

GAO

Briefing Report to the Ranking Minority Member, Subcommittee on Children and Families, Committee on Labor and Human Resources, U.S. Senate

February 1995

EARLY CHILDHOOD PROGRAMS

Promoting the Development of Young Children in Denmark, France, and Italy





United States
General Accounting Office
Washington, D.C. 20548

Health, Education, and
Human Services Division

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The Honorable Christopher J. Dodd
Ranking Minority Member
Subcommittee on Children
and Families
Committee on Labor and Human
Resources
United States Senate

Dear Senator Dodd:

The national demand for high-quality, early childhood programs has grown in recent years.¹ These programs are increasingly sought by parents who, while they work or attend school, want their children to be cared for in a safe and nurturing setting. In addition, experts believe that early childhood programs are a means to enhance children's success in school. Many also see early childhood programs as a way for the growing numbers of low-income children to begin school on a par with their more advantaged peers.

As you know, the Congress has tried to address these issues in a number of ways. In 1994, the Congress enacted the Goals 2000: Educate America Act, legislation that sets forth the national goal to provide high-quality early childhood programs for all children.² The Congress also reauthorized the Head Start program, which provides a range of child development and other services to children from poor families.³ The Head Start legislation emphasizes improved quality and expands the program so it can reach even more young children. Finally, the recently reauthorized Elementary

¹The term "high quality" is generally used to describe environments in early childhood program settings that support and enhance children's development. Some elements often associated with high quality in the research literature or professional standards include well-trained teachers, a child-focused, developmentally appropriate curriculum; low staff turnover; low child-staff ratios; small group sizes; and good working relationships with parents. In this report "early childhood programs" are any that provide education and care in center-based settings. High-quality care, however, can be provided in other settings.

²The Goals 2000: Educate America Act (P.L. 103-227) also includes seven other goals that concern (1) graduation from high school, (2) academic achievement and citizenship, (3) math and science achievement, (4) teacher education and development, (5) adult literacy, (6) drug- and violence-free schools, and (7) parental participation.

³The Office of Management and Budget defines "poor" based on family size and annual household income. Currently, a family of four with an annual income below \$14,800 is considered poor. However, in this report we use the term "low income" broadly and do not limit ourselves to a single economic measure.

and Secondary Education Act of 1965 allows the use of funds for activities that benefit preschool-aged, low-income children.

However, concerns remain about the nation's early childhood programs. The participation rate in these programs is much lower for children from low-income families than for other children. Some of these programs are inaccessible because they are unaffordable or operate during hours that are inconvenient to working families. Other programs provide low-quality services. All of these issues are likely to be included in upcoming debates in the 104th Congress about (1) the Child Care and Development Block Grant, which provides child care subsidies to low-income parents, and (2) proposals to reform the nation's welfare system, which are likely to increase the need for early childhood programs if more parents are required to work or attend training.

To provide a context for discussing early childhood programs in the United States, you asked us to develop information concerning the policies and practices of other countries that have such programs. This report gives a brief overview of the ways that three European countries, Denmark, France, and Italy,

- provide early childhood programs to large numbers of children,
- promote high quality, and
- finance such programs.

This report serves to formalize the information discussed with your office on January 27, 1995.

Background

Most preschool-aged children in Denmark, France, and Italy attend center-based early childhood programs. The governmental levels and departments responsible for managing these programs differ among the countries.

In Denmark, public early childhood programs are completely separate from the public school system and are administered by the Ministry of Social Affairs. However, municipalities are responsible for the day-to-day operation of these programs. Municipalities can also establish early childhood programs and operate them directly or through management contracts with independent or private institutions. The Ministry's broadly stated guidelines list the following objectives for early childhood programs: provide an environment that supplements child-rearing

experiences in the home, offer security and protection, and encourage the child's curiosity and desire to learn. National and municipal policy—as well as contracts or agreements negotiated between the municipalities, unions, and early childhood programs—establish minimum classroom and facility standards.

French public early childhood programs are administered by the Ministry of National Education. It shares responsibility for these programs, however, with the municipalities. French public policy related to early childhood programs seeks to ensure that all programs stimulate children's capabilities for development.

In Italy, the Ministry of Education operates national early childhood programs and broadly supervises other programs, including ones operated by municipalities. National schools are required to follow Ministry guidelines, which discuss the development of the child's personality in every dimension, the role of the school in protecting the rights of the child, the importance of continuity within the school setting and between home and school, and the importance of mainstreaming special needs children, including ethnic and language minorities, into regular classrooms. Municipal schools may follow these guidelines or adopt their own approaches.

Results in Brief

Among 4-year-olds, 76 percent in Denmark and 100 percent in France attended public, center-based early childhood programs in 1992 compared with 55 percent in the United States in 1990. In Italy in 1992, about 92 percent of all children aged 3 to 5 attended early childhood programs, most of which were public. Children in the three European countries attended public programs that were accessible to parents because (1) sliding fee scales allowed children in families at every income level to participate if their parents desired and (2) full-day services made programs convenient for parents, especially those who worked. In addition, children in these countries participated at high rates because parents believed that early childhood programs were beneficial for their children.

Public programs in these countries had elements of quality that have been identified in the research literature or professional standards as enhancing the development of children. Early childhood teachers in Denmark, France, and Italy received from 2 to 3.5 years of specialized training either at the high school, college, or university level to prepare them for their profession. In general, early childhood programs in these countries

encouraged teachers to prepare young children for life using balanced approaches that included activities consistent with the (1) developmental age of a child and (2) physical, emotional, social, and cognitive skills that children must eventually develop. Teacher turnover at sites we visited in all three countries was lower than the 26-percent turnover rate reported for American programs in 1991.⁴ Unlike many early childhood teachers in the United States, all teachers in the three European countries were public employees; received salaries equal to or slightly lower than those of elementary school teachers; and received pensions, leave, and health care benefits. Finally, at the sites we visited in Denmark and Italy, child-staff ratios were generally within the range recommended for U.S. programs by the National Association for the Education of Young Children (which is about 7 to 10 children per one teacher), but the ratios at the sites we visited in France were higher. These ratios ranged from 6.6:1 to 8:1 in Denmark, 11.3:1 to 16:1 in France, and 5:1 to 7.6:1 in Italy.

National and local governments substantially financed early childhood programs in the three countries we studied; in each country these entities together covered about 70 percent or more of the costs of early childhood programs. At the sites we visited, staffing costs per child were higher in Denmark and Italy and lower in France than the average staffing cost of Head Start programs in the United States. These differences were due to variations in child-staff ratios and staff training and experience.

Scope and Methodology

This study focused on children aged 3 through 5 and public programs that provided services to young children in early childhood centers. On the basis of an extensive literature review and discussions with experts in the field of early childhood education, we selected countries for study that (1) had high participation in early childhood programs by preschool-aged children and (2) were recommended to us by a panel of experts as having high-quality programs. We interviewed national, regional, and local government officials, union officials, and professors and researchers knowledgeable about early childhood education and programs in these countries. We visited a total of 24 early childhood program sites in the three countries where we observed classroom activities, interviewed program staff, and collected information about staff training and years of experience (see app. I). We judgmentally selected these sites to represent diverse populations and geographic areas; however, they are not representative of all programs in Denmark, France, and Italy. This report

⁴See Marcy Whitebook, Deborah Phillips, and Carollee Howes, *The National Child Care Staffing Study Revisited: Four Years in the Life of Center-based Child Care* (Oakland, Calif.: Child Care Employee Project, 1993).

was reviewed by individuals knowledgeable about the early childhood programs in each country, and changes were made when appropriate.

As arranged with your office, unless you announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to the Secretaries of Education, and Health and Human Services and provide copies to others on request.

Please contact Beatrice F. Birman, Assistant Director, on (202) 512-7008 if you or your staff have any questions. Other GAO contributors to this briefing report are listed in appendix II.

Sincerely yours,

A handwritten signature in black ink that reads "Linda G. Morra". The signature is written in a cursive style with a large initial "L" and a stylized "M".

Linda G. Morra
Director, Education
and Employment Issues

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Abbreviations

| | |
|-------|--|
| CDA | Child Development Associate |
| NAEYC | National Association for the Education of Young Children |
| OMB | Office of Management and Budget |
| ZEP | Zones d'Education Prioritaires |

Promoting the Development of Young Children in Denmark, France, and Italy

Table 1.1: Participation Abroad Higher Than in the United States

| Age group participating | Denmark | France | Italy | United States |
|-------------------------|--------------------|---------------------------|---------------------------|---------------------------|
| | As of January 1992 | As of school year 1991-92 | As of school year 1991-92 | Based on 1990 Census data |
| Aged 5 | 76% ^a | 100% | ^b | 81% |
| Aged 4 | 76 | 100 | ^b | 55 |
| Aged 3 | 60 | 99 | ^b | 30 |

^aParticipation is lower in Denmark than in France and Italy in part because compulsory school age in Denmark is 7.

^bThe total participation for all age groups combined was 92 percent. Official participation data do not distinguish children by age.

Participation in Programs Abroad Is Higher Than in United States

Almost all preschool-aged children in France and most children in Denmark and Italy attend publicly funded, center-based programs. (See table 1.1.) Children in the United States attend preschool programs in many different settings that are funded by governments as well as businesses and other private organizations. Children in these European countries participate in publicly funded early childhood programs at high rates despite the differences in labor force participation of women in these countries. In the United States, the labor force participation rate of women aged 25 to 34 was 72.6 percent in 1988; while in Denmark the rate was 90 percent; and in France and Italy, 74.5 and 60.8 percent, respectively.⁵ One reason for children’s high participation rates in early childhood programs in these European countries is that parents believe that these programs are beneficial for their children.

Table 1.2: Number of Children Aged 3, 4, and 5 in Denmark, France, Italy, and the United States

| Number of children | Denmark | France ^a | Italy ^a | United States |
|--------------------|------------|---------------------|--------------------|---------------|
| | As of 1992 | As of 1990 | As of 1990 | As of 1990 |
| Aged 5 | 56,245 | 752,486 | 587,733 | 3,569,711 |
| Aged 4 | 56,886 | 758,293 | 570,903 | 3,624,534 |
| Aged 3 | 59,380 | 754,928 | 557,121 | 3,610,486 |

^aNumbers for France and Italy are population projections, not actuals.

Sources: Denmark, Ministry of Social Affairs; France and Italy, International Programs Center, U.S. Bureau of the Census; United States, U.S. Bureau of the Census.

⁵Women aged 25 to 34 are considered to be in the primary childbearing and childrearing period. The figure cited for Italy includes women aged 25 to 39.

GAO PUBLIC PROGRAMS ABROAD
ARE WIDELY AVAILABLE

In Denmark, France, and Italy

- places in programs are open to all children;
 - provisions promote participation by disadvantaged children; and
 - program hours accommodate parents' work schedules.
-

Public Programs Abroad Are Widely Available

All three European countries have universal access policies; that is, public early childhood programs are open to all children and used by most. These countries do not base program eligibility on family income the way Head Start and some state programs in the United States do.⁶ Special provisions, however, are made to promote participation by low-income children (for example, nominal fees and sliding fee scales, see pp. 14 to 15).

Despite universal access policies, spaces are not always available for all children whose parents wish them to attend early childhood programs. Denmark maintains waiting lists for spaces in its early childhood programs. About 6,000 Danish children aged 3 to 6 (or about 3 percent of all children in this age group) are on waiting lists. The Danish government is trying to make more spaces available for children. In 1993 and 1994, 40,000 new places for Danish children from birth to age 10 were created in center-based child care programs. France does not appear to have difficulty accommodating 3- and 4-year-olds in its early childhood programs. In Italy, when a waiting list of more than 15 children forms, the government opens a new school to serve them. This has not occurred recently, though, because of a declining Italian birth rate.

In our previous report, Poor Preschool-Aged Children: Numbers Increase but Most Not in Preschool (GAO/HRD-93-111BR, July 21, 1993), we found that in the United States, while the number of children in low-income families increased between 1980 and 1990, these children were less likely than others to participate in early childhood programs.⁷ According to our analysis of the 1990 Census, about 65 percent of children in low-income families in the United States did not attend early childhood centers in 1989 compared with about 40 percent of children in high-income families who did not attend.

⁶The Head Start program generally uses the Office of Management and Budget's (OMB) definition of poverty to determine eligibility.

⁷The children referred to here are those whose family income is at or below 185 percent of the OMB poverty definition.

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Table 1.3: Preschool Programs Are Full-Day

| Operating schedule | Denmark | France | Italy (national) | Italy (municipal) |
|---------------------------|-----------------|--------------------------------------|-------------------------|--------------------------|
| Months | 12 | 10 | 10 | 10 |
| Days | M-F | M,T,Th.,F, Sat. a.m. ^a | M-F | M-F |
| Total hours/week | 50 ^b | 27 ^c | 40 ^d | 40 ^d |

^aAll French schools are closed on Wednesdays.

^bSome programs in Copenhagen are open 24 hours a day.

^cSupplemental services are available for 30 additional hours per week before and after school, all day Wednesdays, and during vacation time at the end of the regular school year.

^dTotal program hours vary from 25 to 50 hours per week, but 40 hours is typical. While most national schools are open 40 hours, municipal schools are generally open longer because teacher contracts with municipalities require more class time.

Programs Are Full-Day

Virtually all programs in Denmark, France, and Italy are full-day (see table 1.3), unlike many in the United States. In France and Italy, we were told that core early childhood programs are often supplemented by before- and after-school programs and sometimes holiday care, which help working parents. For example, in France the Ministry of Youth and Sports funds special programs for children after school and on holidays.

In the United States, most Head Start programs and public school-sponsored early childhood programs are part-day. Parents must arrange for supplemental programs or family care if they need to work full time and their children attend part-day programs. While some early childhood programs in the United States were primarily designed and implemented to enhance child development, others were generally designed to provide child care so that parents can work. These programs may be more likely to provide full-day care, but may be less likely to have features associated with child development, such as highly trained teachers and low staff turnover (see pp. 16 to 17).

GAO PARENTS PAY LOW FEES;
SLIDING SCALES APPLY

Sliding scales are used in
all 3 countries:

- Denmark—Parents can be charged up to 30% of operating costs; 55% paid the maximum charge in 1992.
 - France and Italy—Parents are charged for supplemental services on the basis of their ability to pay.
-

Parents Pay Low Fees;
Sliding Scales Apply

All three countries use sliding fee scales to determine the cost to parents for early childhood programs; these sliding scales along with low fees especially benefit low-income families. In Denmark, where parents pay a portion of operating costs, discounts are granted when (1) parents have low incomes, (2) their children have special needs (for example, social, pedagogical, physical, or mental), or (3) two or more siblings are enrolled in an early childhood program. As of January 1992, 45 percent of parents with children aged 3 to 6 enrolled in an early childhood program had received discounts. In France and Italy, parents do not pay for operating costs, only for supplemental services. Parents in France pay for meals and care before and after school and during vacations. Italian parents pay for meals, transportation, field trips, and special programs such as second language and music programs.

In addition to sliding fee scales for parents, France has created Zones d'Education Prioritaires (ZEP or education priority zones), which receive

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additional educational resources because they are more likely to have children who are at risk of school failure; these zones are also more likely to have many low-income families. Early childhood programs in the ZEPS

- serve 2-year-olds in addition to 3-, 4-, and 5-year-olds;
- hire more teachers to reduce class sizes; and
- receive extra materials and expert consulting.

Municipalities in Denmark and Italy generally give priority to low-income and other special needs children when space is limited.

In the United States, while the federal government and states subsidize child care costs for many children, including those in low-income families, sufficient funds are not made available to cover all eligible children and families.

Approximately 85 percent of U.S. center-based, early childhood programs charge some parents for their services. According to a 1990 report by Mathematica Policy Research, Inc., for the Department of Education, 3 percent of Head Start programs, 39 percent of public school-sponsored, and most other types of early childhood programs charged parents some fees for care. Parent fees, on average, made up 75 percent of the income received by center-based programs. Since the late 1970s, parent fees have increased as a proportion of center-based programs' budgets, while government funding decreased.⁸

⁸A Profile of Child Care Settings: Early Education and Care in 1990: Executive Summary (Princeton: Mathematica Policy Research, Inc., 1990), p. 5.

GAO PROGRAMS HAVE ELEMENTS
OF QUALITY

- Specially trained teachers
 - Child development emphasis
 - Low staff turnover
 - Low child-staff ratios
-

Programs Have Elements of Quality

U.S. research suggests that high-quality early childhood programs encourage greater overall social, intellectual, physical, and emotional competence in all children who participate. High-quality programs also seem to have especially positive implications for the intellectual development of low-income children. According to experts in the field of early childhood development and the accrediting standards of the National Association for the Education of Young Children (NAEYC), the following are some basic elements associated with high-quality early childhood programs.

Specially Trained Teachers

U.S. researchers have found that staff who have postsecondary training and those who have training in child development or early childhood education exhibit behaviors that encourage child development. NAEYC's accrediting body, known as the National Academy of Early Childhood Programs, suggests that program directors and master teachers have at

least a relevant bachelor's degree and 3 years of experience; teachers and assistant teachers, a Child Development Associate (CDA) National Credential; and teaching assistants, some training in the field. Experts recognize in-service training as very important in maintaining well-trained staff.

Child Development
Emphasis

An emphasis on child development includes (1) interactions among staff and children that are positive, supportive, and individualized; and (2) a developmentally appropriate curriculum that encourages children to be actively involved in learning. A program or curriculum is developmentally appropriate when the environment, materials, and teaching practices are appropriate to the children's levels of understanding and unique ways of learning.⁹ Such a curriculum includes a variety of planned, child-oriented activities that help to develop children's physical, emotional, social, and cognitive skills.

Low Staff Turnover

Research suggests that children develop best in centers where low teacher turnover is a feature. According to NAEYC, every attempt should be made to ensure the consistent presence of adults who work with children. Low turnover is related to teacher compensation. Teachers are more likely to remain at centers where they receive adequate salaries and benefits.

Low Child-Staff Ratios

The research generally indicates that low child-staff ratios facilitate good caregiving behaviors, such as use of developmentally appropriate practices and increased interactions between adults and children. NAEYC recommends the following child-staff ratio ranges, depending on the size of the group¹⁰ that children attend: 7:1 to 10:1 for 3-year-olds in groups of 14 to 20 children and 8:1 to 10:1 for 4- and 5-year-olds in groups of 16 to 20 children.

⁹See David Elkind, "The Resistance to Developmentally Appropriate Educational Practice with Young Children: The Real Issue," A Resource Guide to Public School Early Childhood Programs, ed. Cynthia Warger (Alexandria, Va.: Association for Supervision and Curriculum Development, 1988), p. 53.

¹⁰NAEYC defines a group as the number of children assigned to a staff member or team of staff members occupying an individual classroom or well-defined space within a larger room.

GAO SPECIAL TEACHER TRAINING
AND TECHNICAL ASSISTANCE

Denmark, France, and Italy

- employ teachers trained in early childhood education;
 - provide in-service training;
 - have written guidelines; and
 - provide technical assistance via on-site/visiting personnel.
-

Special Teacher Training and Technical Assistance

In Denmark, teachers in early childhood programs were required to have 3.5 years of college-level theoretical and practical training. In France, teachers for children aged 2 through 12 generally received the same training regardless of whether they taught elementary school or early childhood programs; training included 3 years of general university-level training plus 2 years of specialized training. In Italy, teachers in early childhood programs were required to have 3 years of specialized training in high school. In the United States, teacher training requirements varied from state to state. About 54 percent of all Head Start teachers in 1992 had a CDA, according to the Head Start Bureau's Program Information Report data, and about 79 percent had a CDA or a degree in early childhood education.

With regard to in-service training, requirements did not exist in Denmark; however, the teachers' union, teacher colleges, and some municipalities provided in-service training courses. In one city we visited, the municipality offered 20 different courses for teachers. In France, teachers were allowed to have 1 week of training per year or 3 weeks of training every 3 years. In Italy, teachers were required to devote between 20 to 40 hours per year to a variety of professional development activities. Italian teachers in the region of Emilia Romagna, for example, received this training through a series of courses sponsored by regional and municipal educational authorities. The courses were designed to improve the pedagogical and interpersonal skills of teachers in early childhood programs.

We found different types of technical assistance and program monitoring in the three countries, although we were not able to observe or evaluate their quality. Larger municipalities in Denmark employed pedagogical consultants to help teachers improve program quality. In France, a system of inspectors monitored program quality and provided information about sound educational practices. In Italy, practices differed among different types of schools—the Ministry of Education employed inspectors to improve quality at national schools, while municipalities sometimes employed pedagogical coordinators to improve quality at local schools. For example, in the region of Emilia Romagna, many municipalities had pedagogical coordinators who were each responsible for about six different local programs.

GAO CHILD DEVELOPMENT
EMPHASIS

Each country encouraged its programs to address and develop the various aspects of the young child:

- physical,
 - emotional,
 - social, and
 - cognitive.
-

Child Development Emphasis

As we previously stated, a child development emphasis aims to promote children's physical, emotional, social, and cognitive skills. The countries that we visited attempted to address many aspects of children's development, although we were not able to observe these aspects at all early childhood program sites in each country.

In Denmark, a publication by the Danish National Institute of Social Research states that

"Danish nursery schools pay little heed to formal instruction, competition, and achievement. Instead, the emphasis is on self-expressive games, on the role of the imagination and on creative activities, on the attainment of social maturity through group activities, on linguistic development, and on the overall stimulation of the children with the help of a wide range of materials and activities."¹¹

¹¹Jacob Vedel-Petersen, "Daycare for Children under School Age in Denmark," The Danish National Institute of Social Research (Copenhagen: 1992).

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In France, according to the Ministry of National Education, the general objective of its école maternelle [early childhood program] is to develop all of the possibilities of the child, permitting him to form his own personality and giving him the best chance to prepare for elementary school. The école maternelle permits young children to develop language skills and to express their personality. Officially, there are four categories of activities for children in French early childhood programs: oral and written communication, scientific and technical activities, arts (including manipulative arts, painting, working with clay and plastics, performing arts), and physical activities.

In Italy, according to guidelines that were not prescriptive but that set forth good practices, national early childhood programs were encouraged to promote the development of identity; the acquisition of autonomy and self-reliance; and the development of cognitive, emotional, and social skills in young children. In particular, teachers observe a child's body and movement; language and words; and interactions with people and things. The municipal schools we visited also emphasized various aspects of child development.

In the three countries we visited, programs addressed both child care and child development needs. In the United States, some programs emphasize child development, while others emphasize the provision of child care so that parents can work or attend training. Centers funded by programs that focus on the provision of child care are less likely to have features associated with high-quality child development services.

GAO PROGRAM IN REGGIO EMILIA
CONSIDERED AMONG BEST

Experts cite, among other features

- child-directed projects,
 - art and creativity emphasis,
 - environment/facilities designed for learning, and
 - parental involvement.
-

Program in Reggio Emilia Considered Among Best

The municipal programs we visited in northern Italy each appeared to be adopting innovative practices. One municipality in particular, Reggio Emilia, has been recognized around the world as being a leader in early childhood practices.

In Reggio Emilia, children between the ages of 3 and 6 remain with the same group of children for 3 years. This practice fosters stability and continuity in the relationships that form among children, parents, and teachers. During this 3-year period, Reggio Emilia teachers attempt to respond to children's ideas and interests, and discussions with children often lead to long-term projects completed by small groups of children.

One primary approach used is an emphasis on art. Children are encouraged to express themselves through drawing, sculpture, dramatic play, and writing. Each school has a full-time art teacher and a large art room. Each class has a mini art room to work on long-term, child-directed

projects without having to clean up. These projects (for example, “How Houses Are Built” or “What Happens at the Supermarket?”) allow children to explore a specific topic or problem in depth through direct observation, asking questions of relevant participants and experts, and collecting related materials. Children then record their observations, memories, and feelings in a variety of artistic and often colorful ways. Their work is displayed throughout the school in hallways, classrooms, and reception areas to chronicle the learning experience and inform classmates and parents.

The physical structure of Reggio Emilia schools is another unique characteristic of this municipality’s early childhood program. Planners designed and equipped the space to facilitate social exchanges among and between adults and children. Each school includes a large central area where all children and teachers can meet, smaller work spaces, and the mini art rooms mentioned above. The classrooms are typically arranged around an open central area. School buildings also include other rooms where families can gather and usually a glass-enclosed kitchen so that children and parents can observe food preparation.

Cooperative, noncompetitive relationships between teachers and parents are an important attribute of the Reggio Emilia program. Teachers and parents are considered partners, and parent-teacher boards influence local government decisions about issues that affect the program. When a child is first enrolled, parents provide teachers with information about the child’s sleeping, eating, and play habits, and teachers encourage parents to attend class with their child until the child feels comfortable with the teacher and the program. Parents remain involved in the program by attending field trips and other program activities that are viewed by many parents and teachers as major social events for their families.

In addition to these attributes, Reggio Emilia’s program is also highly rated by early childhood experts because it gives a great amount of autonomy to teachers. Centers do not have directors; the teachers work with each other, pedagogical coordinators, and parents to develop the curriculum.

GAO **TURNOVER LOW AT PROGRAMS
WITH GOOD PAY, BENEFITS**

The program sites we visited had experienced teachers and low turnover rates.

In all 3 countries, teachers

- were public employees;
 - got salaries equal to or slightly lower than those of elementary school teachers;
 - got pensions, leave, and health insurance.
-

**Turnover Low at
Programs With Good
Pay, Benefits**

The program sites we visited in France (nine sites) and Italy (nine sites) had replaced virtually none of their teachers during the previous year. Three of the sites in Denmark we visited lost about one in five teachers in calendar year 1993; but most teachers at each center had worked over 5 years.¹² In contrast, The National Child Care Staffing Study Revisited reported that in 1991, average turnover among early childhood staff in the United States was 26 percent, down from about 40 percent in 1987.¹³ The study reported that in 1987-88, public school teachers left their jobs at a rate of 5.6 percent.

In the three European countries, great differences did not exist between the salaries of early childhood teachers and those of other school

¹²We visited six sites in Denmark, but we excluded three sites from our discussion of turnover because one site had been open less than a year and information gathered at two sites was incomplete.

¹³A 1992 study found a 40-percent turnover rate among the early childhood centers reviewed. S. Scarr, D. Phillips, K. McCartney, and M. Abbott-Shim, "Quality of Child Care as an Aspect of Family and Child-Care Policy in the United States," Pediatrics, Vol. 91, No. 1 (1993), pp. 182-188.

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Children in Denmark, France, and Italy

teachers. In Denmark, starting salaries of early childhood teachers were about 8 percent lower than those of elementary school teachers in April 1993. French early childhood and elementary school teachers received the same salaries, and Italian starting salaries were about 10 percent lower for early childhood teachers than for their elementary school counterparts in April 1994. However, U.S. early childhood teacher salaries were much lower than elementary school teacher salaries. The average annual salary of an American early childhood teacher receiving the lowest pay, \$11,375 in 1992, was about half of that paid to a beginning public school teacher that same year. Even the highest paid early childhood teacher receiving an average salary of \$15,488 was paid considerably less than public elementary school teachers in 1992.

Few early childhood teachers in the United States receive job benefits such as pensions or health insurance. The National Child Care Staffing Study¹⁴ found that early childhood programs provided most teachers with (1) at least a day of sick leave, paid holiday, and paid vacation and (2) reduced fees for child care services for their own children. However, only about 17 percent of both full- and part-time staff had retirement plans and about 33 percent received some form of paid health insurance. Of the 193 centers surveyed again in 1992, 36 percent offered no health coverage, 24 percent partially paid premiums for all of their teaching staffs, and 18 percent provided full coverage for all of their teaching staff. (The 1992 survey did not ask respondents about benefits other than health.) In all three European countries, early childhood teachers are public employees and receive vacation, sick leave, and pension benefits.

¹⁴M. Whitebook, C. Howes, and D. Phillips, Who Cares? Child Care Teachers and the Quality of Care in America: Final Report of the National Child Care Staffing Study (Oakland, Calif.: Child Care Employee Project, 1989).

GAO CHILD-STAFF RATIOS VARY;
FRANCE'S HIGHER THAN U.S.'

In the schools we visited,
the number of children per
staff per class ranged from

- 6.6 to 8 in Denmark;
- 11.3 to 16 in France; and
- 5 to 7.6 in Italy.

NAEYC recommends a ratio of
7-10 children per staff.

Head Start classes average
about 8.7 children per staff.

Child-Staff Ratios Vary; France's Is Higher Than United States'

Child-staff ratios at the sites we visited in Denmark and Italy are lower than in France. The average ratios for the schools we visited in Denmark and Italy were 7.3:1 and 6.5:1, respectively.¹⁵ France's average child-staff ratio across the sites we reviewed was 13.8:1, about two times higher than Denmark's or Italy's and over 50 percent higher than the average Head Start ratio of 8.7:1.

Typical child-staff ratios for early childhood programs in these three countries, however, differed from the ratios we found at the sites we visited. For example, the Danish National Institute of Social Research reported that, though staff numbers can vary from program to program, on average 5.5 children aged 3 through 6 are assigned to 1 adult. An official of the Ministry of National Education said that in France, early childhood classes have on average 27 children to 1 teacher; however, teachers can sometimes share the services of a teaching assistant and are also supported by psychologists and other educators. In Italy, early childhood programs generally have a child-staff ratio of 8.3:1—that is, about 25 children are assigned to 3 staff (2 teachers and 1 helper) per class.

¹⁵We included in this analysis only four of the six Danish schools we visited because data from two sites were incomplete.

GAO NAT'L AND LOCAL
GOVERNMENTS SHARE COSTS

Denmark

- Local governments pay virtually all costs.

France

- The national government pays for teacher salaries; and
 - local governments pay for facilities, maintenance, and some staff salaries.
-

GAO NAT'L AND LOCAL GOVERNMENTS
SHARE COSTS (cont.)

Italy

- The national government pays teacher salaries for national schools; and
 - local governments pay for facilities and service staff for national schools and virtually all costs for municipal schools.
-

GAO STAFFING COSTS PER CHILD
AT SITES VISITED

- Denmark: \$1,980 to \$2,280
- Italy: \$1,570 to \$2,670
- France: \$710 to \$1,480

Costs are lower in France
because of higher child-staff
ratios.

Staffing Costs Per Child at Sites Visited

The average per child cost for Head Start instructional staff for 1992 was \$1,390, according to a U.S. Department of Health and Human Services official.¹⁶ The instructional staff costs at the early childhood programs we visited were higher in Denmark and Italy, and lower at most sites in France than Head Start's average cost.¹⁷

To compare instructional staff costs per child, we interviewed instructional staff using a structured interview guide. We gathered information about the child-staff ratios, education levels, and years of experience of instructional staff (teachers, aides, pedagogues, and directors) at the 24 program sites we visited in Denmark, France, and Italy (see app. I).¹⁸ (Other staff, such as cooks, housekeepers, and secretaries, were not included in our analysis.) We then assigned each of these individuals the 1992 salary rate for U.S. Head Start teachers with comparable attributes. Using these imputed salaries, we calculated per child costs based on the total number of children and instructional staff at the sites we visited. Finally, we compared per child costs in Head Start programs (based on the average classroom ratio of two staff—a teacher and an aide—and 17 children) with our imputed costs per child at the sites we visited in each European country.

We analyzed only staff salary data because personnel costs often make up the largest portion of total center costs, and we specifically focused on instructional staff salaries because (1) they make up the largest portion of personnel costs and (2) we were unable to find comparable Head Start salary data for other staff. We did not include fringe benefits in this analysis because they vary widely across countries and are difficult to cost out.

On the basis of our analysis, it is very likely that the cost of the U.S. Head Start program would be higher than it currently is if the program (1) maintained current child-staff ratios and (2) hired teachers with education and experience comparable with that of the instructional staff at the 24 sites we studied in Denmark, France, and Italy.

¹⁶The U.S. Department of Health and Human Services reported that the average per child cost for Head Start was \$3,415 in fiscal year 1992. This number includes all program costs, including those associated with providing social and health services to program participants except health services covered by Medicaid and the U.S. Department of Agriculture Child Care Food Program.

¹⁷We included in this analysis only four of the six Danish schools we visited because data from two sites were incomplete.

¹⁸Program directors were included in our calculations if they taught classes in addition to their administrative or managerial duties.

Early Childhood Program Sites Included in This Review

Denmark

Den Integredrede Institution "Regnbuen," København Kommune
 Den Integredrede Institution "Garvergården," København Kommune
 Sondervang, Ringsted Kommune
 Sct. Georgs Gårdens Børnehavn, Ringsted Kommune
 Nybrogård Børneinstitution, Gladsaxe Kommune
 Børnehaven Højmarksvej, Gladsaxe Kommune

France

École Maternelle Louise Michel, Port St Louis du Rhône
 École Maternelle Jonquière, Fos-Sur-Mer
 École Maternelle Fontvieille
 École Maternelle Pierre Goujon, Chateauneuf de Gadagne
 École Maternelle, rue Boulainvilliers, Paris
 École Maternelle, rue de Ménilmontant, Paris
 École Maternelle, rue Mouffetard, Paris
 École Maternelle, rue de la Goutte d'Or, Paris
 École Maternelle Jean Moulin, Les Mureaux

Italy

Municipal Schools (Scuole Comunali)

Scuola Materna "Don Milani," Comune di Bologna
 Scuola Materna "Ciari," Comune di Bologna
 Scuola Materna "Pasi," Comune di Ravenna
 Scuola Dell'Infanzia "Villetta," Comune di Reggio Emilia
 Scuola Dell'Infanzia "Diana," Comune di Reggio Emilia

National Schools (Scuole Statali)

Scuola Materna "Caravaggio," Comune di Casalecchio di Reno (Bologna)
 Scuola Materna "Theodoli," Comune di Zola Predosa (Bologna)
 Scuola Materna "Di Lido Adriano," Comune di Ravenna
 Scuola Materna "G. Pascoli," Comune di Reggio Emilia

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**Appendix III
Acknowledgments**

Related GAO Products

Child Care: Child Care Subsidies Increase Likelihood That Low-Income Mothers Will Work (GAO/HEHS-95-20, Dec. 30, 1994).

Early Childhood Programs: Parent Education and Income Best Predict Participation (GAO/HEHS-95-47, Dec. 28, 1994).

Early Childhood Programs: Local Perspectives on Barriers to Providing Head Start Services (GAO/HEHS-95-8, Dec. 21, 1994).

Child Care: Promoting Quality in Family Child Care (GAO/HEHS-95-36, Dec. 7, 1994).

Early Childhood Programs: Multiple Programs and Overlapping Target Groups (GAO/HEHS-95-4FS, Oct. 31, 1994).

Early Childhood Programs: Many Poor Children and Strained Resources Challenge Head Start (GAO/HEHS-94-169BR, May 17, 1994).

Child Care: Working Poor and Welfare Recipients Face Service Gaps (GAO/HEHS-94-87, May 13, 1994).

Poor Preschool-Aged Children: Numbers Increase but Most Not in Preschool (GAO/HRD-93-111BR, July 21, 1993).

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