

NUMBER 15 / JULY 2002

Early Childhood Education: Building a Strong Foundation for the Future

Introduction

Over the past three decades, the AFT has advocated for universal access to high-quality preschool because such programs provide young children with the experiences they need to thrive and because they help to close the achievement gap between advantaged and disadvantaged children. We believe that the United States needs an early childhood education system that is public, accountable for high standards, sufficiently funded to include all children who need it, and comparable to the early childhood education systems of other high-achieving industrialized nations. The union's current concerns reflect earlier calls to action, but they have come to include full-day kindergarten; full funding of Head Start; guaranteeing access to programs by poor and working poor families; and leveraging and coordinating of federal, state, and local funds.

Today, preschools are often of poor quality, in short supply, and prohibitively expensive for poor or even middle-class children. Few of the 8 million children in preschool attend programs that meet even basic standards of quality. Indeed, "many children, especially those in low-income households, are served in programs of such low quality that learning and development are not enhanced and may even be jeopardized." (NRC, 2000a, p. 7). The families of poor children often cannot afford

high-quality programs—on their own or through public subsidies—even if they are fortunate enough to find such a program. And families that do enroll their children in a good preschool may have to defer saving for their children's college education because the fees consume a large part of their family income—up to one-third in many cases (The Urban Institute, 1999).

The problem of availability is likely to grow worse as mothers of young children join the work force in record numbers. (In 2000, nearly 75 percent of women with children between the ages of 3 and 5 worked outside the home.) But there will be little advantage in increasing the *number* of programs without greatly improving their quality. Early childhood programs must be designed to support school readiness through early language and literacy growth and the development of early math skills, cognitive skills, and social-emotional readiness. Programs that promote school readiness help ease children's adjustment to school by exposing them to daily routines, social norms, and language-enriched activities that provide a foundation for all future learning (NRC, 1998). Without such high-quality early learning opportunities, many disadvantaged children have an uphill struggle ahead of them, as they attempt to catch up with their more affluent peers.

AFT president Sandra Feldman, a longtime advocate of early childhood education, recently challenged the

nation to go beyond the custodial mode of childcare typical of many early childhood programs and strive for a preschool experience that prepares children to succeed in school and later in life. She called for a national commitment to universal, high-quality, non-compulsory preschool beginning at the age of 3:

Millions of children across America now start school without the same academic advantages of middle-class youngsters; universal preschool would be preventive medicine for children who don't have exposure to the kinds of experiences that produce early learning and social skills that serve as building blocks for success in later grades.

-AFT 2001 QuEST Conference

This policy brief provides the context and the research supporting AFT's call for universal early childhood education. It focuses on the current challenges the nation faces in achieving such a program; and it includes the signs of progress, a description of what other industrialized countries are doing, the features of high-quality programs, and a set of recommendations for securing them.

Early Childhood Education Works

The positive impact of high-quality early childhood programs on children's success in school and their future has been well documented. Many studies have demonstrated the importance of the early years for the developing brain. And over the past four decades, numerous studies such as the Perry Preschool Study; the Abecedarian Project; the Chicago Longitudinal Study; and the Cost, Quality, and Child Outcomes Study have indicated that high-quality early childhood education increases the likelihood that children—particularly those from disadvantaged backgrounds—will become successful students and citizens (NICHD, 1998).

High-quality programs provide children with secure and caring relationships with educators and caregivers, stimulating learning opportunities, and experiences that prepare them for the later school years. These programs are characterized by the following practices:

■ Language-rich and responsive communication between adults and children;

- Positive and appropriate reinforcement of skills and behavior:
- Extensive rehearsal of old and new cognitive, academic, and developmental skills;
- Guidance in desirable social skills and facilitation of positive interactions between peers and adults;
- Various structured and informal activities that encourage children to reflect, predict, question, and hypothesize;
- Availability of numerous materials, resources, and toys that focus on language and literacy;
- Activities that encourage the involvement of children's families and caretakers; and
- Incorporation of adequate nutrition and habits that will support good health.

After such rich and diverse experiences, children are better able to handle formal schooling. They succeed because they have language skills that are more developed, a better sense of group work and play with other children, and a grounding in other basic academic and social skills. And they have positive expectations about school. Children who have gone through these programs also have more secure relationships with adults; these children are better equipped to follow directions and more likely to trust figures of authority and be able to communicate their needs. Young children are capable learners, and having these types of educational experiences during their preschool years makes it possible for them to learn at a faster rate, become better readers and, consequently, better students.

Although early childhood programs that include the practices described above are expensive, studies consistently show a savings of \$7 for every dollar spent on such programs. These savings come as a result of lower costs for remedial and special education, fewer school dropouts, and less delinquency and subsequent unemployment or criminal activity.

Research demonstrates that high-quality early child-hood education helps bridge the achievement gap, reduces dropout rates and delinquency, and increases economic productivity and social stability. Making preschool universally available would help develop the highly educated work force and citizenry needed in the new millennium.

The Current Situation: The Challenges

Lack of School Readiness

In 1990, the U.S. governors joined with the president in adopting a series of National Education Goals. One of them—"by the year 2000 all children in America will start school ready to learn"—gave national prominence to preparing children for school. However, we are still far from achieving the goal. Veteran kindergarten teachers report that many children are coming to school unprepared, thus jeopardizing their chances to learn and succeed in school. In fact, more than 50 percent of U.S. children have one or more risk factors for school failure (Carnegie, 1994; U.S. Department of Education, NCES, 2001). Risk factors include too little exposure to stimulating language, reading, storytelling, and other literacy-building activities upon which later success in schooling is built (see Table 1). Children with these risk factors often have trouble following directions, working independently, working in groups, communicating, and establishing secure relationships with adults.

Research shows that children with limited English proficiency, children with disabilities, and children whose parents have low literacy skills are most likely to be unprepared for school and to have reading difficulties in the early grades that put them at risk of falling behind in all subject areas. However, the National Research Council's Committee on the Prevention of Reading Difficulties in Young Children found that

preschool programs also can contribute to the lack of school readiness if they do not have a clear focus on early literacy and language development.

Moreover, the National Center for Education Statistics' *Early Childhood Longitudinal Study* points to the socioeconomic factors involved in school readiness. This study concludes that even when kindergarten teachers do an excellent job helping low-income children close the learning gap in basic skills, more-advantaged youngsters continue to have an edge, especially in higher-order skills and reading and mathematics knowledge. (U.S. Department of Education, NCES, 2000b.)

Lack of Access and Quality

Research on availability and effectiveness of early childhood education has determined that the United States is among the worst providers of quality service in the industrialized world (Quality 2000 Initiative, 2000). The majority of public funds target low-income children only, but even so, early childhood programs do not come close to serving all eligible children from poor and working-poor families. In 2000, when public sector expenditures for early childhood education and care for children under age 5 amounted to approximately \$25 billion, only one in every 10 to 12 eligible children under 5 who needed help was getting any assistance (CED, 2002). According to estimates by various economists, it would take another \$25 billion to \$35 billion to extend free preschool programs of acceptable quality to all 3- and 4-year-olds (Barnett and Masse, 2001).

Preschool programs differ in availability, quality, and affordability. Access is also significantly complicated by the lack of coordination among programs. For example,

\neg	г :	1 1	1	4
	ľa	h	e	-1

Percentage of first-time kindergarten students (by family characteristics) who are proficient in school readiness: reading, math, and social-emotional skills

Readiness skill	All children	Children whose mothers have less than high school education	Children whose mothers have a high school diploma or equivalent	Children whose mothers have a bachelor's degree or higher
Letter recognition	66	38	57	86
Beginning sounds	29	9	20	50
Numbers and shapes	94	84	92	99
Relative size	58	32	50	79
Persisting at tasks	71	61	70	79
Paying attention in class	66	55	64	75

Source: U.S. Department of Education, NCES Early Childhood Longitudinal Study, 2000a.

it is not uncommon for social services agencies, state education agencies, school districts, family support programs, state departments of health, and other entities to run overlapping or competing early childhood programs that are divorced from the K-12 system as well as from one another (*Education Week*, 2002). As a result, it is difficult for parents to make sense of what is available and to recognize what a good program is.

Another factor contributing to the shortage of highquality preschool programs is the cost of delivering the services. While the K-12 system has a continuing source of funding, most early childhood programs are largely financed by fees from families and supplemented by modest (and usually inadequate) public and private contributions. Recent studies by the Organization for Economic Cooperation and Development, the Council for Economic Development, and the Urban Institute found that, on average, families' fees cover 50 percent to 60 percent of early childhood program costs. Full-day program costs are approximately \$4,000 to \$10,000 or more per child, per year—at least as much as college tuition at a public university. Yet, one out of three families with young children earns less than \$25,000 a year. Even when high-quality programs are available, most low-income families cannot afford them.

Lack of Qualified and Well-Compensated Staff

The evidence indicates that specialized training, including postsecondary education; low turnover; and decent salaries, are key predictors of program quality and positive child outcomes (NRC, 2000a). In other words, high-quality teachers make the difference. But according to the Bureau of Labor Statistics, early childhood teachers and other staff rank among the lowest in pay, lowest in training, and highest in turnover rates of any occupation and are comparable to parking lot attendants, dishwashers, and dry-cleaning workers (USDOL/BLS, 2002). Forty percent of preschool staff have only a high school diploma, and turnover rates range from 30 percent to 50 percent. As Table 2 indicates, salaries for most preschool staffs remain low. The highest-paid teachers currently earn an average hourly wage of \$10.20. Childcare workers and family childcare providers earn an average hourly wage ranging only from \$4 to \$8.

Table 2

Annual Compensation Rates for Early Childhood Teachers and Workers Compared to Other Occupations

	Annual Average Salary
Sales managers	\$69,560
K-12 Teachers	\$41,820
Fast food managers	\$33,360
Aerobics instructors	\$27,300
Hairdressers/Cosmetologists	\$20,800
Early childhood teachers	\$19,610
Laundry/dry-cleaning workers	\$15,760
Maids/Housekeepers	\$15,530
Early childhood workers	\$15,430
Parking lot attendants	\$15,350
Dishwashers	\$14,090

Sources: U.S. Department of Labor, Bureau of Labor Statistics, 1999; American Federation of Teachers, 2000.

As the first gatekeepers of schooling, preschool staff must have the knowledge and the professional development they need to be effective educators.

Signs of Progress

In 1980, only about 10 states provided early childhood education programs. Today, 43 states offer some type of preschool program for children under age 5 although few provide sufficient funds to cover more than a fraction of the eligible children (see Table 3). These state programs are in addition to the federal Head Start program, which serves approximately half of eligible 3- and 4-year-olds.

Every state provides funding for kindergarten in at least some districts (*Education Week*, 2002). Twenty-five states and the District of Columbia provide full-day kindergarten in districts that choose to offer such services.

Georgia, New York, North Carolina, and Oklahoma have promising universal early childhood education initiatives for 3- and 4-year-olds and are making progress in implementing universally accessible early childhood programs that address school readiness.

The U.S. Department of Defense sponsors another promising initiative. Its early childhood program has evolved from one characterized by weak standards, unsafe and unsuitable facilities, and poorly trained and

compensated staff to one that is a model for the nation (NRC/IM, 2000b; The Future of Children, 2001). More than 98 percent of military child development centers now meet the high-quality standards of accreditation from the National Association for the Education of Young Children, and they serve 63 percent of those children whose families request services.

Table 3				
Overview of State Early Childhood Policies				
The District of Columbia is included as a state				
States that require kindergarten teachers to have a B.A.	51			
States that require pre-kindergarten teachers to have a B.A.	21			
States that require early childhood workers to have a B.A.	1			
States that provide funds for early childhood education	43			
States that require districts to provide kindergarten	42			
States that pay for full-day kindergarten	26			
States that require early childhood education programs to be accredited by the National Association for the Education of Young Children	7			
Sources: Education Week, 2002; Children's Defense Fund, 1999.				

What Other Industrialized Countries Are Doing

According to the most recent international study, high-quality universal preschool is more widely available in other industrialized countries than in the United States. Many industrialized countries that are far less prosperous than most American states have been making far greater investments in educating their young children than the United States has (OECD, 2002). In these countries, there is strong public support—across a spectrum of political viewpoints—for public investment in early childhood education. To illustrate, Denmark, France, Norway, and Sweden each spent two to five times more per child on early childhood programs than did the United States (OECD, 2002; The Future of Children, 2001). And in France and Italy, nearly 100 percent of 3- and 4-year-olds attend public preschool (OECD, 2002).

The education level of preschool workers and teachers in other industrialized countries is also far higher than in the United States. If preschool workers and teachers do not already have a four-year university degree, they receive specialized training and certifica-

tion to ensure they are prepared to minister to children's academic, cognitive, social, emotional, and physical needs.

Characteristics of High-Quality Programs

The following "best practices" among high-quality early childhood programs have been identified by various researchers and the National Research Council:

- Qualified and Well-Compensated Staff. Positive outcomes in children's learning and cognitive development are repeatedly correlated with rigorous postsecondary training and education and with ongoing professional development. Staff who have high levels of formal training and education also tend to get better salaries and have lower turnover rates.
- Low Teacher-Child Ratios and Small Class Sizes.

 Smaller group size and low adult-child ratios are associated with more individualized attention, more classroom interaction, and more opportunities for teachers to work on language development and problem solving and to encourage social interactions and responsive relationships.
- Curriculum Content and Lessons That Emphasize School Readiness. Children are better prepared for the demands of formal schooling when they are exposed to age-appropriate activities that develop and enhance reasoning, communication, and problem solving and involve extensive language and pre-literacy activities and domain-specific knowledge in areas such as math and science. Multiple instructional approaches should be used, and such approaches can be applied in both the context of play and structured activities.
- Curriculum Content and Learning Activities That Focus on Language Development and Early Literacy. Children who are simultaneously exposed to print and literacy-rich settings, are read to regularly, and engage in activities that highlight the relations between print and speech are on their way to developing good vocabularies, an understanding of print concepts, and phonological awareness. A good-quality

early childhood program provides these experiences; in their absence, children are at added risk for later reading difficulties.

- Curriculum Content That Focuses on Cognitive, Social-Emotional, and Motor Development.

 Children's early learning and later academic achievement are enhanced by developmentally appropriate activities that cultivate physical dexterity, social skills, emotional maturity, and thinking strategies. The latest neurobiological research on children confirms that comfortable early environments and nurturing relationships are essential to healthy development. Everything a child experiences in the first months and years of life "sets either a sturdy or a fragile base for what follows" (NRC/IM, 2000b, p. 5).
- Comprehensive Services and Nurturing
 Environments. Children's school readiness depends in part on their health, nutrition, the effect of special needs, if any (e.g., learning and physical disabilities, limitations in English language proficiency), and their parents' level of involvement with their education and care. Providing for these needs in a comprehensive manner will go far to ensure that children are well prepared for success in school and life.

Recommendations

To prepare our next generation, our nation must make the investment necessary to achieve high-quality, universal early childhood education.

■ We need to leverage and coordinate federal, state, and local funds; resources; and programs.

Investments are needed to expand access and make early childhood education programs available to all 3-and 4-year-olds. There must also be coordination among the various programs to eliminate—or at least minimize—the duplication, overlapping, and gaps in services that now exist. But rationalizing existing services is not enough: Agencies running programs (at the national, state, and local levels) must make the improvements necessary to create a system of high-quality early childhood education available through various providers. Following these steps will ensure that all children—whether they are in schools, community-based organizations, state-funded preschool

programs, childcare centers, or federally funded programs like Head Start—have high-quality early child-hood education experiences.

- We need to guarantee free public preschool for all poor and at-risk children. Although free, high-quality early childhood education programs must eventually be made available to all 3- and 4-year-olds, full public funding needs to be extended first to low-income children and children with other risk factors. Integral to this plan is the full funding of an improved Head Start program that will serve all eligible children.
- We need to make public preschool more affordable for other families. Families with higher incomes who want their children in high-quality public preschool and can afford to pay some or all of the costs should be asked to do so according to a reasonable schedule of sliding-scale fees.
- We need to guarantee every child full-day kindergarten. Extending kindergarten to a full school day is key to establishing and reinforcing school readiness. A recent study (U.S. Department of Education, NCES, 2001) confirms that children enrolled in full-day kindergarten achieve greater gains in early language and literacy than children enrolled in only half-day programs. Full-day kindergarten is particularly advantageous for children from low-income backgrounds.
- We need to implement a rigorous licensing and accreditation system. Programs must be monitored on a regular basis to ensure quality and accountability for public funds. Currently, most monitoring focuses on compliance with health and safety regulations, rather than on professionally accepted levels of quality (NAEYC, 1999). Obliging publicly funded programs to meet specified standards would create coherence among programs and would serve to make high-quality practices widespread.
- We need to develop and promote high standards for training, formal education, professional development, and compensation for teachers and other staff. Poor training, substandard pay, and high turnover—all of which compromise quality in many early childhood education programs—must be addressed. (NRC, 2000a; OECD, 2002). Preschool

staff must be given opportunities for further training and ongoing professional development and the wherewithal to seek formal studies or certification.

- We need to incorporate all aspects of school readiness into early childhood education standards and establish linkages to the K-12 system. The standards, instruction, and curriculum of all preschools must be grounded in research-based programs and practices and aligned to state K-12 standards. Doing so will ensure that children entering kindergarten have already been exposed to the education standards and expectations on which the state's K-12 system is built. The connection between early childhood programs and the K-12 public school system is also important because it can help early childhood programs benefit from the public education "infrastructure of state-certified teachers, ongoing professional development, and professional salaries" (U.S. Department of Education, NIECDE, 2000, p. 16). Standards and curriculum should focus on early language and literacy, early numeracy, social-emotional competence, motor readiness, and physical abilities.
- We need to provide children with comprehensive services. Preparing young children for school also requires that they be mentally and physically healthy and provided with the services necessary for overall healthy development. Such services include vision/hearing tests, mental- or physical-health referrals, immunizations, and parent involvement programs.

The need for high-quality, universal early childhood education is great and growing. The American Federation of Teachers urgently calls upon the nation to make a commitment to provide the nation's youngest citizens with the opportunities and experiences that will enable them to realize their full potential.

References

- American Federation of Teachers. (2000). Survey and Analysis of Teacher Salary Trends. Washington, D.C.: AFT.
- Barnett, W.S. (1995). "Long-term effects of early child-hood programs on cognitive and school outcomes." The Future of Children: Long-term Outcomes of Early

- Childhood Programs, 5(3): 25-50. Los Altos, Calif.: Center for the Future of Children, the David and Lucile Packard Foundation.
- Barnett, W.S. and Boocock, S.S. (Eds.). (2001). Early Care and Education for Children in Poverty: Promises, Programs, and Long-Term Results. Albany, N.Y.: State University of New York Press.
- Barnett, W.S. and Masse, L. (2001). Funding Issues for Early Care and Education in the United States. New Brunswick, N.J.: Center for Early Education Research, Rutgers University Graduate School of Education.
- Carnegie Corporation of New York. (1994). Carnegie Task Force on Meeting the Needs of Young Children. Starting Points: Meeting the Needs of Our Youngest Children. New York, N.Y.: Carnegie Corporation.
- Children's Defense Fund. (2000). Issue Basics: Quality Child Care Is Key To School Readiness. Washington, D.C.: CDF.
- Children's Defense Fund. (2000a). Issue Basics: Why Quality Child Care and Early Education Matters. Washington, D.C.: CDF.
- Children's Defense Fund. (1999). K. Schulman, H. Blank, and D. Ewen. *Seeds of Success: State Prekindergarten Initiatives 1998-99*. Washington, D.C.: CDF.
- Committee for Economic Development (CED). (2002). Preschool for All: Investing in a Productive and Just Society. New York, N.Y.: CED.
- Education Week. (2002). "Quality Counts 2002." 21(17).
- Future of Children, The. (2001). "Caring for Infants and Toddlers," 11(1). Los Altos, Calif.: Center for the Future of Children, the David and Lucile Packard Foundation.
- Gomby, D.S., Larner, B.S., Stevenson, C.S., Lewit, E.M., and Behrman, R.E. (1995). "Long-term Outcomes of Early Childhood Programs: Analysis and Recommendations." *The Future of Children: Long-term Outcomes of Early Childhood Programs*, 5(3): 25-50. Los Altos, Calif.: Center for the Future of Children, the David and Lucile Packard Foundation.

- National Association for the Education of Young Children (NAEYC). (1995). *School Readiness: A Position Statement*. Washington, D.C.: NAEYC.
- National Association for the Education of Young Children (NAEYC). (1999). Developing and Implementing Effective Public Policies to Promote Early Childhood and School-Age Care Program Accreditation: A Position Statement. Washington, D.C.: NAEYC.
- National Institute of Child Health and Human Development (NICHD), Early Child Care Research Network. (1998). "The NICHD Study of Early Child Care: A comprehensive longitudinal study of young children's lives." *Psychiatric Times*, 15 (3), 71-72.
- National Research Council (NRC). (1998). Preventing Reading Difficulties in Young Children. Committee on the Prevention of Reading Difficulties in Young Children, C.E. Snow, M.S. Burns, and P. Griffin, (Eds.). Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press.
- National Research Council (NRC). (2000a). *Eager to Learn: Educating Our Preschoolers*. Committee on Early Childhood Pedagogy, B. Bowman, S. Donovan, and M.S. Burns, (Eds.). Commission on Behavioral and Social Sciences and Education. Washington, D.C.: National Academy Press.
- National Research Council and Institute of Medicine (NRC/IM). (2000b). From Neurons to Neighborhood: The Science of Early Childhood Development.

 Committee on Integrating the Science of Early Childhood Development, J. P. Shonkoff, and D.A. Phillips, (Eds.). Board on Children, Youth, and Families. Washington, D.C.: National Academy Press.
- Organization for Economic Cooperation and Development (OECD). (2002). Starting Strong, Early Childhood Education and Care. Paris, France: OECD.
- Quality 2000 Initiative, The. (2000). Bush Center in Child Development and Social Policy. Yale University. New Haven, Conn.: Yale University.
- The Urban Institute. (1999). National Survey of America's Families. Washington, D.C.: The Urban Institute.

- U.S. Department of Education, National Center for Education Statistics (NCES). (2001). Entering Kindergarten: A Portrait of American Children When They Begin School: Findings from The Condition of Education 2000. Washington, D.C.: NCES.
- U.S. Department of Education, National Center for Education Statistics (NCES). (2000a). *Early Childhood Longitudinal Study: America's Kindergartners*. Washington, D.C.: NCES.
- U.S. Department of Education, National Center for Education Statistics (NCES). (2000b). *Early Childhood Longitudinal Study*. Washington, D.C.: NCES.
- U.S. Department of Education, Office of Educational Research and Improvement, National Institute on Early Childhood Development and Education (NIECDE). (2000). School Involvement in Early Childhood. Washington, D.C.: NIECDE.
- U.S. Department of Labor(USDOL). (2001). Report on the American Workforce. Washington, D.C.: USDOL.
- U.S. Department of Labor, Bureau of Labor Statistics (USDOL/BLS). (2002). *Occupational Outlook Handbook, 2002-2003 Edition*. Washington, D.C.: USDOL/BLS.
- U.S. Department of Labor, Bureau of Labor Statistics (USDOL/BLS). (1999). Occupational Employment and Wage Estimates. Washington, D.C.: USDOL/BLS.
- U.S. Department of Labor Women's Bureau (USDOLWB). (2001). Fact Sheet: Work-Related Childcare Statistics. http://www.dol.gov/dol/wb/public/wb_pubs/child2001.htm#3
- Waldfogel J. (2001). "International policies toward parental leave and child care." *The Future of Children: Caring for Infants and Toddlers*, 11(1). Los Altos, Calif.: Center for the Future of Children, the David and Lucile Packard Foundation.
- Yoshikawa, H. (1995). "Long-term effects of early childhood programs on social outcomes and delinquency." *The Future of Children: Long-term Outcomes of Early Childhood Programs*, 5(3): 51-75. Los Altos, Calif.: Center for the Future of Children, the David and Lucile Packard Foundation.