

# Current Comments®

## Child Care: An Investment in the Future. Part 2. The ISI Caring Center for Children and Parents

Number 7

February 14, 1983

Last week, I discussed corporate day-care programs and the effects of day care on child development.<sup>1</sup> At that time, I reviewed various theories on the effects of separating children from their mothers for long periods. I also discussed some of the behavioral differences researchers have found between children enrolled in day care and those raised exclusively by their parents. Now, I'd like to describe the ISI® Caring Center for Children and Parents, and the rationale for establishing it.

I do not believe being a parent, single or otherwise, has to interfere with one's accomplishments at work or in school. My empathy for working parents, based on my own experience, has nothing to do with the notion that one can't do well professionally while shouldering parental responsibilities. Far from having difficulty concentrating on my work, responsibility as a parent forced me to exercise discipline in the use of my time. But there are limits to that if society places insurmountable obstacles in one's path.

Of course, most parents are anxious about their children even under the most ideal circumstances. So I believe it is in ISI's best interest to make it possible for our employees to use their time efficiently by reducing this anxiety. This will make them more productive, better persons, and thereby better parents.

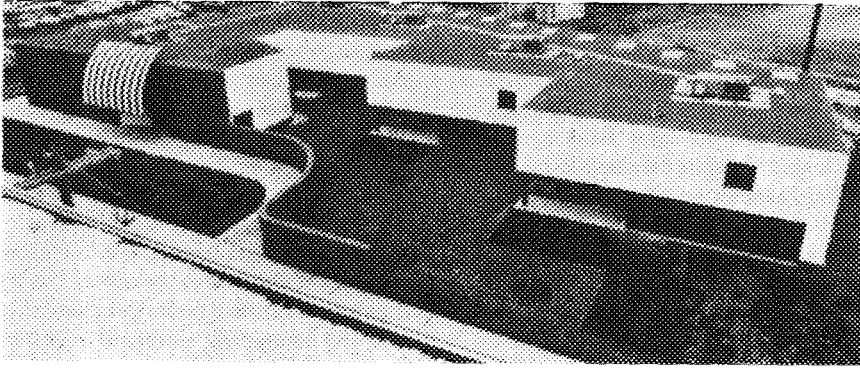
The ISI Caring Center, which opened last September, is designed to accommodate 150 children aged six weeks to

six years. It also provides after-school care for older children. In addition to the children of ISI employees, we enroll the children of people who live or work anywhere in Philadelphia. Located behind ISI headquarters, the 14,000 square foot building, shown in Figure 1, was custom built for young children. All furniture and fixtures are scaled for comfortable use by small bodies, and lighting and colors have been chosen to avoid an "institutional" look. The center also features art that focuses on child-related themes, and a playground with enough space for a variety of outdoor activities. Most importantly, we've hired a highly qualified staff trained in early childhood development and education.

Peter Aborn, ISI's senior vice president, administration, was responsible for planning the center. He executed this assignment with an enthusiasm and energy even greater than he exhibited in planning ISI's headquarters.<sup>2</sup> He negotiated with City of Philadelphia authorities for the acquisition of the 1.6 acre site on which it is built. He has also been responsible for local community relations. Harmony with our neighbors is vital to the success of such an enterprise. He also spent nearly three years reviewing the child care literature, visiting centers throughout the US, and consulting experts in the field.

After considering numerous architectural firms, ISI chose the Philadelphia-based firm of Bower, Lewis and Throw-

**Figure 1:** The ISI® Caring Center for Children and Parents. A large red and white awning (far left) greets visitors. Each of the classrooms opens out into a separate area of the playground.



er, nationally known for its work on The Gallery at Market East (a shopping mall in downtown Philadelphia), the Baltimore Museum of Art, and the Wharton Graduate Center at the University of Pennsylvania. They designed an attractive, spacious structure, with an open floor plan much like that in our headquarters building (see Figure 2). Each of the classrooms is defined by seven-foot wooden partitions that are either lined in fabric, used to frame blackboards, or made into storage units for children's belongings. These partitions give the center some flexibility, since they can be moved to accommodate changes in enrollment and in the program. Each room also includes permanent partitions with sinks in them. In the infant area, these partitions include diapering facilities with soft counters and special sinks for flushing waste. The older children's rooms include private areas with child-sized toilets. The only other enclosed areas in the building are the staff offices and a fully outfitted commercial kitchen.

The ISI Caring Center building is organized into discrete areas for each group of youngsters. The infants are housed in small rooms toward the rear, away from the more boisterous older

children. Toward the front of the building are larger rooms for toddlers, prekindergarten children, kindergartners, and older children who are in the "after-school" program. These rooms open out into play areas with floor-to-ceiling windows facing onto the playground.

Since children can spend as much as ten hours a day at the center, we've tried to create an environment that is attractive and serene, yet stimulating for children. During the day, sunlight entering through the floor-to-ceiling windows at the front of the building fills the center with natural light, while the 16 skylights toward the back of the building let in filtered light. Special shades will soon be installed to cover the skylights at nap time. Artificial lighting for the center was designed by Philadelphia artist Remo Saraceni, whose internationally known work includes such unusual designs as a solar-powered pyramid in Mexico City, featuring sound and lighting that respond to touch and voices. Saraceni's humane and playful attitude toward technology is reflected in the cylindrical and cloud-shaped lighting in the center. By directing fluorescent light through colored gels, Saraceni has created a spectrum of color in many of these fixtures.<sup>3</sup>

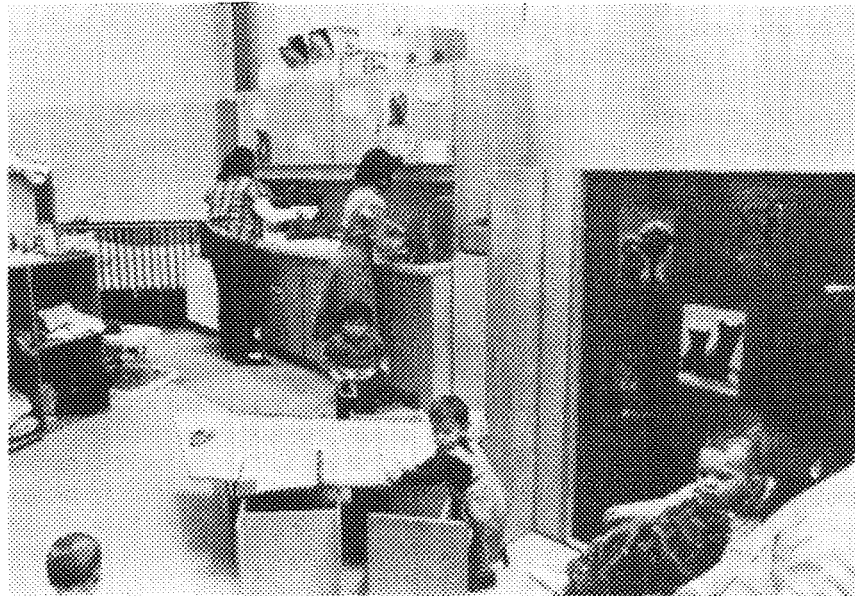
A subtle sense of the outdoors has been created in the center by painting walls and columns in muted pastels to mimic the colors and shapes found in nature. The 17-foot high ceilings are painted sky blue, conveying a sense of spaciousness and airiness. The tops of the walls are the same blue, while the bottoms are painted to look like a gently rolling, earth-tone hill extending around the building. Columns are brown at the base and green at the top, like trees. This gives the impression of standing in a forested valley, looking up at gently rolling hills and the sky.

With 10,000 square feet of space, the playground is large enough to include paved areas on which the children can ride tricycles and bicycles, and grassy areas with play equipment and large, fully grown trees. These trees include a 40-foot pin oak, nonfruit-bearing cherry trees, and espalier apple trees which we have planted against the playground walls. Within the playground, the infants

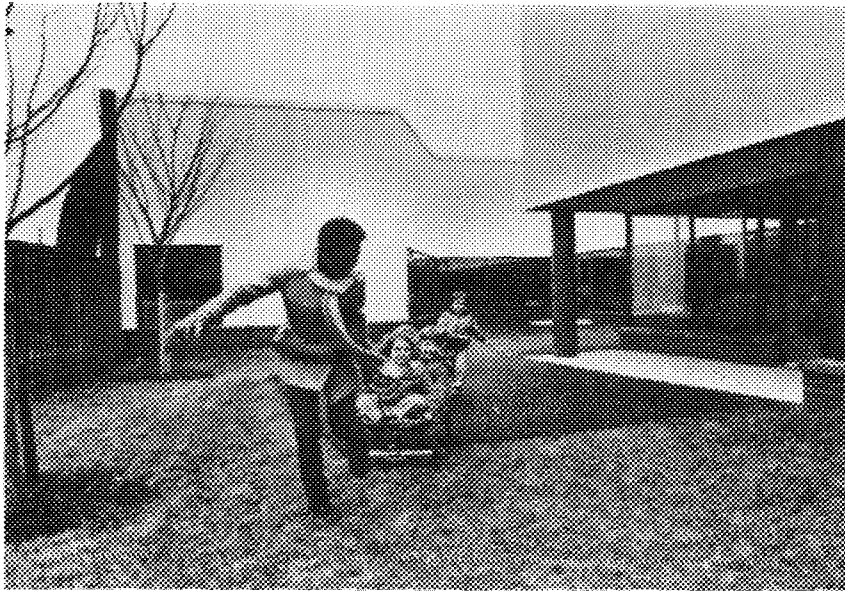
spend much of their time in a small, somewhat secluded area bounded by three of the building's walls, shown toward the back in Figure 3. As they become more independent and courageous, they can venture out into the larger play area, which features a small hill with a "cave" through which the children can walk or crawl (see Figure 4). Later this year, we plan to start a garden and install permanent play equipment.

Every effort has been made to insure the safety of children at the center. Electronically controlled doors safeguard the main and emergency entrances, and the playground is fully enclosed by walls and fences. Our fire alarm system is directly linked to Philadelphia's central fire station, and each of the children's rooms is within a few feet of an exterior door. We have also incorporated nonskid surfaces, and avoided sharp edges wherever possible. And the energy efficient heat pump system used to heat, cool, and ventilate the building uses outside air al-

**Figure 2:** The ISI® Caring Center for Children and Parents' classrooms. The permanent partitions have sinks (left), and wooden partitions can be moved to accommodate changes in enrollment.



**Figure 3:** The 10,000 sq. ft. (900 sq. m.) playground includes a secluded area for the infants as well as open areas for the more active older children.



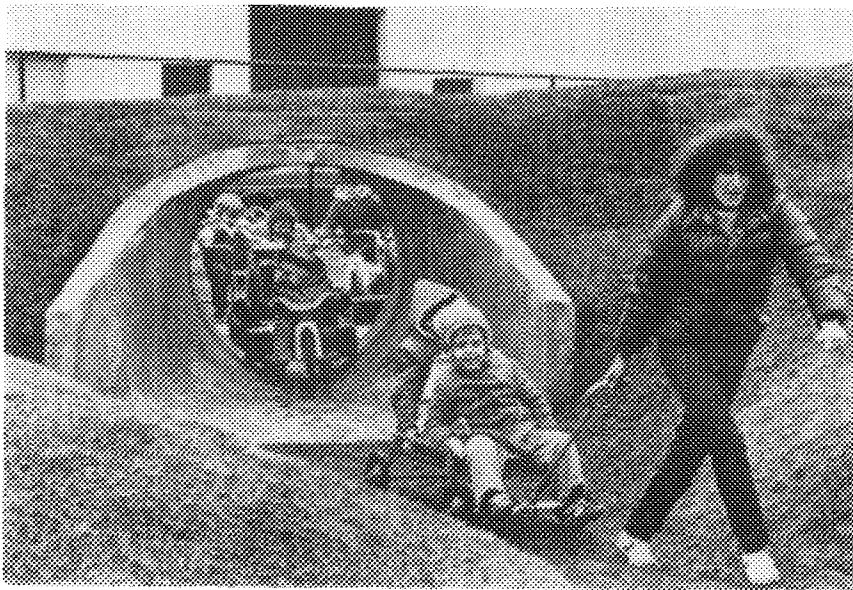
most exclusively during temperate weather and includes a filtration system that screens out many of the airborne pollutants that affect allergic youngsters.

Art can play an important role in stimulating children to use their imaginations and express their emotions.<sup>4</sup> Several artists were commissioned to create original works for the ISI Caring Center. They were selected for their ability to create a sense of discovery among the children, while depicting scenes that are familiar and exciting to them. Covering the entire west wall of the building, facing the parking lot, is an 18 x 36 foot (540 x 1080 cm) carved concrete and mosaic mural entitled "A Celebration of Working Parents and Their Children," by Boston-area artist Lilli Ann Killen Rosenberg. The three-dimensional mural, shown in Figure 5, depicts children, adults, trees, animals, and Philadelphia scenes. It is embedded with hundreds of

brightly colored objects that sparkle in the sun. This incredible work of art can be seen from the high school located across the street, more than 500 yards away, and by ISI employees as they park their cars every day. Even motorists driving along Market Street, Philadelphia's primary east-west artery, can catch a glimpse of the mural.

Four 7 x 13 foot (210 x 390 cm) ceramic tile murals, prepared by Bill Granizo and his wife Lark Lucas, of California, will be installed on the wall of the ISI building facing the child care center. These murals will have the same stained glass effect as Granizo's mural in our third floor landing.<sup>5</sup> A new Huichol yarn painting,<sup>6</sup> executed by Emeteria Martinez Rios and dedicated to children, is currently on display inside the center. I made a special trip to Mexico last year to get the painting. Thanks to Olga Vasquez Brooks, who continues to maintain our contact with the Huichol Indians,<sup>7</sup> it

Figure 4: Children at the ISI® Caring Center for Children and Parents enjoy walking and riding through a "cave" that has been built into the man-made hill in their playground.



eventually passed customs and was shipped safely to the ISI Caring Center.

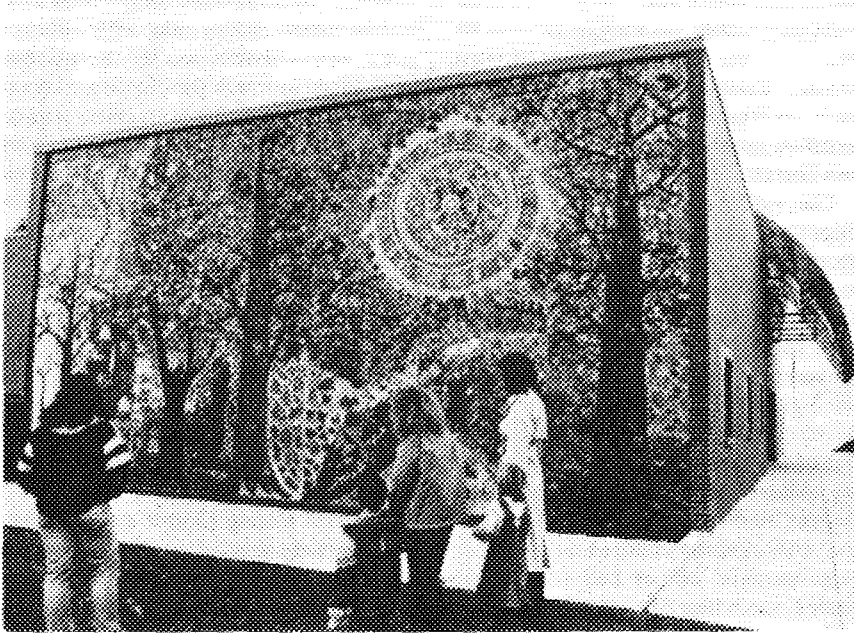
In addition to the murals mentioned above, we have commissioned a sculpture by Eric Berg, a Philadelphia artist who lives a few blocks from ISI. This is the first sculpture that ISI has commissioned. The sculpture, a bronze puma, will be installed in the children's playground this spring and will be life-size as well as lifelike. Berg is a remarkable talent. He is, in fact, the creator of the well-known statue of the 51-year-old gorilla, Massa, that greets visitors to the Philadelphia Zoological Garden. This work, and all the new art in the ISI Caring Center, will be described in detail and shown in color in a future essay.

Of course, the most important components of our day-care center are the program and the people who interact with the children. Susan Silverstein, executive director of the ISI Caring Center, has a master's degree in human develop-

ment and family studies, and ten years of teaching and administrative experience at day-care centers. Since ISI is one of a relatively small number of centers to offer infant and toddler care, we were particularly impressed with the role she played in establishing one of West Philadelphia's first day-care centers for children of this age. Marlene Weinstein, a child care consultant and coauthor of *Day Care: How to Plan, Develop, and Operate a Day Care Center*,<sup>4</sup> one of the first how-to books on establishing child care centers, has been involved in planning the center from the outset.

The ISI Caring Center's approach to child care is developmental—that is, it is based on the theory that children go through several different stages of emotional, social, physical, and cognitive development.<sup>8,9</sup> Their success in passing from one stage to the next is dependent upon appropriate environmental stimuli and the encouragement of their innate

Figure 5: Lilli Ann Killen Rosenberg's "A Celebration of Working Parents and Their Children" is a three-dimensional, carved concrete and mosaic mural covering the entire west wall of the Caring Center building.



abilities. Our staff is trained to recognize these stages and present children with the tasks that will support their passage through them.

Within three months of entry into the ISI Caring Center, and every six months thereafter, each child's development will be assessed. This assessment will be based on a combination of standardized tests,<sup>10,11</sup> the staff members' own evaluations of the child's progress, and conversations with parents. From this information, the staff can determine how best to proceed with each child's development.

The Caring Center's curriculum is designed to help children learn through increasingly complex play activities. Development is encouraged by presenting them with tasks they can comfortably accomplish, along with tasks that are slightly challenging. According to Weinstein, this "insures that success is part of their repertoire." Although each

staff member's objective is "helping children develop concepts by building on their prior experience and knowledge," Silverstein emphasizes that teachers don't set inflexible goals for the youngsters. If they don't want to participate in a planned activity, they can go off by themselves to play with toys, read, or be alone.

Silverstein likens the child care program to a theatrical production in which the staff members are "directors who provide the setting and props for the children, and help them act out the phases of their development. When they are ready for more sophisticated concepts, tools, and activities, we alter the stage and props." She explains that since infants learn primarily through their senses, the staff provides them with "props" that encompass as many different textures, shapes, tastes, scents, and sounds as possible. This helps the youngsters, who range from six weeks to 18

months old, use their senses to distinguish objects. The staff also encourages the infants to use their bodies in as many ways as possible. As they learn to crawl and walk, the staff urges them to move greater distances and use equipment such as tumbling mats and toddler gyms—a combination stepladder, slide, and barrel.

The staff presents the 18-month to three-year-old children in our toddler program with even greater physical and social challenges. They play with more complex objects, and flexible materials such as clay and play dough, that increase their fine motor skills. Exercising on higher ladders and slides helps to develop their gross motor skills. Since one of the center's primary goals is helping children understand how the world "works" and how they fit into this world, the staff takes the children on outings to their parents' offices and other work places, including fire stations and post offices. When they return to the center, the toddlers act out what they've observed on their field trips, using the "props" supplied by the staff.

The prekindergarten (three to five years old) and kindergarten (six years old) children carry these activities several steps further through their use of more sophisticated materials and ideas. The children create, and the staff members read, stories about the places visited. Visitors who come to the center to discuss their work with the children contribute to these youngsters' understanding of the adult world. Since the staff is preparing the prekindergarten and kindergarten children for formal education, the youngsters also spend part of their day in activities that involve concentrating and paying attention to a speaker. The staff also introduces kindergartners to academic subjects through reading and math programs involving individualized instruction and workbooks.

Since children easily become boisterous and tired, each program follows a schedule that alternates quiet times with active times, indoor play with outdoor play, and activities led by the teacher with those in which the children play on their own. All of the youngsters nap or play quietly after lunch, from about 12:30 to 3 p.m. Those prekindergarten and kindergarten children who are not taken home after their naps join the six- to 12-year-olds in the center's after-school program, called "Rocket to Adventure." This program focuses on an appreciation of the arts. Following an outdoor activity and an afternoon snack, the children participate in an hour-long special program featuring either music and rhythm, dance and movement, a movie, or cooking.

The ISI Caring Center staff believes that parents should be involved in the program. Several "parent nights" will be held every year. Equally important, staff members periodically have conferences with individual parents. However, informal conversations held when the child is dropped off or picked up provide the most valuable information about each child's ongoing development. The staff also keeps daily logs of what the infants and toddlers do during the day—how well they eat and sleep, if they've learned any new words or movements, and other information indicative of the child's growth and well-being. The same type of information is recorded daily for each group of prekindergarten children, and weekly for each group of kindergartners. Parents are encouraged to consult these logs, and to let the staff know of any changes in the child's home life, such as new experiences or changes in routines. Parents are also welcome to visit their children at the center at a time arranged with the staff.

The ISI Caring Center provides training for student teachers from the child care programs at Temple University and

Community College of Philadelphia. Silverstein explains that these students contribute to the program by improving the teacher-child ratio, thus offering more individualized care. The center also has access to pediatricians and nurses from Presbyterian Medical Center, a few blocks from ISI, who are consulted when a child becomes ill or has an accident.

Everyone who has been involved in the ISI Caring Center is justifiably proud of the center, and of the quality of care offered the youngsters. But the center is only one component of our family-oriented employee benefits package. We also have a child care assistance plan that defrays some of the day-care costs for our employees. This plan includes a direct subsidy that ranges from \$10 to \$40 a week, depending on the family's income and the number of children in day care. The subsidy is not taxable and can be applied only to the ISI Caring Center. Parents can also convert half of their personal and sick leave (one week a year) and all of their annual leave (two to four weeks a year) into nontaxable credit that can be used to pay for care at *any* day-care center. Finally, ISI's child care assistance plan helps parents take advantage of the US government's child care tax credit, which can amount to a direct tax reduction of as much as \$750 a year for each of two children. Rather than waiting until the end of the tax year to take advantage of the credit, parents simply arrange to have less tax withheld from their paychecks. This provides extra cash immediately for paying child care expenses.

Other family-oriented benefits include our flextime schedule, which permits parents to work hours that fit into their family's schedule. Parents are also encouraged to use their personal and sick leave to care for sick children, or to watch them in a school play. And our

medical, dental, prescription, and mental health plans are available to all family members at no extra cost to our employees.

Finally, ISI has also established a \$10,000 a year scholarship fund to subsidize tuition at the ISI Caring Center for children of low-income families from our West Philadelphia neighborhood. These scholarships, which will be scaled to family income, are being administered by the West Philadelphia Corporation, an organization of area companies, universities, and community groups.

Many companies offering child care programs have reported such tangible benefits as lower turnover and absenteeism, and an easier time recruiting employees.<sup>12</sup> Since all computer-based industries are highly competitive, we eventually expect to see some of these payoffs too. In any event, ISI will have the satisfaction of making a contribution to future generations. And our employees, parents and non-parents alike, can't help but profit from the enthusiasm and joy of these young children.

The name of our child care center was no accident. It emphasizes that the center not only serves children and parents, but that ISI really has a caring philosophy. After all, we are in business not only to help scientists and scholars have better access to knowledge. While we are conscious that so many children throughout the world suffer from malnutrition and disease, we can better help some *parents* to make better lives for their children by starting right here at the ISI Caring Center for Children and Parents.

\* \* \* \* \*

*My thanks to Joan Lipinsky Cochran for her help in the preparation of this essay.*

© 1983 ISI



## REFERENCES

1. **Garfield E.** Child care: an investment in the future. Part 1. An overview of corporate child care programs and the effects of day care on young children. *Current Contents* (6):5-11, 7 February 1983.
2. -----, New year, new building. *Essays of an information scientist*. Philadelphia: ISI Press, 1981. Vol. 4. p. 351-4.  
(Reprinted from: *Current Contents* (1):5-8, 7 January 1980.)
3. **Levy M Z.** Four media freaks. *New York* 9(16):73, 1976.
4. **Evans E B, Shub B & Weinstein M.** *Day care: how to plan, develop, and operate a day care center*. Boston: Beacon Press, 1971. 337 p.
5. **Garfield E.** Fine art enhances ISI's new building. *Current Contents* (5):5-9, 2 February 1981.
6. -----, Huichol mythology and culture. Part 1. World's largest yarn painting is latest in series of ISI-commissioned artworks. *Current Contents* (28):5-11, 13 July 1981.
7. -----, Huichol mythology and culture. Part 2. Can the Huichols absorb modern technology and retain their traditions? *Current Contents* (29):5-11, 20 July 1981.
8. **Piaget J.** *The psychology of intelligence*. New York: Routledge & Kegan Paul, 1950. 182 p.
9. **Erikson E H.** Eight ages of man. *Childhood and society*. New York: Norton, 1963. p. 247-74.
10. **Glover M E, Preminger J L & Sanford A R.** *Early LAP: the early learning accomplishment profile for developmentally young children*. Winston-Salem, NC: Kaplan Press, 1978. 100 p.
11. *Evaluating children's progress*. Atlanta, GA: Southeastern Day Care Project, 1973. 50 p.
12. **US Department of Labor, Women's Bureau.** *Child care centers sponsored by employers and labor unions in the United States*. Washington, DC: US Department of Labor, Women's Bureau, 1980. (Report.)