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ABSTRACT

This descriptive study surveyed directors/education coordinators, lead teachers, and parents to identify the effects of facility design and equipment acquisition on the curriculum offered in preschool centers. Study results indicate that the components of facility design had varying degrees of effect on the curriculum offered. Components such as material accessibility, toileting facilities adapted to the child's size, storage areas for toys, low windows, and the size of indoor and outdoor play areas are cited as examples. The components of equipment acquisition that had a very great affect on the curriculum offered were buying child-sized furniture and equipment, acquiring a variety of equipment and materials, and having age-appropriate equipment. Head Start teachers and education coordinators possessed greater awareness of the effects of facility design and equipment acquisition on the curriculum. Recommendations are submitted for increasing stakeholder's awareness levels of the impact of facility design and equipment on the preschool curriculum. (Contains 41 references.) (GR)

THE EFFECTS OF FACILITY DESIGN AND EQUIPMENT ACQUISITION ON CURRICULUM OFFERED IN PRESCHOOL CENTERS

by

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ABSTRACT

The purposes of this study were (a) to identify the effects of facility design on the curriculum offered in preschool centers, and (b) to identify the effects of equipment acquisition on the curriculum offered in preschool centers.

The research design was a descriptive, nonexperimental study with the population consisting of directors/education coordinators, lead teachers of 3- and 4-year-old children, and parents of 3- and 4-year-old children from randomly selected Head Start and private-for-profit preschool centers in the central Florida counties of Alachua, Brevard, Flagler, Orange, Osceola, Seminole, and Volusia. National Association for the Education of Young Children (NAEYC) accredited and nonaccredited Head Start and private-for-profit preschool centers participated in the study.

Results of the study indicated the following: (a) the components of facility design had varying degrees of effect on the curriculum offered from the perspectives of directors/education coordinators, lead teachers of 3- and 4-year-old children, parents of 3- and 4-year-old children. Components such as clearly defined learning centers, accessibility of materials to the children, toileting facilities adapted to the child's size and within the classroom had a very great effect on the curriculum offered. Storage areas for toys, windows low enough for the children to view the outdoors, size of the indoor and outdoor play areas were

among the components of facility design that had a great effect on the curriculum. (b) the components of equipment acquisition had varying degrees of effect on the curriculum offered from the perspectives of directors/education coordinators, lead teachers of 3- and 4-year-old children, and parents of 3- and 4-year-old children. Child-sized furniture and equipment, a variety of equipment and materials, and age-appropriate equipment were components of equipment acquisition that had a very great effect on the curriculum offered. (c) Head Start teachers were more aware of the effects of facility design and equipment acquisition on the curriculum offered in preschools than were teachers in private-for-profit preschools. This may be related to the specific training required for the teaching staff as determined by the Head Start Performance standards. (d) Head Start education coordinators were more aware of the effects of facility design and equipment acquisition on the curriculum offered in preschools than were directors of private-for-profit preschools. This also may be related to the specific training required for the education coordinators as determined by the Head Start Performance standards.

Recommendations were for directors/education coordinators and teachers to acquire more detailed information through reading professional journals and by their participation in workshops and conferences related to the effects of facility design and equipment acquisition on the curriculum offered in preschool centers. Additionally, it was recommended that parents become more familiar with the effects of facility design and equipment acquisition offered in preschool centers through reading relevant information and materials and participation in parent education programs and preschool open houses. It was further recommended that

education and training specific to the effects of facility design and equipment acquisition be made available to directors/education coordinators, teachers, and parents through community college and university training programs, workshops, and conferences.

For Bill

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the subjects who participated in this study: directors/education coordinators, teachers, and parents of preschool children;

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CHAPTER 1

THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

Growing numbers of young children, increased labor force participation by mothers of young children, and heightened recognition of the value of early childhood education have all combined to create an unprecedented demand for early childhood programs and facilities. Increasing numbers of residential homes are being modified to accommodate the activities of the additional children who spend major portions of their day in these settings. Existing nonresidential buildings are being renovated or space redesigned with the needs of young children in mind. New buildings are being constructed specifically for the purpose of facilitating young children's learning and growth.

The importance of physical design in the construction and renovation of early childhood facilities is slowly being recognized. Factors such as the location within the community and the layout and design of the building and outdoor play areas can either contribute to the children's learning experiences or hinder program quality by constraining the children and staff. The amount of space--whether too little or too much--can also affect the children's and teacher's behavior. Also, the

quality of the connections between outdoor and indoor spaces is important in the design, development and construction process (Greenman, 1992; National Association for the Education of Young Children [NAEYC], 1991b; Prescott, 1994).

Elizabeth Prescott found that an information gap often exists between environmental designers and teachers of young children. Those who understand principles of design often have little knowledge of child development; those who know children best are seldom designers. People who understand both the language of physical design and development of children are rare. Still, the information gap is not unbridgeable. Bridging the gap requires focusing on the key feature of designing for children--the need for flexibility. Both indoor and outdoor spaces, as well as the objects within these spaces, should be flexible enough to allow for modification by teachers as well as children (Prescott, Jones, Kritchevsky, Milich, & Hasselhoe, 1975).

> The most successful facilities grow out of a process that recognizes the need for a design team: the architect, the owner or developer, the child care consultant and the contractor. All have specific experience and work most effectively when they are acknowledged as full "players." (Greenman, 1992).

The flexibility of the environment provides an important tool for inter-disciplinary teaching and for facilitating self-selection of activities among the users. The importance of flexibility is highlighted best by the knowledge of how children

learn: through interaction with the world around them (NAEYC, 1991b). When children's environments are rigid and static, too many opportunities for experimentation and seeing the results of those experiments are lost. Children's environments should be viewed as a setting for growth--a setting they can manipulate and change in response to their changing developmental needs. Because children respond to their total perceived environment, it is also important to understand the relationship between the contents and the surrounding empty space in any given arrangement. These realizations help one to make appropriate design decisions for child care settings (NAEYC, 1991b; Taylor, 1995).

Before an environment can be designed, a determination must be made as to the types of activities that will be taking place in that area. Factors such as site selection, architectural concerns, layout of the building, including arrangement of classrooms, playgrounds and any other space needed, state and local licensing regulations, health and safety, ages and number of children to be served, accessibility and economics need to be considered in the design of a center and the acquisition of equipment. Since each type of learning activity imposes different demands on learning spaces, space needs should be analyzed carefully for both ongoing and new programs. The planning process involves identifying the users, describing the learning activities and desired outcomes, defining the relationship of one learning space to others, describing needed equipment and furnishings, and specifying special environmental considerations (Greenman, 1991, 1992; Meek, 1995; Moore, Lane, Hill, Cohen, & McGinty, 1979).

In addition to the importance of appropriate design decisions, the method in which the environment operates must also be considered. The environment operates in a practical way to enhance or interfere with the operation of the educational program. There is an interrelationship between learning environments, the educational program, and the users (Council of Educational Planners, International, 1985; Taylor, 1995). An early childhood education program should be housed in a spacious, attractive facility that has been created or redesigned for children and that also meets the needs of staff members, children, and parents (Sciarra & Dorsey, 1995).

Statement of the Problem

This study identified, from the perspectives of preschool directors, teachers, and parents, the effects of facility design and equipment acquisition on curriculum offered in preschool centers. Two related problems were investigated:

1. What are the effects of facility design on the curriculum offered in preschool centers?

2. What are the effects of equipment acquisition on the curriculum offered in preschool centers?

Definition of Terms

For the purpose of clarification, the following definition were used throughout the study:

Developmentally-appropriate curriculum--A curriculum for young children that is planned to be appropriate for the age span of the children within the group and is implemented with attention to the different needs, interests, and developmental levels of those individual children. This curriculum provides for all areas of a child's development: physical, emotional, social and cognitive through an integrated approach (Bredekamp & Copple, 1997).

Early childhood--The classification of early childhood spans birth to age 8, which includes infants, toddlers, preschoolers, kindergartners, and children in the primary grades, first through third.

Environment--The sum total of the physical and human qualities that combine to create a space in which children and adults work and play together. It includes all aspects of the physical, temporal and interpersonal settings (Gordon & Browne, 1989).

Head Start preschool center--A federally funded program at the preschool level that is designed to provide early childhood experiences for 3- to 5-year-old children who meet eligibility requirements.

National Association for the Education of Young Children (NAEYC) accreditation--A national, voluntary accreditation system for child care programs.

Preschool/early childhood center--A facility that provides child care for children between the ages of birth and 5 years. Five-year-olds attending these centers are usually not eligible for kindergarten.

Preschoolers--Children between the ages of 2 and 5 years.

Primary useable indoor activity space--The space available for indoor play, activity areas, or nap space. Useable space is calculated by measuring surface area in square feet at floor level from interior walls and by deleting space for stairways, toilets, bath facilities, kitchens, permanent fixtures and nonmovable furniture.

Private for-profit preschool--A privately owned for-profit business providing child care for children under the age of 5 years. Some also provide before and after school child care.

Delimitations

The delimitations of this study were the following:

1. This study was limited to a random sample of preschool/early childhood centers from the following categories in seven central Florida counties: (a) private for-profit preschools (NAEYC accredited and nonaccredited), and (b) Head Start preschool centers (NAEYC accredited and nonaccredited).

2. This study was limited to directors, and teachers and parents of 3- and 4-year-old children at the randomly selected preschool and Head Start centers.

3. This study was limited to teachers and parents of 3- and 4-year-old children chosen by the director to receive a survey.

Assumptions

This study was based on the following assumptions:

1. It was assumed that facility design and equipment acquisition affect the curriculum offered in preschool centers.

2. It was assumed that the survey instruments were appropriate in eliciting the perceptions of the survey respondents relative to the design of the child care facility and its effects on curriculum offered.

3. It was assumed that the instruments were appropriate in eliciting the perceptions of the survey respondents relative to equipment acquisition and its effects on curriculum offered.

Significance of the Study

This study identified, from the perspectives of preschool directors, teachers, and parents, the effects of facility design and equipment acquisition on curriculum offered in preschool centers. A preschool center is a special educational facility. The design of the facility presents special challenges because of its role in the lives of children and their families. Architectural design impacts the children's health and safety, social and emotional development, feelings of security and self-esteem, and learning opportunities (Moore et al., 1979).

The environment is a critical part of the curriculum for young children. Environmental decisions reflect the philosophy and goals of the program. Preschool centers are learning environments in which children are learning about themselves, their relationship to the world, and others in the world. Early childhood settings must provide children with the opportunity to do many of the

things that they would do at home (Brewer, 1998; Maxwell, 1996; Sher & Fried, 1994). Directors and teachers are responsible for creating an environment that is shaped by the needs and interests of the children (Herr, 1998).

Although recommendations have been written for the design of preschool facilities and for acquisition of equipment and materials, preschool owner/operators need only meet the minimum standards set by their state and/or local licensing agency (Moore et al., 1979). State and local municipalities enforce a range of environmental safety codes that may impact design decisions. These include but are not limited to zoning, building, health, fire and safety codes, minimum square footage per child, group size, and teacher/child ratios.

Most states require a minimum allotment of square feet per child of primary, useable activity space (both indoor and outdoor). More space than the minimum is preferred. Recommendations range from 35 square feet per child to 200 square feet per child (Child Welfare League of America, 1984; Moore et al., 1979; NAEYC, 1991b; Sher & Fried, 1994). Studies done by Elizabeth Prescott and colleagues at Pacific Oaks College indicate both too much and too little space may be detrimental, particularly if not properly arranged (Prescott et al., 1975).

Florida's statute regulating child care requires the following:

1. Square Footage Requirements
   a minimum of 35 square feet of useable floor space for each child
   a minimum of 45 square feet of useable outdoor play area for each child

2. Staff-to-children ratio

children under 1 year of age	1 adult to 4 children
children 1-2 years of age	1 adult to 6 children
children 2-3 years of age	1 adult to 11 children
children 3-4 years of age	1 adult to 15 children
children 4-5 years of age	1 adult to 20 children

3. Child Care facilities conform to state standards adopted by the State Fire Marshal, Chapter 4A-36, Florida Administrative Code, Uniform Standards for Life Safety and Fire Prevention in Child Care Facilities and must be inspected annually
4. Toileting facilities--1 toilet and sink for the first 15 children; and 1 toilet and sink for each 30 additional children
5. Toys, equipment and furnishings suitable to each child's age and development and a quantity for each child to be involved in activities is required
   Toys, equipment and furnishings must be safe and maintained in a sanitary condition
6. Outdoor equipment--Equipment and play activities suitable to each child's age and development are to be provided
   All equipment must be securely anchored unless portable by design
   All equipment must be maintained in a safe condition
   Maintenance includes routine checks of all supports, all connectors and moving parts
   Safe, adequate fencing at least 4 feet high is required around the outdoor play area. ("Child Care Facilities," 1996; "Child Care Standards," 1997).

Abbott and Abbott (1995) recommend that the facility be designed from the perspective of the children who will inhabit and be the prime users of the building. Activity areas, both indoor and outdoor, need to be flexible and clearly defined by spatial arrangement. Spaces should encourage spontaneous learning situations, provide for many simultaneous activities and should be arranged so that children can work individually, together in small groups, or in a large group. Clear pathways for children to move from one area to another and to minimize

distractions should be provided through space arrangement. The environment should be attractive, colorful and well lit through a combination of natural and artificial lighting (Abbott & Abbott, 1995; Arroyo, 1981; Bredekamp & Copple, 1997; Caples, 1996; Moore et al., 1979; NAEYC, 1991b; Sanoff, 1995; Sher & Fried, 1994).

There is a need to educate teachers, directors, and parents about the effects of facility design and equipment acquisition on the program curriculum. Teachers and directors need to be able to design and organize the preschool environment so that a developmentally appropriate curriculum, that meets the needs and interests of the children, can be provided. Parents need to be educated as to what a well-designed, developmentally appropriate environment for preschool children looks like.

As more and more children are placed in early childhood programs and facilities, great demands will be made to provide facilities and equipment which support the curriculum for developmentally appropriate programs. Centers specifically designed for the preschool child and having materials and equipment that are age appropriate will be better able to provide developmentally appropriate programs. This will allow the children to more readily interact with the environment within the preschool and have experiences which will lead to their physical, emotional, social, and cognitive growth and their independence.

This study was intended to provide data that could be used to determine the effects of facility design and equipment acquisition on the curriculum offered in preschools.

Purpose

The purpose of this study was to gather data on the effects of the design of preschool facilities and equipment acquisition on the curriculum. At the time of the present study, preschool owner/operators only need to meet the minimum standards set by the state and/or local licensing agency regarding square footage of useable space per child, toileting facilities, adult/child ratios, and acquisition of equipment, without regard to the effect of design features on curriculum. A better understanding of the effects of facility design and equipment acquisition on the preschool curriculum is offered through the examination of NAEYC accredited and nonaccredited private-for-profit preschools and Head Start centers.

Research Questions

Specifically, this study identified components of facility design and of equipment acquisition, which affect the curriculum offered in preschool centers and was guided by the following questions:

1. What components of facility design affect the curriculum offered in preschool centers from the teacher's perspective?

2. What components of facility design affect the curriculum offered in preschool centers from the parent's perspective?

3. What components of facility design affect the curriculum offered in preschool centers from the director's perspective?

4. What components of equipment acquisition affect the curriculum offered in preschool centers from the teacher's perspective?

5. What components of equipment acquisition affect the curriculum offered in preschool centers from the parent's perspective?

6. What components of equipment acquisition affect the curriculum offered in preschool centers from the director's perspective?

Methodology

Population

The research design for this study involved the administration of a survey to directors, teachers, and parents at randomly selected preschool and Head Start centers in Alachua, Brevard, Flagler, Orange, Osceola, Seminole and Volusia counties. All of these counties are in the central region of Florida. A total of 16 centers were selected from a list obtained from the Florida Department of Children and Families' Training Coordinators, and Head Start coordinators in each of the above-named counties. The list of NAEYC accredited centers in these counties was obtained from the National Association for the Education of Young Children. The centers were grouped, within each county, according to the following criteria,

NAEYC accredited private for-profit preschools, NAEYC accredited Head Start centers, nonaccredited private for-profit preschools and nonaccredited Head Start centers.

Research Design

The research design was a descriptive, nonexperimental study involving 16 preschool and Head Start centers in the central Florida area. Surveys were the primary method used to collect data. This study was designed to (a) provide a description of the effects of facility design on the curriculum offered in preschools based on responses given to Surveys A, B, and C (Appendixes A, B, and C), and (b) provide a description of the effects of equipment acquisition on the curriculum offered in preschool centers based on responses given to Surveys A, B, and C (Appendixes A, B, and C).

Instrumentation

Data were collected through the use of survey instruments designed by the researcher. The surveys were reviewed by several early childhood educators in the course of their development and refined based on their comments. Three surveys, one each for directors, Instrument A (Appendix A), teachers, Instrument B (Appendix B), and parents, Instrument C (Appendix C), were developed to gather data on individual perspectives as to what components of facility design and equipment acquisition affect the curriculum offered in preschool centers.

Data Collection

Surveys were delivered to the director of two Head Start centers in Volusia County and one Head Start center in Flagler County by the researcher. The balance of the surveys were mailed to the directors of 11 centers through the U.S. Postal Service. Surveys were mailed at a later date to the Directors of Osceola and Seminole county Head Start at their request. A cover letter (Appendixes D, E, and F) explaining the purpose of the study accompanied each survey and a preaddressed, stamped return envelope was also provided. Additionally, the cover letter to the director of each center explained the requested distribution of the surveys. A deadline to receive responses was included. Each survey had a control number and anonymity was provided to respondents in order to encourage honest reporting of respondent perceptions. Directors were telephoned prior to the distribution of the surveys to elicit their willingness to participate in the study and as a follow-up after the surveys were mailed to inform them to expect the surveys within a few days. Telephone calls were made to centers that did not respond to the initial surveys and follow-up surveys were sent to these centers.

Data Analysis

A descriptive analysis of the effects of facility design and equipment acquisition on curriculum was completed. The results of the study provided descriptions of National Association for the Education of Young Children

(NAEYC) accredited Head Start and private-for-profit preschools and nonaccredited Head Start and private-for-profit preschools.

The first research question, which addressed the components of facility design that affect the curriculum offered in preschool centers from the teacher's perspective, was determined by the responses to survey items 23-31, 34-53, 56, 57, 61, 63, and 67 of Instrument B (Appendix B). Research question 2, which addressed the components of facility design that affect the curriculum offered in preschool centers from the parent's perspective, was addressed by the responses to survey items 1-4, 9-12, 15-23, and 28 of Instrument C (Appendix C). Research question 3, which addressed the components of facility design that affect the curriculum offered in preschool centers from the director's perspective, was addressed by the responses to survey items 24-32, 35-51, 53, 54, 58, 60, and 62 of Instrument A (Appendix A).

Research question 4, which focused on the effects of equipment acquisition on the curriculum offered in preschool centers from the teacher's perspective, was addressed by survey items 32,33, 54, 55, 58, 61, 62, 64-66, and 68-104 of Instrument B (Appendix B). Research question 5, which focused on the effects of equipment acquisition on the curriculum offered in preschool centers from the parent's perspective, was addressed by survey items 5-8, 13, 14, 24-27, 29, and 30 of Instrument C (Appendix C). Research question 6, which focused on the effects of equipment acquisition on the curriculum offered in preschool centers from the

director's perspective, was addressed by survey items 33, 34, 52, 55-57, 59, and 61-66 of Instrument A (Appendix A).

Dependent Variables

Dependent variables for the data analysis were all items listed in the survey.

Independent Variables

The independent variables were the demographic characteristics of the responding directors, teachers, and parents including educational level for directors, teachers, and parents; years of employment in preschools for directors and teachers, and, for parents, the number of years they have had children enrolled in preschool.

Organization of the Study

Chapter 1 of the study outlines the specific problem and its components. Chapter 2 presents a review of literature and research relevant to the problem of the study. Chapter 3 contains a description of the methods and procedures used in the collection of data. Chapter 4 includes the analysis of data and presentation of results. Chapter 5 provides a summary of conclusions, implications for practice, and recommendations for future research.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

The field of early childhood education has a long history. Many contemporary practices and programs such as the value of play, parent involvement, and kindergartens have their roots in the work of earlier philosophers, reformers and educational thinkers. The 19th century has traditionally been regarded as the birthdate of early childhood education (Graves, Gargiulo, & Sluder, 1996).

Prior to this time, children were expected and encouraged to move into adulthood as fast as possible. Children learned from their parents or by apprenticeship outside the family. The German school system, established in the 16th century, influenced education in all parts of Europe. The American educational system began in the colonies (Gordon & Browne, 1989).

Early childhood education is an interdisciplinary field. Important contributions have come from medicine, education and psychology. The ethic of social reform, the importance of childhood and the transmission of values have been at the core of this field throughout history (Gordon & Browne, 1989).

The following review of literature on early childhood education includes a brief history of early childhood education, descriptions of various program models and early childhood settings. The importance of planning the environment and the curriculum so that the needs of the children, teachers and parents are met was prevalent in the literature. This review of the literature is presented in five sections: (a) History of Early Childhood Education, (b) Early Childhood Program Models, (c) Early Childhood Settings, (d) The National Association for the Education of Young Children (NAEYC) Accreditation Process, and (e) The Environment.

History of Early Childhood Education

Early childhood programs trace their development back to early philosophers, Martin Luther, John Comenius, Jean-Jacques Rousseau, and Johann Pestalozzi. Later educators, such as Dewey, Froebel, Montessori, and Piaget developed their own theories of early childhood education. Prior to the 19th century the idea of childhood as a unique period was generally unaccepted (Graves, Gargiulo, & Sluder, 1996). From medieval times until the 1800s, children were regarded as miniature adults and were given no special treatment or consideration (Graves, 1990, as cited in Graves et al., 1996). Gradually, views of children and childhood changed. Factors generally considered responsible for changes include societal conditions--the emergence of new states and their need for an educated citizenry, improvement in child survival which made it worthwhile to invest in

children, increased industrialization and urbanization which led to changes in family organization and structures and beliefs about the nature of childhood (Maxim, 1985; Spodek & Brown, 1993). "The conditions of society often influence our views of childhood, and the ways we view children often determine how we interact with them, the expectancies we have, and the care we provide" (Maxim, 1985, p. 29).

The development of the field of early childhood education as a separate entity is based on the premise that young children are in some ways different from older children. The education of young children should be different from the education of older children because of these differences. It was believed that experiences provided to young children would influence the emerging adult. Unique programs for young children were established but were not based on theories of child development (Spodek & Brown, 1993).

The earliest child care, in the United States, was established in the settlement houses of large U.S. cities at the turn of the 20th century "to provide a shelter for the children of mothers dependent on their own exertions for their daily bread; [but] also to rear useful citizens among the class represented by the children we reach" (Steinfels, 1973, p. 29). Even though most working mothers worked because they had to for economic survival, the belief persisted that mothers should take care of their own children, so the availability of child care declined as the century progressed (Brewer, 1998).

Other efforts at providing child care have been in response to national emergencies. During the Depression, the government funded the Works Progress Administration (WPA) creating nursery schools to provide teaching positions for unemployed teachers and other school staff as well as to help families facing unemployment and poverty. WPA schools were full-day, comprehensive programs for children ages 2 through 6. They were a source of employment for many Americans and also made it possible for mothers to go out and seek work. WPA nursery schools had a lasting impact on the growth of early childhood education. Nursery school and kindergarten teachers were hired as consultants, wrote curricula, and retrained upper-grade and secondary-school teachers to work with young children. It was the first time in the history of early childhood education that many children in every part of the nation had a chance to attend a nursery school. These nurseries helped popularize the notion of out-of-home child care for young children. When the Depression ended, the federal government's involvement with early education faded and the WPA centers closed (Graves et al., 1996; Seefeldt & Barbour, 1994).

During World War II, the Lanham Act (1942) provided federal funds to establish child care centers in war-affected communities so that mothers could assume roles in jobs vacated by males who entered the armed forces. These centers provided basic child care and education on a daily basis (Gordon & Browne, 1989; Graves et al., 1996; Seefeldt & Barbour, 1994). The Lanham Act called for the termination of government funding upon conclusion of the war. As

the men returned from the war and reentered the job market, women went back to their homes and children. Between 1946 and the early 1960s, there was no government support for early childhood programs (Graves et al., 1996).

Interest in early childhood was rekindled in the 1960s. Issues of racial discrimination, inequality, and the devastating effects of poverty on children helped to shape policy and social reform. It was believed that compensatory education could ameliorate the effects of environmental deprivation. The federal government focused its attention and resources on combating poverty. Head Start became a part of America's War on Poverty. A broad range of educational interventions to enhance young children's learning and development was created (Brewer, 1998; Graves et al., 1996; Herr, 1998; Spodek, 1993; Washington & Bailey, 1995).

Changes in family structure and new roles for women in American society contributed to increased demands for child care, preschool programs, and funding to provide assistance with child care costs (Graves et al., 1996; Seefeldt & Barbour, 1994). During the last part of the 1980s and the early 1990s, the federal government passed legislation supporting child care. The reauthorization of Follow Through, which expands the ideas, ideals, and practices of Head Start to include the kindergarten and primary grade programs and passage of Public Law 101-508, which provides assistance with child care costs and improves the quality and availability of services, are examples of the government's continued involvement in the lives of young children (Graves et al., 1996; Seefeldt & Barbour, 1994).

Early Childhood Program Models

Early childhood education is defined as the education of young children from birth through age 8 (Spodek, 1993). An early childhood program is any group program in a center, school, or other facility that serves children of those ages. Early childhood programs include child care centers, family child care homes, private and public preschools, kindergartens, and primary-grade schools. (Bredekamp & Copple, 1997; Gordon & Browne, 1989).

A single program usually does not serve children across this entire age range. Programs for all children in an age range do not look alike. Activities and physical settings in programs for infants and toddlers look different from those for 3- to 5-year-olds. Settings for infants and toddlers are concerned with caregiving and playing with a few infants and toddlers at a time. There will be an area for cribs, diaper changing, feeding, large floor area for crawling and other movement activities. The setting for 3- to 5-year-olds provides space for constructing large complex structures, or to play house, office, store, and post office. This space is also used for large group activities. Interest centers with a wide variety of materials should reflect the interests and culture of the children (Seefeldt & Barbour, 1994).

Historical events, influential individuals, and government involvement have contributed to the development of many contemporary early childhood programs. Factors responsible for differences in programs include different sponsorship of programs, program philosophy, goals and objectives, and curriculum used.

Programs also vary by age, by characteristics of clients, by purpose and by sponsorship (Graves et al., 1996; Spodek, 1993).

Early childhood program models describe goals, materials, teacher roles, and appropriate instructional practices for early childhood education. The wide variety of models represents different philosophical positions and approaches to early childhood education. They differ in philosophy, learning theory, goals, steps to reach goals, classroom procedures, teacher training and curriculum materials. Variations in programs are also attributed to the roles assumed by the teachers and the students (Graves et al., 1996).

The Montessori Model

Maria Montessori (1870-1952) developed an innovative, activity-based sensory education model involving didactic materials. Key elements of the Montessori philosophy (1907) include the ideas of the absorbent mind, the prepared environment, autoeducation, sensitive periods, and the principle of freedom for the child. Each element is a factor in explanations of how children grow and develop. In a Montessori environment, the teacher is responsible for the "prepared environment"--selecting and arranging the materials that make learning possible. Most Montessori materials are self-correcting; that is, they are designed so that the child gets feedback on the correctness of his actions from the materials. Montessori curriculum presents the materials in a sequence, from simplest to most difficult so that the child learns concepts logically. Many of the learning tasks

have a series of steps and must be learned in a prescribed order (Brewer, 19098; Lindauer, 1987; Montessori, 1964).

A basic premise of the Montessori philosophy is that the child copies reality rather than constructs it. The children organize their world and their own thinking from watching and then doing activities. The Montessori teacher, who receives specialized training in the Montessori Method, demonstrates how materials are to be used and how tasks are to be completed. The demonstrations are very specific in that there is an exact procedure for using each set of materials; children are not allowed free expressions with the materials until they have mastered the exact procedures. The materials are arranged so that the children can select from among them the ones in which they are interested, but it is the teacher's role to bring out and demonstrate new materials at the optimal time in the development of each child (Gordon & Browne, 1989; Lindauer, 1987).

The prepared environment in a Montessori program must be orderly so that the children develop a sense of order and control. The tables and chairs must be child sized and lightweight so that the children can arrange them in the way that is most comfortable for them. It must also be attractive so that the children develop a respect for beauty. Materials for learning must be carefully chosen and displayed to catch the children's interest. They are set on low shelves, in an orderly fashion, to encourage independent use by each child (Brewer, 1998; Graves et al., 1996; Montessori, 1964).

The teacher's role in the Montessori setting is that of observing the children. She becomes familiar with the skills and developmental levels, then matches the child to the appropriate material or task. There is little teacher intervention beyond giving clear directions for how to use the materials (Gordon & Browne, 1989; Lindauer, 1987; Montessori, 1964).

The Constructivist Model

Constructivist models are based on the learning theories of John Dewey (1858-1952), Jean Piaget (1896-1980), and Lev Vygotsky (1896-1934). Examples of constructivist programs include the Bank Street College Model (1934-1935) developed by Lucy Sprague Mitchell, and the Cognitively Oriented Curriculum (1960s), also known as High/Scope, developed by David Weikart (Brewer, 1998; Forman, 1987; Zimiles, 1987).

Constructivists believe that children want to learn, are always learning, and that children construct their own understandings and are continually refining them in terms of new experiences and knowledge. The curriculum is planned and the learning experiences are selected to follow children's interests or expose them to new areas in which their interest might be aroused. The process of finding information, analyzing data, and reaching conclusions is considered more important than learning facts (Forman, 1987; Graves et al., 1996).

Although the goals of all constructivist programs are not the same, they are all concerned with the development of children's thinking and reasoning abilities

and their abilities to represent experiences in meaningful ways. Each program depends on children's active involvement with materials and teacher's guidance in helping children reflect on their experiences. The programs focus on development of physical, social, emotional, and intellectual competence. The curriculum is based on children's interest and is integrated so that content is not arranged by subject-matter areas. The interrelationship of all areas of development is important in developing the whole child (Brewer, 1998; Forman, 1987).

A brief description of the Bank Street College Model and the Cognitively Oriented Curriculum (High/Scope) Model follows.

Bank Street College Model

The Bank Street College Model, also known as the Bank Street Approach (BSA), is based on the writings of John Dewey and his theory of progressive education (Graves et al., 1996). It was developed by Lucy Sprague Mitchell, a student of John Dewey as the Bank Street School in 1934-1935 (Brewer, 1998; Gordon & Browne, 1989).

Teachers using the BSA are responsible for creating a rich and stimulating environment where children are safe to explore and initiate their own learning. In this model the children are the initiators and adults take their cues from the child's activities. Children are trusted to initiate their own activities and do their own learning and evaluating. Educational goals are constructed as developmental processes. The child's ability for organizing experiences through cognitive

strategies is promoted in the Bank Street program. Learning is seen as resulting from the children's active participation and involvement with their social and physical world. Play is an important aspect of BSA. Play provides the opportunity for young children to experiment and explore their immediate environment (Lawton, 1987, as cited in Graves et al., 1996).

The teacher's role is to provide an enriched, safe and stimulating environment in which children are free to play, select activities and materials, and determine their own goals. The classroom is a rich and cognitively stimulating learning environment that contains a wide variety of attractive materials designed to engage the children's interest and allows them to be active learners. Items are typically organized around learning or interest centers to facilitate the child's interaction with them (Graves et al., 1996; Seefeldt & Barbour, 1989; Zimiles, 1987).

This approach differs from the Constructivist Model only in its program approach. The BSA is a child-initiated approach where the teacher responds to cues from the child. The Constructivist program approach is a teacher-child initiated approach in which both the child and adult initiate learning activities (Seefeldt & Barbour, 1989).

The Cognitively Oriented Curriculum Model (High/Scope)

This approach has its foundation in the work of Jean Piaget and strongly emphasizes cognitive development. It is a compensatory preschool program

originally designed to benefit children of poverty and has its origins in the Perry Preschool Project begun in the 1960s (Graves et al., 1996).

This program emphasizes careful and systematic observations of the child and organizes the curriculum around key experiences. Key experiences are identified in the categories of social and emotional development, movement and physical development, and cognitive development. They provide teachers with a basis for planning and organizing the curriculum so that activities are not random (Graves et al., 1996; Hohmann & Weikart, 1995).

The learning process in the Cognitively Oriented Curriculum matches the child's level of intellectual development to the curriculum. Children are active participants in this process and they proceed at their own pace with activities selected according to their interest and competency. Planning is an important part of the daily routine in classrooms using this model. The children are given the opportunity to decide what activities they wish to pursue within a consistent routine of daily events. Children have a great deal of freedom to plan and carry out their intentions. The emphasis is on helping children plan their own day (Forman, 1987; Graves et al., 1996; Hohmann & Weikart, 1995).

Teachers are responsible for planning part of the daily agenda. They plan certain key experiences and support and encourage the children's involvement with their activities. An important element of the daily routine is a Plan-Do-Review scheme. Children make their choices, engage in the activity and then recall how they carried out their plan. Teachers also set objectives, guide children, and teach.

They respond to the children, their interests and individual abilities, intelligence, and background (Hohmann & Weikart, 1995).

Classrooms that use the Cognitively Oriented Curriculum are arranged and equipped like many other preschool environments. The physical arrangement consists of a large, open area for group activities and games in addition to centers or work areas for specific activities such as sand and water play, art, and blocks. These work areas are located around the room. Equipment is typical--trucks, dolls, blocks, puzzles, stuffed animals, puppets, etc. (Brewer, 1998; Graves et al., 1996; Hohmann, & Weikart, 1995; Seefeldt & Barbour, 1989).

The Behaviorist Model

The behaviorist model of schools for young children is based on the learning theories of Edward Thorndike (1974-1949) and B. F. Skinner (1904-1990). These theories explain behavior in terms of a stimulus and a response and operant conditioning. Key components of the behaviorist model, also known as direct instruction and teacher-initiated, are reinforcement schedules, shaping of behavior, and extinction of behavior. Behaviorism emphasizes the role of external factors in shaping behavior (Mounts & Roopnarine, 1987).

Teachers are expected to understand and be able to use the components in achieving academic and behavioral goals. The teaching situation is structured so that the children give correct responses to questions. Appropriate behavior and correct answers are lavishly rewarded. Incorrect responses are not rewarded.

Instead, the teacher rephrases the question or restructures the learning activity until the correct answer is provided by the student. Almost every minute of this program is focused on academic skill; very little time is devoted to creative activities (Graves et al., 1996; Seefeldt & Barbour, 1994).

The curriculum is planned and directed by the teacher and is presented to the children. This approach uses highly structured activities with predetermined goals and objectives. Academic content often falls into three main areas--reading, language, and mathematics. The lessons presented are designed to be conducted in small groups and are carefully sequenced. With the direct instruction model, the classroom is simplified and the number of activities is limited (Mounts & Roopnarine, 1987).

The DISTAR program (1966) developed by Carl Bereiter and Siegfried Englemann, is an example of a direct instruction model. It was originally designed as a compensatory education model to help economically disadvantaged preschoolers achieve academic success (Graves et al., 1996; Seefeldt & Barbour, 1994).

Summary

Models serve as guidelines for planning and organizing experiences. As teachers use models and theories, they construct their own understanding of the teaching-learning processes and incorporate their experiences into the model, thus customizing learning experiences for their students (Brewer, 1998; Graves et al.,

1996). The program models described have some common goals, but each has a different view of what is the best and most appropriate learning environment for young children. One goal common to all the models is for children to learn. The models differ on the means used to reach this goal (Brewer, 1998). Montessori educators believe that children learn best through interactions with materials in a prepared environment (Lindauer, 1987). Constructivists also believe that children learn through interactions with objects and people but that children must reflect on their actions as well (Forman, 1987). Behaviorists believe that children learn best in a highly structured environment in which the information presented is carefully sequenced and the rewards are controlled (Mounts & Roopnarine, 1987).

Early Childhood Settings

In addition to the various program models, there are distinct differences among the many types of early childhood settings. Settings differ in terms of size, facilities, staff qualifications, parent involvement, ownership, fees, sponsorship, ages served, purpose of the program, public or private facility, profit or nonprofit organization, funding sources, location and hours of service (Gordon & Browne, 1989; Graves et al., 1996; Seefeldt & Barbour, 1994). The focus may be on children's physical and social growth or on their cognitive growth (Herr, 1998).

Child care centers provide care for children in a variety of settings. They may be located in a church, in the work place, shopping mall, recreational center, buildings specifically built for this purpose, or in buildings or houses remodeled as

child care centers. Centers may be licensed or unlicensed depending on state and/or local regulations. Some centers may be nationally franchised for-profit, privately owned for-profit, or not-for-profit operations (Gordon & Browne, 1989; Seefeldt & Barbour, 1994).

Family home day care settings provide child care for small numbers of children of various ages, from infants to 12-year-olds, in a private home. The homes are licensed or registered with the appropriate state agency where required. Meals are usually provided. The family home day-care provider who has received early childhood training, may plan and provide a developmental curriculum for the children in care in this setting. The hours of operation usually accommodate the needs of individual parents (Graves et al., 1996; Herr, 1998).

Early childhood programs can be grouped based on sponsorship--public, private and employer-sponsored centers. Publicly sponsored programs are funded by federal, state or local governments. These programs are also nonprofit. Examples of publicly sponsored programs are public school pre-kindergarten programs, Head Start, and college and university laboratory schools. Privately sponsored programs include privately owned centers, franchised child care centers, family day care homes, employer-sponsored and church-based centers (Herr, 1998).

A safe environment under adult supervision is provided in each center. The physical, emotional, social, and intellectual well-being of each child are of primary importance. The care is designed to meet the basic nutrition, health, and safety

needs of each child. The educational curriculum emphasizes the whole child. Some centers provide care only for 3- to 5-year-olds, some only for infant to 2-year-olds. Others may serve children from birth to 5-year-olds. The number of children cared for in a child care center is dependent upon licensing regulations (Graves et al., 1996; Herr, 1998).

Head Start

Head Start was created in 1965 as part of President Johnson's War on Poverty. Its primary goal has been to "improve the competence of children in low-income families, that is, their everyday ability to deal with both their current environment and later responsibilities in school and life" (USGAO, Research Insufficient to Assess Program Impact, March, 1998b). Other goals include increasing each child's physical, social, and emotional development, and improving the health of each child by providing medical, nutritional, dental, social, and mental health services. Active parental and community involvement are important components of this program (USGAO, Participant Characteristics, Services and Funding, March, 1998a; Give your child a head start, 1993; Gordon & Browne, 1989; Graves et al., 1996; Herr, 1998).

Ninety percent of the children enrolled in each Head Start program must, by regulation, be from low income families. The law requires that a certain percentage of space in each program be set aside for special populations of children, including those with disabilities, Native American and migrant children.

Head Start serves children of any age below the age of compulsory school attendance (GAO, Participant Characteristics, Services and Funding, March, 1998).

Performance standards, which govern Head Start programs, state the expectations and minimum requirements that all Head Start programs must meet. There are also separate performance standards for services for children with disabilities. Performance standards have been revised and "attempt to reflect the changing Head Start population, the evolution of best practices, and program experience with the earlier standards" (GAO, Participant Characteristics, Services and Funding, March, 1998a). Programs are operated by local public and/or private nonprofit agencies, called grantees. Grantees receive their funding directly from the U.S. Department of Health and Human Services and must also obtain an additional 20 percent of their program costs from nonfederal sources (GAO, Research Insufficient to Assess Program Impact, March, 1998).

Summary--Early Childhood Settings

There is a broad array of educational facilities and programs available for young children including child care centers, family home day cares, Head Start, and pre-kindergarten early intervention programs. Programs are provided in a variety of settings. They may be in a building specifically designed for child care, a renovated building, in someone's home, or in a public school. Funding for programs include private funds for child care centers, franchise centers and family

home day care, federal funds in the case of Head Start, and state funds for pre-kindergarten early intervention programs.

National Association for the Education of Young Children Accreditation

The National Association for the Education of Young Children (NAEYC) accreditation is a national, voluntary accreditation system for child care programs administered by the National Academy of Early Childhood Programs, a division of the National Association for the Education of Young Children. The purpose of this accreditation system is to improve the quality of programs for young children in group care. It assists parents in their search for high quality programs for their children and it helps assure parents that their children are receiving quality care. (NAEYC, 1991a).

The accreditation system is designed to meet two major goals:

1. to help early childhood program personnel become involved in a process that will facilitate real and lasting improvements in the quality of the program serving young children, and

2. to evaluate the quality of the program for the purpose of accrediting those programs that substantially comply with the criteria for high quality programs. (NAEYC, 1991a, p. 1)

To be eligible for accreditation, an early childhood program must

1. serve a minimum of 10 children within the age group of birth through 5 in part- or full-day group programs with at least two adults present at all times.

2. have been in operation at least one year prior to receipt of accreditation.

3. be licensed by the appropriate state/local agencies or if exempt from licensing, demonstrate compliance with its own state's standards for early childhood program subject to licensing.

4. include all of the program that comes under the eligibility criteria in the self-study and validation process. (NAEYC, 1991a, pp. 1-2)

The accreditation process is a three-step system. The self-study is an evaluation process. The evaluation provides valuable professional development experiences for all involved--directors, staff, and parents. Part of the self-study involves evaluating the 10 component areas identified as goals of quality early childhood programs. Through the self-study, a combination of observation form and questionnaires, the director, teachers, and parents evaluate how well the program is meeting the criteria and set goals for improvement. After improvements are made, the director reports the results of the self-study by completing a rating form called the program description. The accuracy of the program description is verified during an on-site visit by trained early childhood professionals, called validators. The verified program description is then reviewed by a three-person commission that makes the accreditation decision on the basis of

professional judgment. Accreditation is either granted or deferred. If deferred, the program may appeal the deferment. The verified program is reviewed by a second commission which either grants accreditation or defers it. If accreditation is deferred by the second commission, the program makes needed improvements and requests a second validation visit. Being accredited by NAEYC certifies that a child care center has met these standards (Herr, 1998; NAEYC, 1991a). Accreditation is not a requirement for licensing in the State of Florida. Programs that do not achieve NAEYC accreditation may continue to operate while working toward accreditation.

Bredekamp (NAEYC, 1991a) stated

> accreditation of early childhood programs helps teachers and directors evaluate and improve their practice and helps parents make informed decisions, but most of all it helps the children. It establishes professional consensus regarding program standards, provides a goal that programs can use in working toward improvement, provides a mechanism for identifying programs that exceed the minimum requirements for operation and strive toward achieving professional standards and it provides additional assurance for parents as they make important decisions about the care and education of their children. (p. x)

The National Association for the Education of Young Children (NAEYC) recommends that the field of early childhood education base its curriculum and programs for young children on knowledge of the child's growth, development, and learning. Curriculum should be planned to be developmentally appropriate for each individual (Bredekamp & Copple, 1997).

The Environment

The environment is the sum total of the physical and human qualities that combine to create a space in which children and adults work and play together. Environment is the content teachers arrange; it is an atmosphere they create; it is a feeling they communicate. Environment is the total picture--from the traffic flow to the daily schedule, from the numbers of chairs at a table to the placement of the guinea pig cage. The choices teachers make concerning the physical setting (the equipment and materials, the room arrangement, the playground and the facilities available), the temporal setting (timing for transitions, routines, activities), and the interpersonal setting (number and nature of teachers, ages and numbers of children, types and styles of interactions among them), combine to support the program goals (Gordon & Browne, 1989).

> The important aspects of environment include arrangement of space, furnishings and equipment, activities to enhance development, the daily schedule, and supervision provided by staff. All settings for early childhood care and education have the same basic environmental components and the same basic goal--that of meeting the needs of children, despite the fact that programs vary in length of day, size of group, number of staff and ages of children served. The environment influences children and staff, whether or not we consciously harness this influence. Teachers need to assume responsibility for creating an attractive, functional, and stimulating environment for children and for themselves. (Harms, as cited in Gordon & Browne, 1989, p. 232)

Summary

This chapter presented a review of literature related to early childhood education. Researchers agree that the environment in which an early childhood program operates affects the goals of the program. Literature related to various early childhood program models, early childhood settings and NAEYC accreditation was also reviewed in this chapter. The increase in the need for child care has resulted in early childhood programs operating in a variety of facilities. The design of these facilities should take into account the needs of all those who will be using the facility--the children, the teachers, the parents, and the program goals.

CHAPTER 3

METHODS AND PROCEDURES

Purpose

The purpose of this study was to gather data on the effects of facility design and equipment acquisition on curriculum offered in preschools. At the time of the study, preschool owner/operators only needed to meet minimum standards set by the state and/or local licensing agency regarding square footage of useable space per child, adult/child ratios, toileting facilities and equipment acquisition. This study sought to determine the effects of facility design and equipment acquisition on the curriculum offered in preschool centers.

Population

The population for this study consisted of 16 center directors/education coordinators, 16 lead teachers of 3-year-olds, 16 lead teachers of 4-year-olds, 32 parents of 3-year-old children, and 32 parents of 4-year-old children. The respondents were from five National Association for the Education of Young Children (NAEYC) accredited private-for-profit centers, one NAEYC accredited

Head Start center, five nonaccredited private-for-profit centers and five nonaccredited Head Start centers.

Setting

Center directors/education coordinators, lead teachers of 3- and 4-year-old children, and parents of 3- and 4-year-old children from randomly selected centers in the central Florida counties of Alachua, Brevard, Flagler, Orange, Osceola, Seminole and Volusia participated in this study. A total of 16 centers were selected from a list obtained from the Florida Department of Children and Families' Training Coordinators and Head Start coordinators in each of the above counties. The list of NAEYC accredited centers in the above counties was obtained from the National Association for the Education of Young Children (NAEYC). The centers were grouped, within each county, according to the following criteria, NAEYC accredited private-for-profit preschools, NAEYC accredited Head Start centers, nonaccredited private-for-profit preschools, and nonaccredited Head Start centers. There were only 4 Head Start centers and 10 private-for-profit centers with NAEYC accreditation in the six counties at the time of this study.

Authorization to conduct this study in the Head Start centers was obtained through a telephone call to the Head Start director and a formal application process. Initially, permission was received from Brevard, Flagler, Orange, Osceola, Seminole, and Volusia County Head Start directors. Permission was later

rescinded by Brevard County, which had three NAEYC accredited Head Start centers. The director for the Osceola and Seminole counties' Head Start asked that the researcher wait until June to distribute the surveys. Directors of the private-for-profit centers were contacted by telephone to obtain their cooperation in participating in this study.

The researcher delivered surveys to the Head Start director for Volusia and Flagler counties. All other surveys were mailed to the center director or Head Start director. A return date of May 15, 1998, was requested. Surveys were mailed to the Head Start director in Osceola and Seminole counties, per his request, on May 21, with a return date of June 5, 1998. A cover letter was distributed with the survey instrument (Appendixes D, E, and F) and a preaddressed, stamped return envelope was provided.

Directors were requested to distribute the surveys as follows: Director Survey: The director was requested to complete this survey if he/she was directly involved with the instructional program. If not, it was requested that the education or curriculum coordinator complete this survey. Teacher Survey: The director was requested to distribute one survey to the lead teacher of a 3-year-old class and to the lead teacher of a 4-year-old class. Parent Survey: The director was requested to distribute a survey to two parents of 3-year-old children and two other parents of 4-year-old children from different families (one survey per family).

Within each center the director, the lead teacher of 3-year-old children, the lead teacher of 4-year-old children, and two parents of 3-year-old children and two

parents of 4-year-old children were asked to participate in the survey. This resulted in a total of 112 surveys being distributed.

Surveys were distributed to one Head Start and five private-for-profit NAEYC accredited centers and five Head Start and five private-for-profit nonaccredited centers in Alachua, Brevard, Flagler, Orange, Osceola, Seminole, and Volusia counties. A total of 16 centers were surveyed. The distribution of the surveys by county is illustrated in Table 1.

Table 1

Distribution of Surveys by County

County	NAEYC Accredited		Nonaccredited	
	Head Start	Private-for-Profit	Head Start	Private-for-Profit
Alachua	0	1	0	1
Brevard	0	1	0	1
Flagler	0	0	1	1
Orange	0	1	1	1
Osceola	0	1	1	0
Seminole	0	1	1	0
Volusia	1	0	1	1

The types of centers that were surveyed are displayed in Table 2. The number of surveys distributed is indicated in column two. The Head Start

Nonaccredited, Private-for-Profit Nonaccredited, and Private-for-Profit Accredited centers each represent 31% of the total number of surveys distributed. The remaining 6% is reflected in the Head Start Accredited center.

Table 2

Distribution of Surveys by Center Type

Center Type	Number	Percentage
Head Start Nonaccredited	5	31
Private-for-Profit Nonaccredited	5	31
Head Start Accredited	1	6
Private-for-Profit Accredited	5	31

Table 3 displays the number of surveys distributed to each type of respondent. Directors represented 14% of the total number of surveys distributed. Twenty-nine percent of the surveys were distributed to teachers. The remaining 57% were distributed to parents.

Table 3

Distribution of Surveys by Respondent

Respondent	Number	Percentage
Directors	16	14
Teachers	32	29
Parents	64	57

Research Design and Rationale

The need for directors, teachers, and parents to understand the effects of facility design and equipment acquisition on curriculum is increasing as more and more children are placed in preschool facilities. At the time of the present study, information, data and statistics on facility design and equipment acquisition's effect on preschool curriculum was limited. This study was designed to gather information and data from preschool centers that could be used as guidelines for future design of preschool facilities and for acquisition of equipment.

A descriptive, nonexperimental research design, using surveys, was selected to gather data for this study. This study was designed to (a) provide a description of the effects of facility design on the curriculum offered in preschools, and (b) provide a description of the effects of equipment acquisition on the curriculum offered in preschool centers.

Six research questions were used to guide the direction of this study to identify components of facility design and of equipment acquisition that affect the curriculum offered in preschool centers:

1. What components of facility design affect the curriculum offered in preschool centers from the teacher's perspective?

2. What components of facility design affect the curriculum offered in preschool centers from the parent's perspective?

3. What components of facility design affect the curriculum offered in preschool centers from the director's perspective?

4. What components of equipment acquisition affect the curriculum offered in preschool centers from the teacher's perspective?

5. What components of equipment acquisition affect the curriculum offered in preschool centers from the parent's perspective?

6. What components of equipment acquisition affect the curriculum offered in preschool centers from the director's perspective?

Instrument Development

Three separate instruments (Appendixes A, B, and C) were developed by the researcher based on her knowledge of preschool facility design, equipment acquisition, preschool curriculum and the literature review on child care facility design, equipment acquisition and curriculum. During the course of their development, these survey instruments were reviewed by several early childhood

educators familiar with preschool facility design and curriculum and were revised based on their recommendations prior to distribution.

Survey A (Appendix A) was designed to gather data on the center director's perspective as to the effects of facility design and equipment acquisition on the curriculum offered in a center. Survey B (Appendix B) was designed to gather data on the teacher's perspectives as to the effects of facility design and equipment acquisition on the curriculum offered in the center they were teaching in. Survey C (Appendix C) was designed to gather data on the parent's perspectives as to the effects of facility design and equipment acquisition on the curriculum offered in the center in which they had children enrolled.

Survey A included 43 items related to the effects of facility design and equipment acquisition on curriculum from the director's perspective. Survey B included 72 items related to the effects of facility design and equipment acquisition on curriculum from the teacher's perspective. Survey C included 30 items related to the effects of facility design and equipment acquisition on curriculum from the parent's perspective. Respondents were asked to indicate the degree of effect each item had on the curriculum offered in their center; no effect, very little effect, little effect, great effect, very great effect, not applicable.

Demographic data requested from the respondents included NAEYC accreditation, licensing status, location, original use or renovated space, curriculum being used, use of equipment and materials specifically designed for the curriculum, additional educational/training requirements for specific curriculums,

number of staff and children by age groups, and educational level of the respondent. Additionally, directors indicated the number of years they had been a director of a preschool, and teachers indicated the number of years they had been a preschool teacher. Parents indicated the number of years they have had children enrolled in preschool, and the number and ages of children they presently had enrolled in the center.

Data Collection

Data were collected through the use of surveys. Center directors were telephoned prior to the distribution of the surveys to elicit their willingness to participate in the study. Directors were telephoned after the surveys were mailed to inform them to expect the surveys within a few days. Surveys for the director, the two lead teachers, and four parents were mailed in one package to the director of each of the centers. Each survey was accompanied by a letter explaining the purpose of the study, with a request for completed surveys to be returned by May 15, 1998. The surveys for Osceola and Seminole County Head Start, which were mailed at a later date, had a request for completed surveys to be returned by June 5, 1998.

A telephone call was made to each center director who did not respond to the initial survey asking the directors for their cooperation in completing and returning their survey and reminding teachers and parents to complete and return their surveys. A third request was made in June, 1998 by telephone and

subsequent mailing of another packet of surveys to center directors who did not respond to the initial survey or telephone call. Overall response rate of all of the survey was 50%.

Data Analysis

The data collected were used to provide a descriptive analysis of the effects of facility design and equipment acquisition on the curriculum offered in preschool centers from the perspectives of directors, teachers, and parents. The data were analyzed for the 12 centers that responded to the survey. Frequencies of responses were calculated, displayed in a series of tables, and discussed in accompanying narratives.

Chapter 4 contains a presentation of the data in narrative and tabular form. This presentation of data was used to arrive at answers to the six research questions that guided the study and to formulate the conclusions, implications, and recommendations found in Chapter 5.

CHAPTER 4

DATA ANALYSIS

Introduction

An analysis of the data derived through the previously described methodology and statistical procedures is presented in this chapter. The findings include data on the characteristics of the respondents and results from the descriptive statistical data. These data were utilized to answer the stated research questions and to present a summary of the information from the respondents.

Chapter 4 is divided into three sections. The first section provides data on the characteristics of the respondents. The second section provides data on the effects of facility design and equipment acquisition on the curriculum offered in preschool centers from the perspectives of teachers, parents, and directors. A narrative discussion reflecting data analysis is presented with tables to facilitate the display of data and to provide further clarity in sections one and two. Section three presents a summary of the results.

The population for this study consisted of 16 lead teachers of 3-year-olds, 16 lead teachers of 4-year-olds, 32 parents of 3-year-old children and 32 parents of 4-year-old children, 13 directors of private-for-profit centers and three education

coordinators of Head Start centers. The 16 centers included five private-for-profit centers accredited through the National Association for the Education of Young Children (NAEYC), one Head Start center accredited through the National Association for the Education of Young Children (NAEYC), five nonaccredited private-for-profit centers and five nonaccredited Head Start centers.

Initially all 16 preschool center directors were contacted by telephone to determine their willingness to participate in this study and to distribute the surveys as requested. Surveys were sent to all 16 centers. Fifty-six of all of the 112 surveys were returned for a return rate of 50%. Fifty-five were completed. The Education Coordinator for the Head Start programs in Osceola and Seminole counties was the same person. The surveys for both counties were returned. However, only one was completed. Both surveys were counted as returned but only the data from the completed survey were included in the analysis.

Data for this study on the characteristics of the respondents and the effects of facility design and equipment acquisition on the curriculum offered were gathered through the use of a self-administered questionnaire (Appendixes A, B, and C). Data collection involved a mail-out of surveys to each center director or Head Start Coordinator. These were mailed in bulk to each center. Included in the bulk mail-out was a letter to each director explaining the title and purpose of this study and the requested distribution of the surveys. A letter to each teacher and parent explaining the title and purpose of this study was included with each of

their surveys. A copy of the summary of the research findings was also offered in this letter. A self-addressed, stamped return envelope was included and a deadline for the return of each survey was set.

Twelve of the 16 directors/education coordinators (75%) returned their surveys. Of the directors/education coordinators who returned completed surveys, four were from Head Start nonaccredited centers, three were from private-for-profit nonaccredited centers, one was from a Head Start accredited center and four were from private-for profit accredited centers.

Nineteen of the 32 surveys (59%), distributed to teachers were returned. Four completed surveys were from Head Start nonaccredited center teachers, five completed surveys were from private-for-profit nonaccredited center teachers, two completed surveys were returned by teachers from a Head Start accredited center. Eight teachers from private-for-profit accredited centers completed surveys.

A total of 25 surveys out of 64 (39%), distributed to parents were completed and returned. Seven parents were from Head Start nonaccredited centers, eight parents who completed surveys were from private-for-profit nonaccredited centers, two parents were from a Head Start accredited center and eight parents were from private-for-profit accredited centers. A summary of the response rate is reported in Table 4.

Table 4

Questionnaire Response Rates

Center Type	Directors*			Teachers			Parents		
	N	R	%	N	R	%	N	R	%
Head Start Nonaccredited	5	4**	80	10	4	40	20	7	35
Private-for-profit Nonaccredited	5	3	60	10	5	50	20	8	35
Head Start Accredited	1	1	100	2	2	100	4	2	50
Private-for-profit Accredited	5	4	80	10	8	80	20	8	40

*This category includes education coordinators. **This includes two surveys returned by the Head Start Director of Osceola and Seminole counties. This is the same person. Only one survey was completed.
N = number of surveys mailed. R = number of surveys returned. % = percentage of each population.

All center directors or education coordinators who responded to the survey indicated that the center was licensed and was operating in space that was renovated for the center. Eight centers were located in suburban areas and three centers were located in urban areas. Two centers each had four staff members, four centers each had six staff members, two centers each had eight staff members, and one center had nine staff members. Two center directors did not respond to this question. The number of 3-year-old children in each center varied from 8 to 40. One center director did not respond to this question. The number of

4-year-old children in each center varied from 15 to 40. One center director did not respond to this question. One center served 68 3- and 4-year-old children in mixed groupings. Table 5 displays the demographic characteristics of the centers that responded to the survey.

Curriculums Used by Centers

Various curriculums were being used. Three centers used the Montessori curriculum. This curriculum required teachers to have specific Montessori teacher training. Specialized equipment specifically designed for the Montessori curriculum was used with this curriculum. Two centers used the High Scope curriculum. Teachers using the High/Scope curriculum required specific training in its use. Three centers used an eclectic curriculum. One center employed a creative curriculum, and one a cognitively oriented curriculum. None of these required additional training for the teachers or specialized equipment. The type of curriculum used by individual centers, the requirement for specialized equipment and the requirement for additional teacher training is illustrated in Table 6.

Summary

The center directors responding to the survey were located in suburban and urban areas. All were in space that was renovated for use as a preschool center. The number of 3- and 4-year-old children enrolled in these centers ranged from 27

Table 5

Demographic Characteristics of Centers

Center Type	Location	Type of Space	Number of Staff	Number of Children	
				3's	4's
Head Start Nonaccredited					
Center 1	Suburban	Renovated	NR	NR	NR
Center 2	Suburban	Renovated	8	34	34
Center 3	Suburban	Renovated	6	18	18
Private-for-profit Nonaccredited					
Center 1	Suburban	Renovated	6	28	22
Center 2	Suburban	Renovated	6	16	17
Center 3	Urban	Renovated	4	12	15
Head Start Accredited					
Center 1	Suburban	Renovated	9	68 children mixed grouping	
Private-for-profit Accredited					
Center 1	Suburban	Renovated	NR	15	15
Center 2	Urban	Renovated	6	20	20
Center 3	Suburban	Renovated	8	40	40
Center 4	Urban	Renovated	4	8	22

NR = no response.

Table 6

Curriculums Used by Centers

Center Type	Curriculum	Specialized Equipment	Additional Teacher Training Required
	Head Start Nonaccredited		
Center 1	Creative Curriculum	No	No
Center 2	High/Scope	No	Yes
Center 3	Montessori	Yes	Yes
	Private-for-Profit Nonaccredited		
Center 1	Eclectic	No	No
Center 2	Eclectic	No	No
Center 3	Cognitively Oriented	No	No
	Head Start Accredited		
Center 1	High/Scope	No	Yes
	Private-for-Profit Accredited		
Center 1	Montessori	Yes	Yes
Center 2	High/Scope	No	Yes
Center 3	Eclectic	No	No
Center 4	Montessori	Yes	Yes

to 80. The number of staff members working with 3- and 4-year-old children ranged from four to eight. Various curriculums were being used--Montessori, High/Scope, Eclectic, Creative Curriculum, and Cognitively Oriented. The Montessori curriculum was the only one that required specialized equipment. The Montessori and High/Scope curriculums were the only ones being used that required additional training specific to that curriculum for the teachers.

Characteristics of Respondents

Respondents to this survey represented seven directors and four Head Start coordinators, 19 teachers (five teachers of 3-year-olds, six teachers of 4-year-olds, and eight teachers of 3- and 4-year-old combination classes), 25 parents (13 parents of 3-year-olds and 12 parents of 4-year-olds). Ten teachers, 10 parents, 4 directors and 1 education coordinator were from NAEYC accredited centers. Nine teachers, 15 parents, and 7 directors were from nonaccredited centers. None of the center directors or education coordinators was teaching at the time of this study. Respondent representation is displayed in Table 7.

Table 7

Respondent Representation

Respondents	N	Accredited Center	Nonaccredited Center	Children's Ages		
				3	4	3 & 4
Teachers	19	10	9	5*	6*	8*
Parents	25	10	15	12**	13**	
Directors	7	4	3			
Education Coordinator	4	1	3			

N = number of respondents.
*This number represents the number of teachers teaching this age group. **This number represents the age of the child enrolled in each age group as reported by parents.

Director/Education Coordinators

Seven directors and four education coordinators of Head Start centers returned surveys. Three directors were from private-for-profit nonaccredited centers. Four directors were from private-for-profit accredited centers. One education coordinator was from a Head Start accredited center and three education coordinators were from Head Start nonaccredited centers. One person was the education coordinator for both Seminole and Osceola counties. This person completed only one survey but returned both.

Head Start Nonaccredited Centers

Three education coordinators returned the surveys. The first education coordinator had eight years of experience and a four-year degree in child development. Additionally, this coordinator had AMS Montessori training in early childhood. The coordinator was involved in designing modifications to an already existing building. The next coordinator had a four-year degree in early childhood education and 10 years of experience. This coordinator was not involved in the design of the center. The last education coordinator had a master's degree in early childhood education. This coordinator was not involved in the design of the center. Table 8 presents data regarding the education coordinator's level of education, years of experience, and participation in the design of the center.

Table 8

Education Coordinator Level of Education (Head Start Nonaccredited Centers)

	Level of Education	Years of Experience	Participated in Design of Center
Education Coordinator 1	4-year degree in child development; AMS Montessori training	8	Designed modifications to an existing building
Education Coordinator 2	4-year degree in early child education	10	No
Education Coordinator 3	Master's degree in early education	NR	No

Private-for-Profit Nonaccredited Centers

Three directors of private-for-profit nonaccredited centers returned surveys. The first director had a two-year degree in early childhood education and 12 years of experience as a director of a preschool. This director was not involved in the design of the center. The next director indicated an educational level that was beyond four years of college with a degree in early childhood education. This director had seven years of experience as a preschool director and was involved in the design of the center. The last director had a B.S. in elementary education and a B.S. in child development. This director did not indicate the years of experience and was not involved in the design of the center. The director's level of education, years of experience, and participation in the design of the center is illustrated in Table 9.

Head Start Accredited Center

One education coordinator from a Head Start accredited center responded to the survey. This coordinator had a four-year degree in early childhood education and four years of experience as the education coordinator of a Head Start center. This coordinator was involved in the design of the center. The coordinator's level of education, years of experience and participation in the design of the center are presented in Table 10.

Table 9

Director Level of Education (Private-for-Profit Nonaccredited Centers)

	Level of Education	Years of Experience	Participated in Design of Center
Director 1	2-year degree in early childhood education	12	No
Director 2	Beyond 4-year college degree in early childhood education	7	Yes
Director 3	B.S. in elementary education; B.S. in child development	NR	No

NR = no response.

Table 10

Education Coordinator Level of Education (Head Start Accredited Center)

	Level of Education	Years of Experience	Participated in Design of Center
Coordinator 1	4-year degree in early education	4	Yes

Private-for-Profit Accredited Centers

Four directors of private-for-profit accredited centers responded to the survey. The first director had a Child Development Associate (CDA) credential, two years of college and four years of experience as a director of a preschool. This director did not participate in the design of the center. The next director had a four-year degree in early childhood education and eight years of experience as a director of a preschool. This director did not participate in the design of the center. The third director had a four-year degree in early childhood education and 12 years of experience as a director of a preschool. This director participated in the design of the center. The last director's educational level was beyond four years of college. This director had a degree in early childhood education and Montessori training through age 12 with 10 years of experience as a preschool director. The director did not participate in the design of the center. Table 11 displays the director's level of education, years of experience, and participation in the design of the center.

Table 11

Director Level of Education (Private-for-Profit Accredited Centers)

	Level of Education	Years of Experience	Participated in Design of Center
Director 1	CDA and 2 years of college	4	No
Director 2	4-year degree in early childhood education	8	No
Director 3	4-year degree in early childhood education	12	Yes
Director 4	Beyond 4-year college degree in early childhood education; Montessori training through age 12	10	NR

Summary

The directors/education coordinators had varying levels of education and experience. Their education levels ranged from a two-year degree in child development/early childhood education to a master's degree in early childhood education. One director and one education coordinator had Montessori training in addition to their degrees. Their experience as directors/education coordinators ranged from 4 to 12 years. Only two directors indicated that they had participated in the design of the center they were directing. One education coordinator designed modifications to an existing building where the center was located.

Teacher Characteristics

Nineteen teachers responded to the survey. Four were from Head Start nonaccredited centers, five were from private-for-profit nonaccredited centers, two were from Head Start accredited centers and eight were from private-for-profit accredited centers. Five teachers were teaching 3-year-olds, six were teaching 4-year-old children, and eight were teaching 3- and 4-year-old children in combination classes. Teachers had varying levels of education and experience. The teachers in the Head Start centers and those in centers using the Montessori curriculum were teaching classes with 3- and 4-year-old children in a mixed grouping. The following narrative with accompanying tables provides specific information on individual teacher's level of education, years of experience and age group they are teaching.

Head Start Nonaccredited Centers

Four teachers in the Head Start nonaccredited centers were teaching classes with mixed age groupings of 3- and 4-year-old children. The first teacher had a Child Development Associate certificate (CDA) and six years of teaching experience with these age groups. Another teacher had a two-year degree in child development and seven years of teaching experience with these age groups. The third teacher had a four-year degree and a CDA with 20 years of teaching experience with these age groups. The last teacher had a two-year degree in child

development, a four-year degree in early childhood education, Montessori teacher training and 17 years of teaching experience with these age groups.

None of the teachers participated in the design of the center in which they worked. All the teachers reported that they participated in the arrangement of their classroom. Data related to the level of education and years of experience of teachers in Head Start nonaccredited centers are displayed in Table 12.

Table 12

Teacher Level of Education (Head Start Nonaccredited Centers)

	Age Group	Level of Education	Years of Experience	Participated in	
				Center Design	Room Arrangement
Teacher 1	3- and 4-year-olds	CDA	6	No	Yes
Teacher 2	3- and 4-year-olds	2 years of college and a CDA	7	No	Yes
Teacher 3	3- and 4-year-olds	4 years of college and a CDA	20	No	Yes
Teacher 4	3- and 4-year-olds	2-year degree in child development; 4-year degree in early childhood education; Montessori training	17	No	Yes

The four teachers in the Head Start nonaccredited centers were teaching classes with 17 to 18 children. One to two adults were assisting the teachers.

Teacher one taught 18 children with two adults assisting. Teacher two taught 18 children with one adult assisting. Teacher three taught 17 children in her classroom with two adults assisting. Teacher four taught 18 children with one adult assisting. The age group of the children, number of children in each teacher's class, and the number of adults assisting in each class is illustrated in Table 13.

Table 13

Number of Children in Group (Head Start Nonaccredited Centers)

	Age Group	Number of Children in the Group	Number of Adults Assisting
Teacher 1	3- and 4-year-olds	18	2
Teacher 2	3- and 4-year-olds	18	1
Teacher 3	3- and 4-year-olds	17	2
Teacher 4	3- and 4-year-olds	18	1

Private-for-Profit Nonaccredited Centers

Two teachers in the private-for-profit nonaccredited centers were teaching classes with 3-year-old children. Three teachers were teaching classes with 4-year-old children. Teachers had varying education backgrounds and years of experience. One teacher of 3-year-olds had a CDA and five years of teaching

experience with this age group. The second teacher of 3-year-olds had a degree in elementary education and two years of teaching experience with this age group.

Three teachers of 4-year-old children responded to the survey. The first teacher of 4-year-olds had some college, a CDA, and nine years of teaching experience with this age group. The next teacher had a two-year degree in child development and eight years of teaching experience with this age group. The third teacher had a four-year degree in early childhood education and five years of teaching experience with this age group.

All the teachers reported that they participated in the arrangement of their classroom but not in the design of the center. Table 14 displays the level of education and years of teaching experience of teachers in private-for-profit nonaccredited centers.

The five teachers in the private-for-profit nonaccredited centers were teaching classes with various numbers of children. All the teachers had one adult assisting. The first teacher of 3-year-old children had 20 children in her class. The second teacher of 3-year-old children worked with 10 students. The teachers of 4-year-old children reported they had 22, 20, and 20 students in the classes, respectively. Data related to the age group of the children, number of children in each teacher's class, and the number of adults assisting in each class are presented in Table 15.

Table 14

Teacher Level of Education (Private-for-Profit Nonaccredited Centers)

	Age Group	Level of Education	Years of Experience	Participated in	
				Center Design	Room Arrangement
Teacher 1	3	CDA	5	No	Yes
Teacher 2	3	CDA; 4-year degree in elementary education	2	No	Yes
Teacher 3	4	Some college and CDA	9	No	Yes
Teacher 4	4	2-year degree in child development	8	No	Yes
Teacher 5	4	4-year degree in early childhood education	5	No	No

Table 15

Number of Children in Group (Private-for-Profit Nonaccredited Centers)

	Age Group	Number of Children in the Group	Number of Adults Assisting
Teacher 1	3	20	1
Teacher 2	3	10	1
Teacher 3	4	22	1
Teacher 4	4	20	1
Teacher 5	4	20	1

Head Start Accredited Center

The two teachers in the Head Start accredited center were teaching classes with a mixed age group of 3- and 4-year-old children. Teacher one had some college, a CDA and 21 years of teaching experience with this age group. Teacher two had some college, a CDA and 29 years teaching experience with this age group. Both teachers participated in the arrangement of their classroom but not in the design of the center. Level of education and years of experience for teachers in the Head Start accredited center is illustrated in Table 16.

Teacher 16

Teacher Level of Education (Head Start Accredited Centers)

	Age Group	Level of Education	Years of Experience	Participated in	
				Center Design	Room Arrangement
Teacher 1	3- and 4-year-olds	Some college and CDA	21	No	Yes
Teacher 2	3- and 4-year-olds	Some college and CDA	29	No	Yes

The two teachers in the Head Start accredited center were teaching classes with 15 to 16 children. Each teacher had two adults assisting. Teacher one had 15 children in the class. Teacher two had 16 children in the class. Table 17

contains information about the number of children in each teacher's class and the number of adults assisting in each class.

Table 17

Number of Children in Group (Head Start Accredited Center)

	Age Group	Number of Children in the Group	Number of Adults Assisting
Teacher 1	3- and 4-year-olds	15	2
Teacher 2	3- and 4-year-olds	16	2

Private-for-Profit Accredited Centers

Three teachers in the private-for-profit accredited centers were teaching 3-year-old children. The first teacher had a CDA and seven years of teaching experience with 3-year-olds. The second 3-year-old teacher had a CDA and 10 years of experience teaching this age group. The third teacher had three and one-half years of college and nine years of teaching experience with 3-year-old children.

Three teachers were teaching 4-year-old children. The first teacher had some college and eight years of teaching experience with this age group. The second teacher had a two-year degree in child development and 11 years of

teaching experience with 4-year-olds. The third teacher had a CDA, four-year degree, and seven years of teaching experience with this age group of students.

Two teachers were teaching classes with mixed age grouping of 3- and 4-year-old children. The first teacher had Montessori teacher training and two years of experience teaching this age group. The second teacher had Montessori teacher training and five years of teaching experience with this age group.

All the teachers reported that they participated in the arrangement of their classroom but not in the design of the center in which they taught. Level of education and years of experience of teachers in private-for-profit accredited centers are reflected in Table 18.

The five teachers in the private-for-profit accredited centers were teaching classes with various numbers of children. The teachers had one to four adults assisting them. Teacher one taught eighteen 3-year-old children with one adult assisting. Teacher two had twenty 3-year-old children in her classroom with two adults assisting. Teacher three taught twenty-seven 3-year-old children with one adult assisting. Teacher four taught twenty 4-year-old children with two adults assisting. Teacher five taught nineteen 4-year-old children with one adult assisting. Teacher six taught thirty 4-year-old children with two adults assisting. Teacher seven worked with forty 3- and 4-year-olds with four adults assisting. Teacher eight taught forty 3- and 4-year-olds with four adults assisting. The age group of

Table 18

Teacher Level of Education (Private-for-Profit Accredited Centers)

	Age Group	Level of Education	Years of Experience	Participated in	
				Center Design	Room Arrangement
Teacher 1	3	CDA	7	No	Yes
Teacher 2	3	CDA	10	No	Yes
Teacher 3	3	3½ years of college	9	No	Yes
Teacher 4	4	Some college	8	No	Yes
Teacher 5	4	2-year degree in child development	11	No	Yes
Teacher 6	4	4 years of college and CDA	7	No	Yes
Teacher 7	3 & 4	Montessori teacher training	2	No	Yes
Teacher 8	3 & 4	Montessori teacher training	5	No	Yes

the children, number of children in each teacher's class, and the number of adults assisting in each class are reported in Table 19.

Table 19

Number of Children in Group (Private-for-Profit Accredited Centers)

	Age Group	Number of Children in the Group	Number of Adults Assisting
Teacher 1	3	18	1
Teacher 2	3	20	2
Teacher 3	3	27	1
Teacher 4	4	20	2
Teacher 5	4	19	1
Teacher 6	4	30	2
Teacher 7	3- and 4-year-olds	40	4
Teacher 8	3- and 4-year-olds	40	4

Summary

Teachers had varying levels of education and experience. Their education levels ranged from a CDA to a four-year degree in early childhood education. Two teachers had Montessori training. One teacher had Montessori teacher training in addition to a four-year degree in early childhood education. The

teachers had from 2 to 20 years of experience with the age group they were teaching. Eight teachers were teaching classes with a mixed age grouping of 3- and 4-year-old children, five teachers were teaching 3-year-old children, and six were teaching 4-year-old children. The number of adults assisting in the class varied from one to four. None of the teachers had participated in the design of the center. All 19 teachers reported participating in the arrangement of their classroom.

Parent Characteristics

Twenty-five parents responded to the survey. Seven parents had children enrolled in Head Start nonaccredited centers, eight parents had children enrolled in private-for-profit nonaccredited centers, two had children enrolled in a Head Start accredited center, and eight parents had children enrolled in private-for-profit accredited centers. Thirteen parents had 3-year-old children enrolled and 12 parents had 4-year-old children enrolled. The following narrative with accompanying tables provides specific information on each parent's level of education, the age of the child they had enrolled, and the number of years the child had been enrolled in preschool.

Head Start Nonaccredited Centers

Seven parents with children in Head Start nonaccredited centers responded to the survey. Three parents had 3-year-old children and four parents had 4-year-old children enrolled in the centers.

The first parent had a 4-year-old child in this program who had been enrolled in preschool for two years. The highest educational level attained by this parent was eighth grade. The second parent had a 4-year-old child who had been enrolled in preschool for one year. This parent had a high school education. The next parent had a 4-year-old child who had been enrolled in preschool for one year. This parent reported having a high school education. The fourth parent had a 4-year-old child who had been enrolled in preschool for one year. This parent reported having some college education. The fifth parent had a 3-year-old child who had been enrolled in preschool for three years. The highest educational level reported by this parent was some college. The next parent had a 3-year-old child who had been enrolled in preschool for three years. The highest educational level attained by this parent was some college with certifications in nursing assistant, home health, phlebotomy, and electrocardiogram. The last parent had a 3-year-old child who had been enrolled in preschool for one year. The highest level of education attained by this parent was two years of college. Parent level of education, age of child enrolled, and number of years child was enrolled in a preschool are displayed in Table 20.

Table 20

Parent Level of Education, Ages of Children, and Number of Children Enrolled (Head Start Nonaccredited Centers)

	Level of Education	Age of Child	Number of Years Child Enrolled in Preschool
Parent 1	Eighth grade	4	2
Parent 2	High school	4	1
Parent 3	High school	4	1
Parent 4	Some college	4	1
Parent 5	Some college	3	3
Parent 6	Some college; certifications in nursing assistant, home health, phlebotomy, and electrocardiogram	3	3
Parent 7	2 years of college	3	1

Private-for-Profit Nonaccredited Centers

Eight parents who responded to the survey had children enrolled in private-for-profit nonaccredited centers. Four parents had 3-year-old children and four parents had 4-year-old children enrolled. The first parent had a 4-year-old child who had been enrolled for one year in preschool. This parent had a high school education. The next parent had a 4-year-old child who had been enrolled for two years in preschool. This parent had some college education. Parent three had a 3-year-old child who had been enrolled in preschool one year. This parent had some

college education. The fourth parent had a 3-year-old child who had been enrolled in preschool one year. The highest educational level attained by this parent was four years of college. The next parent had a 4-year-old child who had been enrolled in preschool one year. Four years of college was the highest level of education attained by this parent. The sixth parent had a 3-year-old child who had been enrolled in preschool one year. This parent's highest level of education was four years of college. The last parent, the eighth, had a 3-year-old child who had been enrolled for three years in preschool. The highest level of education attained by this parent was beyond four years of college. Parent level of education, age of child enrolled, and number of years child was enrolled in a preschool are shown in Table 21.

Head Start Accredited Centers

Two parents who had children enrolled in a Head Start accredited center responded to the survey. The first parent had a 3-year-old child who had been enrolled in preschool for one year. The highest educational level attained by this parent was high school. The second parent had a 4-year-old child who had been enrolled in preschool two years. The highest educational level this parent reported was high school. Parent level of education, age of child enrolled, and number of years child was enrolled in a preschool are reflected in Table 22.

Table 21

Parent Level of Education, Ages of Children, and Number of Children (Private-for-Profit Nonaccredited Centers)

	Level of Education	Age of Child	Number of Years Child Enrolled in Preschool
Parent 1	High school	4	1
Parent 2	Some college	4	2
Parent 3	Some college	3	1
Parent 4	4 years of college	3	1
Parent 5	4 years of college	4	1
Parent 6	4 years of college	3	1
Parent 7	4 years of college	4	4
Parent 8	Beyond 4 years of college	3	3

Table 22

Parent Level of Education, Ages of Children, and Number of Children Enrolled (Head Start Accredited Center)

	Level of Education	Age of Child	Number of Years Child Enrolled in Preschool
Parent 1	High school	3	1
Parent 2	High school	4	2

Private-for-Profit Accredited Centers

Eight parents who had children enrolled in private-for-profit centers responded to the survey. Five parents had 3-year-old children and three parents had 4-year-old children enrolled. The first parent had a 3-year-old child who had been enrolled in preschool for one year. This parent had attained a high school education. The second parent had a 4-year-old child who had been enrolled in preschool for three years. This parent had a CDA. The next parent, the third, had a 3-year-old child enrolled. This parent's reported highest educational level was some college. The next parent had a 4-year-old child enrolled. The highest educational level attained by this parent was two years of college. The fifth parent had a 3-year-old child who had been enrolled in preschool two years. This parent had four years of college. The sixth parent had a 4-year-old child who had been enrolled in preschool two years. This parent's highest educational level was four years of college. The next parent had a 3-year-old child who had been enrolled in preschool three years. This parent reported having more than four years of college. The last parent, the eighth, had a 3-year-old child who had been enrolled in preschool two years. This parent's highest educational level was beyond four years of college. Parental levels of education, ages of child enrolled, and number of years child was enrolled in a preschool are reported in Table 23.

Table 23

Parent Level of Education, Ages of Children, and Number of Children Enrolled (Private-for-Profit Accredited Centers)

	Level of Education	Age of Child	Number of Years Child Enrolled in Preschool
Parent 1	High school	3	1
Parent 2	CDA	4	3
Parent 3	Some college	3	NR
Parent 4	2 years of college	4	NR
Parent 5	4 years of college	3	2
Parent 6	4 years of college	4	2
Parent 7	Beyond 4 years of college	3	3
Parent 8	Beyond 4 years of college	3	2

NR = no response.

Summary

The parents' level of education ranged from eighth grade to beyond four years of college. Four parents had 3-year-old children and five parents had 4-year-old children enrolled in Head Start centers. Nine parents had 3-year-old children and seven parents had 4-year-old children enrolled in private-for-profit centers. Children, identified by their parents, had been enrolled in preschools between one and three years.

Parent Choice of Center

Parents were asked to rate the degree of effect each of the 17 components listed had on their decision to enroll their child in the center. A rating scale was used to determine the effect each of the items had on the parent's choice of center for their child. The scale ranged from zero to five. A score of zero indicated that the component was not applicable to the respondent's decision. A score of one indicated that the component had no effect on the parent's decision. A score of two indicated that the component had very little effect on the parent's decision. A score of three indicated that the component had little effect on the parent's decision. A score of four indicated that the component had a great effect on the parent's decision. A score of five indicated that the component had a very great effect on the parent's decision.

A total of 25 parents responded to the survey. Seventeen parents (68%) agreed that a sense of security had a very great effect on their decision to enroll their child in the center. Sixteen parents (64%) agreed that a sense of safety had a very great effect on their decision to enroll their child in the center. Fourteen parents (56%) agreed that the developmental appropriateness of the program had a very great effect on their decision to enroll their child in the center. Thirteen parents (52%) agreed that the interaction of the staff with the children and the educational philosophy had a very great effect on their decision to enroll their child in the center. Twelve parents (48%) agreed that teacher:child ratios had a very

great effect on their decision to enroll their child in the center. Eleven parents (44%) agreed that staff qualifications and the interaction of the staff with parents had a very great effect on their decision to enroll their child in the center.

Fifteen parents (60%) agreed that the interaction of staff with staff had a great effect on their decision to enroll their child in the center. Fourteen parents (56%) agreed that the cost of care had a great effect on their decision to enroll their child in the center. Thirteen parents (52%) agreed the hours of operation had a great effect on their decision to enroll their child in the center. Twelve parents (48%) agreed that teacher:child ratios, staff qualifications, the interaction of the staff with children, and the interaction of staff with parents had a great effect on their decision to enroll their child in the center. Eleven parents (44%) agreed that the developmental appropriateness of the program had a great effect on their decision to enroll their child in the center.

Ten parents (40%) agreed that the location of the center to work was not applicable to their decision to enroll their child in the center. Nine parents (6%) agreed that the location of the center to school was not applicable to their decision to enroll their child in the center. A summary of the results for the components of parent choice are illustrated in Table 24.

Table 24

Summary of Results for Parent Choice of Center

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
31. Location of center to							
Home	3	1	8	1	8	4	
Work	3	2	2	6	8	4	
School	4	2		2	5	9	3
32. Hours of operation	2		2	13	6		
33. Cost of care	4		2	14	5		
34. Teacher:child ratios		1		12	12		
35. Staff qualification			2	12	11		
36. Interaction of staff with children				12	13		
37. Interaction of staff with parents			1	13	11		
38. Interaction of staff with staff			3	15	7		
39. Developmental appropriateness of program				11	14		
40. Educational philosophy			8	4	13		
41. Discipline policy			6	9	10		
42. Curriculum offered			7	9	9		
43. Meals provided by center	2	2	7	6	6	2	
44. Meals meet USDA guidelines	2	2	6	5	6	4	
45. Appropriate feeding practices	2		6	5	7	4	
46. Sense of safety				9	16		
47. Sense of security				8	17		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Data Analysis

Data on the effects of facility design and equipment acquisition on the curriculum offered in preschool centers from the perspectives of teachers, parents, and directors/education coordinators is presented in this section. A narrative discussion reflecting data analysis is presented with tables to facilitate the display of data and to provide further clarity.

Research Question 1

What components of facility design affect the curriculum offered in preschool centers from the teacher's perspective?

Categorization and Rating of Components of Facility Design

A list of 34 components of facility design was included in the teacher questionnaire. They were divided into two parts: Indoor Area and Outdoor Play Area. There were 29 components in the indoor area and 5 in the outdoor play area. Questions 32, 33, 54, 55, 58-60, 62, and 64-66 relate to equipment acquisition and are not included in this discussion. A rating scale was used to determine the effect each of these components had on the curriculum offered in the center from the perspective of lead teachers of 3- and 4-year-old children in Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited, and private-for-profit accredited preschool centers. The scale ranged from zero to five. A score of zero indicated that the component was not applicable to the respondent's

center. A score of one indicated that the component had no effect on the curriculum. A score of two indicated that the component had very little effect on the curriculum. A score of three indicated that the component had little effect on the curriculum. A score of four indicated that the component had a great effect on the curriculum, and a score of five indicated that the component had a very great effect on the curriculum. A summary of the results including the number of responses for each component and from each of the four categories of centers are included in this discussion.

Head Start Nonaccredited Centers

Four teachers from Head Start nonaccredited centers responded to the survey. Indoor Area: The teachers unanimously agreed that toileting facilities adapted to the child's size, indoor space for large group activities, clearly defined learning centers, low shelves for accessibility of play materials, and less than normal lighting in napping areas had a very great effect on the curriculum.

Three teachers (75%) agreed that a children's eating area inside the classroom, toileting facilities adapted to the child's disability, toileting facilities within the classroom, more than one entrance/exit to the classroom, indoor space for gross motor activities, tile flooring, quiet spaces for children to be alone, and organization of toys on low shelves, had a great effect on the curriculum offered.

Windows low enough for children to view the outdoors, florescent lighting, a water play area, labeling of room items with words, and labeling of shelves with pictures had a very great effect on the curriculum offered.

An alternative weather-protected play area, and wood and concrete floors were not applicable to the centers of three (75%) of the teachers. Responses to the effects of pathways to accommodate wheelchairs, canes, and walkers; incandescent lighting, carpet, isolation area, and a sand play area on the curriculum indicated that none of these design features had a significant effect on the curriculum. A summary of the results for facility design for the Indoor Area for Head Start nonaccredited centers is displayed in Table 25.

Outdoor Play Area: The teachers unanimously agreed that the water play area had a very great effect on the curriculum. Three teachers (75%) agreed that appropriate surfaces and a storage area for outdoor equipment had a very great effect on the curriculum. Three teachers indicated that play space separated by age group or schedule was not applicable to their centers. A summary of the results for facility design for the outdoor play area in Head Start nonaccredited centers is illustrated in Table 26.

Private-for-Profit Nonaccredited Centers

Five teachers from private-for-profit nonaccredited centers responded to the survey. Indoor Area: The teachers unanimously agreed that clearly defined

Table 25

Summary of Results for Facility Design for the Indoor Area (Teachers--Head Start Nonaccredited Centers)

Indoor Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
23. Children's eating area outside classroom	1		1			2	
24. Children's eating area inside classroom				1	3		
25. Toileting facilities adapted to child's size					4		
26. Toileting facilities adapted to child's disability				1	3		
27. Toileting facilities within the classroom				1	3		
28. Toileting facilities adjacent to the classroom					2	2	
29. Storage areas for toys, supplies, etc.				2	1	1	
30. Alternative weather-protected play area			1			3	
31. Pathways to accommodate wheelchairs, walkers, canes			1	1	1		1
34. More than one entrance/exit to your classroom				1	3		
35. Indoor space for large group activities					4		
36. Indoor space for gross motor activities				1	3		

Indoor Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
37. Windows low enough for children to view the outdoors	1			1	2		
38. Florescent lighting	1		1		2		
39. Incandescent lighting	1		1		1		1
40. Tile flooring		1			3		
41. Carpet	1			1	1	1	
42. Wood floor	1					3	
43. Concrete floor	1					3	
44. Isolation area			1		1	1	1
45. Quiet spaces for child to be alone				1	3		
46. Water play area (indoors)			1		2	1	
47. Sand play area (indoors)	1		1		1	1	
48. Clearly defined learning centers					4		
49. Low shelves for accessibility of play materials					4		
50. Organization of toys on low shelves					3	1	
51. Labeling of room items with words	1				2	1	
52. Labeling of shelves with pictures	1				2	1	
53. Less than normal light in napping areas					4		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 26
Summary of Results for Facility Design for the Outdoor Play Area (Teachers--Head Start Nonaccredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
56. Play space separated by age group or schedule	1					3	
57. Appropriate surfaces (grass, hard surface for riding toys, mats or quilts for infants)				1	3		
61. Sand play area					2	2	
63. Water play area					4		
67. Storage area for outdoor equipment					3	1	

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

learning centers had a very great effect on the curriculum offered in their center. Four teachers (80%) agreed that the labeling of room items had a very great effect on the curriculum. Three teachers (60%) agreed that toileting facilities adapted to the child's size and toileting facilities within the classroom had a very great effect on the curriculum. Windows low enough for the children to view the outdoors and alternative weather protected areas had a great effect on the curriculum according to four teachers.

Three teachers agreed that a children's eating area inside the classroom, a storage area for toys and supplies, florescent lighting, tile flooring, organization of toys on low shelves, and less than normal light in napping areas had a great effect on the curriculum offered in their centers. Five teachers reported that toileting facilities adjacent to the classroom, wood floors, and concrete floors were not applicable to the center. Four teachers reported that a children's eating area outside the classroom, and incandescent lighting were not applicable to the center. Three teachers reported that toileting facilities adapted to the child's size, and pathways to accommodate wheelchairs, walkers, and canes were not applicable to the center. Table 27 presents a summary of the results for facility design for the indoor area in private-for-profit nonaccredited centers.

Outdoor Play Area: Four teachers (80%) agreed that play space separated by age group or schedule and the sand play area had a very great effect on the curriculum. One teacher indicated that play space separated by age group or

Table 27

Summary of Results for Facility Design for the Indoor Area (Teachers--Private-for-Profit Nonaccredited Centers)

Indoor Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
23. Children's eating area outside classroom				1		4	
24. Children's eating area inside classroom	1			3		1	
25. Toileting facilities adapted to child's size				2	3		
26. Toileting facilities adapted to child's disability						3	2
27. Toileting facilities within the classroom				2	3		
28. Toileting facilities adjacent to the classroom						5	
29. Storage areas for toys, supplies, etc.			1	3	1		
30. Alternative weather-protected play area				4		1	
31. Pathways to accommodate wheelchairs, walkers, canes			2			3	
34. More than one entrance/exit to your classroom			3		1	1	
35. Indoor space for large group activities			1	2	2		
36. Indoor space for gross motor activities			1	2	2		

Indoor Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
37. Windows low enough for children to view the outdoors				4	1		
38. Florescent lighting			2	3			
39. Incandescent lighting				1		4	
40. Tile flooring				3		2	
41. Carpet			1	2	1	1	
42. Wood floor						5	
43. Concrete floor						5	
44. Isolation area	1		3			1	
45. Quiet spaces for child to be alone			2	1	2		
46. Water play area (indoors)			2	1		2	
47. Sand play area (indoors)			2	2		1	
48. Clearly defined learning centers					5		
49. Low shelves for accessibility of play materials				3	2		
50. Organization of toys on low shelves				3	2		
51. Labeling of room items with words				1	4		
52. Labeling of shelves with pictures				1	3	1	
53. Less than normal light in napping areas				3	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

schedule and the sand play area had a great effect on the curriculum. Appropriate surfaces had a very great effect on the curriculum according to two teachers, and greatly effected the curriculum according to two teachers. One teacher indicated that this was not applicable to the center.

Two teachers indicated that appropriate surfaces, the water play area and storage area had a great effect on the curriculum. Two teachers indicated that the water play area had a very great effect on the curriculum. Table 28 displays the data obtained for facility design for the outdoor play area in private-for-profit nonaccredited centers.

Table 28

Summary of Results for Facility Design for the Outdoor Play Area (Teachers--Private-for-Profit Nonaccredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
56. Play space separated by age group or schedule				1	4		
57. Appropriate surfaces (grass, hard surface for riding toys, mats or quilts for infants)				2	2	1	
61. Sand play area				1		4	
63. Water play area		1	1	2	1		
67. Storage area for outdoor equipment		1	2	2			

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Head Start Accredited Centers

Two teachers from Head Start accredited centers responded to the survey. Indoor Area: The teachers unanimously agreed that more than one entrance/exit to the classroom, indoor space for large group activities and gross motor activities, carpet, a sand play area, clearly defined learning centers, low shelves for accessibility of play materials, organization of toys on low shelves, labeling of room items with words and labeling of shelves with pictures had a very great effect on the curriculum offered. They agreed that a children's eating area outside the classroom had very little effect on the curriculum. A summary of the results for facility design for the indoor area in Head Start accredited centers is displayed in Table 29.

Outdoor Play Area: One teacher (50%) indicated that appropriate surfaces, the sand play area, the water play area and the storage area for outdoor equipment had a great effect on the curriculum. A summary of the results for facility design for the outdoor play area for Head Start accredited centers is presented in Table 30.

Private-for-Profit Accredited Centers

Eight teachers from private-for-profit accredited centers responded to the survey. Indoor Area: Six teachers (75%) agreed that indoor space for large group and gross motor activities had a very great effect on the curriculum. Five teachers

Table 29

Summary of Results for Facility Design for the Indoor Area (Teachers--Head Start Accredited Center)

Indoor Area		Number of Responses in Each Area*						
		1	2	3	4	5	0	NR
23.	Children's eating area outside classroom		2					
24.	Children's eating area inside classroom		1		1			
25.	Toileting facilities adapted to child's size			1	1			
26.	Toileting facilities adapted to child's disability			1	1			
27.	Toileting facilities within the classroom						2	
28.	Toileting facilities adjacent to the classroom				1		1	
29.	Storage areas for toys, supplies, etc.					1	1	
30.	Alternative weather-protected play area			1			1	
31.	Pathways to accommodate wheelchairs, walkers, canes			1		1		
34.	More than one entrance/exit to your classroom					2		
35.	Indoor space for large group activities					2		
36.	Indoor space for gross motor activities					2		

Indoor Area		Number of Responses in Each Area*						
		1	2	3	4	5	0	NR
37.	Windows low enough for children to view the outdoors			1	1			
38.	Florescent lighting	1				1		
39.	Incandescent lighting	1	1					
40.	Tile flooring			1			1	
41.	Carpet		1			1		
42.	Wood floor						2	
43.	Concrete floor	1						1
44.	Isolation area		1				1	
45.	Quiet spaces for child to be alone				1	1		
46.	Water play area (indoors)			1		1		
47.	Sand play area (indoors)					2		
48.	Clearly defined learning centers					2		
49.	Low shelves for accessibility of play materials					2		
50.	Organization of toys on low shelves					2		
51.	Labeling of room items with words					2		
52.	Labeling of shelves with pictures					2		
53.	Less than normal light in napping areas		1			1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 30

Summary of Results for Facility Design for the Outdoor Play Area (Teachers--Head Start Accredited Center)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
56. Play space separated by age group or schedule	1		1				
57. Appropriate surfaces (grass, hard surface for riding toys, mats or quilts for infants)				1	1		
61. Sand play area		1			1		
63. Water play area		1			1		
67. Storage area for outdoor equipment	1				1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

(62.5%) agreed that a children's eating area inside the classroom, clearly defined learning centers, low shelves for accessibility of play materials, and the organization of toys on low shelves had a very great effect on the curriculum. Four teachers (50%) agreed that toileting facilities adapted to the child's size, toileting facilities within the classroom and toileting facilities adjacent to the classroom had a very great effect on the curriculum. Six teachers (75%) indicated that toileting facilities adapted to the child's disability and wood and concrete floors were not applicable to their centers. A summary of the results for facility design for the indoor area for private-for-profit accredited centers is illustrated in Table 31.

Outdoor Play Area: Six teachers (75%) from the private-for-profit accredited centers (75%) agreed that a storage area for outdoor equipment had a very great effect on the curriculum. Five teachers (62.5%) agreed that appropriate surfaces and a water play area had a very great effect on the curriculum. Four teachers (50%) agreed that play space separated by age group or schedule and a sand play area had a very great effect on the curriculum. Table 32 displays the results for facility design for the outdoor play area in private-for-profit accredited centers.

Table 31

Summary of Results for Facility Design for the Indoor Area (Teachers--Private-for-Profit Accredited Centers)

Indoor Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
23. Children's eating area outside classroom	2		1		3	2	
24. Children's eating area inside classroom	2				5	1	
25. Toileting facilities adapted to child's size	1	1		2	4		
26. Toileting facilities adapted to child's disability	2						6
27. Toileting facilities within the classroom	2				4	2	
28. Toileting facilities adjacent to the classroom	2				4	2	
29. Storage areas for toys, supplies, etc.	1	1		3	3		
30. Alternative weather-protected play area	1				1	5	1
31. Pathways to accommodate wheelchairs, walkers, canes	2					6	
34. More than one entrance/exit to your classroom		1	3	1	3		
35. Indoor space for large group activities				2	6		
36. Indoor space for gross motor activities				2	6		

Indoor Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
37. Windows low enough for children to view the outdoors	2			3	3		
38. Florescent lighting	2			3	3		
39. Incandescent lighting	2					5	1
40. Tile flooring			2		1	5	
41. Carpet			5	2	1		
42. Wood floor			2			6	
43. Concrete floor	1			1		6	
44. Isolation area	2		1	4			
45. Quiet spaces for child to be alone		2	1	3	2		
46. Water play area (indoors)			2	3	2	2	
47. Sand play area (indoors)	1		1	3	1	2	
48. Clearly defined learning centers			1	2	5		
49. Low shelves for accessibility of play materials				3	5		
50. Organization of toys on low shelves				3	5		
51. Labeling of room items with words	2		1	3	2		
52. Labeling of shelves with pictures		2	1	3	2		
53. Less than normal light in napping areas	1	1	2	3	1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 32

Summary of Results for Facility Design for the Outdoor Play Area (Teachers--Private-for-Profit Accredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
56. Play space separated by age group or schedule	2			2	4		
57. Appropriate surfaces (grass, hard surface for riding toys, mats or quilts for infants			1	1	5		
61. Sand play area				1	4	3	
63. Water play area				1	5	2	
67. Storage area for outdoor equipment	1	1			6		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Summary

Research question one examined the effect each of the 34 facility design components had on the curriculum offered in preschool centers from the teacher's perspective. The components were divided into two distinct areas, indoor and outdoor areas. A variation in the effect of each component is evident in the tables presented.

The majority of all the teachers responding to the survey agreed that toileting facilities adapted to the child's size, toileting facilities within the classroom, indoor space for large group activities, indoor space for gross motor activities, and clearly defined learning centers had a very great effect on the curriculum offered in preschool centers. Low shelves for accessibility of play materials, organization of toys on low shelves, appropriate surfaces, outdoor sand and water play areas, and a storage area for outdoor equipment had a very great effect on the curriculum offered in preschool centers as reported by a majority of all the teachers.

Nine teachers (50%) agreed that the labeling of room items with words and the labeling of shelves with pictures had a very great effect on the curriculum offered in preschool centers. Ten teachers (52.6%) agreed that windows low enough for children to view the outdoors had a great effect on the curriculum offered in preschool centers.

Fourteen teachers (73.6%) indicated that concrete floors were not applicable to their centers. Ten teachers (52.6%) indicated that toileting facilities adjacent to the classroom and wood floors were not applicable to their centers. Nine teachers (50%) indicated that an alternative weather-protected play area and pathways to accommodate wheelchairs, walkers, and canes were not applicable to their centers.

The majority of the teachers agreed that play space separated by age group or schedule, appropriate outdoor surfaces, a sand and water play area and a storage area for outdoor equipment had a very great effect on the curriculum offered. The data related to facility design for the indoor and outdoor areas for all centers are presented in Table 33.

Research Question 2

What components of facility design affect the curriculum offered in preschool centers from the parent's perspective?

Categorization and Rating of Components of Facility Design

A list of 18 components of facility design was included in this questionnaire. They were divided into three parts: Physical Environment, Classroom Area, and Outdoor Play Area. There were seven components in the physical environment area, four components in the classroom area and seven components in the outdoor play area. Questions 5-8, 13, 14, 24-27, 29, and 30 relate to equipment acquisition and are not included in this discussion. A rating

Table 33

Summary of Results for Facility Design for Indoor and Outdoor Play Area for All Centers (Teachers' Perspective)

Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Area							
23. Children's eating area outside classroom	3	2	2	1	3	8	
24. Children's eating area inside classroom	3	1		4	8	2	
25. Toileting facilities adapted to child's size	1	1	1	5	11		
26. Toileting facilities adapted to child's disability	2	1	2	3	3	8	
27. Toileting facilities within the classroom	2			3	10	4	
28. Toileting facilities adjacent to the classroom	2			1	6	10	
29. Storage areas for toys, supplies, etc.	1	1	1	8	6	2	
30. Alternative weather-protected play area	1		2	4	2	9	1
31. Pathways to accommodate wheelchairs, walkers, canes	2		4	1	2	9	1
34. More than one entrance/exit to your classroom		1	6	2	9	1	
35. Indoor space for large group activities			1	4	14		
36. Indoor space for gross motor activities			1	5	13		

Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
37. Windows low enough for children to view the outdoors	1		2	10	6		
38. Florescent lighting	4		3	6	6		
39. Incandescent lighting	4		3	6	6		
40. Tile flooring		1	3	3	4	8	
41. Carpet	1	1	6	5	4	2	
42. Wood floor	1		5	2	1	10	
43. Concrete floor	3			1		15	
44. Isolation area	3	2	4	4	2	2	2
45. Quiet spaces for child to be alone		4	2	5	8		
46. Water play area (indoors)			5	5	5	4	
47. Sand play area (indoors)	2		4	5	4	4	
48. Clearly defined learning centers			1	2	16		
49. Low shelves for accessibility of play materials				6	13		
50. Organization of toys on low shelves				6	12	1	
51. Labeling of room items with words	3		1	4	9	2	
52. Labeling of shelves with pictures	1	2	1	4	9	2	
53. Less than normal light in napping areas	1	2	2	6	8		
Outdoor Play Area							
56. Play space separated by age group or schedule	4		1	3	8	3	

Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
57. Appropriate surfaces (grass, hard surface for riding toys, mats or quilts for infants			1	5	11	1	1
61. Sand play area		1		2	11	5	
62. Water play area		1	2	2	12	2	
63. Storage area for outdoor equipment	2	1	1	2	12	1	

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

scale was used to determine the effect each of these components had on the curriculum offered in the center from the perspective of parents of 3- and 4-year-old children in Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited, and private-for-profit accredited preschool centers. The scale ranged from zero to five. A score of zero indicated that the component was not applicable to the respondent's center. A score of one indicated that the component had no effect on the curriculum. A score of two indicated that the component had little effect on the curriculum. A score of four indicated that the component had a great effect on the curriculum, and a score of five indicated that the component had a very great effect on the curriculum. A summary of the results, including the number of responses for each component and from each of the four categories of centers is included in this discussion.

Head Start Nonaccredited Centers

Physical environment and classroom area: Seven parents from Head Start nonaccredited centers responded to the survey. Four parents (57%) agreed that cleanliness had a very great effect on the curriculum. Three parents (42.8%) agreed that a homelike atmosphere, attractiveness, accessibility of materials to children, a large play area, and individual storage for the child's personal belongings had a very great effect on the curriculum. Three parents (42.8%) agreed that a homelike atmosphere, attractiveness, organization, accessibility of

materials to children, and a large play area had a great effect on the curriculum. Table 34 displays information regarding the results for facility design for the physical environment and classroom area for Head Start nonaccredited centers.

Outdoor Play Area: Three parents (42.8%) agreed that the size of the play area had a very great effect on the curriculum. Three parents (42.8%) agreed that play areas separated for various age groups, and a large open area for physical activities had a great effect on the curriculum offered. Four parents (57%) agreed that a sand play area had very little effect on the curriculum. Three parents (42.8%) agreed that a water play area had very little effect on the curriculum. A summary of the results for facility design for the outdoor play area is displayed in Table 35.

Private-for-Profit Nonaccredited Centers

Eight parents from private-for-profit nonaccredited centers responded to the survey. Physical environment and classroom area: The parents unanimously agreed that organization very greatly effected the curriculum offered. Six parents (75%) agreed that accessibility of materials to children had a very great effect on the curriculum. Four parents (50%) agreed that cleanliness had a very great effect on the curriculum. Five parents (62.5%) agreed that attractiveness, an eating area outside the classroom, and a large play area in the classroom had a great effect on the curriculum. Four parents (50%) agreed that a homelike atmosphere and an

Table 34

Summary of Results for Facility Design for the Physical Environment and Classroom Area (Parents--Head Start Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
1. Homelike atmosphere	1			3	3		
2. Attractiveness	1			3	3		
3. Cleanliness			1	2	3		
4. Organization (clearly defined areas)			1	3	3		
9. Accessibility of materials to children			1	3	4		
10. Eating area outside classroom			2	1	1	3	
11. Storage areas	2		2	1	1	1	
Classroom Area							
12. Large play area	1			3	3		
15. Individual storage for child's personal belongings			1	3	3		
16. Windows low enough for children to view the outdoors	1	2	2	1	1		
17. Storage areas for additional materials	2	2	1	1			1

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect: 5 = very great effect; 0 = not applicable; NR = no response.

Table 35

Summary of Results for Facility Design for the Outdoor Play Area (Parents--Head Start Nonaccredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
18. Storage facilities for outdoor	2	2	2			1	
19. Size of play area		2		2	3		
20. Play areas separated for various	1	2		3		1	
21. Sand play area	1	4	1	1			
22. Water play area		3	2			2	
23. Large open area for physical	1	2	3		1		
28. Variety of outside surfaces (grass,		2	3	2	1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

eating area outside the classroom had a great effect on the curriculum. Four parents (50%) agreed that storage areas, windows low enough for children to view the outdoors, and storage areas for additional materials in the classroom had little effect on the curriculum offered. A summary of the results for facility design for the physical environment and classroom area in private-for-profit nonaccredited centers is represented in Table 36.

Outdoor Play Area: Four parents (50%) agreed that play areas separated for various age groups had a very great effect on the curriculum. Six parents (75%) agreed that a sand play area had a great effect on the curriculum. Four parents (50%) agreed that the size of the play area and play areas separated for various age groups had a great effect on the curriculum. Three parents (37.5%) agreed that storage facilities for outdoor equipment, the water play area, a large open area for physical activities and a variety of outside surfaces had a great effect on the curriculum. Three parents (37.5%) agreed that storage facilities for outdoor equipment had little effect on the curriculum. The data related to facility design for the outdoor play area in private-for-profit nonaccredited centers are illustrated in Table 37.

Head Start Accredited Centers

Two parents from a Head Start accredited center responded to the survey. Physical environment and classroom area: The parents unanimously agreed that a

Table 36

Summary of Results for Facility Design for the Physical Environment and Classroom Area (Parents--Private-for-Profit Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
1. Homelike atmosphere			2	4	2		
2. Attractiveness			1	5	2		
3. Cleanliness				3	5		
4. Organization (clearly defined areas)					8		
9. Accessibility of materials to children				2	6		
10. Eating area outside classroom		1		4		3	
11. Storage areas	1	1	4	2			
Classroom Area							
12. Large play area				5	3		
15. Individual storage for child's personal belongings			3	2	3		
16. Windows low enough for children to view the outdoors			4	2	2		
17. Storage areas for additional materials		1	4	3	1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 37

Summary of Results for Facility Design for the Outdoor Play Area (Parents--Private-for-Profit Nonaccredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
18. Storage facilities for outdoor equipment		1	3	3		1	
19. Size of play area			1	4	3		
20. Play areas separated for various age groups				4	4		
21. Sand play area			1	6	1		
22. Water play area	1	1	1	3	1	1	
23. Large open area for physical activities		1	2	3	1	1	
28. Variety of outside surfaces (grass, sand hard)			2	3	3		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

homelike atmosphere, attractiveness, cleanliness, organization (clearly defined areas), accessibility of materials to children, an eating area outside the classroom, storage areas, windows low enough for children to view the outdoors and storage areas for additional materials in the classroom had a very great effect on the curriculum offered. A summary of the results for facility design for the physical environment and classroom area is illustrated in Table 38.

Outdoor Play Area: The parents unanimously agreed that a large open area for physical activities and a variety of outside surfaces (grass, sand, hard) had a very great effect on the curriculum. A summary of the results for facility design for the outdoor play are in Head Start accredited centers is shown in Table 39.

Private-for-Profit Accredited Centers

Eight parents from private-for-profit accredited centers responded to the survey. Physical Environment and Classroom Area: Seven parents (87.5%) agreed that organization (clearly defined areas) had a very great effect on the curriculum offered. Six parents (75%) agreed that a homelike atmosphere had a great effect on the curriculum. Five parents (62.5%) agreed that attractiveness and cleanliness had a great effect on the curriculum. Four parents (50%) agreed that accessibility of materials to the children had a great effect on the curriculum offered. Five parents (62.5%) agreed that windows low enough for children to view the outdoors and storage areas for additional materials in the classroom area had little effect on

Table 38

Summary of Results for Facility Design for the Physical Environment and Classroom Area (Parents--Head Start Accredited Center)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
1. Homelike atmosphere					2		
2. Attractiveness					2		
3. Cleanliness					2		
4. Organization (clearly defined areas)					2		
9. Accessibility of materials to children					2		
10. Eating area outside classroom					2		
11. Storage areas					2		
Classroom Area							
12. Large play area				1	1		
15. Individual storage for child's personal belongings				1	1		
16. Windows low enough for children to view the outdoors					2		
17. Storage areas for additional materials					2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 39

Summary of Results for Facility Design for the Outdoor Play Area (Parents--Head Start Accredited Center)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
18. Storage facilities for outdoor equipment				1	1		
19. Size of play area				1	1		
20. Play areas separated for various age groups	1				1		
21. Sand play area	1				1		
22. Water play area	1						1
23. Large open area for physical activities					2		
28. Variety of outside surfaces (grass, sand hard)					2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

the curriculum offered. Table 40 presents a summary of the results for facility design for the physical environment and classroom area.

Outdoor play area: Six parents (75%) agreed that the size of the play area had a great effect on the curriculum offered. Four parents (50%) agreed that a large open area for physical activities had a great effect on the curriculum offered. Five parents (62.5%) agreed that a variety of outside surfaces had little effect on the curriculum offered. Four parents (50%) agreed that play areas separated for various age groups had little effect on the curriculum offered. Three parents (37.5%) agreed that a sand play area and a water play area had little effect on the curriculum offered. A summary of the results for facility design for the outdoor play area is shown in Table 41.

Summary

Research question 2 examined the effect each of the 18 facility design components had on the curriculum offered in preschool centers from the parents' perspective. The components were divided into three distinct areas: physical environment, classroom area, and outdoor play area.

A total of 25 parents from the four categories of centers responded to the survey. Nineteen parents (76%) agreed that organization (clearly defined areas) had a very great effect on the curriculum offered. Sixteen parents (64%) agreed that accessibility of materials to the children had a very great effect on the

Table 40

Summary of Results for Facility Design for the Physical Environment and Classroom Area (Parents--Private-for-Profit Accredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
1. Homelike atmosphere			2	6			
2. Attractiveness		1	2	5			
3. Cleanliness				4	4		
4. Organization (clearly defined areas)				1	7		
9. Accessibility of materials to children				4	4		
10. Eating area outside classroom	2	1	3	1		1	
11. Storage areas	1	3	3		1		
Classroom Area							
12. Large play area			4	2	2		
15. Individual storage for child's personal belongings		1	2	2	3		
16. Windows low enough for children to view the outdoors			6	2			
17. Storage areas for additional materials	1		6	1			

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 41

Summary of Results for Facility Design for the Outdoor Play Area (Parents--Private-for-Profit Accredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
18. Storage facilities for outdoor equipment	1	3	3			1	
19. Size of play area			1	6	1		
20. Play areas separated for various age groups			4	3		1	
21. Sand play area	2	1	3	1		1	
22. Water play area	2	1	3	1		1	
23. Large open area for physical activities	1		2	4	2		
28. Variety of outside surfaces (grass, sand hard)		1	5	1	1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

curriculum offered. Fourteen parents (56%) agreed that cleanliness had a very great effect on the curriculum. Ten parents (40%) agreed that individual storage for the child's personal belongings had a very great effect on the curriculum offered.

Fifteen parents (60%) agreed that the size of the outdoor play area had a great effect on the curriculum. Thirteen parents (52%) agreed that attractiveness had a great effect on the curriculum offered. Ten parents (40%) agreed that cleanliness and play areas separated for various age groups had a great effect on the curriculum. Fourteen parents (56%) agreed that windows low enough for children to view the outdoors had very little effect on the curriculum offered. Eleven parents (44%) agreed that storage areas for additional materials had little effect on the curriculum. A summary of the results for facility design for the physical environment, classroom area, and outdoor play area from the parents' perspective for all centers is presented in Table 42.

Research Question 3

What components of facility design affect the curriculum offered in preschool centers from the director's perspective?

Categorization and Rating of Components of Facility Design

A list of 29 components of facility design was included in this questionnaire. They were divided into two parts: Indoor Play Area and Outdoor

Table 42

Summary of Results for Facility Design for the Physical Environment, Classroom Area, and Outdoor Play Area for All Centers (Parents' Perspective)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
1. Homelike atmosphere	1		4	15	5		
2. Attractiveness	1	1	3	13	7		
3. Cleanliness			1	10	14		
4. Organization (clearly defined areas)			1	5	19		
9. Accessibility of materials to children			1	8	16		
10. Eating area outside classroom	4	2	8	3	3	5	
11. Storage areas	4	6	8	1	5	1	
Classroom Area							
12. Large play area	1		8	8	8		
15. Individual storage for child's personal belongings		2	6	7	10		
16. Windows low enough for children to view the outdoors	1	2	14	5	3		
17. Storage areas for additional materials	3	3	11	4	3	1	
Outdoor Play Area							
18. Storage facilities for outdoor equipment	4	8	8	1	1	3	
19. Size of play area		2	2	15	6		

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
20. Play areas separated for various age groups	2	2	4	10	5	3	
21. Sand play area	4	5	5	8	2	1	
22. Water play area	5	5	6	4	1	4	
23. Large open area for physical activities	1	4	7	7	5	1	
28. Variety of outside surfaces (grass, sand, hard)		3	9	6	7		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Play Area. There were 25 components in the Indoor Play Area and 4 components in the Outdoor Play Area. Questions 33, 34, 52, 55-57, 59, and 61-66 relate to equipment acquisition and are not included in this discussion. A rating scale was used to determine the effect each of these components had on the curriculum offered in the center from the perspective of directors and education coordinators of Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited, and private-for-profit nonaccredited preschool centers. The scale ranged from 0 to 5. A score of zero indicated that the component was not applicable to the respondent's center. A score of 1 indicated that the component had no effect on the curriculum. A score of 2 indicated that the component had very little effect on the curriculum. A score of 3 indicated that the component had little effect on the curriculum. A score of 4 indicated that the component had a great effect on the curriculum, and a score of 5 indicated that the component had a very great effect on the curriculum. A summary of the results, including the number of responses for each component from each of the four categories of centers is included in this discussion.

Head Start Nonaccredited Centers

Three education coordinators from Head Start nonaccredited centers responded to the survey. One education coordinator was the coordinator for the

Head Start programs in both Osceola and Seminole counties. The surveys for both counties were returned but only one was completed.

Indoor Play Area: The coordinators unanimously agreed that toileting facilities within the classroom, the indoor water play and sand play areas, clearly defined learning centers, low shelves for accessibility of play materials, and the organization of toys on low shelves had a very great effect on the curriculum offered.

Two coordinators agreed that the children's eating area inside the classroom, toileting facilities adapted to the child's size, toileting facilities adjacent to the classroom, quiet spaces for the child to be alone, labeling of room items with words, and labeling of shelves with pictures had a very great effect on the curriculum. A summary of the results for the Indoor Play Area for facility design for Head Start nonaccredited centers is illustrated in Table 43.

Outdoor Play Area: The coordinators unanimously agreed that appropriate outside surfaces had a very great effect on the curriculum offered. Two coordinators (66.6%) agreed that the sand and water play areas had a very great effect on the curriculum offered. Table 44 displays the data regarding facility design for the outdoor play area in Head Start nonaccredited centers.

Table 43

Summary of Results for Facility Design for the Indoor Play Area (Education Coordinators--Head Start Nonaccredited Centers)

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
24. Children's eating area outside classroom						3	
25. Children's eating area inside classroom				1	2		
26. Toileting facilities adapted to child's size					2	1	
27. Toileting facilities adapted to child's disability			1	1		1	
28. Toileting facilities within the classroom					3		
29. Toileting facilities adjacent to the classroom					2	1	
30. Storage areas for toys, supplies, etc.		2		1			
31. Alternative weather-protected play area			1				2
32. Pathways to accommodate wheelchairs, canes, etc.	1		1		1		
35. More than one entrance/exit to building			1	1	1		
36. More than one entrance/exit to each classroom			1	1	1		
37. Indoor space for large group activities				1	2		

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
38. Indoor space for gross motor activities			1	1	1		
39. Windows low enough for children to view the outdoors		1			1	1	
40. Florescent lighting			1		1	1	
41. Incandescent lighting						3	
42. Isolation area		1			1	1	
43. Quiet space				1	2		
44. Water play area (indoors)					3		
45. Sand play area (indoors)					3		
46. Clearly defined leaning centers					3		
47. Low shelves for accessibility of play materials					3		
48. Organization of toys on low shelves					3		
49. Labeling of room items with words					2	1	
50. Labeling of shelves with pictures					2	1	
51. Less than normal lighting in napping area			1	1	1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 44
Summary of Results for Facility Design for the Outdoor Play Area (Education Coordinators--Head Start Nonaccredited Center)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
53. Storage facilities for outdoor equipment				1	1	1	
54. Appropriate outside surface (sand, grass, hard, etc.)					3		
58. Sand play area				1	2		
60. Water play area					2		1

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Private-for-Profit Nonaccredited Centers

Three directors from private-for-profit nonaccredited centers responded to the survey. Indoor play area: The directors unanimously agreed that low shelves for accessibility of play materials, organization of toys on low shelves and labeling of room items with words had a very great effect on the curriculum offered. Two directors (66.6%) agreed that toileting facilities adapted to the child's size, a storage area for toys and supplies, pathways to accommodate wheelchairs and canes, more than one entrance/exit to the building, and clearly defined learning centers had a very great effect on the curriculum.

Two directors (66.6%) agreed that indoor space for large group and gross motor activities, water and sand play areas, and labeling of shelves with pictures had a great effect on the curriculum offered.

All the directors indicated that toileting facilities adapted to the child's disability and an alternative weather-protected play area are not applicable to their centers. A summary of the results for facility design for the indoor play area in private-for-profit nonaccredited centers is presented in Table 45.

Outdoor Play Area: Two directors (66.6%) agreed that the sand and water play areas had a very great effect on the curriculum offered. Two directors (66.6%) agreed that storage facilities for outdoor equipment had a great effect on the curriculum offered. A summary of the results for facility design for the outdoor area in private-for-profit nonaccredited centers is illustrated in Table 46.

Table 45

Summary of Results for Facility Design for the Indoor Play Area (Directors--Private-for-Profit Nonaccredited Centers)

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
24. Children's eating area outside classroom			1		1	1	
25. Children's eating area inside classroom		1		1		1	
26. Toileting facilities adapted to child's size				1	2		
27. Toileting facilities adapted to child's disability						3	
28. Toileting facilities within the classroom			1	1	1		
29. Toileting facilities adjacent to the classroom				1	2		
30. Storage areas for toys, supplies, etc.				1	2		
31. Alternative weather-protected play area						3	
32. Pathways to accommodate wheelchairs, canes, etc.					2	1	
35. More than one entrance/exit to building				1	2		
36. More than one entrance/exit to each classroom			1	1		1	
37. Indoor space for large group activities				2	1		

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
38. Indoor space for gross motor activities				2	1		
39. Windows low enough for children to view the outdoors				1	1	1	
40. Florescent lighting			1	1		1	
41. Incandescent lighting				1		2	
42. Isolation area			1	1	1		
43. Quiet space			1		1	1	
44. Water play area (indoors)				2		1	
45. Sand play area (indoors)				2		1	
46. Clearly defined leaning centers				1	2		
47. Low shelves for accessibility of play materials					3		
48. Organization of toys on low shelves					3		
49. Labeling of room items with words					3		
50. Labeling of shelves with pictures				1	2		
51. Less than normal lighting in napping area				1	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 46

Summary of Results for Facility Design for the Outdoor Play Area (Directors--Private-for-Profit Nonaccredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
53. Storage facilities for outdoor equipment			1	2			
54. Appropriate outside surface (sand, grass, hard, etc.)			1	1	1		
58. Sand play area				1	2		
60. Water play area				1	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Head Start Accredited Center

The education coordinator for the Head Start accredited center responded to the survey. Indoor play area: This coordinator indicated that a children's eating area outside the classroom, an alternative weather-protected play area, florescent lighting, and incandescent lighting were not applicable to this center. The coordinator indicated that the remaining 27 items had a very great effect on the curriculum offered. A summary of the results for facility design for the indoor play area in the Head Start accredited center is illustrated in Table 47.

Outdoor Play Area: This coordinator indicated that the four facility design components for the outdoor play area had a very great effect on the curriculum offered. A summary of the results for facility design for the outdoor play area in the Head Start accredited center is presented in Table 48.

Private-for-Profit Accredited Centers

Four directors from private-for-profit accredited centers responded to the survey. Indoor Area: Three directors (75%) unanimously agreed that clearly defined learning centers, low shelves for accessibility of play materials, and organization of toys on low shelves had a very great effect on the curriculum offered. Two directors (50%) agreed that a children's eating area inside the classroom, toileting facilities adapted to the child's size, indoor space for large group activities and for gross motor activities, labeling of room items with words,

Table 47

Summary of Results for Facility Design for the Indoor Play Area (Education Coordinator--Head Start Accredited Center)

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
24. Children's eating area outside classroom						1	
25. Children's eating area inside classroom					1		
26. Toileting facilities adapted to child's size					1		
27. Toileting facilities adapted to child's disability					1		
28. Toileting facilities within the classroom					1		
29. Toileting facilities adjacent to the classroom					1		
30. Storage areas for toys, supplies, etc.					1		
31. Alternative weather-protected play area						1	
32. Pathways to accommodate wheelchairs, canes, etc.					1		
35. More than one entrance/exit to building					1		
36. More than one entrance/exit to each classroom					1		
37. Indoor space for large group activities					1		

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
38. Indoor space for gross motor activities					1		
39. Windows low enough for children to view the outdoors					1		
40. Florescent lighting					1		
41. Incandescent lighting							1
42. Isolation area							1
43. Quiet space					1		
44. Water play area (indoors)					1		
45. Sand play area (indoors)					1		
46. Clearly defined leaning centers					1		
47. Low shelves for accessibility of play materials					1		
48. Organization of toys on low shelves					1		
49. Labeling of room items with words					1		
50. Labeling of shelves with pictures					1		
51. Less than normal lighting in napping area					1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 48

Summary of Results for the Outdoor Play Area (Education Coordinator--Head Start Accredited Center)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
53. Storage facilities for outdoor equipment					1		
54. Appropriate outside surface (sand, grass, hard, etc.)					1		
58. Sand play area					1		
60. Water play area					1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

and labeling of shelves with pictures had a very great effect on the curriculum offered. Three directors (75%) agreed that more than one entrance/exit to the building had little effect on the curriculum. Two directors (50%) agreed that more than one entrance/exit to each classroom and quiet spaces for the child to be alone had little effect on the curriculum.

Four directors indicated that toileting facilities adapted to the child's disability were not applicable to their center. Three directors (75%) indicated that incandescent lighting was not applicable to their centers. A summary of the results for facility design for the indoor play area in private-for-profit accredited centers is displayed in Table 49.

Outdoor Area: Two directors (50%) agreed that appropriate outside surfaces, a sand play area and a water play area had a great effect on the curriculum offered. Table 50 displays the data related to facility design for the outdoor play area in private-for-profit accredited centers.

Summary

Research question 3 examined the effect each of the 31 facility design components had on the curriculum offered in preschool centers from the directors' perspective. The components were divided into two distinct areas, an indoor play area and an outdoor play area. A variation in the effect of each component is evident in the tables presented.

Table 49

Summary of Results for Facility Design for the Indoor Play Area (Directors--Private-for-Profit Accredited Centers)

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
24. Children's eating area outside classroom	1				1	2	
25. Children's eating area inside classroom	1				3		
26. Toileting facilities adapted to child's size				1	2	1	
27. Toileting facilities adapted to child's disability							4
28. Toileting facilities within the classroom	1			1	1	1	
29. Toileting facilities adjacent to the classroom	1			1		2	
30. Storage areas for toys, supplies, etc.	1			2	1		
31. Alternative weather-protected play area	1			1		2	
32. Pathways to accommodate wheelchairs, canes, etc.	1		1			1	
35. More than one entrance/exit to building			4				
36. More than one entrance/exit to each classroom			3			1	
37. Indoor space for large group activities				2	2		

Indoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
38. Indoor space for gross motor activities				2	2		
39. Windows low enough for children to view the outdoors			1	2	1		
40. Florescent lighting			2	1	1		
41. Incandescent lighting						3	1
42. Isolation area			2		1	1	
43. Quiet space			2	1	1		
44. Water play area (indoors)			1	1	1	1	
45. Sand play area (indoors)			1	1		2	
46. Clearly defined leaning centers					4		
47. Low shelves for accessibility of play materials					4		
48. Organization of toys on low shelves				1	3		
49. Labeling of room items with words	1			1	2		
50. Labeling of shelves with pictures	1			1	2		
51. Less than normal lighting in napping area			1	1	1	1	

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 50

Summary of Results for Facility Design for the Outdoor Play Area (Directors--Private-for-Profit Accredited Centers)

Outdoor Play Area	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
53. Storage facilities for outdoor equipment			1	1	1	1	
54. Appropriate outside surface (sand, grass, hard, etc.)			1	2	1		
58. Sand play area				2	1	1	
60. Water play area				2	1	1	

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

All of the 11 directors/education coordinators agreed that low shelves for accessibility of play materials had a very great effect on the curriculum offered. Ten directors/education coordinators (90.9%) agreed that organization of toys on low shelves had a very great effect on the curriculum offered. Eight directors/ education coordinators (72.7%) agreed that labeling of room items with words had a very great effect on the curriculum offered. Seven directors/education coordinators (63.6%) agreed that toileting facilities adapted to the child's size and a water play area had a very great effect on the curriculum offered. Six directors/ education coordinators (54.5%) agreed that a children's eating area inside the classroom, toileting facilities within the classroom, indoor space for large group activities, labeling of shelves with pictures, appropriate outside surfaces, and a sand play area had a very great effect on the curriculum offered. Five directors/ education coordinators (45.5%) agreed that indoor space for large group and gross motor activities greatly effected the curriculum offered.

Nine directors/education coordinators (81%) indicated that incandescent lighting was not applicable to their center. Eight directors/education coordinators (72.7%) indicated that toileting facilities adapted to the child's disability and an alternative weather-protected play area were not applicable to the center. Seven directors/education coordinators indicated that a children's eating area outside the classroom was not applicable to their center. A summary of the results for facility

design for the indoor and outdoor play area for all centers responding to the survey is presented in Table 51.

Research Question 4

What components of equipment acquisition affect the curriculum offered in preschool centers from the teacher's perspective?

Categorization and Rating of Components of Equipment Acquisition

A list of 48 components of equipment acquisition was included in this questionnaire. They were divided into three parts: Indoor Area, Outdoor Area and toys or equipment that provide the following experience. Questions 23-31, 34-53, 56, 57, 61, 63, and 67 relate to facility design and are not included in this discussion. A rating scale was used to determine the effect each of these components had on the curriculum offered in the center from the perspective of lead teachers of 3- and 4-year-old children in Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited, and private-for-profit accredited preschool centers. The scale ranged from zero to five. A score of zero indicated that the component was not applicable to the respondent's center. A score of one indicated that the component had no effect on the curriculum. A score of two indicated that the component had very little effect on the curriculum. A score of three indicated that the component had little effect on the curriculum. A score of four indicated that the component had a great effect on the curriculum, and a score of five indicated that the component had a very great effect on the curriculum.

Table 51

Summary of Results for Facility Design for the Indoor and Outdoor Play Areas for All Centers (Directors/Education Coordinators' Perspectives)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Play Area							
24. Children's eating area outside classroom	1		1		2	7	
25. Children's eating area inside classroom	1	1		2	6	1	
26. Toileting facilities adapted to child's size				2	7	2	
27. Toileting facilities adapted to child's disability			1	1	1	8	
28. Toileting facilities within the classroom	1			2	6	2	
29. Toileting facilities adjacent to the classroom	1			1	4	5	
30. Storage areas for toys, supplies, etc.		2		5	4		
31. Alternative weather-protected play area	1		1	1		8	
32. Pathways to accommodate wheelchairs, canes, etc.	2		2		4	3	
35. More than one entrance/exit to building			5	2	4		
36. More than one entrance/exit to each classroom			5	2	2	2	
37. Indoor space for large group activities				5	6		

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
38. Indoor space for gross motor activities			1	5	5		
39. Windows low enough for children to view the outdoors		1	1	3	4	2	
40. Florescent lighting			4	2	3	3	
41. Incandescent lighting				1		9	1
42. Isolation area		1	3	1	3	3	
43. Quiet space			3	2	5	1	
44. Water play area (indoors)			1	3	5	2	
45. Sand play area (indoors)			1	3	4	3	
46. Clearly defined leaning centers				1	10		
47. Low shelves for accessibility of play materials					11		
48. Organization of toys on low shelves				1	10		
49. Labeling of room items with words	1			1	8	1	
50. Labeling of shelves with pictures				3	6	1	
51. Less than normal lighting in napping area			2	3	5	1	
Outdoor Play Area							
53. Storage facilities for outdoor equipment			2	4	3	2	
54. Appropriate outside surface (sand, grass, hard)			2	3	6		
58. Sand play area				4	6	1	
60. Water play area				3	7	1	

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

A summary of the results, including the number of responses for each component and from each of the four categories of centers is included in this discussion.

Head Start Nonaccredited Centers

Four teachers from Head Start nonaccredited centers responded to the survey. Indoor Area and Outdoor Area: The teachers unanimously agreed that cots for napping, an age appropriate climbing unit, an age appropriate slide, toys for sand play, age appropriate riding toys, and age appropriate blocks had a very great effect on the curriculum. Three teachers (75%) agreed that child-sized furniture for use by the children, child-sized equipment for use by the children, a full-length unbreakable mirror, age appropriate swings, and toys for the water play area had a very great effect on the curriculum offered. A summary of the results for equipment acquisition for the indoor and outdoor areas in Head Start nonaccredited centers is shown in Table 52.

The teachers unanimously agreed that toys or equipment that provided the experiences of dress-up, scribbling, and smearing had a very great effect on the curriculum offered. Three teachers (75%) agreed that toys or equipment that provided the experiences of listening, looking, turning, fitting together, filling/ dumping, target, sifting/pouring, matching, nurturing, molding/squishing, paper, reading exploration, dictating, writing experimentation, reading readiness, measuring, observing, problem solving, exploring, constructing, creating scenes,

Table 52

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Areas (Teachers--Head Start Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Area							
32. Child-sized furniture for use by children				1	3		
33. Child-sized equipment for use by children				1	3		
54. Full-length unbreakable mirror			1		3		
55. Cots for napping					4		
Outdoor Play Area							
58. Age appropriate climbing unit					4		
59. Age appropriate slide					4		
60. Age appropriate swings					3	1	
62. Toys for sand play					4		
64. Toys for water play area				1	3		
65. Age appropriate riding toys (bicycles, wagons)					4		
66. Age appropriate blocks (waffles, giant Legos)					4		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

sorting, classifying, math readiness, eye-hand coordination, and self-help had a very great effect on the curriculum offered. Two teachers (50%) agreed that toys or equipment that provided the experiences of engineering, easel painting and creative expression greatly effected the curriculum. Table 53 displays a summary /of the results for toys or equipment that provided the listed experiences for children attending the Head Start nonaccredited centers.

Private-for-Profit Nonaccredited Centers

Five teachers from private-for-profit nonaccredited centers responded to the survey. Indoor and Outdoor Area: Four teachers (80%) agreed that cots for napping had a very great effect on the curriculum offered. Three teachers (60%) agreed that child-sized furniture for use by children, and child-sized equipment for use by children had a very great effect on the curriculum. Four teachers (80%) agreed that an age appropriate climbing unit had a great effect on the curriculum. Three teachers (60%) agreed that a full-length unbreakable mirror had a great effect on the curriculum. A summary of the results for equipment acquisition for the indoor and outdoor area for private-for-profit nonaccredited centers is displayed in Table 54.

Four teachers (80%) agreed that toys or equipment that provided the experiences of scribbling, smearing, paper, constructing, engineering, and easel painting had a very great effect on the curriculum. Three teachers (60%) agreed

Table 53

Summary of Results for Toys or Equipment That Provide the Listed Experiences (Teachers--Head Start Nonaccredited Centers)

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
68. Listening (records/tapes and players, etc.)				1	3		
69. Looking (mobiles, pictures, wall hangings, within eye contact of children)					3	1	
70. Talking (puppets, telephones, etc.)				1	2	1	
71. Touching (feely bag, textured items, etc.)			1		2	1	
72. Turning (containers with screw lids, dials, etc.)			1		3		
73. Fitting together (puzzles, pop beads, etc.)				1	3		
74. Filling/dumping (containers with objects, etc.)				1	3		
75. Target (lacing cards, peg and peg board, etc.)				1	3		
76. Sifting/pouring (sand, water, rice, etc.)				1	3		
77. Matching			1		3		
78. Nurturing (dolls and accessories, etc.				1	3		
79. Family living (stove, sink, table, chairs, dolls)					3	1	
80. Dress-up clothes (hats, shoes, clothes, etc.)					4		

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
81. Transporting (large and small vehicles)					3	1	
82. Scribbling (large chalk, crayons, markers)					4		
83. Smearing (paint, paste, glue, fingerpaint)					4		
84. Stroking (items/experiences that support the stroking motion)			1		2	1	
85. Molding/squishing (Playdoh, goop, etc.)			1		3		
86. Paper (construction, drawing, easel, etc.)				1	3		
87. Reading exploration (big books, child-made books, teacher-made books, etc.)				1	3		
88. Dictating (pads, pencils, markers, etc.)			1		3		
89. Writing experimentation (writing materials)			1		3		
90. Reading readiness (story sequencing, etc.)				1	3		
91. Measuring (scale, measuring cups & spoons)			1		3		
92. Observing (magnifying glass, microscope)			1		3		
93. Problem solving (simple experiments, etc.)				1	3		
94. Exploring (sensory experiences, pet care)				1	3		

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
95. Constructing (unit blocks, Legos, etc.)				1	3		
96. Creating scenes (animal/people figures, etc.)				1	3		
97. Engineering (Tinker Toys, Legos, etc.)				2	2		
98. Easel painting				2	2		
99. Creative expression (musical instruments)			1	1	2		
100. Sorting/classifying			1		3		
101. Math readiness (sequence puzzles, patterning)				1	3		
102. Eye-hand coordination (pegs and peg boards, lacing sets, puzzles, tracking mazes)				1	3		
103. Self-help (buttoning, zipping, snapping)				1	3		
104. Stacking/nesting (items that can be stacked or that nest inside one another)			1	1	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 54

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Areas (Teachers--Private-for-Profit Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Area							
32. Child-sized furniture for use by children				2	3		
33. Child-sized equipment for use by children				2	3		
54. Full-length unbreakable mirror			1	3			
55. Cots for napping				1	4		
Outdoor Play Area							
58. Age appropriate climbing unit				4	1		
59. Age appropriate slide			2	2	1		
60. Age appropriate swings			1	1		1	
62. Toys for sand play			1	2	2		
64. Toys for water play area		1	2	1	1		
65. Age appropriate riding toys (bicycles, wagons)				2	1	2	
66. Age appropriate blocks (waffles, giant Legos)			1	1	2	1	

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

that toys or equipment that provided the experiences of talking, matching, nurturing, family living, dress-up, and reading exploration had a very great effect on the curriculum offered. The teachers unanimously agreed that toys or equipment that provided the experiences of molding/squishing had a great effect on the curriculum offered. Four teachers (80%) agreed that toys or equipment that provided the experiences of fitting together, measuring, observing, and problem solving had a great effect on the curriculum offered. Three teachers (60%) agreed that toys or equipment that provided the experiences of looking, filling/dumping, sifting/pouring, and creative expression had a great effect on the curriculum offered.

Four teachers (80%) agreed that toys or equipment that provided the experience of dictating had little effect on the curriculum. Three teachers (50%) agreed that toys or equipment that provided the experiences of touching, self-help, and stacking/nesting had little effect on the curriculum offered. A summary of the results for equipment acquisition for toys or equipment that provide the listed experiences for children attending private-for-profit nonaccredited centers is illustrated in Table 55.

Head Start Accredited Center

Two teachers from a Head Start accredited center responded to the survey. The teachers unanimously agreed that child-sized furniture for use by children,

Table 55

Summary of Results for Toys or Equipment That Provide the Listed Experiences (Teachers--Private-for-Profit Nonaccredited Centers)

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
68. Listening (records/tapes and players, etc.)			1	2	2		
69. Looking (mobiles, pictures, wall hangings, within eye contact of children)			1	3		1	
70. Talking (puppets, telephones, etc.)				2	3		
71. Touching (feely bag, textured items, etc.)			3		2		
72. Turning (containers with screw lids, dials, etc.)			2	2		1	
73. Fitting together (puzzles, pop beads, etc.)				4	1		
74. Filling/dumping (containers with objects, etc.)				3	2		
75. Target (lacing cards, peg and peg board, etc.)			1	2	2		
76. Sifting/pouring (sand, water, rice, etc.)				3	2		
77. Matching			1	1	3		
78. Nurturing (dolls and accessories, etc.			1	1	3		
79. Family living (stove, sink, table, chairs, dolls)				2	3		
80. Dress-up clothes (hats, shoes, clothes, etc.)				2	3		

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
81. Transporting (large and small vehicles)			1	2	2		
82. Scribbling (large chalk, crayons, markers)				1	4		
83. Smearing (paint, paste, glue, fingerpaint)				1	4		
84. Stroking (items/experiences that support the stroking motion)			1	3		1	
85. Molding/squishing (Playdoh, goop, etc.)				5			
86. Paper (construction, drawing, easel, etc.)				1	4		
87. Reading exploration (big books, child-made books, teacher-made books, etc.)			1	1	3		
88. Dictating (pads, pencils, markers, etc.)			4	1			
89. Writing experimentation (writing materials)			3	1	1		
90. Reading readiness (story sequencing, etc.)			1	2	1	1	
91. Measuring (scale, measuring cups & spoons)			1	4			
92. Observing (magnifying glass, microscope)			1	4			
93. Problem solving (simple experiments, etc.)			1	4			
94. Exploring (sensory experiences, pet care)			1	2	2		

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
95. Constructing (unit blocks, Legos, etc.)				1	4		
96. Creating scenes (animal/people figures, etc.)				2	3		
97. Engineering (Tinker Toys, Legos, etc.)				1	4		
98. Easel painting				1	4		
99. Creative expression (musical instruments)				3	2		
100. Sorting/classifying			1	2	2		
101. Math readiness (sequence puzzles, patterning)				4	1		
102. Eye-hand coordination (pegs and peg boards, lacing sets, puzzles, tracking mazes)			2	2	1		
103. Self-help (buttoning, zipping, snapping)			3	2			
104. Stacking/nesting (items that can be stacked or that nest inside one another)			3	2			

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

child-sized equipment for use by children, an age appropriate climbing unit, age appropriate swings, toys for sand play, age appropriate riding toys and age appropriate blocks had a very great effect on the curriculum. Table 56 presents a summary of the results for equipment acquisition for the indoor and outdoor areas in a Head Start accredited center.

The teachers unanimously agreed that toys or equipment that provided the experiences of listening, looking, talking, turning, fitting together, filling/dumping, target, sifting/pouring, matching, nurturing, family living, dress-up, transporting, scribbling, and smearing had a very great effect on the curriculum.

One teacher (50%) indicated that toys or equipment that provided the experiences of touching, stroking, molding/squishing, paper, reading exploration, dictating, writing experimentation, reading readiness, measuring, observing, problem solving, constructing, creating scenes, engineering, easel painting, creative expression, sorting/classifying, math readiness, eye-hand coordination, and self-help had a very great effect on the curriculum.

The teachers unanimously agreed that toys or equipment that provided the experience of exploring had a great effect on the curriculum. One teacher indicated that toys or equipment that provided the following experiences of talking, molding/squishing, paper, reading exploration, dictating, writing experimentation, reading readiness, measuring, observing, problem solving, constructing, engineering, easel painting, creative expression, sorting/classifying, math

Table 56

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Areas (Teachers--Head Start Accredited Center)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Area							
32. Child-sized furniture for use by children					2		
33. Child-sized equipment for use by children					2		
54. Full-length unbreakable mirror			1		1		
55. Cots for napping				1	1		
Outdoor Play Area							
58. Age appropriate climbing unit					2		
59. Age appropriate slide				1	1		
60. Age appropriate swings					2		
62. Toys for sand play					2		
64. Toys for water play area			1		1		
65. Age appropriate riding toys (bicycles, wagons)					2		
66. Age appropriate blocks (waffles, giant Legos)					2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

readiness, eye-hand coordination, self-help, and stacking/nesting had a great effect on the curriculum offered. A summary of the results for toys or equipment that provide the listed experiences for children attending the Head Start accredited center is reflected in Table 57.

Private-for-Profit Accredited Centers

Eight teachers from private-for-profit accredited centers responded to the survey. Indoor and outdoor area: Seven teachers (87.5%) agreed that child-sized equipment for use by children had a very great effect on the curriculum offered. Six teachers (75%) agreed that child-sized furniture for use by children and age appropriate riding toys had a very great effect on the curriculum offered. Five teachers (62.5%) agreed that an age appropriate climbing unit and an age appropriate slide had a very great effect on the curriculum. Four teachers (50%) agreed that age appropriate swings, toys for sand play, and toys for water play had a very great effect on the curriculum offered.

Three teachers (37.5%) agreed that a full-length unbreakable mirror, cots for napping, and age appropriate swings had a great effect on the curriculum offered. A summary of the results for equipment acquisition for the indoor and outdoor areas in private-for-profit accredited centers is reported in Table 58.

Seven teachers (86.5%) agreed that toys or equipment that provided the experience of matching had a very great effect on the curriculum. Six teachers

Table 57

Summary of Results for Toys or Equipment That Provide the Listed Experiences (Teachers--Head Start Accredited Center)

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
68. Listening (records/tapes and players, etc.)					2		
69. Looking (mobiles, pictures, wall hangings, within eye contact of children)					2		
70. Talking (puppets, telephones, etc.)					2		
71. Touching (feely bag, textured items, etc.)				1	1		
72. Turning (containers with screw lids, dials, etc.)					2		
73. Fitting together (puzzles, pop beads, etc.)					2		
74. Filling/dumping (containers with objects, etc.)					2		
75. Target (lacing cards, peg and peg board, etc.)					2		
76. Sifting/pouring (sand, water, rice, etc.)					2		
77. Matching					2		
78. Nurturing (dolls and accessories, etc.					2		
79. Family living (stove, sink, table, chairs, dolls)					2		
80. Dress-up clothes (hats, shoes, clothes, etc.)					2		

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
81. Transporting (large and small vehicles)					2		
82. Scribbling (large chalk, crayons, markers)					2		
83. Smearing (paint, paste, glue, fingerpaint)					2		
84. Stroking (items/experiences that support the stroking motion)			1		1		
85. Molding/squishing (Playdoh, goop, etc.)				1	1		
86. Paper (construction, drawing, easel, etc.)				1	1		
87. Reading exploration (big books, child-made books, teacher-made books, etc.)				1	1		
88. Dictating (pads, pencils, markers, etc.)				1	1		
89. Writing experimentation (writing materials)				1	1		
90. Reading readiness (story sequencing, etc.)				1	1		
91. Measuring (scale, measuring cups & spoons)				1	1		
92. Observing (magnifying glass, microscope)				1	1		
93. Problem solving (simple experiments, etc.)				1	1		
94. Exploring (sensory experiences, pet care)				2			

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
95. Constructing (unit blocks, Legos, etc.)				1	1		
96. Creating scenes (animal/people figures, etc.)			1		1		
97. Engineering (Tinker Toys, Legos, etc.)				1	1		
98. Easel painting				1	1		
99. Creative expression (musical instruments)				1	1		
100. Sorting/classifying				1	1		
101. Math readiness (sequence puzzles, patterning)				1	1		
102. Eye-hand coordination (pegs and peg boards, lacing sets, puzzles, tracking mazes)				1	1		
103. Self-help (buttoning, zipping, snapping)				1	1		
104. Stacking/nesting (items that can be stacked or that nest inside one another)			1	1			

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 58

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Areas (Teachers--Private-for-Profit Accredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Area							
32. Child-sized furniture for use by children				2	6		
33. Child-sized equipment for use by children				1	7		
54. Full-length unbreakable mirror			3	3	2		
55. Cots for napping	1	1	1	3	2		
Outdoor Play Area							
58. Age appropriate climbing unit			2	1	5		
59. Age appropriate slide			2	1	5		
60. Age appropriate swings				3	4	1	
62. Toys for sand play				2	4	2	
64. Toys for water play area				2	4	2	
65. Age appropriate riding toys (bicycles, wagons)				6	2		
66. Age appropriate blocks (waffles, giant Legos)			1	1	6		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

(75%) agreed that toys or equipment that provided the experiences of turning, filling/dumping, target, sifting/pouring, eye-hand coordination, and self-help had a very great effect on the curriculum offered. Five teachers (62.5%) agreed that toys or equipment that provided the experiences of talking, touching, scribbling, smearing, molding/squishing, paper, reading exploration, exploring, constructing, creating scenes, engineering, easel painting, creative expression, math readiness, and stacking/nesting had a very great effect on the curriculum offered.

Four teachers (50%) agreed the toys or equipment that provided experiences of nurturing, family living, dress-up, transporting, stroking, dictating, writing experimentation, reading readiness, measuring, observing, problem solving, and exploring had a very great effect on the curriculum. Three teachers (37.5%) agreed that toys or equipment that provide the experiences of listening and looking had a very great effect on the curriculum offered. Three teachers (37.5%) agreed that toys or equipment that provided the experiences of listening, looking, and touching had a great effect on the curriculum. Table 59 displays a summary of the results for toys or equipment that provide the listed experiences for children attending private-for-profit accredited centers.

Summary

Research question 4 examined the effect each of the 48 equipment acquisition components had on the curriculum offered in preschool centers from the

Table 59

Summary of Results for Toys or Equipment that Provide the Listed Experiences (Teachers--Private-for-Profit Accredited Centers)

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
68. Listening (records/tapes and players, etc.)			2	3	3		
69. Looking (mobiles, pictures, wall hangings, within eye contact of children)			2	3	3		
70. Talking (puppets, telephones, etc.)			2	1	5		
71. Touching (feely bag, textured items, etc.)				3	5		
72. Turning (containers with screw lids, dials, etc.)				2	6		
73. Fitting together (puzzles, pop beads, etc.)			1	2	5		
74. Filling/dumping (containers with objects, etc.)				2	6		
75. Target (lacing cards, peg and peg board, etc.)				2	6		
76. Sifting/pouring (sand, water, rice, etc.)				2	6		
77. Matching				1	7		
78. Nurturing (dolls and accessories, etc.				2	4	2	
79. Family living (stove, sink, table, chairs, dolls)		1	1	2	4		
80. Dress-up clothes (hats, shoes, clothes, etc.)				2	4	2	

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
81. Transporting (large and small vehicles)				2	4	2	
82. Scribbling (large chalk, crayons, markers)			2	1	5		
83. Smearing (paint, paste, glue, fingerpaint)			2	1	5		
84. Stroking (items/experiences that support the stroking motion)				2	4	2	
85. Molding/squishing (Playdoh, goop, etc.)			1	2	5		
86. Paper (construction, drawing, easel, etc.)			1	2	5		
87. Reading exploration (big books, child-made books, teacher-made books, etc.)			1	2	5		
88. Dictating (pads, pencils, markers, etc.)			1	2	4		1
89. Writing experimentation (writing materials)		1	1	2	4		
90. Reading readiness (story sequencing, etc.)			2	2	4		
91. Measuring (scale, measuring cups & spoons)			2	2	4		
92. Observing (magnifying glass, microscope)		1	1	2	4		
93. Problem solving (simple experiments, etc.)			1	2	4		1
94. Exploring (sensory experiences, pet care)			2	1	5		

Toys or Equipment That Provided the Following Experiences	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
95. Constructing (unit blocks, Legos, etc.)			2	1	5		
96. Creating scenes (animal/people figures, etc.)			2	1	5		
97. Engineering (Tinker Toys, Legos, etc.)			2	1	5		
98. Easel painting		2		1	5		
99. Creative expression (musical instruments)			2	1	5		
100. Sorting/classifying			2	1	5		
101. Math readiness (sequence puzzles, patterning)			2	1	5		
102. Eye-hand coordination (pegs and peg boards, lacing sets, puzzles, tracking mazes)				2	6		
103. Self-help (buttoning, zipping, snapping)				2	6		
104. Stacking/nesting (items that can be stacked or that nest inside one another)			1	1	5		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

teacher's perspective. The components were divided into three distinct areas, indoor and outdoor play area and toys or equipment that provide the listed experiences.

A total of 19 teachers responded to the survey. Fifteen teachers (78.9%) agreed that child-sized equipment for use by children and toys or equipment that provided the experiences of matching, scribbling, and smearing had a very great effect on the curriculum. Fourteen teachers (73.5%) agreed that child-sized furniture for use by children had a very great effect on the curriculum. Thirteen teachers (68.4%) agreed that age appropriate riding toys, age appropriate blocks and toys or equipment that provided the experiences of dressing-up, working with paper, and creating scenes had a very great effect on the curriculum. Twelve teachers (63%) agreed that toys for sand play, and toys or equipment that provided the experiences of talking, filling/dumping, target, sifting/pouring, nurturing, family living, reading exploration, easel painting, and creative expression had a very great effect on the curriculum. Eleven teachers (57.8%) agreed that toys or equipment that provided the experiences of turning, fitting together, transporting, constructing, and sorting/classifying had a very great effect on the curriculum. Ten teachers (52.6%) agreed that cots for napping, toys for the water play area, and toys or equipment that provided the experiences of listening, touching, math readiness, and self-help had a great effect on the curriculum. Ten teachers (52.6%) agreed that toys or equipment that provided the experience of constructing

had a great effect on the curriculum. A summary of the results for equipment acquisition for the indoor and outdoor play areas and toys or equipment that provide the listed experiences is displayed in Table 60.

Research Question 5

What components of equipment acquisition affect the curriculum offered in preschool centers from the parent's perspective?

Categorization and Rating of Components of Equipment Acquisition

A list of 12 components of equipment acquisition was included in this questionnaire. They were divided into three parts: Physical Environment, Classroom Area, and Outdoor Play Area. Questions 1-4, 9-12, 15-23, and 28 relate to facility design and were not included in this discussion. A rating scale was used to determine the effect each of these components had on the curriculum offered in the center from the perspective of parents who had children enrolled in the center. The scale ranged from zero to five. A score of zero indicated that the component was not applicable to the respondent's center. A score of one indicated that the component had no effect on the curriculum. A score of two indicated that the component had very little effect on the curriculum. A score of three indicated that the component had little effect on the curriculum. A score of four indicated that the component had a great effect on the curriculum, and a score of five indicated that the component had a very great effect on the curriculum. A

Table 60

Summary of Results for Equipment Acquisition for Indoor and Outdoor Play Areas and Toys or Equipment That Provide the Listed Experiences for All Centers (Teachers' Perspectives)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Area							
32. Child-sized furniture for use by children				5	14		
33. Child-sized equipment for use by children				4	15		
54. Full-length unbreakable mirror		1	5	6	7		
55. Cots for napping	1	1	1	5	10		
Outdoor Play Area							
58. Age appropriate climbing unit			2	9	8		
59. Age appropriate slide			4	8	7		
60. Age appropriate swings			1	5	9	4	
62. Toys for sand play			1	4	12	2	
64. Toys for water play area			3	4	10	2	
65. Age appropriate riding toys (bicycles, wagons)				2	13	4	
66. Age appropriate blocks			2	2	13	2	
Toys or Equipment That Provide the Following Experiences							
68. Listening (records/tapes and players, etc.)			3	6	10		
69. Looking (mobiles, pictures, wall hangings, within eye contact of children)			3	6	8	2	

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
70. Talking (puppets, telephones, etc.)			2	4	12	1	
71. Touching (feely bag, textured items, etc.)			4	4	10	1	
72. Turning (containers with screw lids, dials, etc.)			3	4	11	1	
73. Fitting together (puzzles, pop beads, etc.)			1	7	11		
74. Filling/dumping (containers with objects, etc.)			1	6	12		
75. Target (lacing cards, peg and peg board, etc.)			1	5	12		
76. Sifting/pouring (sand, water, rice, etc.)				6	12		
77. Matching			2	2	15		
78. Nurturing (dolls and accessories, etc.			1	4	12	2	
79. Family living (stove, sink, table, chairs, dolls)		1	1	4	12	1	
80. Dress-up clothes (hats, shoes, clothes, etc.)				4	13	2	
81. Transporting (large and small vehicles)			1	4	11	3	
82. Scribbling (large chalk, crayons, markers)			2	2	15		
83. Smearing (paint, paste, glue, fingerpaint)			2	2	15		
84. Stroking (items/experiences that support the stroking motion)			3	5	7	4	

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
85. Molding/squishing (Playdoh, goop, etc.)			2	8	9		
86. Paper (construction, drawing, easel, etc.)			1	5	13		
87. Reading exploration (big books, child-made books, teacher-made books, etc.)			2	5	12		
88. Dictating (pads, pencils, markers, etc.)			6	4	8		1
89. Writing experimentation (writing materials)		1	5	4	9		
90. Reading readiness (story sequencing, etc.)			3	6	9	1	
91. Measuring (scale, measuring cups & spoons)			4	5	9	1	
92. Observing (magnifying glass, microscope)		1	3	7	8		
93. Problem solving (simple experiments, etc.)			2	8	8		
94. Exploring (sensory experiences, pet care)			3	7	9		
95. Constructing (unit blocks, Legos, etc.)		1	3	10	11		
96. Creating scenes (animal/people figures, etc.)			3	3	13		
97. Engineering (Tinker Toys, Legos, etc.)			2	6	11		
98. Easel painting		2		5	12		

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
99. Creative expression (musical instruments)			3	4	12		
100. Sorting/classifying			3	5	11		
101. Math readiness (sequence puzzles, patterning)			2	7	10		
102. Eye-hand coordination (pegs and peg boards, lacing sets, puzzles, tracking mazes)			2	6	11		
103. Self-help (buttoning, zipping, snapping)			3	6	10		
104. Stacking/nesting (items that can be stacked or that nest inside one another)			6	6	7		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

summary of the results, including the number of responses for each component and from each of the four categories of centers in included in this discussion.

Head Start Nonaccredited Centers

Seven parents from Head Start nonaccredited centers responded to this survey. Physical Environment: Four parents (57%) agreed that a variety of equipment, variety of materials, well-maintained equipment, and well-maintained materials had a very great effect on the curriculum offered in the center in which their child was enrolled. Classroom Area: Three parents (42.8%) agreed that child-sized furniture and child-sized equipment for use by the children had a very great effect on the curriculum offered. Three parents (42.8%) agreed that child-sized furniture and child-sized equipment for use by the children had a great effect on the curriculum offered. Outdoor Play Area: Two parents (28.7%) agreed that age appropriate climbing equipment, an age appropriate slide, age appropriate swings, age appropriate riding toys, a method for transporting infants/toddlers, and a variety of age appropriate equipment had a very great effect on the curriculum offered. Three parents (43.8%) agreed that age appropriate climbing equipment, an age appropriate slide, age appropriate swings, age appropriate riding toys, and a method for transporting infants/toddlers had a great effect on the curriculum offered. Two parents (28.7%) agreed that age appropriate climbing equipment, an age appropriate slide, age appropriate swings, age appropriate riding toys, and a

variety of age appropriate equipment had very little effect on the curriculum offered. A summary of the results for equipment acquisition for the physical environment, classroom area, and outdoor play area for Head Start nonaccredited centers is illustrated in Table 61.

Private-for-Profit Nonaccredited Centers

Eight parents from private-for-profit nonaccredited centers responded to the survey. Physical Environment: Six parents (75%) agreed that a variety of equipment and a variety of materials had a very great effect on the curriculum offered in the center in which their child was enrolled. Five parents (62.5%) agreed that well-maintained equipment and well-maintained materials had a very great effect on the curriculum offered. Classroom Area: Five parents (62.5%) agreed that child-sized furniture and child-sized equipment for use by children had a very great effect on the curriculum offered. Outdoor Play Area: Three parents (37.5%) agreed that age appropriate climbing equipment, an age appropriate slide, and age appropriate swings had a very great effect on the curriculum. Five parents (62.5%) agreed that age appropriate riding toys had a great effect on the curriculum. Four parents (50%) agreed that age appropriate climbing equipment and an age appropriate slide had a great effect on the curriculum offered. Three parents (37.5%) agreed that age appropriate swings had a great effect on the curriculum. Table 62 presents a summary of the results for the physical

Table 61

Summary of Results for Equipment Acquisition for the Physical Environment, Classroom Area, and Outdoor Play Area (Parents--Head Start Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
5. Variety of equipment			1	2	4		
6. Variety of materials			1	2	4		
7. Well-maintained equipment		1	1	1	4		
8. Well-maintained materials			1	2	4		
Classroom Area							
13. Child-sized furniture	1			3	3		
14. Child-sized equipment	1			3	3		
Outdoor Play Area							
24. Age appropriate climbing equipment		2		3	2		
25. Age appropriate slide		2		3	2		
26. Age appropriate swings		2		3	2		
27. Age appropriate riding toys		2		3	2		
29. Method for transporting infants/toddlers		1	1	3	2		
30 Variety of age appropriate equipment		2	1	2	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 62

Summary of Results for Equipment Acquisition for the Physical Environment, Classroom Area, and Outdoor Play Area (Parents--Private-for-Profit Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
5. Variety of equipment			1	1	5		
6. Variety of materials				2	6		
7. Well-maintained equipment				3	5		
8. Well-maintained materials				3	5		
Classroom Area							
13. Child-sized furniture			1	2	5		
14. Child-sized equipment			1	2	5		
Outdoor Play Area							
24. Age appropriate climbing equipment			1	4	3		
25. Age appropriate slide			1	4	3		
26. Age appropriate swings			1	3	3	1	
27. Age appropriate riding toys			1	5	2		
29. Method for transporting infants/toddlers					1	6	
30 Variety of age appropriate equipment	1		1	3	4		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

environment, classroom area, and outdoor play area for equipment acquisition for private-for-profit centers.

Head Start Accredited Center

Two parents from a Head Start accredited center responded to the survey. Physical Environment: The parents unanimously agreed that a variety of equipment, variety of materials, well-maintained equipment, and well-maintained materials had a very great effect on the curriculum offered in the center in which their child was enrolled. Classroom Area: One parent (50%) indicated that child-sized furniture and child-sized equipment for use by the children had a very great effect on the curriculum. One parent (50%) indicated that child-sized furniture and child-sized equipment for use by the children had a great effect on the curriculum offered. Outdoor Play Area: The parents unanimously agreed that age appropriate climbing equipment, an age appropriate slide, age appropriate swings, age appropriate riding toys, a method for transporting infants/toddlers, and a variety of age appropriate equipment had a very great effect on the curriculum offered. A summary of the results for the equipment acquisition from the parent's perspective, for the physical environment, classroom area, and outdoor play area for the Head Start accredited center is presented in Table 63.

Table 63

Summary of Results for Equipment Acquisition for the Physical Environment, Classroom Area, and Outdoor Play Area (Parents--Head Start Accredited Center)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
5. Variety of equipment					2		
6. Variety of materials					2		
7. Well-maintained equipment					2		
8. Well-maintained materials					2		
Classroom Area							
13. Child-sized furniture				1	1		
14. Child-sized equipment				1	1		
Outdoor Play Area							
24. Age appropriate climbing equipment					2		
25. Age appropriate slide					2		
26. Age appropriate swings					2		
27. Age appropriate riding toys					2		
29. Method for transporting infants/toddlers					2		
30 Variety of age appropriate equipment					2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Private-for-Profit Accredited Centers

Eight parents from private-for-profit accredited centers responded to the survey. Physical Environment: Six parents (75%) agreed that a variety of equipment and a variety of materials had a very great effect on the curriculum offered in the center in which their child was enrolled. Four parents (50%) agreed that well-maintained equipment and well-maintained materials had a very great effect on the curriculum. Four parents (50%) agreed that well-maintained equipment and well-maintained materials had a great effect on the curriculum. Classroom Area: Four parents agreed that child-sized furniture and child-sized equipment for use by the children had a very great effect on the curriculum offered. Three parents (37.5%) agreed that child-sized furniture and child-sized equipment for use by the children had a great effect on the curriculum offered. Outdoor Play Area: Five parents (62.5%) agreed that a variety of age appropriate equipment had a great effect on the curriculum. Four parents (50%) agreed that age appropriate climbing equipment had a great effect on the curriculum offered. Three parents (37.5%) agreed that an age appropriate slide and age appropriate swings had a great effect on the curriculum offered. Seven parents (87.5%) indicated that a method for transporting infants/toddlers was not applicable to the center in which their child was enrolled. A summary of the results for equipment acquisition, from the parent's perspective, for the physical environment, classroom area and outdoor play area is reported in Table 64.

Table 64

Summary of Results for Equipment Acquisition for the Physical Environment, Classroom Area, and Outdoor Play Area (Parents--Private-for-Profit Accredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
5. Variety of equipment				2	6		
6. Variety of materials				2	6		
7. Well-maintained equipment				4	4		
8. Well-maintained materials				4	4		
Classroom Area							
13. Child-sized furniture			1	3	4		
14. Child-sized equipment			1	3	4		
Outdoor Play Area							
24. Age appropriate climbing equipment			2	4	2		
25. Age appropriate slide			3	3	2		
26. Age appropriate swings			3	3	2		
27. Age appropriate riding toys	1	1	2	2	2		
29. Method for transporting infants/toddlers					1	7	
30 Variety of age appropriate equipment			1	5	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Summary

Research question 5 examined the effect each of the 12 equipment acquisition components had on the curriculum offered in preschool centers from the parent's perspective. The components were divided into three distinct areas, physical environment, classroom area, and outdoor area. A variation in the effect of each component is evident in the tables presented.

A total of 25 parents responded to this survey. Eighteen parents (72%) agreed that a variety of equipment and a variety of materials had a very great effect on the curriculum offered in the center in which their child was enrolled. Fourteen parents (56%) agreed that well-maintained equipment and well-maintained materials had a very great effect on the curriculum. Twelve parents (48%) agreed that child-sized furniture had a very great effect on the curriculum. Ten parents (40%) agreed that child-sized equipment for use by the children had a very great effect on the curriculum. Eight parents (32%) agreed that age appropriate climbing equipment, an age appropriate slide, age appropriate swings, age appropriate riding toys, and a variety of age appropriate equipment had a very great effect on the curriculum.

Twelve parents (48%) agreed that a variety of age appropriate equipment had a great effect on the curriculum. Eleven parents (44%) agreed that age appropriate climbing equipment had a great effect on the curriculum offered. Ten parents (40%) agreed that well-maintained materials, child-sized furniture, and

child-sized equipment for use by the children had a great effect on the curriculum. Nine parents (36%) agreed that well-maintained equipment, an age appropriate slide, and age appropriate swings had a great effect on the curriculum offered. Fourteen parents (56%) indicated that a method for transporting infants/toddlers was not applicable to the center in which their child was enrolled. Table 65 presents a summary of the results for equipment acquisition, from the parent's perspective, for the physical environment, classroom area, and outdoor play area for private-for-profit accredited centers.

Research Question 6

What components of equipment acquisition affect the curriculum offered in preschool centers from the director's perspective?

Categorization and Rating of Components of Equipment Acquisition

A list of 13 components of equipment acquisition was included in this questionnaire. They were divided into two parts: Indoor Play Area and Outdoor Play Area. Questions 35-51, 53, 54, 58, and 60 were related to facility design and were not included in this discussion. A rating scale was used to determine the effect each of these components had on the curriculum offered in the center from the perspective of the directors/education coordinators in Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited and private-for-profit accredited preschool centers. The scale ranged from zero to five. A score of zero

Table 65

Summary of Results for Equipment Acquisition for the Physical Environment, Classroom Area, and Outdoor Play Area for All Centers (Parents' Perspectives)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Physical Environment							
5. Variety of equipment			1	6	18		
6. Variety of materials			1	6	18		
7. Well-maintained equipment		1	1	9	14		
8. Well-maintained materials			1	10	14		
Classroom Area							
13. Child-sized furniture	1		2	10	12		
14. Child-sized equipment	1	2	2	10	10		
Outdoor Play Area							
24. Age appropriate climbing equipment		2	4	11	8		
25. Age appropriate slide		2	6	9	8		
26. Age appropriate swings		2	6	9	8		
27. Age appropriate riding toys		5	4	8	8		
29. Method for transporting infants/toddlers		1	1	3	6	14	
30 Variety of age appropriate equipment		2	3	12	8		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

indicated that the component was not applicable to the respondent's center. A score of one indicated that the component had no effect on the curriculum. A score of two indicated that the component had very little effect on the curriculum. A score of three indicated that the component had little effect on the curriculum. A score of four indicated that the component had a great effect on the curriculum, and a score of five indicated that the component had a very great effect on the curriculum. A summary of the results, including the number of responses for each component and from each of the four categories of centers, is included in this discussion.

Head Start Nonaccredited Centers

Three education coordinators from Head Start nonaccredited centers responded to this survey. Indoor play area: The education coordinators unanimously agreed that child-sized furniture for use by the children, child-sized equipment for use by the children, and a full-length unbreakable mirror had a very great effect on the curriculum offered in the center. Outdoor play area: The education coordinators unanimously agreed that an age appropriate climbing unit, an age appropriate slide, riding toys, and items for throwing had a very great effect on the curriculum. Two coordinators (66.6%) agreed that age appropriate swings, toys for the sand and water play areas, a suspended bar for children to hang from, a balance beam or other item used for balancing, and blocks had a very

great effect on the curriculum. Table 66 displays a summary of the results for equipment acquisition for the indoor and outdoor play areas.

Private-for-Profit Nonaccredited Centers

Three directors from private-for-profit nonaccredited centers responded to the survey. Indoor Play Area: The three directors agreed that child-sized furniture for use by the children had a very great effect on the curriculum offered in their center. Two directors (66.6%) agreed that child-sized equipment for use by children and a full-length unbreakable mirror had a very great effect on the curriculum offered. Outdoor Play Area: Two directors (66.6%) agreed that toys for the sand and water play areas, riding toys, and blocks had a very great effect on the curriculum offered. Two directors (66.6%) agreed that an age appropriate climbing unit, an age appropriate slide, and items for throwing had a great effect on the curriculum offered. A summary of the results for equipment acquisition for the indoor and outdoor play areas in private-for-profit nonaccredited centers is illustrated in Table 67.

Head Start Accredited Center

One education coordinator from a Head Start accredited center responded to the survey. The coordinator indicated that all items in the indoor and outdoor play areas had a very great effect on the curriculum offered. A summary of the results

Table 66

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Play Areas (Education Coordinators--Head Start Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Play Area							
33. Child-sized furniture for use by children					3		
34. Child-sized equipment for use by children					3		
52. Full length unbreakable mirror					3		
Outdoor Play Area							
55. Age appropriate climbing unit					3		
56. Age appropriate slide					3		
57. Age appropriate swings					2		1
59. Toys for sand play area				1	2		
61. Toys for water play area				1	2		
62. Riding toys					3		
63. Suspended bar for children to hang from			1		2		
64. Balance beam or other item used for balancing			1		2		
65. Items for throwing (balls, ring toss, etc.)					3		
66. Blocks (waffle, giant Legos, etc.)			1		2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 67
Summary of Results for Equipment Acquisition for the Indoor and Outdoor Play Areas (Directors--Private-for-Profit Nonaccredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Play Area							
33. Child-sized furniture for use by children					3		
34. Child-sized equipment for use by children				1	2		
52. Full length unbreakable mirror				1	2		
Outdoor Play Area							
55. Age appropriate climbing unit				2	1		
56. Age appropriate slide				2	1		
57. Age appropriate swings				1	1	1	
59. Toys for sand play area				1	2		
61. Toys for water play area				1	2		
62. Riding toys					2	1	
63. Suspended bar for children to hang from			1		1	1	
64. Balance beam or other item used for balancing			1	1	1		
65. Items for throwing (balls, ring toss, etc.)				2	1		
66. Blocks (waffle, giant Legos, etc.)				1	2		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

for equipment acquisition for the indoor and outdoor play areas is illustrated in Table 68.

Private-for-Profit Accredited Centers

Four directors from private-for-profit accredited centers responded to the survey. Indoor Play Area: Two directors (50%) agreed that child-sized furniture and child-sized equipment for use by the children had a very great effect on the curriculum offered. Two directors (50%) agreed that child-sized furniture and child-sized equipment for use by the children had a great effect on the curriculum. Two directors (50%) agreed that a full-length unbreakable mirror had little effect on the curriculum. Outdoor Play Area: Two directors (50%) agreed that all the equipment in the outdoor play area had a great effect on the curriculum offered. Two directors (50%) agreed that a balance beam or other item used for balancing had little effect on the curriculum. A summary of the results for equipment acquisition for the indoor and outdoor play areas in private-for-profit accredited centers is shown in Table 69.

Summary

Research question 6 examined the effect each of the 13 equipment acquisition components had on the curriculum offered in preschool centers from the

Table 68

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Play Areas (Education Coordinator--Head Start Accredited Center)

Component		Number of Responses in Each Area*						
		1	2	3	4	5	0	NR
Indoor Play Area								
33.	Child-sized furniture for use by children					1		
34.	Child-sized equipment for use by children					1		
52.	Full length unbreakable mirror					1		
Outdoor Play Area								
55.	Age appropriate climbing unit					1		
56.	Age appropriate slide					1		
57.	Age appropriate swings					1		
59.	Toys for sand play area					1		
61.	Toys for water play area					1		
62.	Riding toys					1		
63.	Suspended bar for children to hang from					1		
64.	Balance beam or other item used for balancing					1		
65.	Items for throwing (balls, ring toss, etc.)					1		
66.	Blocks (waffle, giant Legos, etc.)					1		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

Table 69

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Play Areas (Directors--Private-for-Profit Accredited Centers)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Play Area							
33. Child-sized furniture for use by children				2	2		
34. Child-sized equipment for use by children				2	2		
52. Full length unbreakable mirror			2	1	1		
Outdoor Play Area							
55. Age appropriate climbing unit			1	2	1		
56. Age appropriate slide			1	2	1		
57. Age appropriate swings			1	2	1		
59. Toys for sand play area				2	1	1	
61. Toys for water play area				2	1	1	
62. Riding toys				2	1	1	
63. Suspended bar for children to hang from			1	2		1	
64. Balance beam or other item used for balancing			2	2			
65. Items for throwing (balls, ring toss, etc.)			1	2		1	
66. Blocks (waffle, giant Legos, etc.)		1	1	2			

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

directors'/education coordinators' perspective. The components were divided into two distinct areas, indoor and outdoor play areas.

A total of 11 directors/education coordinators responded to the survey. Nine directors/education coordinators (81.8%) agreed that child-sized furniture for use by the children had a very great effect on the curriculum offered. Eight directors/education coordinators (72.7%) agreed that child-sized equipment for use by the children had a very great effect on the curriculum. Seven directors/ education coordinators (63.6%) agreed that a full-length unbreakable mirror, riding toys, items for throwing, and blocks had a very great effect on the curriculum. Six directors/education coordinators (54.5%) agreed that an age appropriate climbing unit, an age appropriate slide, and toys for the sand and water play areas had a very great effect on the curriculum. Table 70 displays the data associated with a summary of the results for equipment acquisition for the indoor and outdoor play areas for all centers.

Chapter Summary

This chapter presented an analysis of the data collected through the use of surveys. Of the 112 surveys mailed to 16 centers in the central Florida counties of Alachua, Brevard, Flagler, Orange, Osceola, Seminole, and Volusia, 56 (50%) of all of the surveys were completed and returned. The respondents represented eight directors, three Head Start education coordinators, 19 lead teachers of 3- and

Table 70

Summary of Results for Equipment Acquisition for the Indoor and Outdoor Play Areas for All Centers (Directors'/Education Coordinators' Perspectives)

Component	Number of Responses in Each Area*						
	1	2	3	4	5	0	NR
Indoor Play Area							
33. Child-sized furniture for use by children				2	9		
34. Child-sized equipment for use by children				3	8		
52. Full length unbreakable mirror			2	2	7		
Outdoor Play Area							
55. Age appropriate climbing unit			1	4	6		
56. Age appropriate slide			1	4	6		
57. Age appropriate swings			1	3	5	1	1
59. Toys for sand play area				4	6	1	
61. Toys for water play area				3	6	1	1
62. Riding toys				2	7	2	
63. Suspended bar for children to hang from			3	2	3	3	
64. Balance beam or other item used for balancing			4	3	4		
65. Items for throwing (balls, ring toss, etc.)				3	7	1	
66. Blocks (waffle, giant Legos, etc.)			2	2	7		

*1 = no effect; 2 = very little effect; 3 = little effect; 4 = great effect; 5 = very great effect; 0 = not applicable; NR = no response.

4-year-old children, and 25 parents of 3- and 4-year-old children. Data on the effects of facility design and equipment acquisition from the perspectives of directors, teachers, and parents were discussed and displayed in accompanying tables. Data on the curriculum being used in the centers and the requirement for specific training and/or specialized equipment for the curriculum was also discussed and displayed.

The personal characteristics of the respondents included the highest level of education completed, the number of years employed as a preschool director/ education coordinator or teacher, and for parents, the number of years they had a child enrolled in preschool. Parents also provided information on the effect 17 items had on their decision to enroll their child in the center.

Respondents represented varied educational levels, and years of experience as a director/education coordinator or teacher in a preschool. Parents had children enrolled in preschool from one to four years. Various curriculums were being used. Two of the curriculums, Montessori and High/Scope required additional training for teachers using the curriculum. Additionally, the Montessori curriculum required that specialized equipment be used. A variation in the effect of each component of facility design and equipment acquisition on the curriculum was evident in all centers, Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited and private-for-profit accredited. This

variation was evident from the perspectives of directors/education coordinators, teachers, and parents.

CHAPTER 5

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to investigate the effects of facility design and equipment acquisition on curriculum offered in preschool centers. Three surveys developed by the researcher were used in this research. The study provided information on the characteristics of the respondents and the degree of effect each component had on the curriculum offered in the preschool center from the perspective of the directors/education coordinators, lead teachers of 3- and 4-year-old children and parents of 3- and 4-year-old children.

This chapter offers a review of the statement of the problem and methodology, which includes population, data collection and instrumentation, and procedures for data analysis. This chapter is organized to include a summary of the findings related to each research question. Conclusions, based on the findings, are presented. Implications and recommendations for practice, drawn from the conclusions, are also discussed. The chapter concludes with recommendations for future research.

Statement of the Problem

The problem of the study was (1) to identify the effects of facility design on the curriculum offered in preschool centers, and (b) to identify the effects of equipment acquisition on the curriculum offered in preschool centers.

Methodology

Population

The population for this study was the 11 directors/education coordinators, 19 lead teachers of 3- and 4-year-old children, and 25 parents of 3- and 4-year-old children who responded to the survey. The respondents were from randomly selected preschool and Head Start centers in Alachua, Brevard, Flagler, Orange, Osceola, Seminole, and Volusia counties. The preschool centers were selected from a list obtained from the Florida Department of Children and Families' Training Coordinators and Head Start coordinators in each of the above named counties. The list of National Association for the Education of Young Children (NAEYC) accredited centers in these counties was obtained from the National Association for the Education of Young Children. NAEYC accredited Head Start and private-for-profit centers and nonaccredited Head Start and private-for-profit centers participated in the study.

Data Collection and Instrumentation

Surveys were the method used to collect data for this research. Data were collected using the survey instruments designed by the researcher specifically for this study. Three surveys, one each for directors (Instrument A), teachers (Instrument B), and parents (Instrument C), were developed. Surveys were delivered in bulk to the director of two Head Start centers in Volusia County and one Head Start center in Flagler County. The balance of the surveys were mailed in bulk to the directors of the centers through the U.S. Postal Service. Directors were telephoned prior to the distribution of the surveys to elicit their willingness to participate in the study and as a follow-up after the surveys were mailed to inform them to expect the surveys within a few days. Of the 112 surveys distributed, 56 were returned for an overall return rate of 50%.

Data Analysis

The data were analyzed by respondent type--director/education coordinator, teacher, and parent--within the four categories of centers, Head Start nonaccredited, private-for-profit nonaccredited, Head Start accredited, private-for-profit accredited and overall by respondent type. Frequencies and percentages for responses were calculated and displayed in tables.

Summary and Findings

The discussion of the findings includes an examination of the characteristics of the respondents and a summary of the findings for each of the six research questions that were used to guide this study.

Characteristics of Respondents

Respondents were from Head Start nonaccredited centers, private-for-profit nonaccredited centers, a Head Start accredited center, and private-for-profit accredited centers. Directors/education coordinators' educational levels ranged from a two-year degree in Child Development/Early Childhood Education to a Master's degree in Early Childhood Education. Montessori training was acquired by one director and one education coordinator. Experience as directors/education coordinators ranged from 4 to 12 years. Two directors participated in the design of the preschool center. One education coordinator designed modifications to an existing building.

The educational levels of the lead teachers of 3- and 4-year-old children ranged from a Child Development Associate (CDA) to a four-year degree in Early Childhood Education. Two teachers had Montessori training. Their experience as teachers with the age group they were working with spanned from 2 to 20 years. The teachers were not involved in the design of the center they were working in but participated in the arrangement of their classroom.

The level of education of the parents who responded to the survey ranged from eighth grade to beyond four years of college. A majority of the parents who responded to the survey indicated that a sense of security, a sense of safety, the educational philosophy, staff qualifications, the interaction of the staff with parents, and the discipline policy very greatly effected their decision to enroll their child in the center.

The cost of care, hours of operation, staff qualifications, the interaction of the staff with the children, the interaction of the staff with parents and staff with staff greatly effected the decision of a majority of the parents to enroll their child in the center.

Research Question 1

What components of facility design affect the curriculum offered in preschool centers from the teacher's perspective?

The majority of the nineteen teachers who responded to the survey agreed that a child's eating area inside the classroom, toileting facilities adapted to the child's size, toileting facilities within the classroom, and storage areas for toys and supplies had a very great effect or a great effect on the curriculum offered. Some other aspects of facility design that had a very great effect or a great effect on the curriculum offered included more than one entrance/exit, indoor space for large group and gross motor activities, windows low enough for the children to view the outdoors, florescent and incandescent lighting, and quiet spaces for the child to be

alone. An indoor water play area, clearly defined learning centers, low shelves or accessibility of play materials, the organization of toys on low shelves, labeling of room items with words, labeling of shelves with pictures, and less than normal light in the napping area had a very great effect or a great effect on the curriculum offered. Additionally, the teachers agreed that outdoor play space separated by age group or schedule, appropriate outdoor surfaces, a sand play and water play area, and a storage area for outdoor equipment had a very great effect or a great effect on the curriculum offered. This represented 23 of the 34 components of facility design listed in the teacher's survey. The teachers were divided in their opinion as to the effects of carpet on the curriculum offered.

Research Question 2

What components of facility design affect the curriculum offered in preschool centers from the parent's perspective?

Parents indicated that a homelike atmosphere, attractiveness, cleanliness, organization (clearly defined areas), accessibility of materials to the children, a large play area in the classroom, individual storage for the child's personal belongings, size of the outdoor play area, outdoor play areas separated for various age groups, and a variety of outside surfaces had the greatest effect on the curriculum offered in the centers in which they had children enrolled.

A significant number of parents indicated that an eating area outside the classroom, storage areas, a large play area within the classroom, windows low

enough for the children to view the outdoors, storage facilities for outdoor equipment, and a variety of outside surfaces had little effect on the curriculum offered.

Parents were asked two additional questions at the end of the survey. What one feature do you like best about this center and what one feature do you like least about this center? The features they liked best about the centers that pertain to facility design included a safe environment for the children, cleanliness, organization, the look of the center, the homelike atmosphere and the geographical location.

The features parents liked least about the centers were a small physical building, limited parking, small playground with little equipment available for the children, and not enough bathrooms.

Research Question 3

What components of facility design affect the curriculum offered in preschool centers from the director's perspective?

A majority of the 11 directors/education coordinators who responded to the survey agreed that 20 (64.5%) of the 31 components listed for facility design had a very great effect or a great effect on the curriculum offered in their center. These components were a children's eating area inside the classroom, toileting facilities adapted to the child's size, toileting facilities within the classroom, a storage area for toys and supplies, more than one entrance/exit to the building, indoor space for

large group and gross motor activities, windows low enough for the children to view the outdoors, quiet spaces for the child to be alone, an indoor water play area, clearly defined learning centers, low shelves for accessibility of play materials, organization of toys on low shelves, labeling of room items with words, labeling of shelves with pictures, less than normal lighting in napping areas, storage facilities for outdoor equipment, appropriate outside surfaces, and outdoor sand and water play areas. More than one entrance/exit to each classroom, and florescent lighting had very little effect on the curriculum.

A "Comments" section was included on the last page of the questionnaire mailed to respondents for this study. In addition to the previously noted responses, comments were made about specific survey items related to facility design by directors. These comments referred to the size of the classrooms and outdoor play spaces, the additional supervision needed and stopping of program routines when toileting facilities are not located within the classroom, and the organizational skill development and class organization that results from clearly defined centers within the classroom. Additionally directors commented that outside storage facilitated accessibility to outdoor equipment, and various surfaces and areas allowed for a variety of activities.

Research Question 4

What components of equipment acquisition affect the curriculum offered in preschool centers from the teacher's perspective?

The majority of the 19 teachers who responded to the survey agreed that all 48 components of equipment acquisition had a very great effect or a great effect on the curriculum offered in the center.

Research Question 5

What components of equipment acquisition affect the curriculum offered in preschool centers from the parent's perspective?

Eleven (91.6%) of the 12 components of equipment acquisition either very greatly effected or greatly effected the curriculum according to a majority of the 25 parents who responded to the survey. The components were a variety of equipment and materials, well-maintained equipment, well-maintained materials, child-sized furniture, child-sized equipment, age appropriate climbing equipment, an age appropriate slide, age appropriate swings, age appropriate riding toys, and a variety of age appropriate equipment.

One parent indicated that the one feature they liked best about the center related to equipment acquisition was the materials available for learning.

Research Question 6

What components of equipment acquisition affect the curriculum offered in preschool centers from the director's perspective?

A majority of the directors/education coordinators reported that all 13 components of equipment acquisition had a very great effect or a great effect on

the curriculum offered in the center. These components were child-sized furniture for use by the children, child-sized equipment for use by the children, and a full-length unbreakable mirror. Outdoor play area components included an age appropriate climbing unit, an age appropriate slide, toys for the sand play area, toys for the water play area, riding toys, a suspended bar for children to hang from, a balance beam or other item used for balancing, items for throwing, and blocks.

Directors made additional comments about specific items related to equipment acquisition that were listed in the survey. Child-sized furniture provided easy access for the children and child-sized equipment was easy for the children to manipulate. A mirror assisted in the building of personal pride. Age appropriate outdoor equipment was safer for the children to use and provided activities for gross motor development.

Conclusions

Based upon the findings of this study, the following conclusions were formulated.

1. It was concluded, from the teachers' perspective, that the components of facility design had varying degrees of effect on the curriculum offered in the specific center. Components such as clearly defined learning centers, indoor space for large group and gross motor activities, low shelves for accessibility of play

materials, toileting facilities adapted to the child's size, appropriate outdoor play surfaces, and a storage area for outdoor equipment had a very great effect on the curriculum offered. Storage areas for toys, and windows low enough for the children to view the outdoors were components that had a great effect on the curriculum offered.

2. It was concluded, from the parents' perspective, that the components of facility design had varying degrees of effect on the curriculum offered in the specific centers. Four components, cleanliness, organization (clearly defined areas), accessibility of materials to the children, and individual storage for the child's personal belongings had a very great effect on the curriculum offered. Those components that had a great effect on the curriculum offered included a homelike atmosphere, attractiveness, size of the play area, and outdoor play areas separated for various age groups.

3. It was concluded that the components of facility design, from the directors'/education coordinators' perspective, had varying degrees of effect on the curriculum offered in the specific centers. Components such as a children's eating area inside the classroom, toileting facilities adapted to the child's size and within the classroom, indoor space for large group and gross motor activities, clearly defined learning centers, low shelves for accessibility of play materials, and appropriate outside surfaces had a very great effect on the curriculum. More than

one entrance/exit to the building and to each classroom, and florescent lighting had very little effect on the curriculum offered.

4. It was concluded that all three populations, teachers, parents, and directors/education coordinators, agreed that two components of facility design, clearly defined learning centers, and accessibility of play materials to the children, had a very great effect on the curriculum offered.

5. It was concluded that Head Start teachers were more aware of the effects of facility design and equipment acquisition on the curriculum offered in preschools than were teachers in private-for-profit preschools. This may be related to the specific training required for the teaching staff as determined by the Head Start Performance Standards.

6. It was concluded that components of equipment acquisition, from the teachers' perspective, such as child-sized furniture, child-sized equipment, age-appropriate riding toys, and toys or equipment that provided the experiences of matching, scribbling, smearing, dressing-up, filling/dumping, nurturing, sifting/pouring, and creative expression had a very great effect on the curriculum offered in the specific center. An age-appropriate climbing unit and slide had a great effect on the curriculum offered.

7. It was concluded that the components of equipment acquisition, from the parents' perspective, and applicable to the center in which they had a child enrolled, had a very great effect on the curriculum offered. These components

were a variety of equipment and materials, and child-sized furniture and equipment. Several other components that had a great effect on the curriculum offered included an age-appropriate climbing unit, slide and swings, and a variety of age-appropriate equipment.

8. It was concluded that all components of equipment acquisition, from the directors'/education coordinators' perspective, had a very great effect on the curriculum offered in the specific center. Child-sized furniture and equipment, riding toys, an age-appropriate climbing unit, slide and swings, and riding toys were among those components.

9. All three populations, teachers, parents, and directors/education coordinators agreed that child-sized furniture and equipment had a very great effect on the curriculum offered. Teachers and directors/educational coordinators agreed that age-appropriate riding toys and age-appropriate blocks had a very great effect on the curriculum offered. Additionally, teachers and parents agreed that an age-appropriate climbing unit and an age-appropriate slide had a great effect on the curriculum offered.

10. It was concluded that Head Start education coordinators, who were surveyed, were more aware of the effects of facility design and equipment acquisition on the curriculum offered in their preschools than were directors, who were surveyed, of the private-for-profit preschools. These findings may be related

to the specific training required for Head Start educator coordinators as determined by the Head Start Performance Standards.

Recommendations for Practice

Based upon the findings and conclusion of this study, the following recommendations are offered by the researcher:

1. Directors/education coordinators and teachers should acquire more detailed information related to the effects of facility design and equipment acquisition on the curriculum offered in preschool centers. This can be accomplished through attendance at workshops and conferences, and the reading of professional journals which feature articles on early childhood education. This information should be applied to the design of the center, purchasing of furniture and equipment, and arrangement of the furniture and equipment in the classroom.

2. Parents should become more familiar with the effects of facility design and equipment acquisition on the curriculum offered in preschool centers in which they enroll a child. Parents should be encouraged to read and review articles and materials on early childhood prior to enrolling their child. They should also be encouraged to visit several centers to compare and contrast the strengths and weaknesses of each. Information can also be conveyed to parents through a parent newsletter, parent education program, and open house visits.

3. Education and training specific to the effects of facility design and equipment acquisition on the curriculum offered should be made available to directors/education coordinators, teachers, and parents. Education and training specifically for directors/education coordinators and teachers may be available at community colleges and universities. Workshops and conferences provide additional educational and training opportunities. Parents may obtain education and training through reading relevant materials, parent education programs, workshops, and conferences.

Recommendations for Future Research

Further research is suggested in the following areas:

1. Research could be conducted to evaluate the differences in the educational level of preschool directors/education coordinators and teachers and the effect their educational level had on their understanding of the impact facility design and equipment acquisition had on the curriculum offered in preschool centers.

2. Research could be conducted related to the differences in the effects of facility design on curriculum offered in preschool centers that are located in buildings originally designed as preschools and preschools located in renovated buildings.

3. Research could be conducted on the feasibility and need for mandatory local standards and regulations for facility design and equipment acquisition for preschool centers.

4. Research could be conducted on the feasibility and need for mandatory state standards and regulations for facility design and equipment acquisition for preschool centers.

5. Research could be conducted on the feasibility and need for mandatory national standards and regulations for facility design and equipment acquisition for preschool centers.

6. Research could be conducted on the impact the enforcement of local, state, or national standards and regulations have on the preschool centers. The study should focus on the frequency of visits to the centers and the establishment of enforcement expectations.

APPENDIXES

APPENDIX A

SURVEY INSTRUMENT A

DIRECTOR SURVEY

For the person completing this survey, are you the ___ director or ___ education coordinator?

1. Is your center ___ Private-for-profit ___ Head Start
2. Is your center licensed? ___ Yes ___ No
3. Is your center NAEYC accredited? ___ Yes ___ No

   When was your center last accredited? _____
4. Location (check all that apply) ___ urban ___ suburban ___ rural
5. Is this a renovated space? ___ Yes ___ No
6. Was this site built for this center? ___ Yes ___ No
7. Are there areas specifically designated for adults? ___ Yes ___ No

   Please specify these areas by checking all that apply.

   ___ teacher work room ___ parents ___ office space ___ toilets
8. What type of flooring is used? (Check all that apply)

   ___ carpet ___ tile ___ wood ___ concrete ___ other
9. What curriculum is being used in your center?

   _____ Hi-Scope _____ Eclectic (blended) _____ Montessori

   _____ Bank Street School _____ Cognitively-Oriented

   _____ Other (Please explain _____)
10. Are there materials and/or equipment specifically designed for the curriculum you are using?

    ___ Yes ___ No

    If yes, please explain. _____

    _____
11. Are you using these specialized materials and/or equipment in your center?

    ___ Yes ___ No

    If no, please explain. _____

    _____
12. Are there special educational/training requirements for staff using this curriculum?

    ___ Yes ___ No

    If yes, please explain. _____

    _____

13. Have you participated in this training? ____ Yes ____ No

If no, please explain. _____

13A. Are you currently teaching in your center? ___ Yes ___ No

___ Full-time ___ Part-time Age Group _____

14. Who decided which curriculum would be used in your center? Check all that apply.

___ Director ___ Board of Directors

___ Education Committee ___ Other (Please explain)

_____

15. Indicate the highest educational level you have attained.

____ High School ____ CDA ____ Some College

____ 2-yr. College ____ 4-yr College ____ Beyond 4-yr college

____ Other (Please explain) _____

16. Is your degree in ___ Child Development? ___ Early Childhood Education?

17. Number of years you have been a director of a preschool. _____.

18. What is your current total enrollment? (Count each child only once) _____

19. Indicate the number of children you have enrolled in child care by the age groups below. If you do not have any children enrolled in a particular age group, enter zero (0). If you do not provide care for an age group enter "N/A".

Under 1 year old _____ 1-year-olds _____ 2-year-olds _____

3-year-olds _____ 4-year-olds _____

20. What is the number of staff, currently employed at your center who are ACTIVELY involved with caring for children? (e.g. teachers, assistant teachers, aides, etc.)

___ Infants ___ Toddler ___ 2 year olds ___ 3 year olds ___ 4 year olds

21. Approximate area of site in square feet? _____

21. Total number of individual rooms? _____

23. Who participated in the design of the center? (Check all that apply)

___ Interior designer ___ Architect ___ Care Providers __ Parents

___ Children ___ Others (specify) _____

Please place a CHECK in the column which best indicates the degree of effect each item has on the curriculum offered in your center. If item is not in your center, use N/A column.

	No effect	Very little effect	Little effect	Greatly effect	Very greatly effect	N/A
INDOOR PLAY AREA						
24. Children's eating area outside classroom						
25. Children's eating area inside classroom						
26. Toileting facilities adapted to child's size						
27. Toileting facilities adapted to child's disability						
28. Toileting facilities within the classroom						
29. Toileting facilities adjacent to the classroom						
30. Storage areas for toys, supplies, etc.						
31. Alternative weather-protected play area						
32. Pathways to accommodate wheelchairs, canes etc.						
33. Child-sized furniture for use by children						
34. Child-sized equipment for use by children						
35. More than one entrance/exit to building						
36. More than one entrance/exit to each classroom						
37. Indoor space for large group activities						
38. Indoor space for gross motor activities						
39. Windows low enough for children to view the outdoors						
40. Florescent lighting						
41. Incandescent lighting						
42. Isolation area						
43. Quiet spaces for child to be alone						
44. Water play area (indoors)						
45. Sand play area (indoors)						
46. Clearly defined learning centers						
47. Low shelves for accessibility of play materials						
48. Organization of toys on low shelves						
49. Labeling of room items with words						
50. Labeling of shelves with pictures						
51. Less than normal lighting in napping areas						
52. Full length unbreakable mirror						
OUTDOOR PLAY AREA						
53. Storage facilities for outdoor equipment						
54. Appropriate outside surface (sand, grass, hard, etc.)						
55. Age appropriate climbing unit						
56. Age appropriate slide						
57. Age appropriate swings						
58. Sand play area						
59. Toys for sand play area						
60. Water play area						
61. Toys for water play area						
62. Riding toys (bicycles, wagons, etc.)						

	No effect	Very little effect	Little effect	Greatly effect	Very greatly effect	N/A
63. Suspended bar for children to hang from						
64. Balance beam or other item used for balancing						
65. Items for throwing (balls, ring toss, etc)						
66. Blocks (waffle, giant legos, etc.)						

Please use the space below for additional comments.

Thank you for responding to the survey and returning it in the enclosed envelope by May 15, 1998.

APPENDIX B

SURVEY INSTRUMENT B

THREE- AND FOUR- YEAR OLD TEACHER SURVEY

1. Is your center ___ private-for-profit ___ Head Start
2. Is your center licensed? ___ Yes ___ No
3. Is your center NAEYC accredited? ___ Yes ___ No

   When was your center last accredited? _____
4. Location ___ urban ___ suburban ___ rural
5. Is this a renovated space? ___ Yes ___ No
6. Was this site built for this center? ___ Yes ___ No
7. Are there areas specifically designed for adults? ___ Yes ___ No

   Please specify these areas by checking all that apply.

   ___ teacher work room ___ parents ___ office space ___ toilets
8. What type of flooring is in your classroom? (Check all that apply)

   ___ carpet ___tile ___ wood ___ concrete ___ other
9. What curriculum are your using?

   ___ Hi-Scope ___Eclectic (blended) ___ Montessori

   ___ Bank Street School ___ Cognitively-Oriented

   ___ Other (please explain) _____
10. Are there materials and/or equipment specifically designed for the curriculum you are using?

    ___ Yes ___ No If yes, please explain _____

    _____
11. Are you using these specialized materials and/or equipment in your classroom?

    ___ Yes ___ No If no, please explain _____

    _____
12. Are there special educational/training requirements for teachers using this curriculum?

    ___ Yes ___ No If yes, please explain_____

    _____
13. Have you participated in this training? ___ Yes ___ No

    If no, please explain. _____

    _____

    If yes, are you using the training information in your classroom? ___ Yes ___ No

14. Who decided which curriculum would be used in your center? Check all that apply.

___ Director ___ Board of Directors

___ Education Committee ___ Other (Please explaing)

15. Indicate the highest level of education you have attained.

___ High School ___ CDA ___ Some College ___ 2-yr. College

___ 4-yr. College ___ Other (Please explain) _____

16. Is your degree in ___ Child Development ___ Early Childhood Education

17. Are you teaching ___ 3 year-olds ___ 4 year-olds

18. Number of years you have been working with this age group. _____

19. Number of children in your class. _____

20. Number of other adults assisting you in the classroom. _____

21. Did you participate in the design of the center? ___ Yes ___ No

22. Did you participate in the arrangement of the classroom? ___ Yes ___ No

Please place a CHECK in the column which best indicates the degree of effect each item has on the curriculum offered in your center. Answers should pertain to your class only. If item does not apply to your class or classroom, use N/A column.

	No effect	Very little effect	Little effect	Greatly effect	Very greatly effect	N/A
INDOOR AREA						
23. Children's eating area outside classroom						
24. Children's eating area inside classroom						
25. Toileting facilities adapted to child's size						
26. Toileting facilities adapted to child's disability						
27. Toileting facilities within the classroom						
28. Toileting facilities adjacent to the classroom						
29. Storage areas for toys, supplies, inc.						
30. Alternative weather-protected play area						
31. Pathways to accommodate wheelchairs, walkers, canes, etc. as needed.						
32. Child-sized furniture for use by children						
33. Child-sized equipment for use by children						
34. More than one entrance/exit to your classroom						
35. Indoor space for large group activities						
36. Indoor space for gross motor activities						
37. Windows low enough for children to view the outdoors						
38. Florescent lighting						
39. Incandescent lighting						
40. Tile flooring						
41. Carpet						
42. Wood floor						

	No Effect	Very Little Effect	Little Effect	Greatly Effect	Very Greatly Effect	N/A
43. Concrete floor						
44. Isolation area						
45. Quiet spaces for child to be alone						
46. Water play area (indoors)						
47. Sand play area (indoors)						
48. Clearly defined learning centers						
49. Low shelved for accessibility of play materials						
50. Organization of toys on low shelves						
51. Labeling of room items with words						
52. Labeling of shelves with pictures						
53. Less than normal light in napping areas						
54. Full-length unbreakable mirror						
55. Cots for napping						
OUTDOOR PLAY AREA						
56. Play space separated by age group or schedule						
57. Appropriate surfaces (grass, hard surface for riding toys, mats or quilts for infants)						
58. Age appropriate climbing unit						
59. Age appropriate slide						
60. Age appropriate swings						
61. Sand play area						
62. Toys for sand play						
63. Water play area						
64. Toys for water play are						
65. Age appropriate riding toys (bicycles, wagons)						
66. Age appropriate blocks (waffle, giant legos)						
67. Storage area for outdoor equipment						
Toys or equipment that provide the following experiences.						
68. Listening (records/tapes and players, etc.)						
69. Looking (mobiles, pictures, wall hangings within eye contact of child)						
70. Talking (puppets, telephones, etc.)						
71. Touching (feely bag, textured items, etc.)						
72. Turning (containers with screw lids, dials, etc.)						
73. Fitting together (puzzles, pop beads, etc.)						
74. Filling/dumping (containers with objects, etc.)						
75. Target (lacing cards, peg and peg board, etc.)						
76. Sifting/pouring (sand, water, rice, etc.)						
77. Matching						
78. Nurturing (doils and accessories, etc.)						
79. Family living (stove, sinke, table, chairs, dolls)						
80. Dress-up clothes (hats, shoes, clothes, etc.)						
81. Transporting (large and small vehicles)						
82. Scribbling (large chalk, crayons, markers)						
83. Smearing (paint, paste, glue, fingerpaint)						

	No Effect	Very Little Effect	Little Effect	Greatly Effect	Very Greatly Effect	N/A
84. Stroking (items/experiences that support the stroking motion)						
85. Molding/squishing (playdoh, goop, etc.)						
86. Paper (construction, drawing, easel, etc.)						
87. Reading exploration (big books, child-made books, teacher-made books, etc.						
88. Dictating (pads, pencils, markers, etc.)						
89. Writing experimentation (writing materials)						
90. Reading readiness (story sequencing, etc.)						
91. Measuring (scale, measuring cups & spoons)						
92. Observing (magnifying glass, microscope)						
93. Problem solving (simple experiments, etc.)						
94. Exploring (sensory experiences, pet care)						
95. Constructing (unit blocks, legos, etc.)						
96. Creating scenes (animal/people figures, etc.)						
97. Engineering (tinker toys, legos, etc.)						
98. Easel painting						
99. Creative expression (musical instruments)						
100. Sorting/classifying						
101. Math readiness (sequence puzzles, patterning						
102. Eye-hand coordination (pegs and peg boards, lacing sets, puzzles, tracking mazes)						
103. Self-help (buttoning, zipping, snapping)						
104. Stacking/nesting (items that can be stacked or that nest inside one another)						

Please use the space below for additional comments.

Thank you for responding to the survey and returning it in the enclosed envelope by May 15, 1998.

APPENDIX C

Survey Instrument C

PARENT SURVEY

Please place a CHECK in the column which best indicates the degree of effect each item has on the curriculum offered in the center in which your child is enrolled. If an item is not applicable, indicate N/A.

	No Effect	Very Little Effect	Little Effect	Greatly Effect	Very Greatly Effect	N/A
Physical Environment						
1. Homelike atmosphere						
2. Attractiveness						
3. Cleanliness						
4. Organization (clearly defined areas)						
5. Variety of equipment						
6. Variety of materials						
7. Well-maintained equipment						
8. Well-maintain materials						
9. Accessibility of materials to children						
10. Eating area outside classroom						
11 Storage areas						
Classroom Area						
12. Large play area						
13. Child-sized furniture						
14. Child-sized equipment						
15. Individual storage for child's personal belongings						
16. Windows low enough for children to view the outdoors						
17. Storage areas for additional materials						
Outdoor Play Area						
18. Storage facilities for outdoor equipment						
19. Size of play area						
20. Play areas separated for various age groups						
21. Sand play area						
22. Water play area						
23. Large open area for physical activities						
24. Age appropriate climbing equipment						
25. Age appropriate slide						
26. Age appropriate swings						
27. Age appropriate riding toys						
28. Variety of outside surfaces (grass, sand, hard)						

	No Effect	Very Little Effect	Little Effect	Greatly Effect	Very Greatly Effect	N/A
29. Method for transporting infants/toddlers						
30. Variety of age appropriate equipment						

Please place a **CHECK** in the column which best indicates the degree of effect each item had on your decision to enroll your child in this center. If an item is not applicable, indicate N/A.

	No Effect	Very Little Effect	Little Effect	Greatly Effect	Very Greatly Effect	N/A
31. Location of center to						
Home						
Work						
School						
32. Hours of operation						
33. Cost of care						
34. Teacher:child ratios						
35. Staff qualifications						
36. Interaction of staff with children						
37. Interaction of staff with parents						
38. Interaction of staff with staff						
39. Developmental appropriateness of program						
40. Educational philosophy						
41. Discipline policy						
42. Curriculum offered						
43. Meals provided by center						
44. Meals meet USDA guidelines						
45. Appropriate feeding practices						
46. Sense of safety						
47. Sense of security						

48. Is this center ___ Private for-profit ___ Head Start

49. Is this center licensed? ___ Yes ___ No ___ Don't Know

50. Is this center NAEYC accredited? ___ Yes ___ No ___ Don't Know

52. How many children do you have enrolled in this center? _____

52. What are their ages?

Under 1 year _____
1 – 2 years old _____
2 – 3 years old _____
3 – 4 years old _____
4 – 5 years old _____

53. How many years have you had children enrolled in preschool? _____

54. Indicate the highest educational level you have attained.

___ High School ___ CDA ___ Some College

___ 2-yr. College ___ 4-yr. College ___ Beyond 4-yr. College

___ Other (Please explain) _____

55. What one feature do you like best about this center? _____

_____

_____

56. What one feature do you like least about this center? _____

_____

_____

Please use the space below for additional comments.

Thank you for responding to the survey and returning it in the enclosed envelope by May 15, 1998.

APPENDIX D

Cover Letter to Center Directors

May 1, 1998

Dear Ms. Webb:

I am completing my doctoral dissertation in Educational Leadership at the University of Central Florida in Orlando, Florida. The topic of this dissertation is the "effects of facility design and equipment acquisition on curriculum offered in preschools." This survey has been mailed to you as a director of a private-for-profit preschool/child care center. Please distribute the surveys as follows.

Director Survey: Please complete this survey. If you are not directly involved with the instructional program, please have the Curriculum Coordinator complete the survey.

Teacher Surveys: Distribute one to the lead teacher in a three-year-old classroom and one to the le3T

APPENDIX E

COVER LETTER TO HEAD START COORDINATORS

May 1, 1998

Dear Dr. Spaulding:

I am completing my doctoral dissertation in Educational Leadership at the University of Central Florida in Orlando, Florida. The topic of this dissertation is the "effects of facility design and equipment acquisition on curriculum offered in preschools." These surveys have been mailed to you as the Coordinator of a Head Start program. Please distribute the surveys as follows:

Director Survey: Please complete this survey. If you are not directly involved with the instructional program, please have the Education Coordinator complete the survey.

Teacher Surveys: Distribute one to the lead teacher in a three-year-old classroom and one to the lead teacher in a four-year-old classroom. If you do not serve three-year-old children, please distribute to two lead teachers in two different classrooms of four-year-olds.

Parent Surveys: Distribute a survey to a parent of two three-year-old children and two four-year-old children from different families (one survey per family). If you do not serve three-year-old children, then distribute surveys to a parent of four four-year-old children from different families (one per family).

No reference to any Head Start program or individual will be made in the assessment analysis. All responses will be kept strictly confidential. The coding number found in the upper right-hand corner of the survey is for statistical purposes. Only group data will be analyzed and reported. If you wish a summary of the results or if you have any questions, please contact me at (904) 446-5217.

Please return the completed survey, marked Director, in the enclosed self-addressed, stamped envelope by May 15, 1998. Please instruct parents and teachers to return the survey in the self-addressed, stamped envelope attached to their survey by May 15, 1998.

Your cooperation and assistance in distributing and completing this survey is appreciated.

Sincerely,

Elaine Camerin
U.C.F. Ed.D. Candidate

George E. Pawlas, Ph.D.
U.C.F. Associate Professor

APPENDIX F

COVER LETTER TO TEACHERS

May 1, 1998

Dear Teacher:

I am completing my doctoral dissertation in Educational Leadership at the University of Central Florida in Orlando, Florida. The topic of this dissertation is the "effects of facility design and equipment acquisition on curriculum offered in preschools." This survey has been mailed to you as a teacher of three- or four-year-old children in a private-for-profit preschool/child care center or a Head Start center.

No reference to any preschool, Head Start center or individual will be made in the assessment analysis. All responses will be kept strictly confidential. The coding number found in the upper right-hand corner of the survey is for statistical purposes. Only group data will be analyzed and reported. If you wish a summary of the results or if you have any questions, I can be contacted at (904) 446-5217.

Please return the completed survey directly to me, in the enclosed self-addressed, stamped envelope by May 15, 1998.

Your cooperation and assistance in completing this survey is appreciated.

Sincerely,

Elaine Camerin
U.C.F. Ed.D. Candidate

George E. Pawlas, Ph.D.
U.C.F. Associate Professor

APPENDIX G

COVER LETTER TO PARENTS

May 1, 1998

Dear Parent:

I am completing my doctoral dissertation in Educational Leadership at the University of Central Florida in Orlando, Florida. The topic of this dissertation is the "effects of facility design and equipment acquisition on curriculum offered in preschools." This survey has been mailed to you as a parent of a three- or four-year-old child enrolled in this center.

No reference to any preschool or individual will be made in the assessment analysis. All responses will be kept strictly confidential. The coding number found in the upper right-hand corner of the survey is for statistical purposes. Only group data will be analyzed and reported. If you wish a summary of the results or if you have any questions, please contact me at (904) 446-5217.

Please return the completed survey in the enclosed self-addressed, stamped envelope by May 15, 1998.

Your cooperation and assistance in completing this survey is appreciated.

Sincerely,

Elaine Camerin
U.C.F. Ed.D. Candidate

George E. Pawlas, Ph.D.
U.C.F. Associate Professor

APPENDIX H

FOLLOW-UP LETTER TO CENTER DIRECTORS

June 29, 1998

Dear Ms. Rice:

Several weeks ago you received a group of surveys as part of my research as a graduate student at the University of Central Florida. If you have already completed and returned the director's survey to me, thank you. If you have not completed and returned the survey, I am hopeful that you will take a few minutes to complete this copy of the survey and return it to me in the enclosed self-addressed, stamped return envelope by July 10, 1998, and to distribute the additional surveys as marked. Please encourage the teachers and parents to take a few minutes to complete and return their survey to me by July 10, 1998, if they haven't already done so.

Your participation in this project is critical to its success. If you have any questions or concerns about the survey, please call me at (904) 446-5217. Your cooperation and assistance is appreciated.

Sincerely,

Elaine Camerin
U.C.F. Ed.D. Candidate

APPENDIX I

FOLLOW-UP LETTER TO TEACHERS

June 29, 1998

Dear Teacher:

Several weeks ago you received a survey as part of my research as a graduate student at the University of Central Florida. If you have already completed and returned the survey to me, thank you. If you have not completed and returned the survey, I am hopeful that you will take a few minutes to complete this copy of the survey and return it to me in the enclosed self-addressed, stamped return envelope by July 10, 1998.

Your participation in this project is critical to its success. If you have any questions or concerns about the survey, please call me at (904) 446-5217. Your cooperation and assistance is appreciated.

Sincerely,

Elaine Camerin
U.C.F. Ed.D. Candidate

APPENDIX J

FOLLOW-UP LETTER TO PARENTS

June 29, 1998

Dear Parent:

Several weeks ago you received a survey as part of my research as a graduate student at the University of Central Florida. If you have already completed and returned the survey to me, thank you. If you have not completed and returned the survey, I am hopeful that you will take a few minutes to complete this copy of the survey and return it to me in the enclosed self-addressed, stamped return envelope by July 10, 1998.

Your participation in this project is critical to its success. If you have any questions or concerns about the survey, please call me at (904) 446-5217. Your cooperation and assistance is appreciated.

Sincerely,

Elaine Camerin
U.C.F. Ed.D. Candidate

APPENDIX K

ADDITIONAL COMMENTS BY RESPONDENTS

Director Comments

1. Our school accommodates both Montessori and High Scope. It works very well with our children.

2. We do not have areas for a disabled child, but if one were to enroll be assured they would become available. Disabled visitors have come into our classroom with no problem. Our only one would be the bathroom area.

3. As a Montessori School many of these "play" activities are not required. The activities on the shelves are work not toys--"play" with these activities is a child's work.

4. As per our phone conversation, I want to follow up with some comments. I felt the items listed had much more effect on environment and physical plant than on curriculum. According to Webster, curriculum is "a course of study in a school" and we always tell our teachers they may control and create the curriculum in their rooms. We feel they give us more if they feel they control some aspect of the classroom, however, they do not control (can make suggestions about) the large purchases--or the way the building stands.

The following comments are in regard to specific survey items.

Item #25--Eating within classroom requires more tables, and carpeting to be replaced with tile for cleanup.

Item #28--Not having toilet within class requires supervision of children and limitless ins and outs in class stopping program routines.

Item #29--Adjacent acceptable but still require supervision.

Item #33--Child size needed to provide easy access.

Item #3--Equipment needs to be easy for children to manipulate.

Item #3--Rooms need to be big enough for gross motor development.

Item #39--Center windows are too high. Children can't see out. Children need to be able to observe surroundings to facilitate parent departures, watch weather changes, etc.

Item #42--Isolation area for sick children to relax without classroom distractions is essential.

Item #43--A quiet area to think and/or unwind is essential.

Item #44/45--Water and sand play indoor helps to relax children.

Item #46--Clearly defined centers assist in class organization and organizational skill development.

Item #47 & 48--Materials should be accessible to children for easy accessibility and clean-up.

Item #49 & 50--Labeling facilitates clean-up, room organization and promotes for a good sight vocabulary.

Item #52--Mirror assist in building of personal pride.

Item #53--Outside storage facilitates accessibility to outdoor equipment.

Item #54--Varied surfaces allow for varied activities bikes, rolling on grass, sand play, planting.

Item #55-57--Provide for child's safety.

Item #53-61--Needed to provide varied outdoor experiences.

Item #62--Riding toys--gross motor.

Item #65--Gross motor development.

Parent Comments

Question 55 of Parent Survey--What one feature do you like best about this center?

1. Training of staff and interaction with the children. Materials available for learning. Ability to foster desire to learn.

2. It allows the child an opportunity to progress at his own pace. My children have greatly benefitted from this program.

3. Safe environment for kids.

4. Teachers care about students.

5. Clean, organized and in the neighborhood we live in. We know a lot of the other parents. We've also had great teachers.

6. Age appropriate curriculum.

7. I like the look of the center. It is bright and fun! Also the children are happy and the director is wonderful/excellent staff!!

8. The philosophy about child-centered care and child safety!

9. The attention and love my son receives from the teachers.

10. The teacher is very good with my son and the strict school schedule.

11. Loving atmosphere.

12. Knowing that my son has matured a lot better being in this program. His ability to get along with others his own age. The closeness between teacher and student.

13. Teaches child to be independent more responsible.

14. The educational program.

15. I would have to say the open door policy at the center. I was welcome at any time to come in and help out or spend extra time with my children.

16. It feels like home.

17. Staff's willingness and openness to talk to parents, referencing their children.

Question 56 of Parent Survey--What one feature do you like least about this center?

1. Physical building small and crowded. Not as much space as I would like. Not as late hours as needed. Limited outdoor activities.

2. It does not have a lot of parking area around it.

3. Teachers take field trips outside of building on foot without notifying parents. I know the children are safe but I don't like the idea that they are off school property without my knowledge. A permission slip at the beginning of the school year could help.

4. Having to fund raise--it's not mandatory but they do give sheets/catalogs to the parents for a once-a-week sale. I think preschool is too early for that.

5. It needs better parking. It gets crowded at pick-up time.

6. The assistant teachers do not show enough compassion to the children.

7. I wish the preschool classes were able to start teaching more so the children would be ready for school more so than they are. I say this because I have an 8-year-old that when in preschool they wanted him to go at his own pace and now he is a grade level behind and the elementary school is too full to give him the one on one he needs to catch up. Teaching them to want more knowledge should come at an earlier age than it does.

8. Playground too small not enough equipment for all children.

9. Need more attention focus on personal discipline of children.

10. The only problem with our center is, there is not enough space. The portable does not have enough storage space.

11. Not enough bathrooms.

12. I don't have one favorite feature. I like everything about this center.

13. The geographical location.

Additional comments

1. We've had our daughter with an at-home sitter and then we had to put her in A Child's Place while we were waiting for her spot at her current day care. The differences were enormous. Even though we pay more here--the quality is <u>much</u> higher. We know most of the parents. There is very low teacher turnover and most of her classmates will probably be in her kindergarten class next year. It's much more like a family. The other day care wasn't well maintained. The teachers weren't as educated and there was too broad

of a spectrum with the children. Also we like it that our current school requires their teachers to be at least AA degreed but most are BS.

2. I wish that they paid cay care providers more money. It's hard to get good quality people to stay and work. I feel that our money needs to be put in our PreSchool programs. They do this in New Zealand and the results are wonderful. We spend too much money as they become adults--we need to start at the beginning of their learning year.

3. My greatest concern was to find a place that was not simply in existence to make money. I wanted somewhere that obviously cared about children and child welfare, because we all know that centers based solely around money are usually poorly managed, poorly maintained and a real disappointment. My center provides loving care with an appropriate curriculum. My daughter has thrived there and I am extremely pleased.

4. This was the best thing that ever could have happened for my child.

5. I wish nap time was earlier in the day. We really like the center, teachers and staff. Our child has learned a lot and looks forward to going to "school." The end of the year will be sad for me. A lot of the children will be going to kindergarten.

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