ameliorate SES-related deficits for children and may smooth the transition to fluency in English for children who are non-native English speakers. A variety of other risk factors may be used by states as criteria for enrollment in pre-k programs.

Universal pre-k, offered regardless of a family's income, is an alternative to a targeted program. Universal can be either statewide or within districts that choose to offer pre-k. Whether the population served is universal or targeted is a major factor in overall costs, but also could be important in the acceptance of and willingness to support the program by parents and taxpayers (Raden, 1999). In addition, the nature of the program might vary depending on whether it serves mainly high-risk children or children with disabilities or whether the program blends a variety of children into the classrooms. Issues of racial and class segregation may also be important in decisions regarding the extent to which the program serves all children in a defined age range.

Ages served. Related to the question of eligibility criteria is the issue of which age groups should be offered public school sponsored pre-k programs. Most of the discussion centers around age 4 with some states considering extension down to age 3. Intuition would suggest that 2 years of pre-k might be more effective than 1 year for children of low-income families, but the largest study of this issue found that, although 2 years consistently yielded effects of greater magnitude, they were not significantly or meaningfully greater (Reynolds, 1995). Still other proponents of

continuous early education would argue for children birth to 5 being included in school-sponsored programs (Dryfoos, 1994; Zigler & Finn-Stevenson, 1996).

Location. Two types of policy decisions concern the location of pre-k programs. First, the administrative home for an early childhood pre-k program could be housed within human service or education departments at the state level or even in another specially created department. The decision about administrative home for pre-kindergarten may well be a factor in its success. The rationale for the human services option is to co-locate and thus better coordinate the state's pre-k program with welfare, health, and other programs intended to address the needs of the poor. Alternatively, placing pre-k within the state department of education would place a greater focus on the educational goals of pre-k, articulate early childhood and elementary school programs, and perhaps facilitate the transition of young children into schools.

The second question of location is about the physical home of the pre-kindergarten classes within communities--public school buildings, community-based child care programs, or Head Start. The physical location of state supported pre-k classes is likely to influence the integration of pre-kindergarten with the existing local early childhood programs as well as with kindergarten. It may also be a factor in the quality of the experiences provided to the children. Yet little is known about the distribution of the physical locations of the growing state pre-kindergarten initiatives.

Finances. Estimates of cost per child are imprecise because so many different sources of funding are used for pre-k and decisions are often made locally. Policymakers do not know the real costs of different ways of providing pre-k. In addition, courts have become involved in pre-k in at least 3 states (AR, NC, NJ), where pre-k services have been ordered for disadvantaged or at-risk youngsters to provide them with a more equitable chance of succeeding in school.

Financing is an especially critical issue for these 3 states, as they determine how best to respond to the courts' orders and how much money will be needed.

The questions of which populations to serve and how to finance the programs are closely linked to one another. The broader the reach in regard to access, the more daunting the challenge of financing the programs. Policymakers appreciate implicitly the tradeoffs between the two. Cost concerns may dictate a more restrictive eligibility and access. However, expanding access and eligibility has some benefits. Given the widespread need of working families for out-of-home care for children under 5, expanded access to pre-k for children who are not at risk increases the constituency who could help sustain support for the use of public funds for pre-k programs.

Program Standards and Design: Curriculum, Staffing, Duration and Services

States beginning to implement pre-k programs must address several design issues including curriculum, staffing, and duration of services.

Curriculum. Research in early childhood provides no definitive evidence favoring one particular curriculum over another (Bailey, 1997). In fact, in the fall of 2002, the U.S. Department of Education funded seven randomized studies to examine this very issue. In a previous longitudinal study, three curricula (High/Scope, Distar, and a traditional preschool model) had equal effects on preschoolers' later school achievement, although children in the Distar program had more problems with delinquency (Schweinhart & Weikart, 1997). Another study showed that children in a "child-initiated" pre-k program demonstrated greater attainment of basic skills than those in a "teacher-directed" or "in-between" model (Marcon, 1992). A tension seems to exist between proponents of "academically oriented" programs and programs where children learn through play. Most early childhood experts think that a program can be

both, but we lack evidence from which to draw such a conclusion. How then are states making curricular decisions and what decisions have they made?

Staffing. A case study of 8 states implementing state-supported pre-k indicated that staffing was a significant concern (Gallagher, Clayton, Heinemeier, 2001). Many states are understaffed at all grade levels, particularly pre-k, and many are allowing current or new staff without complete pre-k credentials to teach on a temporary or long-term basis. Extensive studies in the early childhood literature show that teacher education is highly related to classroom quality (Burchinal, Cryer, Clifford, & Howes, 2002; Dunn, 1993; Kontos, Hsu, & Dunn, 1994; NICHD, 1996) and that classroom quality is related to children's cognitive, language, and social outcomes (e.g., Bryant, Burchinal, Lau, & Sparling, 1994; Burchinal, Cryer, Clifford, & Howes, 2002; Dunn, 1993; NICHD ECCRN, 1998, 2000; Peisner-Feinberg et al., 2001). What teacher educational standards are states adopting for pre-k and, in light of the hiring crisis in education, how frequently are exemptions allowed? These same questions apply to the credentials and characteristics of assistant teachers in pre-k classrooms.

States must also make other important policy decisions about the allowable ratio of children to adults and the maximum group size. These decisions also affect staffing. The earliest comprehensive study of child care, the National Day Care Study, concluded that group size was a more important predictor of quality than teacher-child ratio (Ruopp, Travers, Glantz, & Coelen, 1979), although later results have not been consistent. Howes and Rubenstein (1985) found that ratio did predict caregiver and child behaviors in center-based care, and Holloway and Reichhart-Erickson (1988) found that better ratios were associated with less solitary play time of children. Decisions about ratios and group size will also affect the costs of the program as well as the quality.

Program duration. States implementing pre-k must decide whether to offer it for half-day or full-day, and whether to operate during the summer, again with little research evidence to guide their decisions. The decisions states are making regarding pre-k likely reflect the decisions they have already made about kindergarten. As of 2002, 39 states mandate that districts offer at least a half-day of kindergarten and 9 states require full-day (meaning a normal school day of about 6 hours). Thirteen states require children to attend kindergarten (Education Commission of the States, 2002). Regardless of state law, many districts have begun offering full-day kindergarten to meet the demands of parents and the needs of children.

State and federal policymakers clearly could benefit from better information about the state-funded school-related pre-k programs that currently exist. Educational policymakers in the states that do not yet have state-funded pre-k can learn a great deal from the experiences of those who are already involved, yet a thorough review of the states is challenging. There are no federal requirements for states to collect data on state funded pre-k programs and state efforts to maintain such data are sporadic at best. No national entity is responsible for collecting or reporting pre-k data across the 50 states. Previous efforts have documented state pre-k initiatives (Kauthen, Knitzer, & Ripple, 2000; Mitchell, Ripple, & Chanana, 1998; Ripple, Gilliam, Chanana, & Zigler, 1999; Schulman, Blank, & Ewen, 1999), but accelerations in state investments in pre-k and frequently evolving state standards render such reports outdated in a short period of time. In addition, each of these previous studies used broader definitions of pre-k than the present study, including a variety of state-funded early intervention programs in their surveys. The present study focuses on classroom-based programs that are linked to education.

Given the value for states of up-to-date information about school-related pre-k programs, a survey of state programs was undertaken in 2000-2001. The survey covered basic program information on the policy and program design issues discussed above from all 50 states. We

attempted to gain information about as many components of the conceptual model as could be provided via interview. Different than some recent reports that have included a broad range of programs for preschoolers, the purpose of this study was to learn about *public school involvement* in education for pre-kindergarten children (not pre-k more broadly construed) to try to understand the breadth and extent of schools' emerging role in early childhood education.

Method

Sample

Over 125 respondents were interviewed between August 2000 and March 2001. In each state and the District of Columbia, the primary contact was the early childhood specialist in the state education agency. To obtain complete data, in most states we spoke to at least one other person and in many cases two or three other individuals, including Head Start State Collaboration Coordinators, special education program officers, and state coordinators for Even Start and Title 1. Repeated contacts were made with many states and ultimately the dataset included information about pre-kindergarten in 50 states. (The District of Columbia has a pre-k program, but did not respond to the survey.)

Interview

The interview included questions about each kind of school-related program serving 3- and 4-year old children—state funded pre-k in both schools and community settings, federally funded Head Start, state-funded Head Start, Title 1, Even Start, programs for children with special needs, and other state-specific programs. This paper focuses only on the data for the state education-related pre-k programs, not the federally funded programs. The interview questions concerned the overall funding for programs, number of children served, and several standards, such as teacher/child ratios, teacher education, and curriculum requirements. A group of early childhood specialists in state departments of education reviewed the questions before we pilot tested them in five states. We then revised the interview slightly and began contacting potential respondents during the 2000-2001 school year. When possible, data were collected for the current year; however, the majority of states could only provide information about the previous school year. We include in this paper the most up-to-date data reported to us.

Procedures

We mailed each state specialist a letter requesting their participation in a phone interview and also included a copy of the interview questions. We scheduled a phone interview at their convenience and sometimes needed to schedule two or three additional calls to allow time for respondents to find needed information or contact other individuals who might have the information. In many cases, the primary respondent referred us to additional respondents. Two experienced research associates conducted the interviews. They met regularly to discuss data collection complications that arose in the phone interviews, and applied similar “call-back” rules to increase the completeness of the data.

To ensure content validity, interviewers provided each respondent with a summary of their responses and allowed respondents an opportunity to review and correct the summary for their state. Once respondents validated the data from their state, we created state profiles and placed them on a private website that only respondents and project staff could access. After viewing their responses in the context of other states’ responses, some respondents were spurred to make additions or corrections.

Results

In 2000-2001, 34 states and the District of Columbia operated a state-funded pre-kindergarten program. Sixteen states reported no state-funded pre-kindergarten program in 2000 (AK, HI, ID, IN, MS, MT, NH, NV, NM, NC, ND, PA, RI, SD, UT, and WY). Results will first be presented concerning the population and funding of the programs, followed by information on the standards these states have adopted.

Population and Funding of States’ Pre-kindergarten Programs

Ages served. The age of children served in state-funded pre-k varied across states (see Table 1). Eleven states served only 4-year-olds in their year before eligibility for kindergarten,

while 15 states served 3- and 4-year olds, generally with a larger proportion of 4s. Two states (AZ and AR) had state-funded pre-kindergarten programs that served children of all ages under 6, although in both states, the number of children receiving services was small. Four states (MN, NJ, NY, and OH) served large numbers of children through two different programs, one for 4-year-olds and one serving 3s and 4s.

Eligibility. The majority of programs (n = 27 or 79%) focused on children identified as at-risk for learning problems, although “at-risk” was defined differently across states and even within states. The most common criteria were low socioeconomic status of the family, typically determined by the child’s eligibility for free or reduced-price lunch (< 185% of federal definition of poverty for reduced-price lunch and < 135% of poverty for free lunch). However, a wide range of other thresholds were used to define poverty, from 110% of the federal poverty level in Washington to as high as 225% in Vermont. California and Massachusetts used a poverty level that was a percentage of the state median income. Some states targeted children from poor families but allowed local districts to set different thresholds (AL, CO, FL, WV).

In addition to poverty, over half of the states (n = 20) used other risk criteria to prioritize the enrollment of children. These criteria often included children who were born at low birth weight, children with limited English proficiency, children whose parents had limited education and/or documented drug and alcohol abuse. Several states (e.g., CO, MD, MO, SC, VA, WV) allowed districts to define “at-risk.”

Universal eligibility for pre-kindergarten was the policy of Georgia, New York and Oklahoma. Other states including Maine, Minnesota, and Wisconsin did not offer statewide universal pre-kindergarten, but local school districts that offered pre-kindergarten were urged to offer it universally. In New Jersey, universal access was mandated within the poorest (Abbott) districts, but not statewide.

Numbers of children served. It appears that over 740,000 children were being served in state-funded pre-kindergarten programs at the time of this survey (about 8% of the U.S. population of 3- and 4-year-olds). This is a conservative estimate because several respondents could report enrollment only from the previous year or noted that their report was a conservative estimate. In addition, we did not obtain a response from the District of Columbia, which is reported elsewhere to serve over 4,000 children (Education Week, 2001). Most states that served both 3s and 4s could not report enrollment separately by age, so the 740,000 estimate includes children of both ages served in these programs and a small number of even younger children in at least 2 states (AR & AZ). It should be noted that this is the approximate total number of children in state-funded pre-k programs around the year 2000, excluding children funded by federal or local dollars.

Among those states that just served 4-year-olds or could report 4s separately, the percentage of 4s in the state who were enrolled in the state's pre-k program ranged from a low of less than 1% in Alabama and Nebraska to a high of 56% in Georgia. The many question marks in this column in Table 1 indicate that we could not confidently calculate the proportion of the state's 4-year-olds enrolled in pre-k because the states were unable to give us reliable estimates of children served by age of child. Among the states where we could calculate it, 7 states served less than 10% of their 4-year-olds, 8 states served between 11-20%, and 3 states served between 21-30%. Texas, Oklahoma, and Georgia served 39%, 52% and 56%, respectively. (Again, one should keep in mind that these figures do not include children in federally funded Head Start or Title 1 programs.)

Administrative home. The majority of these programs were housed in state departments of education (n = 32), which was expected, given the definition of education related, public pre-k used in this study. In Alabama and Georgia, the state pre-k program was housed in a specially

created office connected to the governor's office. In the state of Washington, the statewide pre-k program was housed in the Department of Community, Trade, and Economic Development. While no state administered pre-k in a health and human service department, many states' programs work collaboratively with other state agencies serving young children.

Physical location in the community. The majority of states with pre-kindergarten allowed classes to be conducted in a wide variety of settings including schools, community child care centers (both for-profit and non-profit), and Head Start. Seven states (KS, LA, ME, MD, OK, SC, & WV) restrict the classes to public schools or have very few exceptions. In these states, the range of children served was from 4% to 52%. Four other states (e.g. AR, MI, MN, WI) served greater than 80% of the participants in schools although other community pre-k sites were allowed. Six states (CO, MA, TN, VA, VT, & WA) reported serving from 50-70% of the children in schools. A broad mix of school-based and community programs characterized most other states. For example, Georgia and New York both estimated about 60% of their pre-k classes were located in community settings other than schools, although precise statewide numbers could not be reported.

Elsewhere it has been reported that 24 states invest some state funds in Head Start (Schulman, Blank, & Ewen, 1999), although these programs are not necessarily linked to schools and are generally much smaller in scope than the state-funded pre-k program. Ohio, however, has chosen to invest the majority of its state pre-kindergarten funds into Head Start rather than start a large separate pre-k program statewide. In 1999 Ohio served over 22,000 preschoolers in Head Start with state dollars, almost equal in number to those served by federal Head Start funds in the state. Almost all of Ohio's Head Start programs received both state and federal funds. The program regulations were the same for the two funding sources. No other state has chosen this model of funding for the majority of their state-funded pre-k children.

State expenditures per child. We calculated state expenditures per pre-k child by dividing the amount of state dollars spent on the program by the number of children reported to be served. State expenditures ranged from \$209 per child in Minnesota to \$14,688 per child in New Jersey, averaging \$2,978 per child per year. Ignoring these 2 extreme outliers, the range was from \$1,294 in Texas to \$6,978 in Oregon, averaging \$2,809 per child per year.

State funding per child for pre-k was lower than for K-12 children (see Table 1). For the 34 states with pre-k, the range for K-12 education was from \$624 to \$6,430 per child from state revenue, with an average of \$3,800 per child (US DOE, 2001). Twenty of the states spent less per pre-k child than for a K-12 child. Of these, 7 states (AR, IA, KS, ME, SC, TX, & VT) spent a great deal less (< 50%/child) from state funds than for a K-12 child. It should be noted that all but one of these 7 states served children for less than or equal to 3 hours per day. Eleven states spent more state dollars for pre-k children than for K-12 children (AL, AZ, CT, IL, MA, MO, NJ, NY, OR, TN, & VA). Georgia spent almost the same.

Since none of the per child figures reported above, neither pre-k or K-12, included local or federal contributions to the pre-k or K-12 budgets, these figures provide information only on the state commitment to the pre-k programs. It is impossible from this information to determine the full cost of operating pre-k programs. We do, however, know that **total** per child expenditures from **all** sources for K-12 education (federal, state, and local) was from \$4,210 (Utah) to \$10,145 (New Jersey), averaging \$6,508 (US DOE, 2001). Since the state expenditure per child for K-12 is approximately 58% of total expenditures per child for K-12, we would expect that total expenditures for pre-k are similarly underestimated.

State Pre-k Program Standards

Most states attempted to ensure minimal standards of health and safety in their pre-k program but others have set much higher standards. Standards include program duration, adult-

child ratios, group size, teacher qualifications, and whether a curriculum or national certification is required. This information is summarized in Table 2.

Program duration. The majority of state-funded pre-k programs (59%) required services to be offered for 2.5 to 4 hours per day. Fifty percent of states required that classes be held 5 days a week for 9-10 months per year. Seven southern states (AL, AR, FL, GA, LA, TN, & VA) were the only ones to offer 6-hour school-like days. In New Jersey, Abbott pre-kindergartens operated 10 hours a day all year, although pre-k classes in non-Abbott districts operated 3 hours/day. A few states had no requirements on these dimensions and allowed local decisions.

Ratio and group size. The National Association for the Education of Young Children recommends an adult:child ratio of 2:20 for 4-year-olds (Bredekamp & Copple, 1997). Half of the states that offered pre-k met this standard; 4 states had set a 1:9 ratio; and 7 states used 1:8. Washington's maximum ratio was 1:6. Six states had not set standards for ratios. As for maximum group size, 20 was the maximum in 13 states (38%); 17 or 18 in 5 states (15%), and 15 or 16 in 4 states (12%). California allowed groups of up to 24 pre-kindergartners. Ten states had set no standards in regard to maximum size, probably counting on the maximum ratio to set, in effect, the group size limit. Six states (AZ, KS, ME, TX, WV, & WI) had no state requirements concerning ratio or class size.

Teacher qualifications. Across state pre-k programs, the teacher education requirements varied from a Bachelor's degree (BA) with teacher certification to an Associates degree (AA) or other 2-year degree to a Child Development Associate (CDA) certificate. Twenty-two states (65%) required a pre-kindergarten teacher to have a BA and most of these (77%) required an Early Childhood or Birth Through Kindergarten (B-K) certification. The minimum education required in eight states was a CDA (24%) and an AA in 4 states (9%). All of the states that allowed pre-k classes to be housed in school and community centers required a minimum of a

BA in programs operated in schools. Seven of these states allowed a lower level of education (either AA or CDA) in programs operated in community child care programs or Head Start centers.

A complicating factor is that many states offer waivers providing exemption from the teacher education requirements. It is impossible to tell from the survey the extent to which the states actually fulfill the stated requirement, but the data do provide important information on the expectations state programs have for services delivered.

Curriculum and accreditation. Most states do not have a standard curriculum. Alabama, Georgia, and Missouri require a curriculum to be selected from among an approved few, typically High/Scope, Creative Curriculum, Montessori, and Bank Street or to apply for approval of any other curricula. Two additional states (IL and TN) call for state approval of the locally selected curriculum. Several states have written guidelines for program content that could best be described as “developmentally appropriate practices” although do not technically comprise a curriculum. Eight states require that state-funded pre-k programs meet some national accreditation standards, typically the Head Start Performance Standards that are required for the state-funded Head Start programs or the program accreditation standards of the National Association for the Education of Young Children.

Supplemental services offered. Most states leave up to local choice the decisions about provision of comprehensive services for children and their families. Nutrition (meals) and health, provision of transportation, and family support services are often encouraged of programs, but the funding amount is not enough to cover services beyond the classroom. The state-funded Head Start models and any program adopting the Head Start Performance Standards do generally provide a wider array of services for children and their families.

Discussion

The information obtained through this study documents the remarkable variability across states in the way in which pre-kindergarten education is being implemented in the U.S. On every dimension we assessed, the range is considerable. All states that have pre-k programs serve 4-year-olds, but almost half also include 3s and some include even younger children. All states focus on children at-risk; even the 3 universal states place a special emphasis on enrolling at-risk children. However, the definitions of “risk” vary widely.

Most states serve small percentages of their 4-year-olds. Only Georgia, Minnesota, and Oklahoma have universal access and sufficient funding to serve large percentages of their 4-year-olds. States with targeted populations of children from low-income families or with other risk factors generally are serving small percentages of these children. New Jersey and Ohio seem to have dedicated sufficient funds to pre-k to serve most of their targeted population, although New Jersey did it under court order.

Most states fund programs in community centers and Head Start programs, taking advantage of existing resources and buildings. Few states restrict pre-k to school buildings but in several states, pre-k is very much associated with schools because of the high percentages of classes offered in schools. To receive state funding, certain program standards must be met in most states, but these requirements also vary widely. Adult-child ratios range from 1:6 to 1:10; group size from 15 to 24; teacher qualifications from a CDA credential to a BA with certification. In sum, large variations exist in the public pre-kindergarten experiences of children across the United States.

How did we arrive at this uneven non-system called “pre-k”? It appears that some of the states have adopted pre-k standards that are modifications of K-3 standards moved downwards for younger children, while the standards of other states seem to be child care standards that have

been made more stringent for pre-k. These two approaches perhaps reflect the different starting points of states as they made decisions to serve 4-year olds and possibly the impetus behind starting pre-k in the various states. Decision-makers in some states may have been trying to improve the child care system so that preschoolers' group care experiences better prepared the children for school. In other states, decision-makers may have begun their pre-k enterprise to be "school-like" but, due to lack of space, needed to house children in non-school buildings. Yet other states may have made decisions to include qualified preschool and Head Start programs in state funded pre-k so that existing systems of care would not be disrupted and might possibly be improved. Different philosophies may have led to different program models and standards.

What are the implications of such diversity in pre-k? Is it a problem to have such variety across the U.S. in the states' pre-k programs? We do not think that enough evidence exists currently to answer this question. Both education and child care are basically state responsibilities, although significant amounts of federal and local funds flow into the two systems. As the states experiment with different types of pre-k programs, it is possible that more characteristics will be seen in common. Only a handful of states currently serve more than 20% of their 4-year-olds in state-funded pre-k programs, so all states—even those with existing pre-k programs—will likely increase the size of the pre-k program over the next few years. As growth in these programs increases, practical experience will also increase and may bring about programmatic change. Documentation of the status of states' pre-k programs over time will be needed to chart and understand these trends.

The lack of a body of knowledge about the effectiveness of the different types of programs is a significant hindrance to policymakers as they continue to make decisions about pre-k. The potential influence of pre-k programs on children's kindergarten readiness has been a primary motivation for states to begin and expand these programs. Gilliam and Zigler (2000)

summarized evaluations of 13 of the state pre-k programs, finding modest support for positive effects of pre-k on children's cognitive development into the early school years, although most studies were of weak design. The within-state studies, however, did not answer more fine-grained questions such as: Should pre-k be a full school day (6.5 hours) or is a part-day program enough to help children be ready for school? Are 2 years of pre-k significantly more effective for children than 1 year? Does a Bachelor's level teacher provide a more optimal learning environment or can well-supervised Associate's degree teachers do the same? More within-state studies would be helpful, but cross-state studies might be especially useful.

With the increasingly strong emphasis from federal policy makers on literacy and preparation for academic success in school, the lack of knowledge about which, if any, curricula are more effective with 4-year-olds is a particular concern. Two agencies, the National Institute of Child Health and Human Development and the Office of Educational Research and Improvement, are funding two major consortia of studies, just underway, to help understand the impact of a formal pre-k curriculum on child progress.

Answers to some of these questions are especially pressing given the types of children prioritized into enrollment in state pre-k programs. Most programs target children from low-income families and, in many states, children who also have one or more additional risk factors for delayed development. Such children may especially need and benefit from a year or two of pre-k. The quality of their experiences may be even more important for their school readiness than for typical children from middle-income families. The Cost, Quality, and Outcomes study followed a wide range of children from their preschool years into second grade and found stronger positive effects of child care quality on children from more at-risk backgrounds (Peisner-Feinberg, et al., 2001).

We should also be concerned about educating at-risk pre-kindergartners in homogeneous classes. If the first school experiences of at-risk children are in classes where all their classmates are also at-risk, are the children socially prepared for a kindergarten that might be more integrated with children of all types and abilities? If all children in the pre-k are at-risk, the types of extra services that are required may be extensive (e.g., speech, language, and physical therapies). These are just some of the questions that need to be answered regarding the implementation of state-funded pre-k.

Limitations of the data. We need to be cautious about drawing conclusions from these survey data as respondents were not always confident in the numbers they reported to us. In fact, reporting whether a state even had a state-funded pre-k program was problematic for a few states because, as mentioned earlier, the definition of state pre-k varies from state to state and study to study. For example, Rhode Island reported to us that it does not have a program that meets our definition of “state-funded pre-k,” although Rhode Island’s Early Childhood Investment Trust fund was considered to be a state pre-k program in an earlier summary of state initiatives, probably because some of the funds are used for classroom-based programs (Schulman, Blank, & Ewen, 1999). This report also indicated that North Carolina spent about \$200 million on pre-k, but our knowledge of NC's program (Smart Start) is that only \$8 million was spent specifically on school related pre-k classes. Smart Start does not meet our definition of a state funded pre-k program. Such is the variability in these emerging initiatives.

In addition, just since our survey, Nevada and North Carolina have begun statewide pre-k initiatives and many states have expanded programs. Personal reports from the State Specialists indicate that Kansas and Alabama have more than doubled the numbers of children served; Massachusetts and West Virginia have added 50%; and Tennessee has quadrupled in number.

Texas has extended the length of the pre-k day. One wonders whether the states' budget problems in 2001-02 will result in a slower expansion of state pre-k than originally intended.

At the time of this survey, states invested over \$2 billion in education-related pre-kindergarten programs and served over 740,000 children. The per capita spending by the states ranged from less than \$1,000/child to greater than \$5,000/child in state funds. However, many caveats should be placed on the expenditure data. Financial data were problematic because several funding streams were blended to fund many pre-k programs and because state officials lacked information about the local and federal contribution to pre-k programs. We compared our data to those reported by the Children's Defense Fund in an examination of costs in a survey of states in 1999 (Schulman, Blank, & Ewen, 1999). Our data showed program growth in some states, status quo in other states, and wildly different numbers in 7 states. Consequently, we are cautious about these data, but we present them because cost is such a key factor in states' expansion of pre-k services, and we believe these data are as accurate as those reported elsewhere.

We thought that the length of the school day would be reflected in the state expenditure/child and to some extent this was true. States with part-day programs tended to report per-child state expenditures ranging from \$1,300 – \$3,000 per pre-k child whereas states with 6-hour school-day programs generally reported per-child expenditures in the \$3,000 – \$5,000 range. However, New York, Connecticut and Oregon, with half-day programs, spent from \$4,800 to \$7,000 per child, and Arkansas and Louisiana, with school-day programs, reported spending \$1,500 and \$2,500 per child, respectively. Clearly, a more in depth study of pre-k financing is warranted.

Summary

These data provide a picture of the diversity of public pre-kindergarten in America, especially the variety of ways in which it is being implemented across the states. However, the survey left many unanswered questions about pre-k: What is the distribution of quality and practices in typical state pre-k programs? Do relationships that are found in child care studies (i.e., higher teacher education positively associated with higher quality; and higher quality positively associated with better child outcomes) also hold true within public pre-k? And perhaps most important, what are the outcomes in kindergarten for children who attend these public pre-k programs?

In conclusion, the survey data indicate that states are still searching for the best design for operating pre-k programs. Few structural characteristics of programs are common across states. States are in a period of exploration of the best ways of providing this important service to young children and their families. But at the same time, there is a press for expansion of the programs in the hope that we will be able to address a multitude of issues in our education of youth in the US through this kind of effort. Will pre-k live up to its expectation to help us leave no child behind? Will all children come to kindergarten fully ready to take advantage of the K-12 education offered to all in this country? Will pre-k for at-risk children help to reduce or eliminate the gap in achievement for students from low SES backgrounds?

It is clear that states are investing large amounts of state tax dollars in these pre-k programs with the expectation that some or all of these goals will be met. State and local officials are striving to provide the best programs possible. Yet much still needs to be learned about exactly what is being provided in these programs and how decisions about structural features and classroom practices lead to programs that meet these high expectations.

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Table 1 (continued)

State	Year of Data	Name of Program	Ages Served	Risk Factors		Children			Funding		
				Poverty Criterion	Other Risk Factor Criteria	No. Served	% of State's 4-yr-olds Served	% Served in Schools	Total State \$ for Pre-K	State \$ per Pre-K Child	State \$ p K-12 Chi
MI	00-01	Michigan School Readiness Program	4	>50% are low inc.	2 of 20 at-risk factors	25,909	19%	85%	\$85,500,000	\$3,300	\$5,519
MN	98-99	School Readiness	3s/4s	Univ w/LI priority Universal	Some risk factors	49,832	?	“most”	\$10,395,000	\$209	\$4,563
	98-99	Early Childhood Family Education	3s/4s			19,555 fours 25,787 threes	?	?	\$40,000,000	\$882	
MO	00-01	Missouri Preschool Project	3s/4s	Local		2,166	?	?	\$11,047,229	\$5,100	\$2,678
NE	99-00	Early Childhood Projects	3s/4s	LI	Some risk factors	249	<1%	?	\$400,000	\$1,606	\$2,764
NJ	99-00	Early Childhood Program Aid (ECPA): Abbott	3s/4s	Universal w/in LI districts		19,179	~15%	44%	\$320,123,474	\$14,700	\$4,625
		ECPA: All other districts	4s			2,616	2%				
NY	00-01	Universal Pre-K and	4s	Priority to LI dists.; 80% LI		52,490 4s	21%		\$255,832,172	\$4,874	\$4,379
		Experimental Pre-K	3s/4s			19,300 mostly 4s	~7%		\$50,200,000	\$2,601	
OH	98-99	Public School Pre-School	4	<185%		7,694	5%	~75%	\$19,585,983	\$2,546	\$3,288
		State-funded Head Start	3s/4s	<125%		22,072	~14%	2%	\$91,142,148	\$4,129	
OK	00-01	Early Childhood Program for Four Year Olds	4	Universal		23,500	52%	100%	\$45,000,000	\$1,915	\$3,500
OR	99-00	Oregon Prekindergarten	3s/4s	LI		3,064	?	10%	\$21,374,189	\$6,978	\$4,233
SC	99-00	Child Development Programs for 4-Year-Olds	4	LI	Local risk factors	15,393	30%	100%	\$23,000,000	\$1,494	\$3,449
TN	99-00	Early Childhood Education Pilot Program	3s/4s	LI	Other risk indicators	670	?	61%	\$3,038,000	\$4,534	\$2,655
TX	99-00	Texas State Pre-Kindergarten Program	3s/4s	LI	ESL, homeless	15,037 3s 125,602 4s	5% of 3s 39% of 4s	?	\$182,700,000	\$1,294	\$2,756
VA	99-00	Virginia Preschool Initiative	4	LI	Local	5,865	6.4%	69%	\$31,670,200	\$5,400	\$2,514
VT	99-00	Early Education Initiative	3s/4s	<225%	AN, ESL	1,048	?	>50%	\$1,344,494	\$1,283	\$6,430
WA	00-01	Early Childhood Education and Assistance Program	3s/4s	<110%	10% slots, at-risk; 10% Native Am.	6,851	?	67%	\$30,053,699	\$4,387	\$4,669

Table 1 (continued)

State	Year of Data	Name of Program	Ages Served	Risk Factors		Children			Funding		
				Poverty Criterion	Other Risk Factor Criteria	No. Served	% of State's 4-yr-olds Served	% Served in Schools	Total State \$ for Pre-K	State \$ per Pre-K Child	State \$ p K-12 Chi
WV	00-01	Pre-kindergarten	local	Local	Local	3,881	?	100%	?	?	\$4,700
WI	99-00	Four-year-old Kindergarten	4	Universal in districts		~13,000	19%	93%	\$30,000,000	\$4,077	\$4,498

? = state not able to report these data; AN = abused/neglected; CPS = child protective services referrals; DAP = developmentally appropriate guidelines; DD =developmental disabilities; ESL = English second language; LBW = low birthweight; LE = low education of parent; LI = Low-income; psw = parents seeking work; smi = state median income; V = varies across district

Table 2
Structural Characteristics of States' Pre-kindergarten Programs

State	Minimum Duration of Program			Staffing and Content Standards					Services Offered		
	Hrs/Day	Days/Week	Length of Yr.	Max. Ratio	Max. Size	Min. Teacher Qualification	Curriculum	Standards	Meals	FSWs	Trans
AL	6.5	5	175 days	2:18	NR	AA in ec	Y: 6 approved	N	Y		Y
AZ	NR	NR	NR	NR	NR	CDA	N	National accreditat.	Y	Y	V
AR	5	3	9 mo.	1:10	20	BA in ec	N	"DAP"	Y	N	V
CA	4	5	9 mo.	1:8	24	24 credits in ec	N	N	Y	N	N
CO	10 hrs/wk		9 mo.	1:8	15	CDA	N	Push for NAEYC	V	V	V
CT	2.5	5	180 days	1:10		CDA	N	State standards	Y	V	V
DE	4	5	160 days or 32 wks.	1:10	20	CDA	N	Head Start Perform. Stands.	Y	Y	Most
FL	6	5	10 mo.	1:10	NR	CDA	N	N	Y	V	Y
GA	6.5	5	180 days	2:20	20	CDA now, AA in 01-02	Y: 5 approved	Stand. Learning goals	Y	V	V
IL	3	4 or 5	9 mo.	1:10	20	BA + ec certification	Y: approved	NAEYC consistent	Y	Y	V
IA	3	4	9 mo.	1:8	16	BA in schools; CDA elsewhere	N	Based on HS Perform. Stands.	Y	V	V
KS	2.5	V	186 days	NR	NR	BA + ec or elem. Certif.	N	N	Y	V	Y
KY	2.5	4	175 days	1:10	20	BA w/BK, K, or elem tchng certif	N	"DAP"	Y	V	Y
LA	6.5	5	9 mo.	2:20	NR	BA + cert.	N	N	Y	N	Y
ME	NR	NR	NR	NR	NR	BA	N	N	V	V	V
MD	2.5	5	10 mo.	1:10	20	BA + ec cert	Y: state developed	Y	Y	V	Y
MA	V	3-5	9-12 mo.	2:15 or 2:18	15	BA + cert in schools; CDA elsewhere	N	State guidelines	V	N	V
MI	2.5	4	30 wks.	1:8	18	BA + ec cert generally; AA or CDA in some comm.	N	State standards	Y	N	Y

Table 2 (continued)

State	Minimum Duration of Program					Staffing and Content Standards			Services Offered		
	Hrs/Day	Days/Week	Length of Yr.	Max. Ratio	Max. Size	Min. Teacher Qualification	Curriculum	Standards	Meals	FSWs	Trans
MN	SR: 4	2 or 3	9 mo.	1:10	20	BA + cert. in schools; less in Head Start BA + certif.	N	WSS	Y	V	Y
	ECFE: 2	1 day	9 mo.	4s: 2:20; 3s: 2:15	20		N	Local standards	N	V	N
MO	3-6.5	5	9 or 12	1:10	20	BA + certif in schools; AA or CDA elsewhere	Y: 3 approved	N	V	N	V
NE	4-6	5	9 mo.	1:10		BA + certif in ec	N	All are NAEYC	Y	V	Y
NJ	Abbott: 10	5	12 mo.	2:15	15	Both: BA + cert in schools; CDA in other sites	N	State standards	Y	V	Y
	Others: 3	5	180 days	2:25	25						
NY	UPK 2.5	5	180 days	2:18	20	Both: BA + elem or ec cert	N	Both: state standards	Y	V	V
	EPK 2.5	12 h/w	?	2:16	20		N		Y	Y	V
OH	Both Ohio programs: 448 hours/year			2:17	20	AA by 2008	N	State standards & HS Perf. St.	Y	V	Y
OK	2.5	5	175 days	1:10	20	BA + ec cert	N	DAP	Y	N	Y
OR	3.5	5	32 wks.	2:20 4s 2:17 3s	20	CDA	N	HS Perf. Standards	Y	Y	most
SC	2.5	5	9 mo.	2:20	20	BA + ec cert.	N	State standards	Y	V	Y
TN	5.5	5	180 days	1:10 4s 1:8 3s	20	BA in ec	Y: approved by state	NAEYC practices	Y	Y	V
TX	3	5	10 mo.	NR	NR	BA + ec endorsement	N	State guidelines	V	V	V
VA	6	5	180 days	1:9	18	CDA	N	N	Y	N	Y
VT	10 hrs/wk		32 wks.	1:10	18	BA in schools; AA or CDA in others, but lead teacher has BA	N	State framework and standards	N	N	V
WA	240 hours over 30 wks, one 4-hr-day/week minimum			1:6	18	AA in ec	N	DAP guidelines	Y	Y	V
WV	NR	NR	NR	NR	NR	BA + teaching cert.	N	N	N	N	Y
WI	2.5	4	175	NR	NR	BA + cert in ec or K	N	State guidelines	N	N	Y

? = state not able to report this information; ec = early childhood; cert = certification; DAP = developmentally appropriate practice guidelines; FSWs = family service workers; HS = Head Start; NR = no requirement; V = varies; WSS = Work Sampling System (Meisels)