

Janet Currie

A Fresh Start for Head Start?

When Congress and the new administration debate the future of Head Start, the public preschool program for poor children, the questions will be whether the program works and whether it should place more emphasis on specific academic goals, such as reading readiness, as President George W. Bush has argued. The debate may also revolve around whether the government should increase funding for Head Start so that more low-income children can attend, or move toward support of a universal preschool program, as advocated by Vice President Al Gore during the 2000 presidential campaign. The best available evidence suggests that:

NO.

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- The program is associated with short-term gains in cognitive skills as well as longer-term gains in school completion, and even greater gains are possible if children receive good follow-up in the early grades.
- Head Start may have focused too heavily on social supports at the expense of language and literacy training, but children need to acquire both cognitive and noncognitive skills before they enter school.
- Given evidence that disadvantaged children are the ones most in need of a preschool experience, priority should be given to expanding Head Start rather than to funding universal preschool.
- Although Head Start centers vary in quality, on average they are better than privately-run child care centers, have achieved short-term benefits, and would pay for themselves if they produced even a fraction of the long-term benefits associated with model programs. For this reason, they merit some expansion and greater attention paid to their quality.

What is Head Start?

Head Start aims to improve the skills of disadvantaged children so that they can begin schooling on an equal footing with their more advantaged peers. Begun in 1965 as part of President Lyndon B. Johnson's "War on Poverty," Head Start now serves almost 800,000 children in predominantly part-day programs, according to 1999 data from the Administration on Children, Youth and Families.

Though the program is large, enrollment represents only about 35 percent of eligible poor three- and four-yearold children. The program is not an entitlement, but is funded by an annual appropriation, which means that when funds run out, eligible children cannot be served. Head Start is a popular program—the number of children served and federal appropriations grew during both the Bush and Clinton administrations, as shown in Figures 1 and 2.

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What's Ahead for the

Head Start is run at the local level, but local operators are subject to federal quality guidelines. These guidelines specify that Head Start is to provide a wide range of services in addition to providing a good learning environment. For example, Head Start is required to facilitate and monitor utilization of preventive medical care by participants, as well as to provide nutritious meals and snacks. Head Start programs also emphasize parental involvement, and many provide a wide range of services to parents.

According to a 1995 report from the General Accounting Office, Head Start has served as a model for public preschools targeted to low-income children in states such as California and also for new (voluntary) universal preschool programs in Georgia and New York. In 1999, the Children's Defense Fund reported that as of the 1998-99 school year, 724,610 children were participating in state-funded enriched preschool programs. Thus, the number of children in state-funded initiatives is roughly equal to the number in Head Start.

Does Head Start Work?

Most of the evidence regarding the long-term effectiveness of early intervention comes not from evaluations of Head Start, but from studies of "model" early intervention programs such as the famous Perry Preschool project, which took place in Michigan between 1962 and 1967, or the Carolina Abecedarian project, conducted in North Carolina from 1972 to 1985. The results from these two interventions have been particularly impressive and influential.

In the Carolina Abecedarian Project, children were randomized into a treatment group that received enriched center-based child care services for eight hours per day, five days a week, fifty weeks per year, from birth to age five, and a control group that did not receive these services. The teacher/student ratio ranged from 1:3 to 1:6, depending on the child's age. Upon entering school the children were again randomized into two groups. One received no further intervention, and the other had a "Home School Resource Teacher," who provided additional instruction, a liaison between parents and the school, and served as a community resource person for the family. The investigators have now completed a follow-up assessment of the Abecedarian children at age 21. At age 21, the children who received the preschool treatment had higher average tests scores and were twice as likely to have stayed in school or to have ever attended a four-year college than children who did not.

The Perry Preschool Project intervention involved a half-day preschool every weekday plus a weekly 90-minute home visit, both for eight months of the year, for two years. Teacher/student ratios were one to six, and all teachers had master's degrees and training in child development. As of age 27, the intervention had positive effects on achievement test scores, grades, high school graduation rates, and earnings, as well as negative effects on crime rates and welfare use.

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Public Preschool Program

While these results are impressive, it is important to keep in mind that the typical Head Start program spends less per child, uses less qualified staff, and has higher student-teacher ratios than these model

programs. Moreover, because Head Start is run at a local level, there is wide variation among Head Start centers in their levels of teacher training, relative emphasis on parent involvement vs. classroom activities, and curriculum. Thus, results from model intervention programs cannot automatically be applied to Head Start.

Evaluations of Head Start itself have found that centers tend to be of higher quality than commercially available child care, on average. This result stems from the fact that there are few bad Head Start centers. By way of comparison, the recent Child Care Cost, Quality, and Outcomes study,



conducted by a team that includes researchers from the Universities of California, Colorado, and North Carolina, found that 11 percent of the child care sites they surveyed offered care that did not meet even minimal levels of quality.

Many evaluations have also found evidence that Head Start has short-term positive effects on some cognitive skills such as vocabulary. Research has shown that Head Start helps children avoid grade repetition and placement in the special education track, and that both of these factors are linked to higher schooling attainments later in life. Unfortunately, most studies have also found that gains in children's cognitive test scores are relatively short-lived, and begin to disappear by the time children reach third grade. However, my research with Duncan Thomas and the research of Arthur Reynolds and his colleagues suggest that such "fadeout" is not inevitable.

Duncan Thomas and I point out that most evaluations which find fadeout focus on inner-city, African-American children. Using data from the National Longitudinal Survey of Mothers and Children, we find evidence that long-term positive effects on white and Hispanic children are often sustained at least until early adolescence. Given that the initial impact of Head Start is very similar for whites and blacks, these findings suggest that fadeout may be due to the poor quality of subsequent schooling rather than to deficiencies in Head Start.



Research by Reynolds supports this hypothesis. Reynolds studies children who benefited from both Head Start and a followup program called the Chicago Child Parent Centers, which has been in place since 1967 and is designed to enhance the quality of their schooling. He finds that this program has had significant effects on schooling attainment, as well as negative effects on delinquency and criminal activity.

Both of these sets of studies rely on statistical methods to allow for the fact that children who enroll in Head Start may differ in many ways from those who do not. Currently, this is

the best that can be done since there has never been a randomized trial of Head Start. The Advisory Committee on Head Start Research Evaluation, appointed by the Administration on Children, Youth and Families, recommended in 1999 that the Department of Health and Human Services (HHS) conduct an evaluation that relies on randomly assigning children to sites where funds are insufficient to serve all eligible children. The committee felt that if some children are to be denied services in any case, it makes sense to do it randomly, so that the effect of the Head Start "treatment" can be rigorously assessed in the way that, for example, a new drug would be assessed using a randomized trial.

A Fresh Start for Head Start?

Despite considerable evidence that Head Start benefits poor children, there is a growing sense among policymakers that the program is not as effective as it could be. Dissatisfaction centers on several issues, including: uneven quality across centers; insufficient attention to pre-literacy skills; and lack of accountability in demonstrating improvements in child outcomes. During the most recent Head Start reauthorization in October 1998, Congress demanded that HHS address these problems by mandating the adoption of performance standards related to children's literacy skills and school readiness, expanding the monitoring of child outcomes (rather than program inputs), and improving the quality of Head Start teachers.

Uneven Quality of Head Start Centers Quality of care is of particular concern given that in most cases, the alternative to high quality preschool is not home care, but lower quality child care. The National Institutes of Child and Human Development's (NICHD) Early Child Care Study found that most infants were placed in some sort of non-maternal care by the time they were four months old. Welfare reform is likely to underscore this reality, as women are pushed to join the work force rather than receive cash assistance.

Several different scales have been developed for assessing child care/preschool quality. These scales generally have two components, one that evaluates "structure" and one that evaluates "classroom process." Structure refers to such easily measurable attributes as the teacher/pupil ratio, class size,

and teacher/administrator background and experience. Classroom process refers to less quantifiable qualities such as the nature of teacher/child interactions, the layout of classroom

materials, and whether the activities are "developmentally appropriate."

Perhaps not surprisingly, the two types of measures tend to be correlated. The NICHD Study of Early Child Care found that child care situations with better "structures" (e.g. safer, cleaner, more stimulating environments and better child/staff ratios) also tended to be better in terms of "classroom process" (e.g. caregivers who were more sensitive and provided more cognitively stimulating care). Children in high-quality centers have fewer behavior problems and better cognitive and language development than children in poorer centers, although it is not clear to what extent this is due to unobserved aspects of family background which are associated with placement in higher quality care.

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Head Start centers appear to be of higher quality on average than private centers, but the quality of Head Start is not uniform. Quality tends to be higher in programs based in areas with higher family incomes, and in those with fewer minority families. Edward Zigler, one of the founders of Head Start, argues that funds are insufficient to allow for meaningful enforcement of Head Start program standards, which may be one reason for the variation in quality.

A second reason that the characteristics of Head Start centers tend to vary with the characteristics of the children served is that many Head Start teachers are current or former Head Start parents. While the practice of hiring parents helps to involve them and may provide mothers with a way out of poverty, this practice may not be consistent with the goal of hiring the most qualified teachers for Head Start classrooms. The 1998 Head Start reauthorization directed Head Start to strive to have at least 50 percent of all teachers attain an associate, bachelor's, or advanced degree in early childhood education by 2003. Accomplishing this goal may require earmarking a higher fraction of Head Start program budgets for teacher salaries.

Head Start and School Readiness The promotion of school readiness among disadvantaged children is one of the key goals of Head Start, yet there has not always been agreement on what this means. The Carnegie Foundation's 1991 survey of kindergarten teachers found that only 65 percent of new students were deemed ready to learn. This figure has received a great deal of attention, and many people assume that the teachers were referring to shortfalls in the children's cognitive skills. Yet when asked to name the most important determinants of readiness to learn, the attributes cited most often by teachers, in order, were: being physically healthy, rested, and well-nourished; being able to communicate needs, wants, and thoughts verbally; being enthusiastic and curious in approaching new activities; taking turns; knowing how to sit still and pay attention.

Teachers did not emphasize knowledge of specific "academic" skills. For example, only 10 percent of kindergarten teachers thought that it was important that children starting school know the alphabet.

More recently, the National Academy of Sciences published a landmark study called "Preventing Reading Difficulties in Young Children," which argues that learning to read, write, and understand the printed word is one of the most important elementary school tasks, and that children who have not mastered certain pre-literacy skills before they enter kindergarten are "at risk" of reading difficulties and other academic problems later in life.

Knowledge of word meanings, an understanding that print conveys meaning, phonological awareness, and some understanding that printed letters code the sounds of language all contribute to reading readiness, and these skills can be enhanced by reading to children and encouraging activities that direct attention to the sound structure of words (such as rhyming games). In general, children should be exposed to a rich language and literacy environment that promotes vocabulary, the understanding of print concepts, and phonological awareness. The National Academy notes, however, that other preschool abilities such as identifying letters, numbers, shapes, and colors are correlated with reading readiness but have not been found to play any causal role in learning to read.

While little hard evidence is available, some critics feel that Head Start has been promoting the "social" skills identified in the Carnegie Foundation survey at the expense of the "cognitive" preliteracy skills identified in the National Academy report. Head Start program guidelines focus on the emotional development, health, and nutritional needs of the child, and until recently have said little about promoting cognitive development.

While it is not clear if they are referring specifically to Head Start, the National Academy report concludes that "Preschools and other group care settings for young children, including those at risk for reading difficulties, too often constitute poor language and literacy environments." The 1998 Head Start reauthorization addresses these concerns by directing the program to monitor specific child outcomes. In particular, every child is to "know that the letters of the alphabet are a special category of visual graphics that can be individually named; recognize a word as a unit of print; identify at least ten letters of the alphabet; and associate sounds with written words."

Head Start is also required to develop a system to track these outcomes, although this system has not yet been implemented. It is important, however, that the pendulum not swing too far the other way. There is increasing evidence that children need both cognitive and noncognitive skills to succeed in the classroom and outside it.

An Optimal Age for Intervention?

In 1997, the White House Conference on Early Childhood brought to light research suggesting that the first three years are a critical period for brain growth and learning, and hence for early intervention. However, it is not easy to make the leap from basic scientific research on brain development to public policy, largely because there is no direct correspondence between brain growth and increases in capabilities. Moreover, critical periods have only been established for a few specific functions, such as vision and language, and they may extend well into the elementary school years. Finally, while we know that extreme deprivation can do terrible harm, there is no evidence that extra stimulation in the

first few years produces lasting benefits for normal children. Compounding the problem is the fact that literature on child attachment suggests that infants who are separated from their primary caregivers too early may suffer psychological damage.

These arguments suggest that while early childhood is important, we should not focus early childhood interventions exclusively on birth to age three at the expense of other periods of childhood. Nor should we conclude that interventions aimed, for example, at four- and five-year-old preschool children, are too little, too late. In fact, some experts believe that in order to have any effect, intervention must be continued at least into the early grades, but the available evidence on this point is sparse and conflicting.

The 1994 reauthorization of Head Start created a program called "Early Start"

which serves children from birth to age three. Currently, the program serves 35,000 infants and toddlers, and evaluations of it will shed important light on the wisdom and efficacy of intervening with very young children.

Public Preschool for Everyone?

If the government were to provide an enriched child care experience to all poor children whose parents or guardians desired it, as would be the case if Head Start were fully funded, it would raise the question of whether it was legitimate to exclude children who could also benefit, but who were not quite as poor. Thus, an important question for policymakers seeking to know where to draw the line is whether the benefits of early intervention are greater for more disadvantaged children than for others. Benefits may be greater for more disadvantaged children than for others. Benefits may be greater for more disadvantaged children than for others.

The question of whether preschool has greater effects on disadvantaged children than on others affects how we should view proposals for universal developmental preschool programs. It is possible that a universal program could significantly benefit disadvantaged children by improving their chances for success, while for less disadvantaged children, the program would effectively function as a child care subsidy, and not improve their development.

The available evidence suggests that the benefits of developmental preschools are indeed larger for disadvantaged children, particularly children whose mothers have low levels of education; children whose mothers are depressed, distant, cold, or abusive; and children of non-native English speakers. Thus, where budgets are limited, it is appropriate to target early intervention to the most disadvantaged children. In defining which children are disadvantaged, factors in addition to family income including risk of abuse or neglect, lack of maternal education, and limited English-language proficiency—should be considered.

Ensuring Head Start's Future

The goal of extending Head Start to all eligible, poor three- to five-year-old children has been pursued with less urgency in recent years, as policymakers have increasingly emphasized the program's alleged

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deficiencies and its lack of demonstrated long-term benefits. However, given the numerous documented shorter-term benefits of the program, Head Start would pay for itself if it generated even a fraction of the long-term benefits associated with model programs such as Perry Preschool, and thus the program merits some expansion.

While the long-term benefits of Head Start have not been documented, the problem reflects an absence of research rather than any proof that the program does not yield long-term benefits. To remedy this problem, the Head Start Bureau should take steps to implement the recommendations of the Advisory Committee on Head Start Research Evaluation, which urged HHS to rigorously test the effects of Head Start on young children.

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