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# Who Goes to Preschool and Why Does it Matter?

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In a world shaped by global competition, preschool education programs play an increasingly vital role in child development and school readiness. There is growing awareness that early learning's impacts persist across children's life spans, affecting educational achievement, adult earning and even crime and delinquency.

Preschool education is increasingly seen as a middleincome essential.<sup>1</sup> In 2005, two-thirds of 4-year-olds and more than 40 percent of 3-year-olds were enrolled in a preschool education program. This represents a substantial increase over earlier decades, particularly at age 4. The evidence indicates the increase in enrollment has not reached all segments of the population equally and there are variations in participation rates regionally within the U.S. This report seeks to identify these important differences and shed light on how income, education, ethnicity, family structure, maternal employment and geography relate to preschool education program participation.

#### What We Know:

- The preschool participation picture is complex and dynamic, with children attending a patchwork quilt of public and private programs.
- Long-term increases in pre-K participation owe as much to increased demand for education as increased demand for child care.
- Pre-K attendance rates remain highly unequal and many of those who might benefit most from pre-K participation do not attend.
- Targeted programs appear to have improved access to preschool education for children from lower-income families, but fall short of their intended goals.
- Families with modest incomes (under \$60,000) have the least access to preschool education.
- Existing data sources on preschool education do not provide an unduplicated count of participation by program.

#### Policy Recommendations:

- Federal and state programs will require expansion and greater coordination to finish the job of reaching disadvantaged children with high-quality preschool education.
- Strategies need to build upon and move beyond targeting to increase access to middle-income families who find it difficult to access high-quality pre-K.
- Policy initiatives should address regional imbalances in preschool education access.
- As access is increased, quality must be raised. Yet, there are limits to how fast the supply of good teachers and good facilities can be increased and policies may need to increase capacity gradually.
- Accurate data on participation by type of program, child's age and length of enrollment are needed. Coordination is needed among researchers, and local, state and federal agencies responsible for pre-K programs.

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# Long-Term Trend: Preschool Education is on the Increase

Preschool education program participation in the United States has increased steadily for many decades. Today, the vast majority of children spend time in a classroom before they enter kindergarten. In effect, many children attend "school" for one or even two years before they enter kindergarten. This represents a profound change in American education.

Over the past half century, the way America educates its young children has changed substantially. Data from the Current Population Survey (CPS) describe the enrollment of young children in "school" (as reported by parents) over 40 years. In 1965, only 60 percent of 5-year-olds were in school. This rose to 85 percent by 1980 and reached the low 90s by 2005. Participation of younger children was far lower in 1965, only 5 percent of 3-year-olds and 16 percent of 4-year-olds. These percentages increased rapidly through 1980 and have continued to increase since. In 2005, more than 40 percent of 3-yearolds and nearly 70 percent of 4-yearolds attended "school" according to the CPS. The trends over time are



displayed in Figure 1.

For more than two decades the overwhelming majority of American children have begun school no later than age 5, and kindergarten is widely seen as the first year of school. Most public schools begin with kindergarten. The U.S. Bureau of the Census has documented this trend, but still classifies kindergarten as "preprimary education." Clearly, this is an anachronism. As shown in Figure 1, two-thirds of today's children begin school at age 4, though the vast majority do not attend public school.<sup>2</sup> At both 3 and 4, children attend a complex patchwork of public and private programs that go by a variety of names including: preschool, prekindergarten (pre-K), 4-year-old kindergarten (4K), Head Start, child care, day care, and nursery school. In this brief we use the term "preschool" or "pre-K" to represent educational, center-based programs.

The many names for programs young children attend reflect the diverse auspices and dual purposes of pre-K programs. The federal government provides Head Start to children in poverty. State and local education agencies offer preschool and prekindergarten programs. Private for-profit, nonprofit, and faith-based organizations operate programs under all of these names. These programs vary in the extent to which they are designed to meet: (1) the educational needs of young children and (2) the child care needs of parents. Thus, it cannot be assumed that either education or child care needs are adequately met just because a child is enrolled in *some* program.

Although pre-K programs can serve both education and care purposes well, they do not always do so. First, families vary in their child care needs and many families desire a good education for their child, but do not seek long hours of child care in a classroom setting. Some programs

specialize in serving children in these families. Second, the educational effectiveness and hours of a program both increase its costs. Thus, government agencies, private organizations, and families paying for preschool education programs may trade educational quality for hours of care when they need long hours of care. The extent to which programs emphasize education or hours of care is often reflected in program names. Programs called child care and day care generally are designed to meet the needs of working parents, providing as many as 10 hours per day and even offering weekend and evening hours in some cases. Preschool, prekindergarten and nursery school programs tend to emphasize their educational aspects and may offer each child as little as two to three hours per day, for two or three days a week. Head Start is a child development program that provides a broad range of services to meet the educational and other needs of young children in poverty and their families.

Despite these generalizations, program names are not a highly reliable guide to either educational effectiveness or hours of care. Nearly all classrooms for young children are considered to offer education by the providers and parents. Child care programs can deliver an effective education and provide long hours of care, given sufficient resources. Some state education agency preschool education programs operate up to 10 hours per day and many offer wraparound care to extend hours. Head Start programs can be part day or full-day and offer wrap-around care. Educational quality varies considerably under every name.<sup>3</sup> Unfortunately, true high quality is not the norm for the nation's preschool education programs. This report makes no attempt to differentiate program participation on the basis of quality.

Discussion of the dual purposes of pre-K programs raises the question of the extent to which one or the other has driven growth in participation. This question is answered in Figure 2. Over the past half century, preschool participation has increased at the same pace for children whether or not their mothers are employed outside the home. The primary source of growth is increased demand for the education of young children by all parents. As children with employed mothers are more likely to enroll in a pre-K classroom, the growth of maternal employment has played some role in increased participation rates, but child care demand is of secondary importance to education.





Source: Current Population Survey (CPS) October Supplement 1965-2005. Note: Some children enter kindergarten at age 6 and are not included here.





Source: Current Population Survey (CPS) October Supplement 1967-2005. Data for the following years have been interpolated: 1977–1981, 1983, 1984 and 1986.



#### **Recent Trends**

More detailed information about pre-K participation is provided by a data source for recent years. Beginning with 1991, the National Household Education Survey (NHES) obtained information on the education and child care experiences of young children and on the characteristics of these children and their families. The NHES provides a much more detailed picture of who attends preschool education programs than does the CPS. It describes participation in all types of classroom programs whether or not parents view them as "school" and in child care provided in other settings including family home day care and care in the child's own home. The NHES provides a basis for statistical analyses that seek to find the reasons some children attend preschool education programs while others do not. The NHES collected data on preschool children in 1991, 1993, 1995,

1999, 2001, and 2005. However, comparisons to the CPS indicate that while the NHES and CPS are consistent for 2005, the 1991 NHES finds much higher levels of preschool participation than the 1991 CPS. Why the two surveys differ is unclear.

Based on the NHES data, this brief reports on how preschool attendance varies with key characteristics of the children and family. These are age, ethnicity, income, parental education levels, parental labor force participation, and region of the country. For the most part, change is not rapid from one year to the next and patterns of pre-K participation within the population have changed slowly over the past decade. Thus, preschool education program participation is broken down for each child and family characteristic in graphs that compare only the years 1991 and 2005, focusing on change over that entire period.

#### **Our Data Sources**

Data sources employed to look at pre-K participation include the Current Population Survey (CPS), and the National Household Education Survey (NHES). Each source has unique advantages and limitations. Together, they enable us to develop a much more thorough understanding of trends and relationships than would be possible using just one of these sources. The CPS provides data back to 1965 but the NHES permits detailed statistical analyses of the relationships of family characteristics to preschool education participation from 1991 to 2005.

### Measuring the Changes in Participation

The NHES permits pre-K program participation to be defined in various ways. The definition employed in this brief includes any participation in a classroom whatever the name or expressed purposes attached to that classroom.4 Virtually all such programs are educational to some extent, and it is unclear that parents can effectively differentiate those that offer a sound education from those that are educationally ineffective. This is slightly broader than the "school" definition employed by the U.S. Bureau of the Census in both the CPS and the decennial census.

The definition of preschool education programs employed here *excludes* educational programs delivered to children only by home visitors and child care delivered in the child's home or another home. Our rationale for excluding these other arrangements is that they are different types of activities and are not generally found to be educationally effective.<sup>5</sup> We do report some analyses conducted using NHES data on participation in all types of non-parental child care for comparison purposes.

#### Age

The child's age is a powerful predictor of pre-K participation. As Figure 1 shows, children have been much more likely to attend pre-K at age 4 than at age 3, at least back to 1965. This remains true even with the higher levels of attendance achieved in the last decade. Polls reveal that Americans tend to believe that preschool education outside the home is more appropriate at age 4 than age 3. Data on participation in any kind of child care shows similar patterns indicating that Americans' preference for parental care alone is higher for 3s than 4s, but the size of the difference by age is smaller for all types of non-parental child care than for center-based preschool education.

According to the NHES, 69 percent of 4-year-olds and 43 percent of 3-year-olds were enrolled in some type of preschool education program in 2005 compared to 59 percent and 41 percent in 1991 (Figure 3).<sup>6</sup> For 4-year-olds, there was a shift in attendance toward longer days, especially from half-day to school-day pre-K programs, between 1991 and 2005.

As children with employed mothers are more likely to enroll in a pre-K classroom, the growth of maternal employment has played some role in increased participation rates, but child care demand is of secondary importance to education.





Source: NHES 1991 and 2005.

Definitions: Workday ( >35 hours), School Day (21–35 hours), Half-day (up to 20 hours)

#### Ethnicity

Figure 4 presents pre-K participation rates for 1991 and 2005 by ethnicity. African-American children have the highest pre-K participation rates among the three largest ethnic groups. White non-Hispanic children have participation rates that are somewhat below those of African-American children. The "other" category (which includes Asians and Native Americans) has the highest rates at age 4 and second-highest rate at age 3. Hispanic children have by far the lowest pre-K participation rates. From 1991 to 2005, participation rates increased for all ethnic groups. As Figure 4 shows, attendance patterns by ethnicity are similar for 3- and 4-year-olds when considered separately.

Differences among ethnic groups in pre-K attendance are not necessarilv due to cultural differences in attitudes toward preschool education programs. Ethnic groups differ from each other in many other ways that can influence pre-K participation including average income, family size and structure, parental education levels, and where they live. Statistical analyses indicate that parental education, income, employment, family structure, and region explain much of the difference in pre-K participation rates between Hispanics and other ethnic groups. A survey of 1,000 Hispanic families across the country found that 75 percent considered it "very important" that children attend prekindergarten, and 95 percent believed that attending prekindergarten was an advantage for school success.7 These data suggest that inadequate access is the biggest explanation for low rates of Hispanic pre-K participation. However, for public policy purposes it useful to know how attendance varies by ethnic group even if the differences result from other factors.

Figure 4. Preschool Education Participation by Ethnicity



Source: NHES 1991 and 2005.





Source: NHES 1991 and 2005.

#### Income

Family income has two very different effects on participation in preschool education programs. On one hand, families with higher incomes are better able to purchase high-quality preschool education and child care. On the other hand, the federal Head Start program, the vast majority of state pre-K programs, and government child care subsidies target lower-income families. On the whole, government policy does not fully offset the effects of income on affordability. However, government policy does seem to substantially increase participation rates for many low-income families.

Figure 5 displays pre-K participation rates for poor and non-poor families. Overall, children in poverty have lower participation rates than others despite the compensatory efforts of government. Increases in pre-K participation from 1991 to 2005 were essentially the same for families in and out of poverty, so that poor families did not gain relative to others. The expansion of Head Start and state preschool education programs over the decade seems to have just kept poor families from falling further behind.

Figure 6 charts preschool education participation in 2005 against finer gradations of family income in order to provide a more detailed picture of the relationship with income. Pre-K participation rates vary relatively little over the bottom half of the income distribution. For 4-yearolds, they are lowest for families with annual incomes between \$20,000 and \$40,000, and about the same for families with incomes less than \$20,000 and between \$40,000 and \$60,000. Four-year-old enrollment rises sharply with an income of \$60,000 thereafter and reaches nearly 90 percent for families with annual incomes more than \$100,000. For 3-year-olds, participation drops rapidly moving from the "less than \$10,000" range to

Figure 6. Preschool Education Participation by Income: 2005



the "\$10,000 to \$20,000" range and then to the "\$20,000 to \$30,000" range. This likely reflects the positive effects of Head Start and the lack of state-funded pre-K for 3-year-olds. Only at family incomes more than about \$85,000 do over half the children attend pre-K at age 3. Participation at age 3 jumps to over 70 percent in the top income category.

The participation pattern by income suggests that public policies raise pre-K participation rates for low-income families. However, young children in poverty still have much lower rates of preschool education enrollment than children whose families have higher-than-average incomes. Families with modest incomes may face the greatest difficulties in obtaining high-quality preschool education for their children as their private options are unlikely to be as educationally effective as Head Start and other public programs.

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#### Mother's Education

Mother's education is highly predictive of a young child's educational experiences in and out of the home. Preschool education participation rates rise as mother's educational attainment increases, as shown in Figure 7. For both 3- and 4-year-olds, the highest participation rates are for children whose mothers have a fouryear college (BA) degree—over 80 percent at age 4 and about 60 percent at age 3 in both 1991 and 2005. Children of mothers with at least a high school diploma, but not a BA degree, have lower rates of attendanceabout 60 percent at age 4 and 40 percent at age 3. This reflects an increase in participation for 4-yearolds over 1991. Children of high school dropouts have the lowest participation rates: over the period it has risen to 55 percent at age 4 but remained near 20 percent at age 3. The educational opportunity gap at ages 3 and 4 remains quite large between children of parents with BA degrees and all others.

The strong link between pre-K participation and parental education raises serious policy concerns. Parental education is an important influence on education in the home, and those children whose parents have the least education have the least opportunity for quality education outside the home. Parental education is also a powerful predictor of abilities at school entry and subsequent educational success or failure. Thus, the children who may be expected to gain the most from high-quality preschool education programs are the least likely to attend. The persistence of this strong link between parental education levels and preschool education participation is remarkable given the extent to which federal and state programs target disadvantaged children. It suggests that programs targeted by family income level are less effective at reaching children with the least educated parents and raises questions about whether income-tested programs are wise.







Source: NHES 1991 and 2005.

Note: In a small number of cases, the mother is not the primary caregiver and the father or other primary caregiver's employment status is substituted.

#### Mother's Employment

As discussed above and shown previously in Figure 2, the long-term trend toward increased pre-K attendance is not primarily driven by rising maternal employment. However, at any point in time pre-K program participation is related to maternal employment. As shown in Figure 8, in 2005 preschool education participation rates were 74 percent for 4-year olds with employed mothers compared to 61 percent for those with mothers who were not formally employed. In 1991, the corresponding figures were 65 percent and 51 percent, respectively. Levels of participation for 3-year-olds in both categories stayed about the same, a third for mothers not in the labor force and nearly half for those formally employed.

The difference in participation rates associated with mother's employment is much smaller for preschool education classrooms than it is for participation in all types of child care. Figure 9 displays participation rates for all types of non-parental child care by mother's employment status. In 2005, rates were 88 percent for 4-year-olds with mothers in the labor force and 66 percent for children with mothers at home. In 1991, these rates were 85 percent and 54 percent. One of the questions raised is the extent to which this may reflect barriers to using classroom-based programs that provide a good education as well as child care. For example, many preschool education programs operate for only a half-day and highquality preschool classrooms that operate for a full day are more expensive than some other child care arrangements.

Figure 8. Preschool Education Participation by Mother's Employment



Source: NHES 1991 and 2005.

Note: In a small number of cases, the mother is not the primary caregiver and the father or other primary caregiver's employment status is substituted.

#### Figure 9. Participation in Any Regular Child Care by Mother's Employment



Source: NHES 1991 and 2005.

Note: In a small number of cases, the mother is not the primary caregiver and the father or other primary caregiver's employment status is substituted.

# Accounting for Regional Variations

Pre-K participation rates vary substantially from one region to another and state-by-state. Figure 10 displays preschool education participation rates by region for 1991 and 2005. It appears that regional differences increased over the period. With regard to 4-year-olds, all regions progressed but the West and Midwest fell behind the Northeast and South. Participation in the South made noteworthy advances, jumping from the lowest participation rates for 4-year-olds in 1991 to the second highest in 2005.8 For 3-year-olds, the Northeast, and to a lesser extent the West, appear to have made progress while the South actually lost ground. While regional differences in pre-K participation may reflect differences in populations, it is likely that differences in state policies also play an important role. These regional differences correspond to what is known about the growth of state preschool education programs over the last decade and are not explained by regional differences in family size or structure, maternal employment, education, income or ethnicity.

How much of the regional variation is due to state policy differences is difficult to assess. However, there is no denying that it is easier to obtain a preschool education in some states than others and that state policy can change participation rates dramatically. Universal pre-K programs in Oklahoma, Georgia and, more recently, Florida have made free preschool education programs available to most children at age 4. Twelve states (six are in the West) offer no state-funded pre-K program at all.



Figure 10. Preschool Education Participation by Region



Source: NHES 1991 and 2005.

# Why High-Quality Preschool Education Matters

A substantial body of research finds that high-quality preschool education can enhance a child's learning and development. These improvements in learning and development, in turn, can have far reaching consequences including: increased educational attainment, increased employment and earnings, less delinquency and crime, and even improved healthrelated behaviors like less drug use and less smoking.<sup>9</sup> Children from low-income families or whose parents have limited education may benefit the most, as they are most likely to encounter problems in school and later in life due to poor academic performance.<sup>10</sup> Nevertheless, as public programs have expanded to serve all children, it has become apparent that even those who are not disadvantaged can benefit from a preschool education.<sup>11</sup> And, recent studies reveal that, despite better performance on average, children from middle-income families account for most school failure and dropout, problems that a good preschool education can help prevent.<sup>12</sup>

Researchers have quantified the

costs and benefits of highly effective preschool education based on three studies with follow-up on a comprehensive range of outcomes from the preschool years into adulthood. These are the Perry Preschool,<sup>13</sup> Abecedarian,<sup>14</sup> and Chicago Child-Parent Center<sup>15</sup> studies. Table 1 presents basic descriptions of each study together with estimated costs and benefits. The methods employed in the three studies are similar so that estimates are comparable across studies except that a few benefits were not investigated in all three.

# Table 1. Three Benefit-Cost Analyses of High-Quality Preschool Education

CHARACTERISTIC	PROGRAM		
	Carolina Abecedarian	Chicago Child-Parent Centers	High/Scope Perry Preschool
Year began	1972	1983	1962
Location	Chapel Hill, NC	Chicago, IL	Ypsilanti, MI
Sample size	111	1,539	123
Research design	Randomized trial	Matched neighborhoods	Randomized trial
Age	6 weeks to age 5	Ages 3–4	Ages 3–4
Program schedule	Full day, year round	Half-day, school year	Half-day, school year
COSTS AND BENEFITS (2006 DOLLARS, DISCOUNTED AT 3%)			
Cost	70,697	8,224	17,599
Child Care	30,753	2,037	1,051
Maternal Earnings	76,547	0	0
K-12 Cost Savings	9,841	5,989	9,787
Post-Secondary Ed. Cost	-9,053	-685	-1,497
Abuse & Neglect Cost Savings	NE	329	NE
Crime Cost Savings	0	41,100	198,981
Welfare Cost Savings	218	NE	885
Health Cost Savings	19,804	NE	NE
Earnings	41,801	34,123	74,878
Second Generation Earnings	6,373	NE	NE
Total Benefits	\$176,284	\$ 83,511	\$ 284,086
Benefit-to-Cost Ratio	2.5	10.1	16.1

"NE" indicates that a benefit was not estimated for a particular outcome even though one might have occurred.

These three benefit-cost analyses are particularly useful when considered together because they encompass different types and intensities of programs implemented with different populations in different types of communities. Two programs were half-day pre-K programs during the school year; one provided full-day, year-round child care from birth to age 5. The Chicago program is similar in cost and design to the best of today's public programs. All of the programs produced benefits far exceeding their cost. Indeed, in the worst-case situation that a program was only one-tenth as effective as the Chicago program, it would still yield a positive return at the same cost. While no one should expect a specific large-scale public program to produce the exact same results as any one of the studies, there is a wide margin for programs to depart from these results and still be a good public investment. Moreover, a comparison of immediate program outcomes between the Chicago study and Oklahoma's universal pre-K program in Tulsa indicates that the two programs results are quite similar.<sup>16</sup>

Obviously, policymakers take into account that all three programs served disadvantaged children. As a rule of thumb, one might expect similar programs implemented for broader populations to produce economic benefits no more than half that produced for disadvantaged populations. The rationale is that incidence rates for the problems prevented or ameliorated by high-quality preschool education are about half as high for middle-income as for disadvantaged populations.<sup>17</sup> The estimated benefit levels in Table 1 suggest that programs would still be good investments at this lower level of return for children who are not disadvantaged.

Given the high returns of highly effective programs, the challenge for public policy is not just to ensure that every child has a place in a classroom somewhere. The challenge is to ensure that every child has access to a highquality program. In contrast to the results discussed above, the best estimates indicate that most preschool programs have little positive effect on children's learning and development. Although there is much variation, Public policy faces the task of raising the quality of preschool education as well as increasing access to those programs. This requires a combination of higher standards and increased public support.

most private programs appear to be quite weak. This is not surprising as parents find it difficult to assess educational effectiveness and regulatory standards are weak. Public programs like Head Start and state-funded pre-K are more effective but even these programs vary in their quality and effectiveness. Overall, it is reasonable to conclude that the majority of children attending preschool education programs are not in quality programs. Thus, public policy faces the task of raising the quality of preschool education as well as increasing access to those programs. This requires a combination of higher standards and increased public support. This can be done without replacing private programs. Research demonstrates that private preschool programs can be just as effective as publicly operated programs when they meet the same standards and have the same level of public financial support.





# **Conclusions and Policy Implications**

Participation in preschool education has grown steadily over the past several decades in the United States. Most American children spend time in a pre-K classroom at age 4 and many attend at age 3 as well. This trend contributes to the development of the nation's children and has the potential to substantially reduce educational inequality in the United States. Yet, pre-K participation in the United States remains highly unequal, with many children starting out behind before they begin kindergarten. This inequality in preschool education participation seems likely to exacerbate rather than ameliorate educational inequality. The rising tide of preschool education participation has

not lifted all boats equally and the factors that predicted inequality in 1991 still predicted inequality in 2005. In addition, strong regional differences in pre-K participation became apparent by the end of the decade.

The children least likely to attend pre-K are those whose parents have the least education and least income, whose mothers do not work outside the home, and who live in the western and mid-western regions of our country. Hispanic children appear to be particularly disadvantaged as they have a much lower rate of preschool education participation than other children but apparently not because cultural values lead them to avoid such programs.<sup>18</sup> African-American The nation and its children will not benefit if quality is sacrificed to increase participation rates. Higher standards and added resources for quality are essential components of any effort to increase equality of access to effective preschool education. children have somewhat higher rates of participation than might be expected given their family resources and location.<sup>19</sup>

In the most educated families, preschool education participation rates at age 4 are almost as high as kindergarten participation rates. Over the last decade, there has been progress in closing the attendance gap for 4year-old children of the least educated parents. This likely reflects the growth of Head Start and state preschool education programs. However, these targeted programs have not fully accomplished their goals with respect to access. Targeted programs have enrolled far more children than the number who are in poverty or whose mothers are high school dropouts. However, targeted programs still do not reach many of those eligible.

Targeted programs fail to fully accomplish their goals. This is in part due to the dynamic nature of the population, which leads to difficulties in identification, changes in eligibility, and geographic mobility. Also, targeted programs do not adequately address issues of access for children whose families have modest incomes and have lower participation rates than even children in poverty.<sup>20</sup>

In addition to the inequalities in overall access just noted, it is apparent that inequality in access to preschool education is greater at age 3 than age 4. Improvements in access for the most disadvantaged children from 1991 to 2005 seem largely limited to 4-year-olds. Thus, more advantaged children are not just more likely to go to pre-K before they enter kindergarten; they are likely to have started at an earlier age. Although this could, at least in part, reflect differences in attitudes about the appropriate time for children to enter preschool education programs, public policy in the United States undoubtedly plays a role. Head Start serves considerably fewer children at age 3 than at age 4. Most state pre-K programs serve only

or primarily 4-year-olds. The consequences are readily apparent.

How might public policy in the United States decrease inequities in preschool education participation at ages 3 and 4? One approach would be to expand targeted programs. This would mean increased funding for Head Start, state preschool education programs, and child care subsidies, including tax credits for families with moderate incomes. Western and midwestern states, in particular, could improve equality in access by investing much more in state-funded pre-K programs.

Greater attention could be focused on funds to expand the enrollment of children at age 3 in educationally effective programs. For most state preschool education programs, serving equal numbers at age 3 would essentially require doubling the size of the programs.

Obviously, the most effective approach would be to offer preschool education programs to all children. A preschool education program for all children would cost the public more, but the added benefits from serving more children could more than justify the added costs. In addition to reaching previously underserved disadvantaged children, newly served children from families that are not currently eligible also would benefit in ways that can contribute to the public good, such as increased school readiness and achievement. These families benefit from the enhanced educational opportunities their children receive even if they already had access to some preschool education or child care. For many middle-income families "preschool participation" does not mean highquality education. They simply cannot afford high quality. Parents who need long hours of child care to stay afloat financially can face an especially difficult trade-off between

quality and hours.

Other studies have found that inequalities in access extend to quality as well as quantity. As highlighted in a recent NIEER report on state preschool education programs, quality and adequate funding continue to be major issues.<sup>21</sup> The nation and its children will not benefit if quality is sacrificed to increase participation rates. Instead, the promised benefits will be lost and America will have only the illusion of progress in preschool education. Higher standards and added resources for quality are essential components of any effort to increase equality of access to effective preschool education.

## Endnotes

<sup>1</sup> Warren, E. & Tyagi, A.W. (2003). *The two-income trap. Why middle-class mothers and fathers are going broke*. NY: Basic Books.

<sup>2</sup> One of the complications of research on preschool education programs is that it is generally conducted by age, whereas most research on schools is by grade. Although we focus on 3- and 4-year-olds in this report, the total preschool population includes 5-year-olds not yet in kindergarten. The percentage of all children who attend a preschool program prior to kindergarten is slightly higher than the percentage of 4-year-olds enrolled. Magnuson and colleagues (2004) estimate a preschool participation rate of 72 percent for the cohort of children who entered kindergarten in 1998 based on the Early Childhood Longitudinal Study-Kindergarten Cohort. Magnuson, K.A., Meyers, M.K., Ruhm, C.J., & Waldfogel, J. (2004). Inequality in preschool education and school readiness. *American Educational Research Journal* 41(1), 115-57.

<sup>3</sup> Barnett, W.S. (2004). Better teachers, better preschools: Student achievement linked to teacher qualifications. *Preschool Policy Matters*, Issue 2. New Brunswick, NJ: National Institute for Early Education Research. Espinosa, L. M. (2002). High-quality preschool: Why we need it and what it looks like. *Preschool Policy Matters*, Issue 1. New Brunswick, NJ: National Institute for Early Education Research.

<sup>4</sup> This definition includes all private and public child care and preschool programs, not including 4-year-olds in kindergarten. It results in slightly higher rates of participation than are reported in the CPS which is less inclusive and relies on a parental definition of "school."

<sup>5</sup> Behrman, R.E. (Ed.) (1993). Home visiting. *The Future of Children*, 3(3),; Denton, K.L., West., & Reaney, L.M. (2001). The kindergarten year: *Findings from the Early Childhood Longitudinal Study, Kindergarten class of 1998-99*. NCES 2001-023. Washington, DC: National Center for Educational Statistics.; Layzer, J.I., Goodson, B., Bernstein, L., & Price, C. (2001). *National evaluation of family support programs, Volume A: The meta-analysis. Final report.* Cambridge, MA: Abt Associates.; Magnuson et al. (2004); NICHD Early Childcare Research Network (2002). Child-care structure, process, outcome: Direct and indirect effects of child care quality on young children's development. *Psychological Science*, *13* (3), 199-206.

<sup>6</sup> A small number of 4-year-olds attend kindergarten and are not included in these figures. In addition, about one-quarter of 5-year-olds attend preschool, but our analyses focus only on 3s and 4s.

<sup>7</sup> Pérez, P. & Zarate, M.E. (2006). *Latino public opinion survey of pre-kindergarten programs: knowledge, preferences, and public support.* Los Angeles: Tomás Rivera Public Policy Institute, University of Southern California.

<sup>8</sup> Regions are as defined by the U.S. Census. West: AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY. Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT. South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA,WV. Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI.

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