

## Cato Institute Policy Analysis No. 187: Caveat Emptor: The Head Start Scam

December 18, 1992

John Hood

John Hood is research director of the John Locke Foundation, a state policy think tank in Raleigh, North Carolina, and a contributing editor of *Reason* magazine.

### Executive Summary

It is safe to say that America's public schools are not exactly basking in the glow of achievement and approbation. While the education establishment continues to block fundamental state and federal reform efforts, public disaffection with the country's system of public education is at an all-time high. Business leaders are increasingly vocal in their criticism of public schools. Journalists are not as eager as they used to be to parrot the National Education Association's line on school reform. Activists across the country have won important victories--from privately funded voucher plans to local and state choice initiatives--against sloth and bureaucratic intransigence. Students in Indiana, Michigan, Maryland, Georgia, and Texas already receive or will soon receive vouchers from businesses and foundations to attend local private schools. Private firms are managing public schools in several states, and Chris Whittle's Edison Project plans a nationwide network of for-profit schools to revolutionize American education.

But even as public elementary and secondary schools increasingly draw fire from every side, one government-run education program continues to attract substantial political and public support: Head Start. Both liberal Democratic and conservative Republican governors tout it. Even disgruntled, frustrated business leaders--willing to back revolutionary change in K-12 education--nonetheless sing the praises of Head Start, a Great Society program that spends billions of dollars a year to provide educational, developmental, medical, and nutritional services to poor preschoolers.

Head Start's impressive public relations triumph should surprise no one. The program's boosters base their appeal on a sensible-sounding premise: if we can intervene early in poor children's lives, give them a "head start" on developing into good students and well-adjusted teens, then many of them will not grow up to be welfare mothers, deadbeats, or criminals. With every social catastrophe averted, we'll save ourselves a lot of worry, trouble, and money. That is the essence of "fiscal conservatism," advocates say, since a little "public investment" now will pay huge dividends in tax revenues and forgone social spending later.

Head Start's sales pitch works wonderfully. Business leaders like the investment rhetoric. Journalists love all the photo opportunities with cute, smiling kids. Teachers' union officials and other leaders of the education establishment relish the chance to extend their reach beyond kindergarten into the preschool years. Big-spending politicians enjoy touting a program that actually appears to work. Fiscal conservatives prefer Head Start's relatively low price tag (in comparison with the rest of the education establishment's agenda: higher teachers' salaries, smaller class sizes, bigger buildings, equalization of spending for small or rural school systems, and so on).

The pitch works, despite the fact that Head Start's major selling point--early intervention can prevent future dependence and delinquency--rests on several shaky foundations. First, it assumes that policymakers can draw sweeping national conclusions from studies of a few unique (and non-Head Start) preschool programs. Second, it

assumes that children's futures are fundamentally malleable, that a brief outside intervention can make an indelible impact on most children's lives despite the continuing influence of both heredity and environment. And third, the Head Start thesis assumes not only that successful early intervention is possible but that government is an appropriate and effective provider of it.

All three of those propositions are false. Head Start's hucksters, all smiles and promises, have sold the public on a shiny prototype that bears little resemblance to what will actually be provided and, upon closer examination, is an empty shell with nothing under the hood. Before American policymakers sign anything, they'd better take a good look at what they're getting.

### **Three Decades of Head Start**

Head Start was a linchpin of President Lyndon Johnson's Great Society, and it is one of the few programs created during the mid-1960s that has not only survived basically intact but retains a good reputation outside the insular circles of Johnson administration alumni. Since its inception in 1965, the program has served over 12.5 million pre-school children, the vast majority of whom have come from poor households. The U.S. Department of Health and Human Services predicts that over 600,000 children will be enrolled in Head Start this year, 7 percent more than in 1991 and 61 percent more than in 1981.[1]

Numerous press accounts and public statements by Head Start boosters have made the claim that the program is "falling short" of its potential as the result of federal neglect and budget cuts.[2] It is certainly true that Congress has not appropriated the amount of funds authorized in 1990 Head Start legislation; the bill authorized \$4.3 billion in Head Start spending in fiscal year 1992, whereas the actual appropriation was approximately \$2.2 billion. Still, that 1992 figure represents a real increase of about 70 percent over Head Start's 1981 budget of \$819 million.[3]

Although Head Start does serve poor children, one common stereotype of program beneficiaries--that they are mostly black children of single mothers--is untrue. Only about half of the children in Head Start come from single-parent families. A third of Head Start children are white, 38 percent are black, and 22 percent are Hispanic.[4]

### **Telling Head Start Whoppers**

The efficacy of preschool programs hasn't been ignored by academic and government researchers. During the past three decades, researchers have published hundreds of studies on preschool programs nationwide. Over 200 of those studies focused on the Head Start program itself, though only about half of them provided detailed information about samples and results.[5] The distinction between studies of Head Start and those of other preschool programs is crucial--all preschool programs are not created equal.

Policymakers have gotten the wrong impression about Head Start by listening to enthusiastic boosters who cite the success of model preschool programs as though it proved the efficacy of Head Start. But you don't judge the quality of a Ford Escort by test driving a Lincoln Continental. Similarly, Head Start must be judged on its own merits, not by a sort of "fleet averaging" gimmick that hypes the successes of one or two unique projects that aren't Head Start programs at all.

Perhaps the most famous preschool in the United States is the Perry Preschool in Ypsilanti, Michigan. In 1962 that preschool selected 123 poor children to take part in an experiment. Half the group was given two years of preschool instruction and services, two and a half hours a day, five days a week. The other half took part in no preschool program. Both groups of children were then tracked throughout their academic careers and into adulthood. The Perry students demonstrated not only significant short-term gains-- higher I.Q. scores one year into the program, for example-- but also long-term gains. About two-thirds of the Perry group graduated from high school, compared to 50 percent of the control group. Similarly, whereas 51 percent of the control group had been arrested by age 19 for some crime, less than a third of the Perry graduates had.[6]

Studies of the long-term effects of the Perry program, many conducted by the operators of the program itself, made a big splash when they were first published in the mid-1980s. Suddenly, there was "hard evidence" for the notion that universal preschool for poor children might significantly reduce crime, increase graduation rates, increase employment,

and lessen dependency on public services. The Perry studies even generated a useful factoid for advocates of preschool education: every dollar spent on "quality pre-school education" saves about \$5 in future economic, education, welfare, and crime costs.[7]

Policymakers in the 1990s should keep in mind the atmosphere in which those findings were made public. When Ronald Reagan was elected, Washington bureaucrats still running Great Society programs got a big scare. Most believed their programs were doomed. Even though Head Start enjoyed strong support from Reagan administration officials such as budget director David Stockman and Caspar Weinberger, former secretary of Nixon's Department of Health, Education, and Welfare, program boosters sought to cement their support. They made a calculated effort to link the long-term benefits of the Perry Preschool with Head Start. In fact, while the researchers who studied Perry believed their results wouldn't generate much national interest, Head Start supporters engineered a highly successful public relations effort that created a boomlet of positive press coverage. As Edward Zigler, the creator of Head Start in the 1960s, writes, program boosters believed that "if the research had implications for Head Start funding, reporters would be interested." They were.[8]

The problem is that the studies of the Perry project actually don't tell us very much about the efficacy of Head Start. For openers, the Perry project and Head Start are not interchangeable. Perry's was a special experiment conducted under near-laboratory conditions. "These programs were conducted under ideal circumstances," wrote Ron Haskins, a staff member of the House Ways and Means Committee, in an article for the *American Psychologist*. "They had skilled researchers, capable staffs with lots of training, ample budgets. . . . It seems unwise to claim that the benefits produced by such exemplary programs would necessarily be produced by ordinary preschool programs conducted in communities across the United States." [9]

The difference between studies of the results of the Perry experiment and studies of Head Start programs couldn't be more striking. A 1985 U.S. Department of Health and Human Services analysis of Head Start studies to date showed that ambitious claims for Head Start's long-term effects were exaggerated. "Children enrolled in Head Start enjoy significant immediate gains in cognitive test scores, socio-emotional test scores, and health status," the HHS report noted. "In the long run, cognitive and socioemotional test scores of former Head Start students do not remain superior to those of disadvantaged children who did not attend Head Start." [10] More recent research confirms that conclusion. [11] Short-term gains in intelligence scores and learning skills disappear for most Head Start students after two years at school, and copious evidence that Head Start has a long-term effect on graduation rates, teen pregnancy, crime, or unemployment simply doesn't exist.

Another major difference between Perry and Head Start is obvious: studies of the Perry project and a few similar projects track only a relative handful of students, a few hundred, through their academic and early adult lives. Studies of Head Start, on the other hand, involve hundreds of preschool programs and thousands of children. When dealing with complex issues such as child development, researchers and policymakers must seek out a consensus--not simply hype a few best cases. To any fair-minded observer, the evidence available to date on Head Start suggests only temporary academic benefits. A few studies of Head Start programs show limited benefits extending until about junior high, but most do not. Grandiose claims about Head Start's being an anti-poverty program, or an anti-crime program, or a welfare-reform program exhibit little regard for truth or reason.

### **The Problem with Early Intervention**

As stated above, policymakers should seek a consensus among researchers and academic literature when devising new policies or evaluating old ones. Yet in the case of Head Start, as in so many others, elected officials, bureaucrats, and opinion leaders have mistaken a few special cases for "proof" of a general thesis: early intervention by the federal government can keep poor children from growing up into poor adults or criminals. The reason elected officials and others swallow the Head Start hype hook, line, and sinker is that they believe in "early intervention" as an article of faith, not a proposition to be proven or disproven with facts.

That is ironic, given that the early intervention fad in child development and education circles, which began in midcentury and gained momentum during the 1960s, is starting to fade. Liberal social workers, development specialists, educators, and others graduated from college in the 1950s and 1960s convinced that a child's social and

intellectual development was infinitely malleable. Jerome Kagan, a Harvard developmental psychologist who has studied human behavior for more than three decades, explained in a recent interview:

In 1950, when I graduated from college, there was much more optimism over the ability of the social sciences, especially developmental psychology, to solve social problems like crime, delinquency, and psychosis. Psychology was very confident then for it believed that some combination of learning theory and psychoanalysis constituted the truth; hence most social problems were learned rather than genetic. Therefore, if one could discover the learning experiences of children during the first five or six years that produced these undesirable outcomes, we could tell parents in America what they should and should not do, and we would have no crime and no more psychoses.[12]

But after years of research in developmental psychology, as well as years of experience in running the new social programs of the Great Society, many experts began to change their minds. It became apparent that children's minds are so unique, and personal traits so determined by heredity and idiosyncratic relationships between particular parents and children, that researchers could no longer defend their limitless faith in the efficacy of intervention. Again, Kagan explains:

It is improbable that I would be working on temperament because temperament implies the inheritance of styles of behavior and moods that are hard to change. I am politically liberal, trained in the 1950s to be an environmentalist who, for the first twenty years of my career, wrote essays critical of the role of biology and celebrated the role of the environment. I am now working in the opposite camp because I was dragged there by my data.[13]

Kagan's research revealed significant differences in the way children develop at very early ages, before parenting environments can really make a difference. For example, studies showed that even in the first week of life, middle-class Chinese-American infants displayed different personality traits than did middle-class Caucasian infants.[14] Other studies using twins separated at birth showed that heredity has an important influence on future behavior.[15] Similarly, psychologists found that "general rules" about the success of particular parenting styles or environments were hard to come by.[16] Research showed that the relationship between care providers (parents, therapists, teachers) and children matters more than the type of care provided. Because children exhibit different personalities--due largely to heredity--they require different types of care, therapy, and education.

For decades those currents of thought flowed through the psychological literature without having a great deal of impact on policy. But in recent years psychologists and child development experts have begun to speak out against some of the main assumptions of the therapeutic state--and against the idea that preschool education is a "silver bullet" against social problems. In an important 1990 article in *Science*, a number of experts told reporter Constance Holden of their doubts about Head Start's success. Kagan, for example, told Holden that early intervention programs have traditionally been spelled out like recipes: administer the treatment, measure the outcome. But the crucial aspect, he said, may be the relationship between the person doing the intervening and the child. And, unfortunately, "we don't know how to measure relationships," he told Holden.[17]

Kagan's point has great relevance to the Head Start debate. If he is right, not only is it unwise to assume that a few unique projects prove the need for universal preschool education, it is also a fundamental misunderstanding of the data. Personal talents of staff, not design, explain the success of a few projects. So a mandated universal preschool program for poor children, even one based on the model of the Perry Preschool, will not enjoy the success its boosters assume.

Several other noted developmental psychologists and education experts have questioned the assumptions behind the Head Start myth. Russell Gersten of the University of Oregon told *Science's* Holden that early intervention research "is not a very intellectually rigorous field." He said the field was highly politicized and had therefore produced "mushy findings" such as those on the Perry Preschool project. Child development specialist Craig Ramey also blamed the problem on political influence. Ramey said that, in order to support Head Start, an idea everyone in the field thought instinctively was good, research on early intervention "got pushed prematurely into looking at long-term consequences"--the purported findings that research data support the least.[18] It is important to remember that many of the experts still believe in the efficacy of government programs; they simply do not buy Head Start's claim to be a

"silver bullet." Most, in fact, favor even more government spending on new "Head Start Plus" programs that would continue to provide special attention and services to youngsters throughout their school careers. For example, Newsweek--breaking a virtual "code of silence" among the major media--recently trumpeted the results of a new study on the long-term impact of Head Start with the headline "A Head Start Does Not Last." [19] The study was conducted by J. S. Fuerst of Chicago's Loyola University School of Social Work. Fuerst traced the performance of 684 Chicago kids who attended not only two years of preschool but also, during their elementary school years, two to seven additional years of what Fuerst calls "Head Start to the fourth power." While his initial study--published in 1974 when most of the students were age 13 and younger--found significant reading and math gains, his new study tells a different story. Only 62 percent of the participating students graduated from high school, compared to the national average of 80 percent. The graduation rate had improved relative to a control group of poor children, but the long-term impact of the intensive Chicago program was nevertheless disappointing. [20]

Fuerst himself contends that his results only prove the need for special education programs that last as long as nine years--which shatters the notion that a small early investment heads off bigger costs down the road. It also begs an obvious question: why not fix the school system itself, rather than devise new and expensive federal supplements to it? Furthermore, if children can avoid the ravages of poverty, dependency, and delinquency only if they receive a quality education throughout their school career, then why spend extra money on Head Start in the first place? Early intervention could never make as much of a difference to a child as 13 years of quality education could, as even the most vocal Head Start booster admits. The authors of a recent study, which is generally favorable to Head Start, wrote:

Policy decisions that support the expansion of preschool programs without addressing the more fundamental question of trying to alter what happens to disadvantaged children in our nation's public schools are short-sighted. Research such as this, which provides evidence of some success of preschool education for disadvantaged children, could be used to support arguments for what might be politically expedient and even short-sighted "solutions" to a pervasive problem. Inducing sustained and successful academic experiences for children of poverty throughout their educational careers, rather than focusing on efforts to "fix" the problem with one-year preschool programs (however successful they may be), is absolutely essential. [21]

A similar point is made by Edward Zigler, creator of Head Start, and Susan Muenchow in their recently published book, *Head Start: The Inside Story of America's Most Successful Social Experiment*. As you can tell by its title, the book is full of praise for Head Start. The authors exaggerate the evidence of Head Start's long-term benefits and ignore some of the evidence against the benefits of early intervention generally. But even Zigler and Muenchow resist the notion that Head Start is a "silver bullet." They write:

We must also guard against the impression that any one- or two-year program can, by itself, rescue a whole generation of children and families. Early childhood educators are rediscovering what was really clear from the outset of Head Start: the program is far more effective when it is followed up by projects designed to ease the child's transition to elementary school. [22]

International evidence would tend to support the view that early intervention is not a panacea for learning problems. Indeed, in such countries as Japan and Korea, no "Head Start" types of programs exist for the vast majority of children. In general, Asian parents simply do not believe that formal instruction during a child's preschool years provides a boost in educational achievement. Instead, write Harold W. Stevenson and James W. Stigler, "Asian mothers believe that whatever teaching they do with their pre- school children should be as informal as possible." [23] Japanese preschools have no relationship to elementary schools; they exist primarily to help children "learn to enjoy group life and to participate effectively in it," Stevenson and Stigler continue. [24]

In keeping with the pattern discussed above, American children do at first exhibit academic benefits from formal preschool experiences. American kindergartners hold their own, or even outscore their Asian peers, on various tests of academic performance. But those benefits are purely short-term. "Only a year separates the ages of the kindergartners and the first-graders, but during this time the performance of the American children deteriorates relative to that of the Chinese and Japanese children," Stevenson and Stigler conclude, and they go on to identify explanatory factors in schooling and home environments. [25] In other words, even though we already give American children a "head start"

in academic competition with Asians, our children still fall behind fairly quickly.

The dilemma posed for proponents of the Head Start myth by modern psychological research is perhaps best summarized by the comments of Sandra Scarr, who has served as president or board member of some of the most prestigious professional associations in psychology during her academic career. She is no conservative hack; she believes in an activist role for government in day care and other areas. Yet she, too, questions many of the assumptions implicit in the Head Start hype. She believes that heredity plays a crucial role in development, that children's natures are not infinitely malleable by outside forces, and that parenting environments need not be uniformly "perfect" for children to succeed. "Fortunately, evolution has not left development of the human species, nor any other, at the easy mercy of variations in their environments," she said in her 1991 presidential address to the Society for Research in Child Development. "We are robust and able to adapt to wide-ranging circumstances. . . . If we were so vulnerable as to be led off the normal developmental track by slight variations in our parenting, we should not long have survived." [26]

Scarr is blunt about Head Start. "There is quite a mystique in our culture about the importance of early intervention," she told Holden, yet "there is no evidence [for it] whatever." [27] Scarr and other child development experts may favor a significantly different approach to education reform than do free-market thinkers, but they clearly reject the notion that "investing" our hopes and our tax dollars in preschool education programs such as Head Start will make our social ills go away. It's the public schools that must change. Head Start is neither a necessary nor a sufficient condition for helping poor children succeed.

### **Head Starts, Government Stumbles**

Despite the paucity of evidence that Head Start has a long-term impact on children, there is no doubt that Head Start's medical, nutritional, and (to some extent) educational services provide immediate benefits to poor children. But it does not follow that a federal government program is needed to provide those services to preschoolers. A mix of private-sector, nonprofit, church, community group, and extended-family providers is a better way to provide such care for children, poor or not.

There is plenty of evidence to suggest that an ever-increasing number of employers provide help to their employees in finding quality day-care and preschool programs. Some large corporations, such as Campbell Soup Company, Corning Glass Works, and Richardson-Vicks U.S.A, provide their employees on-site or near-site day-care centers for a low weekly fee. Other corporations are forming consortia to make child care available to employees who live in a particular city or metropolitan area. [28]

Still, the number of companies that can actually provide programs on site will always remain rather small; a 1989 survey of employers by Developmental Child Care, Inc., of Connecticut found that only 600 firms--out of 3,700 firms that provided employees some help with child care--had centers on site. The remaining firms provided financial assistance, information, referral, and flexible personnel policies to help employees find the care best suited to their children. [29] There is no need for government to force further action on this front, since competitive pressures will continue to drive many large and medium-sized firms toward helping employees find appropriate care for their children. [30]

Child care and preschool will be a major growth industry throughout the 1990s. American Demographics estimates that the child-care business will grow 21 percent a year until at least 1995, when for-profit services will claim nearly half of all child-care spending. There are already more than 60,000 licensed day-care centers in the United States and many more in-home day-care settings across the country. And demographers predict that the population of 3- to 5-year-olds will reach 12 million next year. [31]

Given those trends, it should come as no surprise that America's education establishment covets the huge, lucrative market for providing preschool care. That's one reason (blame-shifting is another) the National Education Association, state and federal education bureaucrats, education researchers and consultants, and their legislative allies in Washington and the state capitals all spend so much time attributing current education problems to lack of a comprehensive federal Head Start program. Indeed, the education establishment would like to take it one step further and base virtually all Head Start and preschool programs at public schools. They view the prospect of a dynamic,

private marketplace for preschool care with much disdain. By masterminding further federal intervention in preschool programs, the establishment hopes to broaden and strengthen its power over American education. If you think I exaggerate their intentions, consider the remarks of Keith Geiger, president of the NEA, in a March 1991 editorial in the association's in-house magazine:

Might not our reluctance to open our public schools to children younger than age five be one reason our nation faces such a stern economic challenge from foreign competitors? I think there's something to that analysis. And so does our NEA Board of Directors. That's why the Board has formally adopted a position that "public schools should become the primary providers of preschool education for three- and four-year-olds." . . . Right now, early childhood education is a hodgepodge of public and private day-care centers, nursery schools, child-care homes, and baby sitters of widely differing quality and huge cost variations. All of us know what this hodge-podge means. It means failure.[32]

Geiger's barely concealed contempt for diversity and competition demonstrates a bureaucratic conceit of the highest order: unless one institution--the public school--controls the entire preschool sector and imposes uniformity, children will fail. Given public education's record in recent years, it would be hard for anyone unaffiliated with the NEA not to burst out laughing at Geiger's preposterous thesis.

### **A Head Start Won't Win the Race**

America's leaders and policymakers need to think more strategically about how best to improve the lives and prospects of poor children.

First, there is the issue of child-care costs. Church and community day care cost an average of \$46 a week per child, or \$2,392 annually, in 1990. Some church-run centers provide lower cost care, while private, selective preschools and centers can cost up to \$100 or more a week.[33]

Government is one major cause of such high costs. Local and state regulations of employees, staff-child ratios, services, insurance, and amenities all increase the per child cost of preschool and child care significantly.[34]

Zoning is another major culprit; it forces child-care centers into business or industrial areas and raises building costs.[35] Numerous studies confirm that effect. One study of day-care regulation in North Carolina found that every increase of one year in training mandates for care givers increased the annual fee per child by \$71 (in 1992 dollars). The average fee increased another \$429 for every increase of one care giver per day-care group.[36] Even researchers who are sanguine about the impact of government regulations nonetheless advocate lifting some of the costliest rules, such as child-staff ratios, and reducing the regulatory burden on informal home-care arrangements that provide adequate, low-cost services for most families-- especially for poor families who may find formal centers or preschools beyond their means even after deregulation.[37]

There is no evidence that formal centers or preschools necessarily provide better care for children than informal centers and homes (indeed, there is quite a bit of evidence to the contrary).[38] Many psychologists counsel that preschoolers, disadvantaged or not, should not be pushed precipitously into formal education, anyway. As Lilian G. Katz, a professor of early childhood education at the University of Illinois, Urbana-Champaign, wrote in *Parents* magazine:

The fact that preschoolers can learn basic academic skills through formal instruction does not mean that they should: The issue is not simply whether it can be done but rather what the immediate and long-term effects of early academic pressures might be. Recent research indicates that for many children, early academic pressures produce anxiety, doubts about parents' acceptance of them, and less positive attitudes toward school.[39]

Relieving preschools, day-care centers, and informal child-care arrangements of regulatory burdens would do much to help poor families provide for their children. Radically altering the federal government's current role in preschool programs--by ending the Head Start program--would help even more. The amount of federal funds appropriated for Head Start in fiscal year 1992--\$2.2 billion--represents a per child expenditure of \$3,410, surely a sum large enough to provide care for a child in the private or nonprofit sector.[40] Policymakers should at least convert Head Start funds

into direct grants to families, thus allowing poor parents to choose among care providers. For all the same reasons that choice and competition could improve public schools, Head Start-like services would be better provided in the already competitive marketplace for child-care and preschool programs.

An even better approach would be to convert federal money now committed to Head Start into vouchers or tax relief to give parents the opportunity to send their children to private or parochial schools in their communities. If the federal government converted the amount of money spent on Head Start in 1992 into \$2,000 vouchers--which would significantly defray the cost of attending most private schools--each year as many as 1.1 million poor children would have the chance to get a decent education in a local school of their parents' choice. As argued above, helping poor children to attend quality elementary and secondary schools would be a much better "public investment" than extending the federal government's reach further into the lives of preschool children.

Head Start's popularity is due more to slick salesmanship and superficial thinking about child development than to proven success. The immediate benefits Head Start confers on poor children--by improving their nutrition, providing a safe and stimulating environment, and helping teach their parents basic parenting skills--could be made available to poor families more efficiently through a competitive, deregulated marketplace of private centers, nonprofit organizations, and church- and community-run programs. More important, early intervention by any outside institution is not a panacea for the long-term ravages of poverty. The money spent on Head Start, if converted into vouchers for poor children to attend the schools of their parent's choice, offers a much better prospect of ending the poverty cycle and its immense public costs than does increased government control of and intervention in the lives of American preschoolers.

## Notes

[1] Project Head Start Statistical Fact Sheet, Administration for Children, Youth and Families, U.S. Department of Health and Human Services, January 1992, pp. 23.

[2] "Funds for Head Start," Christian Science Monitor, July 9, 1992, p. 20.

[3] Computations based on appropriations listed in Project Head Start Statistical Fact Sheet, pp. 23., and the Consumer Price Index for 196592.

[4] Project Head Start Statistical Fact Sheet, p. 4.

[5] Ron Haskins, "Beyond Metaphor: The Efficacy of Early Childhood Education," *American Psychologist* 44, no. 2 (February 1989): 277.

[6] Stefan Kanfer, "Good Things, Small Packages," *Time*, July 29, 1991, pp. 5455.

[7] As quoted in "The State of America's Children 1991," Children's Defense Fund, 1991, p. 6.

[8] Edward Zigler and Susan Muenchow, *Head Start: The Inside Story of America's Most Successful Educational Experiment* (New York: Basic Books, 1992), pp. 19192.

[9] Haskins, p. 277.

[10] "The Impact of Head Start on Children, Families and Communities: Head Start Synthesis Project," Administration for Children, Youth and Families, U.S. Department of Health and Human Services, June 1985, Executive Summary, p. 1.

[11] Haskins, p. 274.

[12] Michael V. Ellis and Erica S. Robbins, "In Celebration of Nature: A Dialogue with Jerome Kagan," *Journal of Counseling and Development* 68, no. 6 (July-August 1990): 623.

[13] Ibid., p. 624.

[14] Jerome Kagan, R. B. Kersley, and P. R. Zelazo, *Infancy: Its Place in Human Development* (Cambridge, Mass: Harvard University Press, 1978).

[15] See, for example, the discussion of Sandra Scarr's research in "Award for Distinguished Contributions to Research in Public Policy: 1988," *American Psychologist* 44, no. 4 (April 1989): 65253.

[16] See, for example, David C. Rowe, "As the Twig Is Bent? The Myth of ChildRearing Influences on Personality Development," *Journal of Counseling and Development* 68, no. 6 (July-August 1990): 60611.

[17] Constance Holden, "Head Start Enters Adulthood," *Science* 247 (March 23, 1990): 1402.

[18] Ibid.

[19] Barbara Kantrowitz, "A Head Start Does Not Last," *News week*, January 27, 1992, pp. 4445.

[20] Ibid., p. 45.

[21] Valeria E. Lee, J. BrooksGunn, Elizabeth Schnur, and FongRuey Liaw, "Are Head Start Effects Sustained? A Longitudinal Followup Comparison of Disadvantaged Children At tending Head Start, No Preschool, and Other Preschool Programs," *Child Development* 61, no. 2 (April 1990): 505.

[22] Zigler and Muenchow, p. 207.

[23] Harold W. Stevenson and James W. Stigler, *The Learning Gap: Why Our Schools Are Failing and What We Can Learn from Japanese and Chinese Education* (New York: Summit Books, 1992), p. 76.

[24] Ibid., p. 78.

[25] Ibid., pp. 7980.

[26] Sandra Scarr, "Developmental Theories for the 1990s: Development and Individual Differences," *Child Development* 63, no. 1 (February 1992): 1516.

[27] Holden, p. 1402.

[28] Stanley D. Nollen, "The WorkFamily Dilemma: How HR Managers Can Help," *Personnel* 66, no. 5 (May 1989): 27.

[29] William B. Werther, Jr., "Childcare and Eldercare Bene fits," *Personnel* 66, no. 9 (September 1989): 42.

[30] Fran Sussner Rodgers and Charles Rodgers, "Business and the Facts of Family Life," *Harvard Business Review* 67, no. 6 (NovemberDecember 1989): 12223.

[31] Blayne Cutler, "Business Reports," *American Demographics* 11, no. 9 (September 1989): 2021.

[32] Keith Geiger, "An Idea Whose Time Has Come," *NEA Today*, March 1991, p. 2.

[33] Cutler, p. 20.

[34] John Hood and John Merline, "What Consumers Should Know about Day Care," *Consumers' Research*, August 1990, pp. 2126. See also Karen Lehrman and Jana Pace, "DayCare Regulation: Serving Children or Bureaucrats?" *Cato Institute Policy Analysis* no. 59, September 25, 1985.

[35] Virginia Postrel, "Who's behind the Child Care Crisis?" *Reason*, June 1989, pp. 2027.

[36] Michael L. Walden, "The Cost of Care," *Carolina Journal* 1, no. 6 (June/July 1992): 16.

[37] William T. Gormley, Jr., "State Regulations and the Availability of Child-Care Services," *Journal of Policy Analysis and Management* 10, no. 1 (Winter 1991): 91.

[38] See, for example, Charles N. Siegel, "The Brave New World of Child Care," *New Perspectives Quarterly* 7, no. 1 (Winter 1990): 34-45.

[39] Lilian G. Katz, "Should Preschoolers Learn the Three R's?" *Parents* 65, no. 10 (October 1990): 206.

[40] Project Head Start Statistical Fact Sheet, p. 2.