2005

Early childhood education in Sudan today

Azza Moawia Habib

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Early childhood education in Sudan, today

by

Azza Moawia Habib

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Human Development and Family Studies
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Program of Study Committee:
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2005

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Major Professor

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For the Major Program
Dedicated to my beloved son,
Ahmed Abdel-Magied

and

with loving memory
to my father,
Moawia Habib
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INTRODUCTION

The quality of programs for young children has been studied extensively. Shared concerns for the wellbeing and development of young children, since the initial expansion of programs for children in the early 1900s, has led to a recognition that children of given ages have similar needs in terms of program quality regardless of program administration. A commonly held perception is that early childhood education in the United States has a history of dual development of one type of full-day program (e.g., child care) to provide care for children of working mothers and another type of half-day program to provide education for children of non-employed mothers (e.g., preschool programs or nurseries). Two classifications are made: care in the first type of program and education in the second.

Recently, however, the term “educare” (Caldwell, 1991) or “early care and education” has been used to indicate that children, regardless of type of program they attend, need education and care (Roseman, 1999). Education and care are not two separate functions, but are elements necessary in any quality early childhood program whether it is a child care, preschool, or kindergarten. Smith (1996) suggested that “quality care is educational and quality education is caring” (p. 331). Therefore, quality of programs will become a central issue and program type of lesser importance. But, what is quality? Doherty-Derkowski (1995) suggested that the term “high quality” requires more than meeting minimal standards for health and safety. A high-quality program could be considered in terms of its effect on the child's health and safety, as well as the child's physical, social, emotional, and cognitive development. Children need stimulating interactions with adults to enhance social, cognitive, and language development in early childhood (e.g., Bronfenbrenner & Morris, 1998). In addition, quality could be defined in
terms of the program's involvement with and support of the family in its child-rearing role. Therefore, a high-quality program is one that "supports and assists the child's physical, emotional, social, language, and intellectual development; and supports and complements the family in its child-rearing role" (Doherty-Derkowski, 1995, p. 4).

Researchers have documented that high-quality programs have long-term positive effects on children's development. For example, children who attended quality early childhood programs were rated as having fewer behavior problems in elementary school than peers who had been enrolled in low-quality early childhood programs (e.g., Howes, 1987, 1988; Vandell & Corasaniti, 1990; Vandell, Henderson & Wilson, 1988). Researchers also have documented that children enrolled in low-quality early childhood programs demonstrate poorer peer social skills than children who attend high-quality programs (e.g., Vandell & Corasaniti, 1990; Vandell et al., 1988). In addition, children who attended high-quality programs make more general academic progress in elementary school than do children who attended low-quality programs (e.g., Howes, 1988; NICHD & Duncan, 2003; Peisner-Feinberg et al., 2001). Furthermore, high-quality programs that provide environments rich in spoken and written language experiences promote children's literacy and language development (e.g., McCartney, 1984; NICHD Early Child Care Research Network, 2000). Researchers also have documented that quality child care can enhance the development of at-risk children and children from impoverished families (e.g., Campbell, Ramey, Pungello, Miller-Johnson, & Sparling, 2002).
LITERATURE REVIEW

Most studies of quality programs for children conducted in the United States have employed a global perspective; that is, the impacts of a number of different program characteristics have been investigated simultaneously. The definition provided earlier implies that program quality is multidimensional; therefore, one could argue that studying quality based on multiple areas of program characteristics is more useful than singling out one indicator or characteristic of the program.

Researchers in the United States have identified multiple elements necessary for high quality programs for young children. These elements include: adult-child ratio (e.g., NICHD, 1996; Scarr, Eisenberg, & Deat-Deckard, 1994), group size (e.g., Howes, 1983; Howes, Phillips, & Whitebook, 1992), educational background and training of teachers (e.g., Berk, 1985; Whitebook, Howes, & Phillips, 1989), staff consistency (e.g., Howes & Rubenstein, 1985; Whitebook et al., 1989), physical environment (e.g., Clarke-Stewart, 1987; NICHD, 1996), and parent involvement (e.g., Hogan, 1991; Powell, 1997).

**Adult-Child Ratio**

Researchers have documented that appropriate adult-child ratio is an essential element in high-quality programs. Adults mediate and enhance children's social and physical interactions and, therefore, adults need to engage with limited numbers of children to guarantee their availability for stimulating and responsive interactions with them. The National Institute for Child Health and Human Development (NICHD) Early Child Care Research Network investigated characteristics of high-quality programs for infants and toddlers in nine states across ten research sites. Extensive observations revealed that low
adult-child ratio was associated with sensitive, warm, and responsive behaviors from adults toward children (NICHD, 1996). Low adult-child ratios were found to enable adults to give individual attention to each child, whereas high adult-child ratios led teachers to being unable to offer individual attention to children. These results replicate earlier findings (e.g., Burchinal, Roberts, Nabors, & Bryant, 1996; Ruopp, Travers, Glantz, & Goelen, 1979; Scarr et al., 1994). In infant-toddler centers, low adult-child ratios have been associated with adult responsivity, developmentally appropriate activities, and children's social competence.

Ruopp et al. (1979) gathered information on 38 infant and toddler child care centers, and concluded that infants and toddlers in settings with low adult-child ratios receive high-quality caregiving from teachers in terms of developmentally appropriate activities and teacher responsivity.

Also, Howes (1983) found, in a study of 40 toddlers and their caregivers, that adults engaged in more facilitative social stimulation, expressed more positive affect, and were more responsive and less restrictive in classrooms with low adult-child ratios. In terms of social interaction, Howes (1983) reported that low adult-child ratio predicted social competence and more complex play, whereas children in high adult-child ratio classrooms engaged in unproductive activities and low rates of social interaction. Field (1980) observed 80 three- and four-year-old children in four child care classrooms that varied on two dimensions: adult-child ratio and physical environment. Observations of the four child care centers lasted one school year. Each child was observed 18 times with no less than 20 minutes per observation period. Results documented higher verbal interaction and play
among children in low adult-child ratio classrooms compared to children in high adult-child ratio classrooms.

In addition, Scarr et al. (1994) assessed quality of care in 363 classrooms with infants, toddlers, and preschool children in 120 child care centers. They used the Infant-Toddler Environment Rating Scale (ITERS; Harms, Cryer, & Clifford, 1990), the Early Childhood Environment Rating Scale (ECERS; Harms & Clifford, 1980), and the Assessment Profile for Early Childhood Programs (Abbott-Shim & Sibley, 1987). Scarr et al. (1994) concluded that adult-child ratio, not group size, was the important variable in predicting adults' responsive behavior toward children.

In contrast, Hegland and Oesterreich (2004) examined the relations among child ratio, group size, and teachers' responsive behaviors in family child care homes and in infant-toddler center-based classrooms. Using the Program Assessment Rating Scale (PARS; Mangione, 2004), Hegland and Oesterreich (2004) reported that group size was statistically significantly and negatively related to program quality. Caregivers working in larger groups of children, regardless of the staff-child ratio, were less sensitive, more negative in tone, less engaged, and less responsive than caregivers in smaller groups. Furthermore, they provided significantly less cognitive and language stimulation. In contrast, results of the study failed to document a correlation between adult-child ratio and program quality. Hegland and Oesterreich (2004) argue that these results should be considered cautiously and explained in terms of the limited range of adult-child ratios due to the regulatory context. In Iowa, adult-child ratios are governed by registration and licensing regulations. Required ratios vary by age group; for example, adult-child ratio of 1:4 is required for infants and a ratio of 1:6 is
required for toddlers. Therefore, the restricted range of adult-child ratio makes statistical
detection difficult. In contrast, group size, which is unregulated in Iowa, might relate more to
quality because it is directly under caregiver or center director control.

On the other hand, Burchinal, Roberts, Riggins, Zeisel, Neebe, and Bryant (2000)
studied 89 African American children longitudinally from 6 to 36 months of age. Data were
collected through observations of infant classrooms. Burchinal et al. (2000) employed the
Bayley Scales of Infant Development (Bayley, 1969, 1993), the Sequential Inventory of
Communication Development (Hedrik, Prather, & Tobin, 1984), and the Communication and
Symbolic Behavior Scale (Wetherby & Prizant, 1993) to measure cognitive development,
language development, and communication skills, respectively. Results provided evidence
that higher quality child care was related to higher measures of cognitive development at age
three. Results also documented that classrooms that met professional recommendations
regarding adult-child ratios tended to have children with better language skills (Burchinal et
al., 2000). These recommended ratios were 1:3 or less for infant classrooms, 1:4 or less for
mixed-age and toddler classrooms, 1:5 or less for 2-year-old classrooms, and 1:6 or less for
3-year-old classrooms.

In addition, studies involving older age groups (i.e., preschool age children) show
interesting results. For example, the National Child Care Study (Ruopp et al., 1979) did not
find strong or consistent relations between low teacher-child ratios in preschool child care
classrooms and positive developmental outcomes. Similarly, Dunn (1993) did not emphasize
the importance of low adult-child ratio as an indicator of positive child development
outcomes. Using the ECERS (Harms & Clifford, 1980) to assess the environment of 30 child
care classrooms, Dunn (1993) concluded that adult-child ratio in preschool child care classrooms was not as important in predicting children’s development as were the characteristics of the caregiver.

Some researchers have associated adult-child ratio with quality infant-mother attachment. For example, in an attempt to study infant-mother attachment and program quality, Sagi, Koren-Karie, Gini, Ziv, and Joels (2002) conducted the Haifa study of Early Child Care in Israel. The study sample consisted of 758 infants representing the full socio-economic status spectrum in Israel. The Strange Situation was used for this study and for the NICHD (1997) study. Results showed that in Israeli child care centers, the percentage of securely attached infants was significantly lower than in their counterpart centers in the NICHD (1997) study. The Haifa-NICHD merged data, in addition, documented a significant result showing that higher teacher-child ratios were associated with less infant attachment security (Love et al., 2003).

**Group Size**

Roupp et al. (1979) reported that the benefits of smaller group size were observed even when adult-child ratio was held constant. For example, adults’ behaviors were reported to be more positive in situations of one adult with eight children than in situations of three adults for twenty-four children, even though adult-child ratio was 1:8 in both situations. Group or classroom size is important because of its effect on adults’ behavior towards children in the classroom. Researchers have shown that adults in classrooms with large groups of children spend a higher percentage of their time simply controlling the children, and a smaller percentage of their time in social stimulation or in program activities (e.g.,
Field, 1980; Roupp et al., 1979). For example, Roupp et al. (1979) found that in groups of 12 or fewer three- to five-year-old children, adults were involved with children more actively than were adults with groups of 24 or more children. In addition, Howes (1983) found that larger groups were associated with less social stimulation and responsiveness in both center and family child care settings. Howes and Rubenstein (1985) further documented that children in small groups exchanged more verbal interaction than did children in large groups. In line with these results, the NICHD study team (1996) documented that the smaller the group size, the higher the probability of sensitive, positive care from adults. Furthermore, Howes, Phillips, and Whitebook (1992) assessed the quality of center-based child care on relationships with adults and peers for 414 children ranging in age from 14 months to 54 months. Again, the ECERS (Harms & Clifford, 1980) was used to assess process quality in preschool classrooms and the ITERS (Harms, Cryer & Clifford, 1990) was used for infant and toddler classrooms. Results documented that classrooms that were in compliance with the Federal Interagency Day Care Requirements (FIDCR) for adult-child ratio and group size were more likely to be rated as high quality in caregiving and classroom activities.

Clarke-Stewart, Gruber, and Fitzgerald (1994) observed 150 two- and three-year-old children in family and child care settings. Children were observed according to five categories: children at home with mother with or without siblings, children with an in-home caregiver, children in child care homes, children in centers or preschool part-time, and children in centers full-time. Results documented that small group size was the strongest predictor of home-based caregivers' positive behavior. Moreover, group size seemed to compromise sensitive, warm, and responsive caregiving in both centers and home-based
settings. However, Clarke-Stewart and Gruber (1984) had previously reported positive effects for group size; they reported that children in large groups were more knowledgeable about the stranger's social perspective and less likely to behave negatively with unfamiliar peers.

More recently, Clarke-Stewart, Vandell, Burchinal, O'Brian, and McCartney (2002) used data from the NICHD dataset to assess whether regulable features of child care homes, such as teacher education and number of children, affect children’s development. Children in the study were 242 at 15 months, 248 at 24 months, and 201 at 36 months, and results were in line with the researchers’ previous findings. Teachers in child care homes that were in compliance with recommended group size limits showed more positive caregiving. Additional findings of the study documented that children with more educated and well-trained teachers performed better on tests of cognitive and language development than did children with less educated teachers (Clarke-Stewart et al., 2002). Inconsistent with this finding, Burchinal, Howes, and Kontos (2002) found that quality of care is more a function of teacher education and training than a function of group size or adult-child ratios. However, group sizes for this sample were substantially smaller than is typically observed in child care centers (Burchinal et al., 2002). Burchinal et al. (2002) concluded that when making decisions about child care, parents should rely more heavily on teacher characteristics such as education and training than on adult-child ratios when selecting among programs with small to moderate group sizes.

Educational Background and Training of Teachers

The National Association for the Education of Young Children (NAEYC), an organization that promotes quality early childhood education, states in their position
statement on developmentally appropriate practices that, “A major determinant of program
quality is the extent to which knowledge of child development is applied in program
practices” (Bredekamp, 1987, p. 3). The NAEYC shares this position with the Association
for Childhood Education International, the National Association of State Boards of
Education, and the National Association of Early Childhood Specialists in State Departments
of Education also have mandated knowledge of child development consistently as a requisite
for teaching and providing child care (Mandelson, 1994). Knowledge of child development
provides teachers and caregivers with theoretical and scientific background regarding what
children can do at given age levels and provides an understanding of developmental
milestones. Teachers so trained should be in a better position to plan age-appropriate
activities (Bredekamp & Rosegrant, 1992).

Whitebook et al. (1989) conducted classroom observations, child assessments, and
interviews with center directors and teaching staff in 227 child care centers in five
metropolitan areas: Atlanta, Boston, Phoenix, Detroit, and Seattle. Results revealed that
college-level training was associated with stimulating and effective teaching. Whitebook et
al. (1989) also documented that teachers who have postsecondary school training in child
development or early childhood education show higher rates of responsiveness,
encouragement of children’s efforts, and social stimulation than do teachers with a high
school diploma or less.

Researchers also have shown that teachers’ educational levels correlate with
providing developmentally appropriate activities for children (e.g., Howes, 1983; Roupp et
al., 1979; Whitebook et al., 1989). In line with these findings, Berk (1985) found that
caregivers with at least some education in child development or related fields provided children with guidance, as well as encouragement and stimulation of their language skills, more often than did caregivers with less education. Furthermore, teachers with more college education or with college degrees provided children with even more guidance, encouragement, and stimulation. Howes et al. (1992) assessed the quality of relationships in child care centers with adults and peers for 414 children ranging in age from 14 to 54 months. Results reflected that children who experienced good caregiving tended to be securely attached with their teachers, whereas children exposed to less than good caregiving tended to be ambivalent toward their teachers. Also, Howes et al. (1992) reported that children who enjoyed secure relationships with their teachers also were more competent with their peers than were children with insecure relationships. Therefore, Howes et al. suggested, based on the results of this study as well as previous research findings, that only college-level training of teachers was associated with effective teaching. Howes et al. (1992) further argued that even with favorable adult-child ratios and group sizes, untrained teachers would find it difficult to provide developmentally appropriate activities.

On the other hand, the NICHD Early Child Care Research Network (1996) did not document significant relations between teachers' educational background or training and quality of caregiving for infants and toddlers, whereas teachers' educational background and training were significantly important with older children (Whitebook et al., 1989). One possible explanation for these results may be that teachers of older children, including preschoolers and kindergartners, provide greater variety of activities and experiences than do teachers for infants and toddlers. However, if the term "educare" is to be adopted fully in the
field, teachers of infants and toddlers, and older children in child care for that matter, need to provide children with more than just a healthy and safe environment.

Nonetheless, in a more recent study (NICHD & Duncan, 2003), observational assessments were conducted at 6, 15, 24, and 36 months of age for children who were in child care for 10 or more hours per week. The NICHD’s 1991 dataset was used for the study. The main objective of the study was to compare three statistical methods that adjust for family selection bias to examine whether child care type and quality of program related to later cognitive and academic skills. Caregiver-child interaction and stimulation experienced by children were used as indices of quality for the study, and the Observational Record of the Caregiving Environment (ORCE; NICHD & Duncan, 2003) was used to rate the quality of caregiving. The researchers were unable to establish empirically which model best adjusted for selection bias. However, NICHD and Duncan (2003) used the Bayley Scales of Mental Development (Bayley, 1969, 1993) to measure children’s cognitive development. Results suggested that child care quality predicted cognitive outcomes for children at age 54 months. In addition, teachers’ education showed relatively consistent associations with children’s cognitive development at 54 months. These results further suggested that children with early cognitive deficits profit most from high-quality care (NICHD & Duncan, 2003).

Peisner-Feinberg et al. (2001) addressed the issue of long-term effects of child care following school entry. They examined the relation of child care quality in the preschool years to children’s cognitive and social skills through second grade. Peisner-Feinberg et al. (2001) followed 733 children longitudinally from ages 4 to 8 years. Quality of the classroom environment was measured using the ECERS (Harms & Clifford, 1980). Results
documented that child care quality has a modest long-term effect on children’s cognitive and socio-emotional development at least through kindergarten, and in some cases through second grade. In addition, the study provides evidence that teacher-child relationships characterized by teacher sensitivity and teacher responsivity were related to cognitive skills and even more strongly to social skills. Results also suggested that at-risk children are especially likely to benefit from high-quality care (Peisner-Feinberg et al., 2001). In line with these results, the Clarke-Stewart et al. (2002) study of infant and toddler child care centers documented that children with more educated and trained teachers performed better on tests of cognitive and language development than did children with less educated teachers (Clarke-Stewart et al., 2002).

**Staff Stability**

The relationship between a child and adult is built on what is shared together and the child’s experience of that adult. When the adult is consistently responsive and available when needed, the child develops, according to Bowlby (1982), a secure attachment relationship. On the other hand, if the adult ignores the child’s signals, or there are frequent changes among adults, the child will develop either an anxious or avoidant attachment. Therefore, staff stability is an important component in early childhood programs.

Howes and Rubenstein (1985) argued that young children have the ability to differentiate between stable and nonstable caregivers. Infants interact more with stable teachers than they do with nonstable teachers. Howes and Rubenstein (1985) further documented a significant relation between consistency of the primary caregiver and more social interactions with the adult by children aged 18 to 24 months. Howes (1983) also
documented that instability of caregivers was associated with lower rates of competent play with peers and objects. In another study, Howes (1988) followed 87 children through early childhood experiences and into first grade. After controlling for family characteristics, Howes (1988) found that academic progress, school skills, and fewer behavior problems were predicted by high-quality, stable child care.

In line with the above findings, Whitebook et al. (1989), in their study of 227 child care centers, reported that instability or staff turnover is detrimental to young children. In programs where teacher turnover was high, Whitebook et al. (1989) found that children tended to be less engaged in social activities or social interactions with peers. Instead, children in centers with high staff turnover rates spent more time in aimless wandering than did children in centers with lower staff turnover rates. In addition, children in centers with high staff turnover were found to receive lower scores on measures of language development than were children of the same age in centers with lower staff turnover.

Howes and Hamilton (1993) speculated that staff changes would be more disadvantageous to younger children than to older children. The fact that younger children are less mobile and have less well-developed social skills makes them more dependent on adults. To test their hypothesis, Howes and Hamilton (1993) observed 72 children, their teachers, and peers. Results documented that 18- to 24-month-old infants who experienced caregiver change, regardless of the quality of their attachment to the caregiver, were more likely to be aggressive than children who did not experience staff turnover. Phillips, Scarr, and McCartney (1987) studied nine centers in Bermuda. Results revealed that centers with
low staff turnover rates had the highest quality ratings as measured by the ECERS (Harms & Clifford, 1980).

In an effort to investigate factors related to staff turnover, Whitebook et al. (1989) reported many factors that contribute to high staff turnover rates. These factors are low wages and poor benefits packages, poor working conditions, lack of opportunities for input into the program’s policy development and program planning, and poor communication patterns among staff. Moreover, Doherty-Derkowski (1995) argued that job satisfaction is the key to lower turnover rates, and therefore, that work conditions for early childhood caregivers and teachers should be improved.

The Physical Environment

The physical environment refers to both the indoor and outdoor space, as well as the availability of toys and equipment. Researchers have documented that both child development and adult behavior are influenced by the organization of the program’s setting and the accessibility of materials. Moore (1986) investigated the effects of well-defined physical environments compared to poorly-defined environments. Moore described well-defined physical environments by the following characteristics: clear boundaries and separation between circulation space, group space, and activity areas; at least partial acoustic separation of areas for small group and large group activities; space sizes appropriate for the intended activity such as large spaces for large group and gross-motor activities; an appropriate amount and type of storage, work surface, and display space; materials for use by the children located to be readily accessible to them; and variation in floor coverings, textures, and levels. Moore (1986) observed children and their teachers in 14 programs that
served children ranging in age from 18 months to 6 years. Results documented significant relations among well-defined environments and positive adult-child interactions; children's exploratory behaviors such as investigating, asking questions, and manipulating objects; and increased socially cooperative interactions among children.

Field (1980) reported similar results for the effects of teacher-child ratio and organization of classroom space. Children were found to demonstrate improved and increased rates of cooperative peer interactions in classrooms with partitioned activity areas. Also, Holloway and Reichhart-Erickson (1988) investigated the relation of child care quality to the activities of 4-year-old children during free play and their knowledge of social problems. Subjects for the study were 55 children attending 15 child care centers and nursery schools. Physical space, spaciousness of the environment, appropriateness and variety of the materials provided for play, and quality of the outdoor area were used as indicators of child care quality. The observations documented lower rates of unfocused activities in classrooms where the total classroom area was partitioned into smaller activity areas.

Furthermore, the Chicago study conducted by Clarke-Stewart (1987) documented a relation between an organized physical environment and positive child development outcomes. Clarke-Stewart (1987) studied a sample of 80 children ranging in age from two-to three-years-old in center-based child care and in home child care arrangements. The observations and tests conducted reflected that when the physical environment was safer and more orderly, and contained more varied and stimulating toys, and decorations and educational materials were appropriately organized into activity areas, children did better on
tests of cognitive skills and social competence with adult strangers. Clarke-Stewart (1987) specifically concluded that neatness, orderliness, safety, and structure in the physical environment were related to higher levels of social competence, whereas the opportunities to interact with varied toys and educational materials were related to higher levels of cognitive competence. More recently, the NICHD study team (1996) documented that programs with organized space and more variety of appropriate materials tended to provide more stimulation and exploration to young children.

Other researchers have documented the influence of the toys and equipment on children’s activities. For example, in a study of 40 children ranging in age from 18 to 27 months, Howes and Rubenstein (1981) reported that the highest levels of interactive play with peers occurred around large unmovable objects such as climbing equipment and jungle gyms. Yet other studies have documented that preschoolers were more apt to play alone if the toys available were mainly things like puzzles, peg boards, Legos, or play-dough, whereas sharing behavior was associated with balls, puppets, dress-up clothes, and housekeeping areas (e.g., Henrickson, Strain, Tremblay, & Shores, 1981; Quilitch & Risely, 1973).

Physical space is also associated with adults’ behavior. Howes (1983) found that adults dealing with children ages 18- and 22-months, working in space that was safe, were less likely to be restrictive or negative than were providers working in space that was unsafe. In addition, they were more likely to be responsive and to engage in activities that would stimulate children’s social development.

Phyfe-Perkins (1980) made similar conclusions based on a review of literature on the physical environment and its effect on children’s behavior. First, limited space was
associated with increased incidences of aggression and low social interaction and involvement, whereas large space was associated with decreased incidences of aggression and increased social interaction and involvement among children. Second, the way the indoor and outdoor spaces were planned and arranged affected interactions among children, as well as their safety. Finally, accessible developmentally appropriate materials were essential in children's active construction of knowledge.

In addition, it has been suggested that a child's developing knowledge of language and literacy can best be facilitated by exposing children to print-rich environments (e.g., Adams, 1990; Clark, 1976; Lass, 1982; McLachlan-Smith, 1991). Central to this position, Dowhower and Beagle (1998) assessed four categories of the physical print environment of 18 kindergarten classrooms: books; writing supplies; literacy centers; and examples of print subcategorized as student, teacher, and commercially produced. Results documented overall print-poor environments in most classrooms. A conclusion was made that the teachers may affect children's access to literacy areas and the amount and types of print displayed, as well as the opportunities children have to create their own print around the classroom (Dowhower & Beagle, 1998).

Parent Involvement

Communication between parents and teachers or caregivers is recognized as a key element in developmentally appropriate early childhood programs. The NAEYC guidelines on developmentally appropriate practices indicate that good practice entails reciprocal relationships with families, including mutual respect, cooperation, shared responsibility, and negotiation of conflicts toward achievement of shared goals (Bredekamp, 1987; Bredekamp
Furthermore, teachers are to accommodate parents' choices for children and respond with sensitivity and respect to parents' preferences and concerns without abdicating professional responsibility to children, and involve families in assessing and planning for individual children (Bredakamp & Copple, 1997).

Although it is recognized as an essential element in quality early childhood programs, family involvement is rarely included in studies of program quality (Powell, 1997). Studies that have been conducted, however, reflect positive outcomes of parent involvement in early childhood programs. For example, Hogan (1991) examined the relationships between parents and caregivers in 25 regulated home-based child care settings that had at least one three- or four-year-old child. Observations revealed that children whose parents talked most with caregivers showed the highest rates of positive interaction with both the caregiver and other children in the child care setting. Results suggest that communication between the parent and the early childhood staff member has a positive effect on the child's interactions with other children and adults.

Ghazvini and Readdick (1994) investigated the relation between parent-caregiver communication and child care quality in 12 centers. Communication patterns were determined by questionnaire responses of parents and caregivers, and the ECERS (Harms & Clifford, 1980) was used to determine program quality. Results revealed positive correlations between quality of child care and frequency of parent-caregiver communication. Moreover, Peet, Powell, and O'Donnel (1997) speculated that children's performance is enhanced when adults in different settings such as family and school share similar
perceptions of the child because the adults create appropriately stimulating environments for the child in both settings.

In an attempt to examine family participation in early childhood education, Fantuzzo, Tighe, and Childs (2000) developed the Family Involvement Questionnaire (FIQ) to indicate the nature and extent of parent involvement in their children's early educational experiences. The study included 641 parents of children enrolled in Head Start, comprehensive child care, kindergarten, or first-grade programs. Results revealed that parents with education beyond high school were engaged in higher levels of school-based involvement and home-school conferencing than were parents with less than high-school education. In addition, results of the study showed that two-parent families had higher rates of involvement than did single-parent households (Fantuzzo, Tighe, & Childs, 2000).

Quality Guidelines

Some early childhood associations and organizations have invested resources to develop guidelines, recommended practices, and performance standards to guide quality in early childhood programs. These guidelines incorporate many of the research findings discussed in the previous sections such as adult-child ratio, group size, teacher education, and physical environment.

Developmentally Appropriate Practices. The National Association for the Education of Young Children (NAEYC) is an organization committed to fostering the growth and development of children from birth through age eight providing educational services and resources to adults who work with and for children. The NAEYC has published position statements on developmentally appropriate practices (Bredekamp, 1987; Bredekamp &
Copple, 1997) that outline guidelines for delivering developmentally appropriate services in early childhood education programs. The documents were developed to support implementation of the NAEYC accreditation process to guide quality early childhood programs seeking accreditation. The second purpose was to respond to and possibly moderate the growing trend toward more formal, academic education for young children that resulted in a downward escalation of curriculum from the elementary grades.

Developmentally appropriate practices as delineated by NAEYC focus on major principles based on research and theory. These principles are: stimulate learning in physical, social, emotional, and cognitive development via an integrated curricular approach; respond to individual differences in ability, interests, development, and learning styles by using age-appropriate and individually-appropriate activities; offer children choices of many activities, materials, and equipment; offer children time to explore through active involvement and interaction with children and adults; and provide children with concrete and real experiences relevant to their own lives by using culturally appropriate activities (Rosegrant & Bredekamp, 1992).

The NAEYC guidelines further emphasize the role of play in children’s learning. Children learn best through play that is self-initiated, self-directed, and self-chosen. The role of the teacher is centered on providing a variety of rich and stimulating activities and supporting and guiding children’s play. With respect to teacher-child interaction, the guidelines include teachers’ curriculum goals, teaching strategies in preparing the environment and interacting with children, and the nature of teachers’ guidance of children’s social-emotional development.
Curriculum goals reflect the appropriateness of a teacher's curriculum beliefs and curriculum plans. Researchers have documented positive relations between caregivers', teachers', and directors' beliefs and developmentally appropriate ratings of classrooms and programs. For example, Oakes and Caruso (1990) examined the relation between kindergarten teachers' use of developmentally appropriate practices and their attitudes toward authority in the classroom. Twenty-five teachers completed the Problems in Schools Questionnaire (Deci, Schwartz, Sheinman, & Ryan, 1981) to reflect their attitudes about authority with children, and also completed a questionnaire about their professional backgrounds. Observational data were collected from the classrooms, and a behavior checklist was used to determine if teachers used developmentally appropriate practices in their classrooms. Results reflected that teachers who rated themselves higher in authority sharing as opposed to authority controlling were more likely to use developmentally appropriate practices in their classrooms.

Teaching strategies reflect the teacher's facilitation of learning through the preparation of the environment and teacher-child interactions. The NAEYC guidelines define quality teaching strategies in terms of: 1) an appropriately prepared environment in which children are encouraged to explore actively and interact with materials, peers, and adults rather than one in which children are expected to be passive and concentrate on adult-directed activities; and 2) appropriate adult interaction with children characterized by facilitation of children's activities through asking divergent questions, offering suggestions, and encouraging and helping children elaborate their activities (Bredakamp & Copple, 1997).
Teachers’ guidance of children includes both positive guidance techniques and the establishment of limits for children’s behavior. According to the NAEYC guidelines (Bredekamp & Copple, 1997), guidance techniques include giving praise or encouragement; providing nurturance, comfort, help, and affection; redirecting behavior or suggesting alternate activities; and following up with directions given to children.

The use of developmentally appropriate practices as a guide for program quality has been supported by researchers. Burts, Hart, Charlesworth, and Kirk (1990) explored differences in the frequency of stress-related behaviors such as complaints of feeling sick, physical hostility, nervous laughter, and nail-biting reflected by children in developmentally appropriate and inappropriate kindergarten classrooms. Thirty-seven developmentally appropriate and 20 developmentally inappropriate kindergarten classrooms were included in the study. Using a checklist for rating developmentally appropriate practices in kindergarten classrooms, Burts et al. (1990) reported that developmentally appropriate classrooms reflected more center, group story, and transition activities, while developmentally inappropriate kindergarten classrooms showed more whole group and workbook/worksheet activities. Results documented that children in developmentally appropriate classrooms showed significantly fewer stress-related behaviors than did children in developmentally inappropriate classrooms where stress behaviors were reported to be especially high during whole group and workbook/worksheet activities.

Hirsh-Pasek, Hyson, and Rescorla (1990) examined the effects of early academic environments on children’s developmental outcomes. Hirsh-Pasek et al. (1990) made comparisons between highly academic, developmentally inappropriate pre-kindergarten...
classrooms and low-academic, developmentally appropriate classrooms. Subjects for the study included 90 pre-kindergarten children and 56 follow-up children at the end of kindergarten. Results revealed that children who attended the high-academic pre-kindergarten classrooms scored higher than did children in low-academic programs in tests of letter and numbers. At the end of kindergarten, however, the children who were enrolled in high-academic programs did not maintain their advantages during the kindergarten year. Instead, they reflected more negative attitudes toward school and were less creative and more anxious during parent-child tasks than were children who attended developmentally appropriate, low-academic preschool programs.

Moreover, developmentally appropriate practices as delineated by NAEYC speak to other issues and indicators of quality early childhood programs. Developmentally appropriate practices include appropriate adult-child ratio, group size, educational background of teachers, staff stability, physical environment, and parent involvement.

**DEC Recommended Practices.** Founded in 1973, the Division for Early Childhood (DEC) of the Council for Exceptional Children (CEC) is a national organization working with or on behalf of children with special needs, birth through age eight, and their families. At the beginning of the 1990s, DEC undertook a project to identify recommended practices in early intervention and early childhood special education. This process was guided by the intention to identify practices that result in quality programs and thus have a positive impact on both child and family outcomes (Sandall, Mclean, Santos, & Smith, 2000). These practices were compiled in a document entitled DEC Task Force on Recommended Practice
(1993), a book that outlines these concepts (Odom & Mclean, 1996), and more recently an updated version of this book (Sandall, McLean, & Smith, 2000).

The DEC guidelines for recommended practices cover seven themes: inclusion, family involvement, assessment, Individualized Family Service Plans (IFSPs) and Individualized Educational Plans (IEPs), curriculum and intervention, service delivery, and transition.

Inclusion is a concept that supports the basic right of young children with disabilities to full and active engagement in their communities. The issue of individual appropriateness with inclusive environments incorporates the role of the family as the decision maker; families will choose which setting is optimal and most natural for their children with disabilities. Therefore, successful inclusion practice implies that families' choices of inclusive programs as the best service delivery model for their young children with disabilities will become typical rather than being the exception (LaMontagne, Danbom, & Buchanan, 1998). As with NAEYC, DEC identifies age appropriateness as practices that consider young children with disabilities' developmental and chronological ages when planning interventions (Mclean & Odom, 1993).

Family involvement is an area in which the DEC recommended practices puts great emphasis. The DEC recommended practices prescribe a strong focus on family centered-practices, and family and child advocacy to support families' active roles in the assessment and intervention process (LaMontagne et al., 1998).

Assessment is used for instructional planning and identification of children with special needs (Bredekamp, 1987; Bredekamp & Rosegrant, 1992; DEC Task Force on
Recommended Practices, 1993). More specific consideration is given to a systematic set of procedures for information gathering including screening, eligibility, program planning, monitoring, and evaluation (Neisworth, 1993). The DEC recommended practices support the use of socioecologically valid assessment procedures and the right of families’ access to all assessment information related to themselves and their children. In addition, DEC recommended practices provide guidance on family involvement. Families determine the acceptability of assessment materials and the use of family information related to concerns and priorities as a guide to planning the assessment (Neisworth & Bagnato, 2000).

IFSPs and IEPs are mandated by law and designed for the purpose of individualizing education programs and to link assessment to an intervention plan systematically. In developing general early childhood education program units and activities, professionals pay attention to the diverse needs of children whom the program serves using a curriculum that incorporates continuous planning, implementation, and assessment (Rosegrant & Bredekamp, 1992). The DEC recommended practices emphasize the notion that IFSPs must specifically address family priorities, concerns, and resources, as well as include desired outcomes for the child with special needs and the family (Trivette & Dunst, 2000). On the other hand, IEPs should provide precise goals and objectives individualized for the child, as well as a plan for achieving them and monitoring progress toward them (Wolery, 2000).

Curriculum and intervention strategies should meet the needs of a wide range of children, encourage and support positive relationships with members of children’s families, be meaningful and functional for children and their families, and actively support the engagement of young children with their environments (McLean & Odom, 1993). The DEC
recommended practices tend to promote great emphasis on learning outcomes as demonstrated by a child's performance of a developmental skill, whereas NAEYC guidelines support a focus on cognitive and psychological development that a child experiences while learning (LaMontagne et al., 1998; Mclean & Odom, 1993).

Generally, practices for young children should be delivered in nurturing, safe, accessible environments, and meet the needs of young children's development. For young children with disabilities, DEC recommended practices expand these components into a service delivery approach that represents an expansion of typical early childhood education and community environments (Mclean & Odom, 1993).

The DEC recommended transition practices identify strategies for supporting young children and their families as they move among programs, services, and environments. DEC practices emphasize the role of families in preparing themselves, their children with special needs, and the receiving environments for transition (Mclean & Odom, 1993). For young children with disabilities, a strong emphasis is put on formal interagency agreements and well-planned transition programs that use precise procedures for all individuals and agencies involved in the transition (LaMontagne et al., 1998).

Mclean, Snyder, Smith, and Sandall (2002) executed a field survey to obtain ratings from key stakeholders in the field to validate the DEC recommended practices. Survey questionnaires were sent to 800 practitioners, administrators, parents, and higher education professionals. Returned surveys were received from 388 respondents who supported all the recommended practices. Mclean et al. (2002) considered a practice as recommended if more than 50% of the respondents to a particular item indicated "Agree" or "Strongly Agree" in
response to the statement "This is a recommended practice." Actually, every practice received 90% or more of the respondents’ endorsements.

**Head Start Program Performance Standards.** One of the most important provisions of the 1994 Head Start Act was the requirement to review and revise the Head Start Program Performance Standards for the first time in 20 years (Lombardi & Cubbage, 2004). This law required the U.S. Department of Health and Human Services to develop performance measures of the quality and effectiveness of Head Start Programs. In addition, the Head Start Act of 1994 required the Department to review and revise the regulations guiding teacher education, and family service workers and to promote the development of model training curricula.

Many studies were executed to examine whether performance improvements of Head Start programs were achieved, (e.g., Powell, 1998; Powell, Brush, & Gaidurgis, 1998). Researchers documented that structural features of quality improved from 1990 to 1995. Researchers found significant lower adult-child ratios in center-based and home-based programs. In addition, results showed lower group sizes, decreased year-to-year staff turnover, and higher rates of qualified teachers. Finally, the researchers showed that improvements were stronger for programs at the lowest levels of quality in 1990 (Powell, 2004).

The Head Start Act of 1998 contained new provisions to address further improvements (Lombardi & Cubbage, 2004). Qualifications for classroom teachers were strengthened by adding a new set of requirements. At least one teacher in every classroom in center-based programs had to demonstrate competency to 1) plan and implement learning...
experiences that promote children's physical and cognitive development, 2) provide a safe and healthy learning environment, 3) support children’s social and emotional development, and 4) encourage family involvement and support parent-child relationships (Lombardi & Cubbage, 2004).

Furthermore, the Head Start Act of 1998 established a new provision on education performance standards to ensure school readiness. This provision reflected emphasis on language and literacy. The new performance standards must ensure that children 1) develop phonemic, print, and numerical awareness, 2) understand and use language to communicate for various purposes, 3) understand and use increasingly complex vocabulary, and 4) develop and demonstrate an appreciation for books (Lombardi & Cubbage, 2004).

As a result, the revised Head Start Program Performance Standards (U.S. Department of Health and Human Services, 1999) covered ten themes: 1) child health and developmental services, 2) education and early childhood development, 3) child health and safety, 4) child nutrition, 5) child mental health, 6) family partnerships, 7) community partnerships, 8) program governance, 9) human resources management, and 10) facilities, materials, and equipment. In addition, The Head Start Program Performance Standards established standards on services for children with disabilities.

The Head Start Family and Child Experience Survey (FACES) was launched in 1997 to evaluate the impact of these recent efforts on the quality of classroom practices and children’s overall development (DHHS, 2001). FACES employed a stratified random sample of 3,200 children and their families in Head Start classrooms. Findings indicated that the quality of most Head Start classrooms is good, and that Head Start is succeeding in
narrowing the gap between disadvantaged children and all other children in terms of school readiness (DHHS, 2001). However, the findings suggested the need for improvements in the language and literacy components of programming and recommended that future improvements focus on four issues: 1) the quality of the education component, 2) renewed health services and parental involvement, 3) expanding Early Head Start to cover more expectant families and their infant and toddler children, and 4) more training, technical assistance, and any resources needed to promote effective collaboration (Lombardi & Cubbage, 2004).

**Does Quality Alone Matter?**

Literature in the field provides strikingly consistent evidence for the importance of quality early care and education in the development of young children. High-quality care has been associated consistently with improved cognitive and language skills across a wide range of studies (e.g., Burchinal et al., 1996; Howes et al., 1992; Love et al., 2003; Peisner-Fein et al., 2001; NICHD, 2000). However, results associating quality care and social development have not been completely consistent. For example, recent studies conducted by NICHD Early Childhood Care Research Network (2003a, 2003b) suggested that extensive early experience in any form of non-maternal care may be associated with later behavior problems, including aggressive and defiant behaviors as well as child-adult conflicts, regardless of quality of care. Nevertheless, quality may be an important moderator of the amount of time in care (e.g., Love et al., 2003).

In addition, child and family characteristics and family selection of child care are important issues to consider in child care research because the type and quality of child care
are related to demographic and family characteristics that predict outcomes (e.g., Lamb, 1998; NICHD & Duncan, 2003).

The present researcher maintains the position that child care is a reality of modern life. Many families have no choice but to send their children to part-time or full-time out-of-home care to secure the necessities of life for their families. Following this line, the researcher strongly believes that quality of care and education for infants, toddlers, preschool-age, and school-age children is a priority for all concerned. High-quality child care moderates the negative effects of quantity time in child care as consistently documented by researchers. Young children need high-quality child care to “short-circuit the development of internalizing and externalizing behavior problems” (Maccoby & Lewis, 2003, p. 1074) and to enhance their cognitive and social-emotional development.

**Toward International Quality Indicators**

The international community has come to realize the importance of establishing guidelines for identifying and establishing quality early childhood programs for young children. For example, the main issue at the International Conference of the World Organizations for Early Childhood Education, held in Hong Kong in 1996, was achieving quality early childhood programs. Recommendations to establish this goal included: considering quality from the perspective of parents and society, as well as from the perspectives of advocates, researchers, and providers; establishing policy steps that will produce high quality; thinking about the totality of children's experiences as quality inside the classroom and inside the entire program must be major priorities; conceptualizing services as
services for children and their families; and realizing that quality programs cannot exist without quality training, good regulations, and involved parents and communities.

More recently, global guidelines for early childhood education and care in the 21st century were a major theme of the International Symposium for Early Childhood Education and Care for the 21st Century, held in Ruschlikon, Switzerland in 1999. Early childhood education professionals from 28 countries composed seven working groups. They produced one document representing guidelines for early childhood programs that are especially useful for nations just beginning to establish polices about the settings for the care and education of young children. The guidelines covered the following areas: environment and physical space of settings for children; curriculum content and pedagogy; early childhood educators’ and caregivers’ knowledge including knowledge of performance, personal, and professional characteristics, and moral and ethical dimensions; partnership with families and communities; services for young children with special needs; and accountability, supervision, and management of programs for children.

**International Perspectives on Quality: Snapshots**

Quality of early childhood education programs has been on the top of the American research agenda for more than two decades. As reflected here, numerous studies have been conducted in the United States, and recommendations for quality indicators are well established. Some nations have established indicators for quality programs, and other developing countries are working toward this goal. The following are a few examples of the efforts to offer children quality early childhood programs in some countries.
India. India’s Constitution (1950) mentions young children. For example, Article 45, concerned with the issue of fundamental rights, states, “The State must endeavor to provide free and compulsory education for all children until they complete 14 years of age” (Khalakdina, 1998, p. 168). In recent years, an interpretation of the term “quality” involved factors such as relevance to the community and the basis in perceived needs, which vary across communities (Swaminathan, 1998). However, certain stable indicators such as attainment of certain standards in health, nutrition, and education are involved in different communities and across different programs. Moreover, flexibility, sensitivity and responsiveness to needs, adaptation to diversity, cultural relevance, and extent of community participation became important criteria for evaluating program quality (Swaminathan, 1998).

The age group covered under early childhood education in India is birth to age eight. The birth-to-three age group is essentially state-supported or sponsored by non-governmental organizations child care/creche facilities. The three-to-six age group participates in early childhood centers or preschools. Between ages five and six, children start grade school (Kaul, 1992). According to Kaul (1992), four types of programs operate to serve children from birth to age six. The Integrated Child Development Services programs offer mainly health and nutritional services and are sponsored by the Central Government Department of Women and Child Development. The early childhood education centers or child cares also offer health and nutrition services and are run by voluntary agencies with governmental assistance. Preschools offer non-formal preschool education and are run by the state governments, municipal corporations, and other agencies. Commercial, fee-charging preschools also offer non-formal preschool education and are run by private individuals or
agencies. In 1992, the various state-sponsored and voluntary programs served 6,224,000 children in India (Kaul, 1992). This number, a small proportion of those requiring services, represents less than 12 percent of the corresponding age group.

The United Kingdom. In recent years, increased emphases have been placed on the importance of quality and standards in early childhood programs, by both the private sector and the government in the United Kingdom (Brophy & Statham, 1994). In the private sector, a number of organizations such as Kids Club Network and Pre-school Playgroups Association (PPA) have developed guidelines and codes of good practice. The national government established a Committee of Inquiry within the Department of Education and Science to report on the quality of the educational experiences offered to three- and four-year-olds. Legislation also has been used as a tool to establish quality early childhood programs. For example, The Children’s Act (1989) requires local authorities to review all existing programs for children under eight years of age every three years.

In an effort to provide young children from birth to eight years with developmentally appropriate curriculum, voluntary and independent sectors in the United Kingdom came together to explore possibilities of reaching consensus regarding what is an appropriate curriculum. These efforts gave birth to the Agreed Framework for Early Learning (AFEL), which is based on a British model of developmentally appropriate practices (Miller, 1997). The model’s central ideas are compatible with NAEYC’s developmentally appropriate practices guidelines. According to AFEL, the child’s education is seen as an interaction between the child and the environment, including adults, and the people with whom the child interacts are of central importance.
Children commence primary school at age five. Children under age five are offered a variety of programs. Nursery education is offered publicly by the State. Day nurseries are open year-round, and, public or private, must be registered by the social services department of the local authority. The public nursery schools serve three- and four-year-old children, whereas children from birth to age five may attend day nurseries (Curtis, 1992). The public nurseries offer a curriculum based on the needs of three- to five-year-old children. Day nurseries, on the other hand, emphasize care rather than the education of children. The preschool playgroups established by the PPA provide opportunities for all types of play, encouraging children to explore, discover, and converse. As of 1990, there were some 18,000 registered playgroups in the United Kingdom serving children ranging in age from two and a half to four years.

Sweden. In Sweden, national policy documents emphasize early childhood education and care as primary goals. National polices for education are built on humanistic traditions and grounded on the democratic system (Alvestad & Samuelsson, 1999). Emphasis in early childhood education is on programs for children while their parents are occupied with work and education (Carlson, Zvagina, & Sjolom, 1997). Swedish law guarantees a placement for each working or studying parent’s child within a few months from the day parents request it (Alvestad & Samuelsson, 1999). As a result, young children attend publicly supported preschools while parents work or engage in educational training. “Preschool” is the official name for child care as well as kindergarten (Alvestad & Samuelsson, 1999). Costs are among the highest in the world, but care is available for most families who need child care.
The primary goals of early childhood education have to do with the creation of an environment that enhances the implementation of democratic values and the development of the whole child (Kärby & Giota, 1994). The development of the whole child involves high-quality relationships between children and adults characterized by a respect for the child's own initiative, the emotional atmosphere, informal communication, and non-directive teaching.

Sweden has come a long way, from having no guidelines at all to having national curricula in place. Over a period of 20 years, teachers have been introduced to the idea of having curricula (Alvestad & Samuelsson, 1999). Curricula for early childhood programs in Sweden are heavily loaded on the professional experiences and reflections of teachers through their local development work over the years. Preschool is being viewed now as a place where life-long learning begins.

**China.** All children are expected to proceed at the same pace. The child is responsible for keeping up and poor performance is usually attributed to not working hard enough (Vaughan, 1993). China, and other countries in the Far East for that matter, emphasize academics and use teaching methods similar to those used in Chinese elementary classrooms. China's socialist ideals and Confucian traditions place emphasis on whole-group, teacher-directed approaches rather than the use of individual choices and creative self-expression. As a result, early childhood education in China is in conflict with Western ideas regarding developmentally appropriate practices, which are seen as the heart of quality early childhood programs in the West. According to NAEYC, a high-quality developmentally appropriate program is both age-appropriate and individually appropriate. Furthermore,
children are encouraged to explore materials and interact actively with peers and adults rather than be expected to be passive and concentrate on adult-directed activities. Therefore, teacher-directed, whole-group approaches common to Chinese early childhood practices do not promote developmentally appropriate classrooms according to Western standards.

Preschools and kindergartens represent the two types of early childhood programs in China providing children with comprehensive educational content areas: habits of hygienic living, physical activities, morality, language, natural and social common sense, mathematics, music, and art (Laing & Pang, 1992). There were 57 preschools in 1985, and there were 176,000 licensed kindergartens in 1987 (Laing & Pang, 1992). This is due to the efforts of research institutions and organizations such as the National Preschool Education Research Association and the Early Childhood Education Research Division of the Chinese Central Education Research Institute.

Korea. Teacher education and training standards are established by education law and are enforced within each educational institution by the Ministry of Education (Shim & Herwig, 1997). Teachers of early childhood education have a four-year college degree or two years of college and passing scores on the National Teacher Exam (Lee, 1997). In addition, there is a recent trend to improve the quality of teacher education on a continuous base. Thus, in-service teacher education efforts have increased a great deal. Continuing education institutions have been established in four-year colleges (Shim & Herwig, 1997).

Korean early childhood institutions include kindergartens, Saemaul nursery schools, private nursery schools, child care centers, and family child care programs (Shim & Herwig, 1997). Kindergartens are divided into private and public, administered by the Ministry of
Education, and serve three- to six-year-old children. The Saemaul nursery schools, unique to Korea, provide protection and education to three- to six-year-old children from low-income families, and provide all-child care for children of working parents (Shim & Herwig, 1997). Private nursery schools are university run institutions serving three- to four-year-old children, in addition to private nurseries established in apartment complexes. In addition, four types of child care centers are identified in Korea: private, public, family, and employer-provided child care centers. These centers serve 3.8 percent of all children from infancy to age six (Shim & Herwig, 1997).

Early Childhood Education in Sudan

Sudan is the largest country in Africa, with an area of almost one million square miles. Ethnologically, Sudan is composed of several groups. The Northern and Central zones are a mixture of Arabs and Africans. The result of this mixture is that the Northern Sudanese are Negroid in their features and Arabic in culture. Southern Sudan has remained beyond the reach of Arab influence and is composed of different purely African tribes, each with its own language and culture (Badri, 1978, 1992). This diversified ethnicity in Sudan is posing problems for unity, leading to major political problems including a civil war.

Literature on the history and development of early childhood education in Sudan is limited. However, Badri (1992) and Khattab (1995) give an adequate description that is summarized below. After the spread of Islam in northern and central Sudan in the 16th century, education in general followed the traditional Islamic model represented by the Khalwa. The Khalwa is a traditional type of school that has no age limits for enrollment of students. Male students range in age from seven years to late teens. The sole purpose of the
Khalwa is to teach Quran, the Islamic book. The teacher in the Khalwa is called Faki. The Faki, who by definition must be a male teacher, is more than a teacher. Discipline is a major component in his teaching load; corporal punishment as a means of discipline is the rule and anything else the exception (Badri, 1992). Rote learning is the usual mode of teaching.

Under the Anglo-Egyptian administration (1898-1955), the first kindergartens were established as part of the Catholic missionary school. The terms “kindergarten” or “preschool education” are used to refer to programs serving children under the age of first grade. Kindergartens were established in Khartoum and Omdurman attached to the Catholic missionary schools. Music, play, and drawing constituted the curriculum in these programs. Soon after, the Coptic College in Khartoum founded a kindergarten on its premises for the purpose of serving the Egyptian community. Both the Catholic and Coptic kindergartens used Arabic as the medium of instruction. The first Sudanese kindergarten was established in 1930.

In spite of the westernization of Sudan in the Anglo-Egyptian era, the Khalwa maintained its position as an important component of the educational map in Sudan. According to the statistical reports in 1930, some 11.5 percent of school-age boys were receiving some kind of education, with the Khalwa accounting for 8 percent of this figure.

Since independence from the Anglo-Egyptian administration in 1956, enormous strides in formal education have been achieved under the supervision of the national government. The government, represented by the Ministry of Education, focused on expanding elementary, intermediate, and secondary education. All finances and manpower were allocated toward that goal.
In the area of early childhood education, the present situation is not different from that under the Anglo-Egyptian administration. The Ministry of Education, although accepting of the idea of early childhood education programs since the 1970s, has not required kindergartens in its existing schools. Instead, the Ministry functions as the licensing authority, leaving the task of early childhood education to the private sector including individual and private organizations. As a result, four different types of kindergartens have been identified (Badri, 1992; Khattab, 1995): 1) privately-owned elementary school kindergartens attached to private schools, 2) privately-owned kindergartens in rented buildings, 3) the Department of Social Welfare kindergartens, and 4) the associations' kindergartens that are run by business unions. In addition, there is only one university-run program operated by Ahfad University for Women. All these types of kindergartens combined provide service to only 6 percent of Sudanese children under age six.

Kindergartens are located primarily in the Capital and other big cities in Sudan. In rural areas, however, the Khalwa is still the only means of education. The Khalwa would be located on the school premises, representing an early childhood program.

The elementary school kindergarten is the oldest of all types of programs. As mentioned earlier, the first was established in the early 1900s by the Catholic Mission. These kindergartens, which are attached to missionary primary schools, are very few in number, about six (Badri, 1992) to nine (Khattab, 1995). The high fees required for enrollment restrict access to these kindergartens, for the most part, to the rich who can afford to pay. Discipline and the teaching of reading, writing, and arithmetic are the emphases of the curriculum in the elementary school kindergartens. Music and songs are also included as part
of the curriculum. In effect, the curriculum is a downward extension of first grade curriculum.

The privately owned kindergartens are based on the individual initiatives of certain wealthy women. These kindergartens began to exist in large cities, mainly the three cities that constitute the capital: Khartoum, Khartoum North, and Omdurman. Except for a few, these kindergartens operate in private homes or rented houses, and space for children's play is generally limited. Adequate toilet facilities are rare. Furthermore, the classrooms are not properly ventilated. Most of the women in charge of these kindergartens have no professional training. These kindergartens are more like play groups or baby-sitting services than early childhood education programs. Children are merely safeguarded from harming themselves while playing (Badri, 1992).

The governmental kindergartens established by the Department of Social Welfare started operating in the early 1970s in the capital. These originally included 12 kindergartens, each of which was assigned a small corner in the youth center of a family club. All 12 kindergartens had the same daily timetable, which was drawn up in the Department headquarters. Some of the teaching staff had received in-service training in the form of a few general lectures on child development. Currently, there are a total of 106 governmental kindergartens available in the three major provinces of the capital.

The association kindergartens are the most recent type of kindergartens. These kindergartens were established and are operated by different associations or unions of workers and employees of both the governmental and private sectors. Each kindergarten usually serves children of the members of the association or union. Most of these
kindergartens are located in the particular association’s club which is a building used in the evenings by the association members for social entertainment.

In addition, there is only one university-run kindergarten (the Ahfad University Early Childhood Education and Training Center). Research suggests (e.g., Vandell & Powers, 1983) that university-run early childhood programs in the United States are served by teachers with higher levels of training, large amounts of space per child, and good staff-child ratios. Similarly, the Ahfad University Early Childhood Education and Training Center can be considered the best early childhood program in the country.

Curriculum. As mentioned earlier, the Ministry of Education acts as a licensing authority to those who want to establish kindergartens. However, the Ministry has no specific licensing regulations. Furthermore, the Ministry is maintaining its position with regard to incorporating kindergartens in its existing educational system. However, in 1992, a series of workshops and seminars were conducted under the supervision of the Ministry of Education for the purpose of constructing a national curriculum for existing kindergartens. The researcher attended one of these workshops. The emphasis of the proposed National Early Childhood Curriculum was on memorizing the Quran, and the objectives were to help children memorize as many verses of the Quran as possible before they enter first grade. In addition, the National Early Childhood Curriculum promotes teacher directed instruction and sheet work activities rather than emphasizing child-initiated activities. The National Early Childhood Curriculum was approved and first introduced in 1993.

Mohamed and Mohamed (1998) investigated teachers’ attitudes toward the National Early Childhood Curriculum. Forty-five teachers responded to a questionnaire reflecting
their attitudes toward the National Early Childhood Curriculum. Results documented that teachers in the sample criticized the curriculum for its emphasis on rote learning. In addition, the National Early Childhood Curriculum did not cover the different domains of cognitive, motor, emotional, and social development of young children. Recommendations to modify the curriculum were made by the researchers.

Teacher Training. A major problem facing the development of early childhood education in Sudan is the lack of teacher training institutions. The Department of Social Welfare, however, with aid and funding from the United Nations Children Fund (UNICEF), established a center for training kindergarten teachers in 1983. The center is located in Khartoum and provides a six-month training course in child development, nutrition, art, music, and the production of developmentally appropriate teaching materials. The participants are usually teachers who have spent some years working in kindergartens. A plan to increase the course duration to one full year is now under consideration.

The other institution that provides training for early childhood educators is Ahfad University for Women. Ahfad University offers a bachelor’s degree in psychology and early childhood education. However, many graduates prefer to work in other fields because of low salaries in early childhood education. Ahfad University also offers training courses for selected rural women who receive up to six months of training in child development as well as training on how to set up kindergartens in their rural areas. Other universities have started recently to offer degrees in early childhood education.

In summary, the limited literature on early childhood education in Sudan led to questioning the availability of any quality early childhood programs. Little is known about
the contribution different indicators make to the quality of early childhood education in Sudan. Therefore, the purpose of this study was to provide empirical data to describe the quality of kindergartens in Sudan.
METHOD

The present study examined 60 kindergartens in the three major provinces of the capital of Sudan: Khartoum, Khartoum North, and Omdurman. Classroom observations and head teachers’ responses to questionnaires provided data on kindergarten characteristics, program quality, and teachers’ qualifications and experience. In addition, teachers provided data regarding their perspectives on the Sudanese National Early Childhood Curriculum.

The study was designed to address the following research questions:

1. To describe Sudanese kindergarten programs’ administration, teacher characteristics, teachers’ perceptions of the National Early Childhood Curriculum, and program quality.

2. To examine the relation between program quality and kindergarten administration (i.e., private and governmental kindergartens).

3. To examine the relations among kindergarten quality and the following factors: program type, teacher education, teacher specialization, teacher experience, teacher training, acceptance of the National Early Childhood Curriculum, adult-child ratio, group size, length of school day, enrollment fees, exposure to prints, accessibility of materials, and parent-teacher communication.

4. To examine the relations among the rates and quality of parent-teacher communications, program related factors, and teacher characteristics.

The Sample

The State of Khartoum, Sudan consists of seven provinces. The three major provinces namely Khartoum, Khartoum North, and Omdurman, were selected for this study. The 1999-2000 educational statistics released by the Department of Educational Planning at the
Ministry of Education in the State of Khartoum were used to reflect the latest figures on kindergartens in those three provinces. There were a total of 593 licensed governmental and private kindergartens in the three provinces. Table 1 summarizes information regarding the distribution of these kindergartens.

Table 1. Private and Governmental Kindergartens in the Capital of Sudan

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Number of Municipalities</th>
<th>Private Kindergartens</th>
<th>Governmental Kindergartens</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 16</td>
<td>N = 487</td>
<td>N = 106</td>
<td>N = 593</td>
</tr>
<tr>
<td>Khartoum</td>
<td>6</td>
<td>246</td>
<td>16</td>
<td>262</td>
</tr>
<tr>
<td>Khartoum North</td>
<td>6</td>
<td>129</td>
<td>53</td>
<td>182</td>
</tr>
<tr>
<td>Omdurman</td>
<td>4</td>
<td>112</td>
<td>37</td>
<td>149</td>
</tr>
</tbody>
</table>

The sample for this study consisted of 60 kindergartens. Equal numbers of private (N=30) and governmental kindergartens (N=30) were selected from the pool of private kindergartens (N=487) and governmental kindergartens (N=106). One classroom from each of the 60 kindergartens was selected for observation. In cases where there was more than one classroom in the program, the five-year-old group was selected for the study. Random selection was applied in cases of more than one group of five-year-old children or multiple mixed-age groups. Head teachers from each selected classroom also participated in the study.

Approval for conducting the study was obtained from the Human Subjects Review Committee at Iowa State University (see Appendix A). Consent forms were distributed to directors of the kindergartens and head teachers of the selected classrooms (see Appendix A). Approval was obtained prior to any observation or interview.
Instruments

In each classroom, observational data were collected to describe program quality. An adapted version of The Early Childhood Classroom Observation Scale (ECCOS; National Association for the Education of Young Children, 1991) was used to collect observational data. The ECCOS-A was used to observe classrooms, and the Classroom Demography Information Sheet was used to obtain information regarding program characteristics. Finally, the Teacher Questionnaire was used to assess head teachers' attitudes toward the National Early Childhood Curriculum. Both of the last two measures were developed for this study.

The Early Childhood Classroom Observation Scale. The ECCOS-A was adapted for this study from the original ECCOS. (See Appendix B). The National Association for the Education of Young Children (NAEYC) introduced the ECCOS and promotes its use to rate the level of quality in early childhood programs seeking accreditation from the National Academy of Early Childhood Programs (NAECP), which is the accreditation division of NAEYC. The ECCOS consists of 71 items that rate the quality of programs in the following areas: interactions among teachers and children, implementation of the curriculum, the physical environment, and mechanisms for protecting children's health and safety, and nutrition. Permission to use and adapt the ECCOS for the study was obtained in writing from NAEYC (see Appendix A).

To assess the acceptability and adaptability of the ECCOS to the Sudanese culture, the researcher contacted a group of nine Sudanese professionals during the summer of 1999. This group consisted of two early childhood university professors, three early childhood directors, and four early childhood teachers. These professionals were asked to evaluate, comment on, and modify the ECCOS to suit the Sudanese culture. Focused interviews with
the nine professionals revealed a high rate of acceptability for use of the ECCOS in the Sudanese culture. The researcher initially intended to contact more than the nine professionals using snowball sampling techniques; however, the unanimous approval of the ECCOS by the selected professionals led the researcher to stop interviewing and conclude that the ECCOS is acceptable to the Sudanese culture. However, minor adaptations and modifications were made to two items without changing the basic intent of each item. For instance, an example included in an item of the ECCOS states, “Teachers do not force children to apologize or explain their behavior but help children recognize another child’s feelings.” In Sudanese culture, it is passionately expected that one apologizes for wrongdoing; therefore, the item was modified in the ECCOS-A to, “Teachers help children recognize another child’s feelings before apology is delivered.” Another item on the ECCOS that deals with the use of media, such as television, films, and videotapes, was not included in the analyses. The researcher found, during data collection, that only six programs used media in their programming for children. Internal consistency of the ECCOS-A for the data was verified using Cronbach’s Alpha ($r = .98$). Internal consistency for the subscales was ($r = .95$) for “Interactions among Teachers and Children”, ($r = .96$) for “Curriculum”, ($r = .90$) for “Physical Environment”, and ($r = .82$) for “Health and Safety.”

**The Classroom Demography Information Sheet.** A Classroom Demography Information Sheet (CDIS) was developed by the researcher to collect demographic information to describe the early childhood classrooms (see Appendix C). The CDIS consists of a series of items covering information such as the type of program, group size, adult-child ratio, description of prints on classroom walls, and accessibility of materials. Information was recorded through direct observation.
The Teacher Questionnaire. To assess teachers' beliefs and practices regarding the National Early Childhood Curriculum and to examine their perceptions regarding staff-family relationships and interactions, a Teacher Questionnaire was used (see Appendix D). Part one of the Teacher Questionnaire opens with demographic data about the teacher, including age, educational background, experience, and in-service training. Part two covers program information such as group size, adult-child ratio, age of children, and length of school day. The researcher verified information on group size and adult-child ratio by direct observation and the highest figure, whether reported by teachers or observed directly by the researcher, was used for analyses. Part three includes the Parent-Teacher Communication Scale (PTCS) and is composed of six Likert-type items, with all items scored on a five-point set of ordered responses ranging from (1) almost never to (5) very often. Some items were selected from the Staff Questionnaire used in the NAEYC accreditation procedure (NAECP, 1991). Internal consistency of the PTCS was verified using Cronbach's Alpha ($r = .91$). Part four consists of the National Curriculum Acceptance Scale (NCAS) that assesses teachers' beliefs regarding the National Early Childhood Curriculum. This section contains 13 Likert-type items, with all items scored on a five-point gradation ranging from (1) strongly disagree to (5) strongly agree. Part five consists of one item to reflect how often teachers used the curriculum in their classroom activities and an open-ended item to collect teachers' additional comments on the National Early Childhood Curriculum. Internal consistency for the NCAS was verified using Cronbach's Alpha ($r = .99$).

Data Collection Procedures

Training. The principal researcher received seven hours of training on administration of the ECCOS from an NAECP validator. This validator is also involved with the Program
of Study committee for the principal researcher. Training involved observing two early
childhood programs and coding with the ECCOS. The first program visited was a university-
based laboratory school and the second was a community-based child care program.
Discussion of ratings followed each visit. The discussions were focused on how to rate a
criterion as being "partially met" or "not met." It was agreed to follow the manual and rate a
criterion as "partially met" when at least half the indicators, but not all, were checked,
whereas when fewer than half the indicators were checked, the criterion would be rated as
"not met."

Contacts with a prospective second researcher were made upon the principal
researcher's arrival in Sudan. The chosen second researcher is a graduate of Ahfad
University for Women, has three years experience working as a kindergarten teacher, and is
working currently in a non-governmental organization dealing with issues regarding women
and children. The second researcher's role was to conduct observations with the principal
researcher for the purpose of establishing inter-rater agreement and ensuring reliability of the
data. Training of the second researcher included familiarizing her with the study and
conducting pilot observations in four kindergartens. Again, discussions followed each visit
and inter-rater agreement was checked. Initially, inter-rater agreement on the Early
Childhood Classroom Observation subscales ranged from 82% to 100%. After resolving
disagreements with discussion, final inter-rater agreement reached 100%. Inter-rater
agreement was established prior to data collection.

Translation. A procedure called back-translation was employed in translating the
ECCOS-A into the Arabic language (see Appendix B). In back-translation, one bilingual
individual translates from the source to the target language, and another blindly translates
back to the source (Brislin, 1986). The procedure can then be repeated several times until the back-translated version closely approximates the original source. Therefore, a bilingual lecturer of early childhood education at Ahfad University for Women translated the ECCOS-A into the Arabic language. Another bilingual Early Childhood professional translated the Arabic version back to English. This last procedure was not repeated because the translated version closely approximated the original English version of the ECCOS-A.

**Initial Contacts and Data Collection.** Upon arrival in Sudan (July, 2000), the principal researcher obtained the most recent list of all licensed early childhood programs (kindergartens) in the State of Khartoum from the State Ministry of Education. This process consumed more than ten days, as Sudan lacks public records that are easily available or adequately compiled. It was determined that due to feasibility issues and time frame for data collection to include only the three major provinces in this study: Khartoum, Khartoum North, and Omdurman. In addition, most of the population is concentrated in Khartoum, Khartoum North, and Omdurman, and therefore so are most of the kindergartens. Contacts with kindergarten directors and head teachers were made following random selection. However, the researcher could not reach some of the kindergartens initially chosen. Addresses of kindergartens were not provided in the list obtained from the State Ministry of Education. The researcher had to contact the head office of each of the sixteen municipalities to obtain addresses and driving directions to the randomly selected kindergartens. Some of the addresses were not clear or hard to find in a country like Sudan where not all streets are named. Therefore, the researcher had to establish a rule in the search process: A kindergarten that is not to be found in two hours will be dropped from the study, and a replacement kindergarten will be selected randomly. This rule was followed until the 60
kindergartens were contacted. Although the researcher did not manage to contact the first 60 kindergartens randomly selected for the study due to the reasons listed above, the researcher was successful in obtaining approvals from the first 60 kindergartens contacted.

The contact phase of the study initially was intended to be completed prior to any observation or interview. However, due to the difficulties associated with locating the different kindergartens, the researcher decided to collect data the same day first contact was made. Accordingly, whenever possible the researcher conducted the program observation and gave and received questionnaires for the head teacher on the same day. The researcher interviewed the 60 head teachers. The average time for each teacher interview was 20 minutes.

Collection of data lasted for five and a half months. In collecting observational data, the researcher observed each program using the ECCOS-A and the CDIS for a minimum of two and a half hours.

**Preliminary Analyses**

To maintain inter-rater reliability, the second researcher observed 20% of the sample with the principal researcher; programs were selected based on the availability of the second researcher on the day of observation. Therefore, observations involving the second researcher lasted throughout the data collection period. Inter-rater reliability for coding was established by using percentage of agreement per item. Inter-rater agreement on the ECCOS-A items ranged from 86% to 100% on the different subscales. The overall inter-rater agreement across all items was 94%.
RESULTS

As the present study is, to my knowledge, the first to examine quality of kindergartens in Sudan, descriptive data are being presented first to provide a context for the study. Demographic descriptions of participating classrooms and head teachers will be presented. Means and ranges or frequencies and percentages will be provided as applicable. Tables 2 and 3 present these data.

Kindergarten Classroom Information

Type of Kindergarten and Administration. Sixty kindergartens were included in the study; 30 were private kindergartens and 30 were governmental kindergartens. Private kindergartens were distributed in the three cities as follows: Khartoum \((n = 13, 43.3\%)\), Khartoum North \((n = 9, 30\%)\), and Omdurman \((n = 8, 26.7\%)\). The majority of governmental kindergartens were in Khartoum North \((n = 13, 43.3\%)\). Table 1 presents these data. The majority of kindergartens were not religiously affiliated \((N = 35, 58.3\%)\).

Religious affiliation was determined by whether or not a kindergarten carries an Islamic name. The overwhelming majority of private kindergartens were not religiously affiliated \((n = 23, 76.7\%)\) while almost half the governmental kindergartens were religiously affiliated \((n = 14, 46.7\%)\).

The length of school day for the large majority of private \((n = 16, 53.3\%)\) and governmental \((n = 20, 66.7\%)\) kindergartens, reported by teachers, was five hours. Teachers in private kindergartens reported more five-hour long days \((n = 14, 56.7\%)\) than did teachers of governmental kindergartens \((n = 9, 30\%)\). Only one teacher \((3.3\%)\) reported that the length of school day at the governmental kindergarten where she worked was six hours.
Governmental kindergartens assessed much lower fees than private kindergartens. The overwhelming majority of governmental kindergartens \((n = 24, 80\%)\) imposed less than 3,000 Sudanese Dinars per month as compared to only a small minority of private kindergartens \((n = 3, 10\%)\). The majority of private kindergartens \((n = 10, 33.3\%)\) imposed between 4,100 – 5,000 Sudanese Dinars. No family paid more than 4,000 Sudanese Dinars per child in governmental kindergartens in one month. Officially, the American dollar is equivalent to 260 Sudanese Dinars.

**Children Served and Group Arrangements.** Private and governmental kindergarten teachers reported the minimum and maximum ages of children enrolled in their classrooms. Participating private kindergartens enrolled children as young as 3 years and 9 months \((SD = 5.93)\) and children as old as 5 years and 10 months \((SD = 2.81)\). Children enrolled in governmental kindergartens were as young as 3 years and 11 months \((SD = 5.29)\) and as old as 5 years and 9 months \((SD = 2.14)\).

Adult-child ratio in the private kindergartens included in the study ranged from 1:6 to 1:33 \((M = 1:16, SD = 6.69)\). Results for governmental kindergartens, where the adult-child ratio ranged from 1:5 to 1:38 \((M = 1:17, SD = 7.65)\), were similar.

The average number of boys in private kindergarten classrooms was 11.93 \((SD = 6.26)\), and the average number of girls was 11.03 \((SD = 5.65)\). For governmental kindergarten classrooms the average was 11.53 \((SD = 7.27)\) boys and 12.07 \((SD = 5.25)\) girls. Overall, there were no significant differences between private and governmental kindergarten classrooms in the average number of boys and girls. However, the range of children in classrooms was very large. Private kindergarten classrooms enrolled from 6 to 49 children, and governmental kindergarten classrooms enrolled from 5 to 60 children.
Classroom Environments. The researcher reported the prints on kindergarten walls that are child, teacher and commercially produced and contained letters, numbers, and children’s work based on one of three levels: almost none, few, or adequate. “Almost none” was coded for classrooms where prints on walls were rare. “Few” was coded for classrooms where more than half the wall space was blank. “Adequate” was coded for classrooms where more than half the classroom walls were covered with prints. Forty-three percent of private kindergartens had adequate numbers of prints on their walls, as compared to only 13.3% of governmental kindergartens. Two-third of the governmental kindergartens included in the study had few prints in their walls (66.7%). In addition, 20% of governmental kindergartens had almost no prints on walls, as compared to 14% of private kindergartens (see Table 2).

The researcher reported children’s accessibility of materials on one of three levels: not accessible, partially accessible, or fully accessible. “Not accessible” was coded for classrooms where materials were totally inaccessible to children. “Partially accessible” was coded for classrooms where at least some of the materials were not accessible to children. “Fully accessible” was coded for classrooms where materials were totally accessible to children. Results documented that 46.7% of private kindergartens provided their children full accessibility of materials, as compared to 13.3% of governmental kindergartens. The majority of governmental kindergartens (70%) provided their children partial accessibility of materials, as compared to 46.7% of private kindergartens. In addition, fewer private kindergartens (6.7%) provided almost no accessibility of materials than did governmental kindergartens (16.7%).
Table 2. Classroom Description of Private and Governmental Kindergartens

<table>
<thead>
<tr>
<th></th>
<th>Private Kindergartens</th>
<th>Governmental Kindergartens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=30</td>
<td>%</td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Khartoum</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td>Khartoum North</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Omdurman</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>Religious Affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Not religious</td>
<td>23</td>
<td>76.7</td>
</tr>
<tr>
<td>Cannot decide</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Length of School Day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four hours</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>Five hours</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Six hours</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fees per Month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in Hundreds Sudanese Dinars)</td>
<td>46</td>
<td>25 - 60</td>
</tr>
<tr>
<td>Minimum Age of Children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in Months)</td>
<td>52</td>
<td>45 - 65</td>
</tr>
<tr>
<td>Adult-Child Ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>12</td>
<td>3 - 25</td>
</tr>
<tr>
<td>Girls</td>
<td>11</td>
<td>2 - 26</td>
</tr>
<tr>
<td>Prints on Walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Almost none</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Few</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Adequate</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>Accessibility of Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not accessible</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Partially accessible</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>Fully accessible</td>
<td>14</td>
<td>46.7</td>
</tr>
</tbody>
</table>
Teachers' Demographic Information

The majority of teachers in governmental kindergartens ($n = 19, 63.3\%$) were between 31 to 40 years of age, and six governmental kindergarten teachers ($20\%$) were more than 41 years old. On average, private kindergarten teachers were younger than governmental kindergarten teachers. These data are represented in Table 3.

The overwhelming majority of private ($n = 21, 70\%$) and governmental kindergarten ($n = 18, 60\%$) teachers reported that they have a bachelor's degree as the highest level of education completed. However, a noticeable number of governmental kindergarten teachers ($n = 12, 40\%$) and private kindergarten teachers ($n = 7, 23.3\%$) reported a high school diploma as the highest level of education completed. A larger percentage of private kindergarten teachers ($n = 16, 53.3\%$) had majored in early childhood education or a related field as compared to governmental kindergarten teachers ($n = 5, 16.7\%$), where a large number of teachers reported that they had specialized in other fields ($n = 13, 43.3\%$).

A large percentage of private kindergarten teachers ($n = 12, 40\%$) reported only one opportunity for in-service training during their careers as kindergarten teachers, as compared to fewer governmental kindergarten teachers ($n = 3, 10\%$). Overall, governmental kindergarten teachers were more likely to report multiple opportunities for in-service training than were their counterparts in private kindergartens.

Half the teachers in both types of kindergarten reported that their experiences in teaching ranged from two to five years. Governmental kindergarten teachers reported more experience on average, than did private kindergarten teachers. Furthermore, governmental kindergarten teachers ($80\%$) were more likely to report that they had worked in their present kindergartens for two or more years than their private kindergarten counterparts ($60\%$).
Table 3. Demographic Information of Head Teachers

<table>
<thead>
<tr>
<th></th>
<th>Private Kindergartens</th>
<th>Governmental Kindergartens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( N = 30 )</td>
<td>%</td>
</tr>
<tr>
<td><strong>Age (in Years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 30</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td>31 - 40</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>Above 40</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>Partial college, enrolled in</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>college, or specialized training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td><strong>Area of Specialization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Specialization (no degree)</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>ECE or related field</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td><strong>Years of Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>1 year</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>2 - 5 years</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>11 - 20 years</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>Years at Present Kindergarten</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>1 year</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>2 - 5 years</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>11 - 20 years</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Training Opportunities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>One opportunity</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Two opportunities</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Three opportunities</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>More than three opportunities</td>
<td>5</td>
<td>16.7</td>
</tr>
</tbody>
</table>
Quality of Kindergarten Classrooms

For each kindergarten, quality was measured with the ECCOS-A, some questions on the CDIS, the NCAS, and the PTCS. Scores for the ECCOS-A were calculated by summing the items of each subscale. Possible scores for the “Interactions among Teachers and Children” subscale range from 15 to 45; actual scores ranged from 17 to 45. Possible scores for the “Curriculum” subscale range from 20 to 60; actual scores ranged from 23 to 57. For the “Physical Environment” subscale, possible scores range from 11 to 33, and actual scores ranged from 13 to 32. Possible scores for the “Health and Safety” subscale range from 15 to 45, and actual scores ranged from 23 to 45. Possible scores for the “Nutrition and Food Service” subscale range from 1 to 3; actual scores ranged from 2 to 3. A total score for the adapted ECCOS-A was also computed for each kindergarten. Possible scores range from 62 to 186; actual scores ranged from 78 to 180. Table 4 presents the means and standard deviations for each subscale and total scores on the ECCOS-A. Table 5 reflects the frequencies, means, and standard deviations for subscale scores on the ECCOS-A for private and governmental kindergartens.

Teachers’ Attitudes towards the National Early Childhood Curriculum

As part of the first objective of the study, the researcher examined teachers’ attitudes toward the National Early Childhood Curriculum imposed by The Sudanese Ministry of Education. Do teachers perceive the National Early Childhood Curriculum as developmentally and individually appropriate? Factor analysis of the NCAS revealed that the correlation matrix was not positive definite which indicates linear dependency and perfect dependability of scores. A teacher’s response to the first item on the NCAS predicts her responses to the remaining 12 items. Therefore, factor analysis will not be reported.
Scores were summed across the 13 Likert-type items of the NCAS to produce a total score reflecting teachers' attitudes towards the National Early Childhood Curriculum. Possible and actual scores for private and governmental kindergarten teachers ranged from 13 to 65 with higher scores indicating stronger endorsement. Mean scores were 46.10 for governmental kindergarten teachers ($SD = 15.60$) and 39.43 for private kindergarten teachers ($SD = 17.02$).

Also, scores were summed across the six Likert items of the Parent-Teacher Communication Scale (PTCS) to produce a total score reflecting the degree of communication between teachers and parents. Possible scores range from 8 to 42; actual scores for private kindergartens ranged from 18 to 42 ($M = 30.63$, $SD = 7.74$), whereas for governmental kindergartens the actual scores ranged from 16 to 42 ($M = 28.1$, $SD = 5.31$).

Table 4. Means and Standard Deviation of Kindergarten Subscales and ECCOS-A Total Scores

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Range</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactions among Teachers and Children</td>
<td>17 - 45</td>
<td>32.17</td>
<td>8.14</td>
</tr>
<tr>
<td>Curriculum</td>
<td>23 - 57</td>
<td>38.98</td>
<td>10.81</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>13 - 32</td>
<td>20.27</td>
<td>5.19</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>23 - 45</td>
<td>35.08</td>
<td>4.86</td>
</tr>
<tr>
<td>Nutrition</td>
<td>2 - 3</td>
<td>2.48</td>
<td>.50</td>
</tr>
<tr>
<td>ECCOS-A Total Scores</td>
<td>78 - 180</td>
<td>128.98</td>
<td>27.59</td>
</tr>
</tbody>
</table>
Table 5. Private and Governmental Kindergartens Scores on Subscales of the ECCOS-A

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Not Met</th>
<th>Partially Met</th>
<th>Fully Met</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>(SD)</td>
<td>M</td>
</tr>
<tr>
<td>Interactions among Teachers and Children</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private kindergartens</td>
<td>10 (2.75)</td>
<td>23.70</td>
<td>20 (3.77)</td>
</tr>
<tr>
<td>Governmental kindergartens</td>
<td>15 (3.65)</td>
<td>23.73</td>
<td>14 (4.43)</td>
</tr>
<tr>
<td>Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private kindergartens</td>
<td>14 (5.11)</td>
<td>29.86</td>
<td>16 (4.22)</td>
</tr>
<tr>
<td>Governmental kindergartens</td>
<td>18 (4.53)</td>
<td>30.17</td>
<td>12 (5.29)</td>
</tr>
<tr>
<td>Physical Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private kindergartens</td>
<td>14 (2.95)</td>
<td>16.93</td>
<td>16 (2.73)</td>
</tr>
<tr>
<td>Governmental kindergartens</td>
<td>23 (2.60)</td>
<td>16.74</td>
<td>7 (2.87)</td>
</tr>
<tr>
<td>Health and Safety</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private kindergartens</td>
<td>1 (0)</td>
<td>26</td>
<td>28 (4.24)</td>
</tr>
<tr>
<td>Governmental kindergartens</td>
<td>2 (2.12)</td>
<td>24.5</td>
<td>28 (3.80)</td>
</tr>
<tr>
<td>Nutrition and Food Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private kindergartens</td>
<td>0 (0)</td>
<td>0</td>
<td>12 (0)</td>
</tr>
<tr>
<td>Governmental kindergartens</td>
<td>0 (0)</td>
<td>0</td>
<td>19 (0)</td>
</tr>
<tr>
<td>ECCOS-A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private kindergartens</td>
<td>12 (10.17)</td>
<td>105.33</td>
<td>18 (14.64)</td>
</tr>
<tr>
<td>Governmental kindergartens</td>
<td>17 (11.54)</td>
<td>103.65</td>
<td>13 (15.72)</td>
</tr>
</tbody>
</table>
Teacher Agreement with the National Early Childhood Curriculum and Kindergarten Affiliation. The researcher tried to identify factors that might influence teachers’ acceptance and endorsement of the National Early Childhood Curriculum. First, the researcher predicted that kindergarten religious affiliation would influence teachers’ acceptance of the National Early Childhood Curriculum. To examine the expected differences on teacher’s scores on the NCAS based on kindergartens’ religious affiliation, a one-way analysis of variance (ANOVA) was conducted with the NCAS scores as the dependent variable (see Table 6). No significant results were documented \[F(2, 57) = 3.16; p = .050\]. However, teachers working in kindergartens that carry Islamic names had higher scores on the NCAS \((M = 50.82, SD = 15.42)\) than did teachers who were working in kindergartens that did not carry Islamic names \((M = 38.97, SD = 15.75)\), reflecting a trend among teachers working in religiously affiliated kindergartens to endorse the National Early Childhood Curriculum.

Table 6. Analysis of Variance Comparing Teachers’ Agreement with the National Early Childhood Curriculum as a Function of Kindergarten Religious Affiliation

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious Affiliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>804.90</td>
<td>3.16</td>
<td>.050</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>254.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teacher Agreement with National Early Childhood Curriculum and Teacher-Related Factors.

The researcher also predicted that teacher education, teacher specialized training, years of experience, years working at present kindergarten, and opportunities for in-service training teachers received would relate to their acceptance of the National Early Childhood
Curriculum. To test for significant differences in scores as a function of teacher education, a one-way analysis of variance (ANOVA) was conducted with the teachers’ scores as dependant variable. The results showed significant differences \[ F(2, 57) = 3.81; p = .028 \]. Scheffe’s multiple-range test for post-hoc analyses revealed a significant difference between teachers with a high school diploma and teachers with college degrees. Teachers with college degrees were significantly less likely to approve of the National Early Childhood Curriculum than were teachers with a high school diploma \( p = .041 \).

As expected, a statistically significant difference was found when teachers’ specialization was the independent variable in a one-way analysis of variance \[ F(2, 57) = 6.95; p = .002 \]. Teachers who had specialized in early childhood education or related fields were less likely to endorse the National Early Childhood Curriculum than were teachers with only a high school education or those who had specialized in other areas. In addition, there was a trend toward a relation between the number of years working at the present kindergarten and teachers’ acceptance of the National Early Childhood Curriculum. Teachers with more years at their present kindergartens were more likely to disapprove of the National Early Childhood Curriculum \[ F(4, 55) = 2.54, p = .050 \]. Table 7 presents these findings.

Curriculum Use. A t-test was conducted to examine differences in the degree to which teachers implemented the National Early Childhood Curriculum during daily activities as a function of program-related factors such as religious affiliation and teacher-related factors such as teacher education. Significant results were documented for program type \[ t(1, 58) = -3.12; p = .003 \]. Teachers in governmental kindergartens used the National Early Childhood Curriculum more often than did teachers in private kindergartens. However, an
analysis of variance with program religious affiliation as an independent variable showed no significant differences \( F(2, 57) = 2.80, p = .069 \).

**Table 7. Analysis of Variance Comparing Teachers’ Agreement with the National Early Childhood Curriculum as a Function of Teacher Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>105.94</td>
<td>.38</td>
<td>.686</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>279.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>951.37</td>
<td>3.81</td>
<td>.028</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>249.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>1580.63</td>
<td>6.95</td>
<td>.002</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>227.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>425.81</td>
<td>1.62</td>
<td>.182</td>
</tr>
<tr>
<td>Within Groups</td>
<td>55</td>
<td>262.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years at Present Kindergarten</td>
<td></td>
<td>628.72</td>
<td>2.54</td>
<td>.050</td>
</tr>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>247.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>13.54</td>
<td>.046</td>
<td>.996</td>
</tr>
<tr>
<td>Within Groups</td>
<td>55</td>
<td>292.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results from the analyses of variance conducted on teacher-related factors documented significant differences for teacher specialization \( F(2, 57) = 7.196; p = .002 \).
Teachers who had specialized training in early childhood education or related fields were less likely to use the National Early Childhood Curriculum than were teachers who had specialized in other fields. Table 8 presents these findings.

Table 8. Analysis of Variance Comparing Teachers’ Use of the National Early Childhood Curriculum as a Function of Teacher Characteristics

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>1.40</td>
<td>.16</td>
<td>.854</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>8.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>21.35</td>
<td>2.62</td>
<td>.081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>8.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>51.00</td>
<td>7.20</td>
<td>.002</td>
</tr>
<tr>
<td>Within Groups</td>
<td>57</td>
<td>7.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4</td>
<td>15.30</td>
<td>1.89</td>
<td>.125</td>
</tr>
<tr>
<td>Within Groups</td>
<td>55</td>
<td>8.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years at Present</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten</td>
<td>4</td>
<td>16.64</td>
<td>2.08</td>
<td>.095</td>
</tr>
<tr>
<td>Training Opportunities</td>
<td>4</td>
<td>7.47</td>
<td>.86</td>
<td>.492</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>8.66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Program Type

The second objective of the study was to examine differences between private and governmental kindergarten programs' quality. A series of analyses were conducted.

Program Type and Program Characteristics. Governmental kindergartens were more likely to be religiously affiliated than were private kindergartens. Programs were dropped from this analysis because it was impossible to determine whether or not the name represented an Islamic affiliation. Results of a 2 x 2 Chi-Square after deletion of “can not decide” kindergartens documented a significant relation between religious affiliation and program type \( \chi^2 (1, N = 52) = 10.58, p = .001 \).

A t-test revealed statistically significant differences between private and governmental kindergartens in enrollment fees. Private kindergartens imposed higher fees than did governmental kindergartens \( t (1, 58) = 8.89, p = .001 \). No significant differences were reported for length of school day \( p = .137 \), adult-child ratio \( p = .556 \), or group size \( p = .831 \).

The researcher considered prints on walls and accessibility of materials as quality related program characteristics, and t-tests revealed statistically significant differences. Private kindergartens were found to have more prints on their classroom walls \( t (1, 58) = 2.20, p = .032 \) and have more materials accessible to children \( t (1, 58) = 2.85, p = .006 \) than did governmental kindergartens.

Program Type and Teacher Related Factors. A series of independent sample t-tests were performed to investigate differences between the characteristics of teachers in private and governmental kindergartens. Results revealed statistically significant differences in age, total number of years of teaching experience, and years working at present kindergarten.
Governmental kindergarten teachers were significantly older than private kindergarten teachers \( t (1, 58) = -2.23, p = .030 \), more experienced \( t (1, 58) = -2.05, p = .045 \), and had worked more years in their present kindergartens \( t (1,580) = -2.06, p = .044 \) than had private kindergarten teachers. No differences were found for teacher education \( p = .272 \), area of teacher specialization \( p = .875 \), or opportunities for in-service training \( p = .175 \). Table 9 presents these findings.

<table>
<thead>
<tr>
<th>Teacher Characteristics</th>
<th>( t )</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-2.23</td>
<td>.030</td>
</tr>
<tr>
<td>Education</td>
<td>1.11</td>
<td>.272</td>
</tr>
<tr>
<td>Specialization</td>
<td>-.16</td>
<td>.875</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>-2.05</td>
<td>.045</td>
</tr>
<tr>
<td>Years at Present Kindergarten</td>
<td>-2.06</td>
<td>.044</td>
</tr>
<tr>
<td>Training Opportunities</td>
<td>-1.37</td>
<td>.175</td>
</tr>
</tbody>
</table>

Program Type and NCAS, PTCS, and ECCOS-A Scores. To examine expected differences between private and governmental kindergarten teachers' scores on the NCAS and PTCS, \( t \)-tests were conducted. No significant differences were documented. There were no mean differences between private and governmental kindergarten teachers in their acceptance of the National Early Childhood Curriculum \( p = .119 \) or their communications with parents \( p = .145 \).

\( T \)-tests were conducted to examine differences between private and governmental kindergartens scores on the ECCOS-A total and subscales. Results showed statistically
significant differences between private and governmental kindergartens on the ECCOS-A total scores \[ t(1, 58) = 2.07, p < .05 \]. Private kindergartens had higher ECCOS-A total scores than did governmental kindergartens. Statistically significant differences were also found between private and governmental kindergartens on the “Physical Environment” \[ t(1, 58) = 2.61, p < .01 \], and “Health and Safety” \[ t(1, 58) = 2.71, p < .01 \] subscales. Again, private kindergartens scored higher than did governmental kindergartens. Table 10 presents these results.

Table 10. Comparisons of Differences between Private and Governmental Kindergartens in ECCOS-A Total and Subscale Scores

<table>
<thead>
<tr>
<th></th>
<th>Private Kindergartens</th>
<th>Governmental Kindergartens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>ECCOS-A</td>
<td>136.13</td>
<td>(28.63)</td>
</tr>
<tr>
<td>Interactions among</td>
<td>33.73</td>
<td>(7.98)</td>
</tr>
<tr>
<td>Teachers and Children</td>
<td>41.17</td>
<td>(11.69)</td>
</tr>
<tr>
<td>Curriculum</td>
<td>21.93</td>
<td>(5.51)</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>36.70</td>
<td>(4.80)</td>
</tr>
<tr>
<td>Health and Safety</td>
<td>2.60</td>
<td>(.50)</td>
</tr>
</tbody>
</table>

Note *p < .05; **p < .01

Predictors of Classroom Quality

The third objective of the study was to examine the relations among classroom quality and the following factors: teacher related factors (e.g., teacher education), structural factors (e.g., adult-child ratio), and process factors (e.g., parent-teacher interaction). To examine possible relations among indicators and ECCOS-A total and subscales scores,
Pearson product moment correlations between the ECCOS-A scores and indicators of quality yielded several statistically significant relations. Table 11 presents these correlations.

ECCOS-A scores were found to be positively correlated with teacher education, prints on walls, accessibility of materials, PTCS, and enrollment fees, whereas it was negatively correlated with adult-child ratio and group size, and NCAS. Further analyses were conducted using linear regression. Program type, education of teachers, the PTCS, the NCAS, group size, adult-child ratio, prints on walls, accessibility of materials, and enrollment fees all were entered simultaneously as predictors of classroom quality as measured by the ECCOS-A total scores. The overall model was significant \( F(9, 50) = 12.29, p < .001 \), accounting for 68.9% of the variance in the dependent variable (adjusted R-square = .633). The standardized regression coefficient for adult-child ratio was -0.33 (\( t = -2.92, p = .005 \)), for parent-teacher communication was 0.21 (\( t = 2.13, p = .038 \)), and for the NCAS was -0.22 (\( t = -2.27, p = .028 \)). Table 12 presents these findings.

An additional analysis was conducted using linear regression with backward deletion. The same above predictor variables were entered to account for quality as measured by the ECCOS-A total scores. The analysis revealed six significant models. The model that included adult-child ratio, accessibility of materials, NCAS, and PTCS as predictor variables was significant \( F(4, 55) = 28.97, p < .001 \) and explained 67.8% of variance in the ECCOS-A scores and the greatest adjusted R-square (.655). The standardized regression coefficients for the predictor variables, t-test, and statistical significance are presented in Table 13. The regression standardized residuals were normally distributed.
Table 11. Pearson Correlation Coefficient and 2-tailed Significance Among Program Type, ECCOS-A, Subscales, and Indicators of Quality

<table>
<thead>
<tr>
<th>Indicators</th>
<th>ECCOS-A</th>
<th>ISC</th>
<th>C</th>
<th>PE</th>
<th>HS</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>Program Type</td>
<td>-.26*</td>
<td>-.19</td>
<td>-.21</td>
<td>-.32*</td>
<td>-.34**</td>
<td>-.23</td>
</tr>
<tr>
<td>Teacher Related Indicators</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher education</td>
<td>.48**</td>
<td>.39**</td>
<td>.47**</td>
<td>.54**</td>
<td>.44**</td>
<td>.26*</td>
</tr>
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<td>Area of specialization</td>
<td>.19</td>
<td>.11</td>
<td>.19</td>
<td>.24</td>
<td>.19</td>
<td>.06</td>
</tr>
<tr>
<td>Years of experience</td>
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<td>.06</td>
<td>-.04</td>
<td>-.02</td>
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<tr>
<td>Years at present kindergarten</td>
<td>.21</td>
<td>.25</td>
<td>.20</td>
<td>.10</td>
<td>.18</td>
<td>.22</td>
</tr>
<tr>
<td>Training opportunities</td>
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<td>.27*</td>
<td>.19</td>
<td>.07</td>
<td>.05</td>
<td>.09</td>
</tr>
<tr>
<td>NCAS</td>
<td>-.54**</td>
<td>-.50**</td>
<td>-.57**</td>
<td>-.51**</td>
<td>-.42**</td>
<td>-.23</td>
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<td>Structural Indicators</td>
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<tr>
<td>Adult-child ratio</td>
<td>-.57**</td>
<td>-.58**</td>
<td>-.47**</td>
<td>-.60**</td>
<td>-.52**</td>
<td>-.48**</td>
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<tr>
<td>Group size</td>
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<td>-.41**</td>
<td>-.38**</td>
<td>-.42**</td>
<td>-.33*</td>
<td>-.32*</td>
</tr>
<tr>
<td>Length of school day</td>
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<td>.10</td>
<td>.08</td>
<td>-.05</td>
<td>.05</td>
<td>.24</td>
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<tr>
<td>Fees</td>
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<td>.47**</td>
<td>.52**</td>
<td>.57**</td>
<td>.57**</td>
<td>.27*</td>
</tr>
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<td></td>
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<tr>
<td>Prints on walls</td>
<td>.64**</td>
<td>.55**</td>
<td>.64**</td>
<td>.64**</td>
<td>.58**</td>
<td>.33**</td>
</tr>
<tr>
<td>Accessibility of materials</td>
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<td>.51**</td>
<td>.61**</td>
<td>.68**</td>
<td>.64**</td>
<td>.52**</td>
</tr>
<tr>
<td>PTCS</td>
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<td>.28*</td>
<td>.52**</td>
<td>.45**</td>
<td>.56**</td>
<td>.26*</td>
</tr>
</tbody>
</table>

Note  *p < .05; **p < .01

ISC = Interactions among Teachers and Children; C = Curriculum; PE = Physical Environment; HS = Health and Safety; N = Nutrition
Table 12. Summary of Linear Regression Analysis Predicting ECCOS-A Scores

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Type</td>
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<td>.664</td>
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<tr>
<td>Teacher Education</td>
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<td>.45</td>
<td>.658</td>
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<td>PTCS</td>
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<td>.038</td>
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<tr>
<td>Adult-Child Ratio</td>
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<td>.005</td>
</tr>
<tr>
<td>Prints on Walls</td>
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<td>.23</td>
<td>.819</td>
</tr>
<tr>
<td>Accessibility of Materials</td>
<td>.23</td>
<td>1.61</td>
<td>.113</td>
</tr>
<tr>
<td>Fees</td>
<td>.15</td>
<td>.87</td>
<td>.391</td>
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Table 13. Summary of Linear Regression Analysis Using Backward Deletion to Predict ECCOS-A Scores

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTCS</td>
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<td>3.02</td>
<td>.004</td>
</tr>
<tr>
<td>NCAS</td>
<td>-.26</td>
<td>-2.97</td>
<td>.004</td>
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<tr>
<td>Adult-Child Ratio</td>
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<td>-4.60</td>
<td>.001</td>
</tr>
<tr>
<td>Accessibility of Materials</td>
<td>.30</td>
<td>3.23</td>
<td>.002</td>
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</table>

Parent-Teacher Communication

For the fourth objective of the study, analyses were conducted to investigate possible differences in parent-teacher communication as a function of program type, teacher-related factors, group size, and adult-child ratio.
Communication and Program Type. To examine possible differences in communication between teachers and parents as a function of program type, a t-test was conducted with PTCS scores as a dependent variable. No significant difference was found between private and governmental kindergartens on communication between teachers and parents \[ t (1, 58) = 1.48; p = .145 \].

Communication and Teacher Characteristics. A series of one-way analyses of variance (ANOVA) were conducted to examine if the PTCS scores varied as a result of teacher-related variables. Significant effects of teacher education on communication scores were found \[ F (2, 57) = 3.70; p = .03 \]. Teachers with more education communicated more with parents than did teachers with less education.

Also, teacher-parent communication was related to the teachers’ specialization areas \[ F (2, 57) = 10.05; p = .001 \]. Scheffe’s multiple-range test for post-hoc analyses revealed that teachers who had specialized in early childhood education or related fields were found to communicate more often with parents than did teachers with no specialization \( p = .001 \) or those who had specialized in fields other than early childhood education \( p = .003 \).

To explore differences in communication scores as a function of teacher age, the total years of teaching experience, number of years working in present kindergarten and the number of training opportunities teachers were exposed to, a series of one-way analyses of variance were conducted. The results did not reveal any statistically significant differences for age \( p = .644 \), teaching experience \( p = .257 \), years in present kindergarten \( p = .219 \), or training opportunities \( p = .208 \). Table 14 presents all findings.

Communication Scores, Group Size, and Adult-Child Ratio. To examine possible effects of group-size and adult-child ratio on communication between teachers and parents, a
Pearson product moment correlation was conducted. Results, unexpectedly, documented no statistically significant relations between PTCS and group size (-.17, \( p = .193 \)) or between PTCS and adult-child ratio (-.15, \( p = .240 \)).

Table 14. Analysis of Variance Comparing Communication between Parents and Teachers as a Function of Teacher Characteristics

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean Square</th>
<th>( F )</th>
<th>( p )</th>
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<tr>
<td>Age</td>
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<td>.44</td>
<td>.644</td>
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<td></td>
<td>57</td>
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<td>Teacher Education</td>
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<td></td>
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<td>Years of Experience</td>
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<td>.219</td>
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<td></td>
<td>55</td>
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<td></td>
<td>55</td>
<td>43.44</td>
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DISCUSSION

This study was the first known attempt to examine the quality of early childhood education programs, or kindergartens, in Sudan. The researcher's intent was to provide empirical data by examining four specific objectives. The first objective was to describe Sudanese kindergarten programs in terms of program administration and quality, teacher characteristics and teachers' perceptions of the National Early Childhood Curriculum. The second objective was to examine the relation between program quality and kindergarten administration. The third objective was to examine the relations among kindergarten quality and program type, teacher education, teacher specialization, teacher experience, teacher training, teachers' acceptance of the National Early Childhood Curriculum, adult-child ratio, group size, length of school day, enrollment fees, exposure to prints, accessibility of materials, and parent-teacher communication. The fourth objective of the study was to examine the relations among the rates and quality of parent-teacher communications, program related factors, and teacher characteristics.

Program Characteristics

In Sudan, the term kindergarten is considered to apply to any program before first grade, whereas in the United States the term refers to programs for five-year-old children. The sample here showed that in a Sudanese kindergarten, children could range in age from three years and nine months to five years and ten months. And, the number of children in a kindergarten classroom could range from five to sixty children. And, the number of children in a kindergarten classroom could range from five to sixty children. In addition, one teacher can be responsible for six and up to thirty-eight children. From an educator's view point, one might argue that it is a difficult task for any teacher to provide developmentally appropriate programming for that wide range of age and number of children. Therefore, the researcher
advocates that this should be the first feature in Sudanese kindergartens to be changed. The range of children’s ages, child-adult ratio, and group size should be governed by registration and licensing regulations.

Furthermore, descriptive data generally provide a less than encouraging picture of the children’s classroom environments. The amount of prints on the walls and accessibility of materials to children in the kindergarten programs is not as desired. More than half of kindergartens, especially governmental kindergartens, provide less than adequate amounts of prints on their walls. Also, more than half of private kindergarteners and more than seventy percent of governmental kindergarteners do not have full access to educational and activity materials regardless of the amount of materials actually available. Sudanese kindergartens face a problem of insufficient materials. This problem is compounded with the fact that in most kindergartens children do not have full access to materials. Because of the insufficient amount of materials, teachers and program personnel tend to be overly protective of what they have. In most kindergartens, materials are deliberately stored on high and inaccessible shelves or behind glass cupboards in efforts to make materials last longer. As a result, in a Sudanese kindergarten one would observe more teacher directed activities and instruction than child initiated and exploratory activities.

With regard to cost of early childhood programs, there are no free or subsidized programs in Sudan. Private and governmental kindergartens are fee-charging institutions. As a result, early childhood education is limited to the urban wealthy community leaving the at-risk children in rural and poor communities unserved. Khattab (1995) suggested that in judging whether costs of early childhood education are affordable or not, it is advisable to relate cost estimates to the particular economic context in which they are anchored; as costs
are sometimes compared to household income, the level of minimum wage, or the per capita Gross National Income (GNI). In the case of Sudan, descriptive data showed that families pay from 24,000 to 72,000 Sudanese Dinars annually for one child’s early childhood education. Given the current rate of exchange, 260 Dinars is equivalent to one U.S. Dollar, Sudanese families pay from $93 to $277 per one child annually. For a country like Sudan where the GNI per capita is $460 in 2003 (World Bank, 2005), it is very obvious that early childhood education will indeed be limited to the wealthy few.

**Kindergarten Teachers**

Although the overwhelming majority of private and governmental kindergarten teachers reported a bachelor’s degree as the highest level of education completed, almost half of teachers received specialized training in fields other than early childhood education. This percentage is even higher for governmental kindergarten teachers. This finding supports Khattab’s (1995) speculations that the lack of training institutions for early childhood educators is a major problem facing the proper development of early childhood programs in the country. In addition, many early childhood education graduates do not opt to work in kindergartens or drop out because of low salaries (Badri, 1992). Even the limited numbers of college graduates who actually work in kindergartens tend to leave their jobs for more well paying jobs whenever scarce opportunities arise. However, governmental kindergarten teachers reported more experience on average and were more likely to report that they had worked in their present kindergartens more years than their counterpart private kindergarten teachers. This finding can be explained in terms of the stability of working for the government regardless of low salaries. As a government employee, generally one’s job is maintained unless one is laid off “for the benefit of the people.” This term has political
connotations implying that the specific employee contradicted verbally or action-wise any of the policies set forth by the government.

Quality of Kindergarten Programs

The researcher measured kindergarten quality with some questions on the CDIS such as adult-child ratio, group size, prints on walls, and children's accessibility of materials. Kindergarten quality was also measured by the ECCOS-A total scores. The researcher also measured kindergarten quality based on teachers' endorsement of the National Early Childhood Curriculum, with quality being equated with lower degrees of endorsement or non-endorsement of the National Early Childhood Curriculum. In addition, the researcher measured quality with the rates of parent-teacher communications.

None of the 60 kindergartens included in the study fully met the standards of quality as measured by the ECCOS-A total scores. When considering the ECCOS-A subscales, only one kindergarten fully met the standards as measured by "Interactions among Teachers and Children" subscale. Again, only one kindergarten fully met the requirements of the "Health and Safety" subscale. However, a total of 29 kindergartens fully met the requirements of the one item "Nutrition and Food Service" subscale. As a group, kindergartens scored worst on the "Physical Environment" subscale followed by the "Curriculum" subscale. These findings suggest that in areas where financial resources are needed most, kindergartens did the worst.

A major problem facing Sudanese kindergartens is the lack of suitable educational materials. Most kindergartens have no adequate variety of educational materials and children's accessibility of whatever is available is indeed another problem. The standard materials in a Sudanese kindergarten are comprised of mainly sand and water, a few artwork tools, dolls, climbing frames, handicraft materials, and gardening tools. Moore (1986) documented that
both child development and teacher behavior in an early childhood education program are influenced, among other things, by an appropriate amount of materials for use by the children located so as to be readily accessible to them. Moore (1986) further reported that children's exploratory behaviors such as manipulating objects was positively associated with increased rates of socially cooperative interactions among children in the early childhood education setting. In addition, any developmentally appropriate curriculum should emphasize the role of play in children's learning (Bredekamp & Copple, 1997). Children learn best through play that is self-initiated, self-directed and self-chosen with the role of the teacher being centered on providing a variety of rich and stimulating activities and supporting and guiding children's play. Therefore, it is not surprising that Sudanese kindergartens score poorly on the "Interaction among Teachers and Children" and "Curriculum" subscales.

Teacher’s Attitudes towards the National Early Childhood Curriculum

For the most part, teachers working in religiously affiliated kindergartens reflected a greater tendency to endorse the National Early Childhood Curriculum than did teachers working for other kindergartens. Findings from this study also documented that governmental kindergartens were more likely to be religiously affiliated than were private kindergartens. Taken together, these findings suggest that teachers are influenced and pressured by the policies of the specific kindergartens that employ them. A teacher working at a religiously affiliated kindergarten, which is more likely to be a governmental kindergarten, feels pressured to declare endorsement of the National Early Childhood Curriculum to avoid being laid off "for the benefit of the people." In line with this explanation is the fact that the degree to which teachers use and implement the National Early Childhood Curriculum is not influenced by program religious affiliation.
Results of this study documented that teachers with college degrees who specialized in early childhood education or a related field and with more years working at their present kindergartens were less likely to endorse and use the National Early Childhood Curriculum. Surprisingly, teachers with more teaching experience and those who had more opportunities of in-service training were found to have a greater tendency to endorse and use the National Early Childhood Curriculum. However, and for the most part, these results suggest that the National Early Childhood Curriculum needs to be modified and follow the empirically validated guidelines for early childhood education that children are active learners who learn best from activities they choose and carry out themselves. Any early childhood curriculum should adopt an active learning methodology by creating an environment in which young children can explore actively; discover relations through direct experiences; and manipulate, transform, and combine materials in a safe environment. By implementing such a curriculum the researcher by no means is intending to detract from the spiritual and religious standing of the National Early Childhood Curriculum. On the contrary, the aim is to modify the National Early Childhood Curriculum to respond to present day young children's needs and rights to developmentally and individually appropriate curriculum.

Differences between Private and Governmental Kindergartens

Private kindergartens were found to have more prints on their classrooms walls and have more materials accessible to children than did governmental kindergartens. Also, private kindergartens were found to impose higher enrollment fees than governmental kindergartens. Accordingly, the researcher suspects that imposing higher enrollment fees gives private kindergartens the advantage of having more financial means to use towards
providing materials for their kindergarten classrooms. The researcher, however, does not suggest that kindergartens should impose higher enrollment fees.

A major difference between private and governmental kindergartens was a difference in their overall quality as measured by the ECCOS-A total score. Private kindergartens had higher ECCOS-A total scores than did governmental kindergartens. In addition private kindergartens scored higher than governmental kindergartens in the “Physical Environment” and “Health and Safety” subscales. These results are rather surprising given that governmental kindergarten teachers were significantly older, more experienced, and had worked more years in their present kindergartens than had their counterparts in private kindergartens. The researcher speculates that the differences in the ECCOS-A total scores are due to the advantages private kindergartens have in the two subscales of “Physical Environment” and “Health and Safety.” However, the researcher expected governmental kindergarten teachers, who were more experienced, to outperform private kindergarten teachers in the “Interaction among Teachers and Children” and “Curriculum” subscales. One explanation as to why governmental kindergarten teachers failed to outperform private kindergarten teachers despite their relatively greater years of experiences could be the importance of specialization in early childhood education or related field. Only 16.7% of governmental kindergarten teachers had specialized in early childhood education or related field as compared to 53.3% of private kindergarten teachers.

Predictors of Quality

Quality as measured by the ECCOS-A total score was correlated with teacher education, prints on walls, accessibility of materials, adult-child ratio, group size, parent-teacher communication, the National Early Childhood Curriculum acceptance scale, and
enrollment fees. When these variables were entered as predictors in a linear regression model to predict quality, the results showed significance. The rate and quality of parent-teacher communication, teachers’ disapproval of the National Early Childhood Curriculum, low adult-child ratios, and children’s accessibility of materials explained 67.8% of the variance in the ECCOS-A total scores (adjusted R-square = .665).

These results are in line with results of research conducted in the United States. For example, Ghazvini and Readdick (1994) documented a positive correlation between program quality and frequency of parent-caregiver communication. Also, Hogan (1991) reported that children whose parents talk most with teachers showed the highest rates of positive interactions with both the teacher and other children in the child care setting. These results suggest that communication between the parent and the early childhood teacher tends to increase the child’s interactions with other children and with adults. With regard to adult-child ratio, researchers in the United States have consistently documented that low adult-child ratio is correlated with responsive, sensitive caregiving which is an indicator of high-quality programs. Therefore, conclusions were drawn that appropriate adult-child ratio is a necessary element in high-quality early childhood programs.

As for the National Early Childhood Curriculum, results of the present study consistently documented a negative relation between the National Early Childhood Curriculum and program quality as measured by the ECCOS-A total scores. These findings are not surprising, because the focus of the National Early Childhood Curriculum is on memorizing as many verses of the Quran as possible. Any developmentally appropriate curriculum should stimulate learning in physical, social, emotional, and cognitive development via an integrated curricular approach that responds to individual differences in
ability, interest, development, and learning styles. In addition, the curriculum should offer children choices of many activities and materials, and offer children time to explore through active involvement and interaction with other children and adults. Furthermore, children should be provided with concrete and real experiences relevant to their own lives by using culturally appropriate activities (Bredekamp & Copple, 1997). Unfortunately, the Sudanese National Early Childhood Curriculum lacks those developmentally appropriate qualities. Therefore, and as mentioned previously, for kindergartens to achieve high quality, major changes to the National Early Childhood Curriculum ought to be made.

**Parent-Teacher Communication**

Results of the present study revealed that teachers with more education communicated more with parents than did teachers with less education. Furthermore, teachers who had specialized training in early childhood education or related fields were found to communicate more often with parents than were teachers with no specialization or those who had specialized in fields unrelated to early childhood education. Evidence of the importance of parent-teacher communication as an indicator of high-quality early childhood education programs is undebatable. Therefore, the researcher considers the above results very promising as they suggest there is room for intervention. Again, the fact that teacher education and teacher specialization accounted for significantly higher rates of parent-teacher communication strengthens the researcher’s argument that teacher training is a significant indicator of high-quality early childhood education programs. Recommendations for teacher education and teacher specialization in early childhood education or related fields could be supported based on the results of this study. Indeed, results of the present study consistently reflected the importance of teacher education and specialization.
CONCLUSIONS AND IMPLICATIONS

The results of this study have documented that teacher education with specialization in early childhood education or related fields could be considered the cornerstone in enhancing the quality of kindergartens in Sudan. One of the major problems facing early childhood education in Sudan is the lack of teacher training institutions. Ahfad University for Women is the only institution in Sudan that provides teacher training in early childhood education. To supplement Ahfad University’s leadership, some efforts were carried out by the Ministry of Social Welfare and UNICEF to rectify the problem of teacher training. Jointly these two institutions established a center for training teachers in 1983 (Khattab, 1995). In addition, other universities have started to introduce early childhood education as a major. However, the researcher strongly believes that the Government of Sudan represented by the Ministry of Education should make early childhood education part of the educational system. By doing so, early childhood education would get the financial and professional support needed for teacher training. In addition, the Ministry of Education should establish licensure requirements for early childhood teachers. This step would guarantee that only highly educated and qualified teachers will interact with young children. The discouraging scores kindergartens received on the subscales of “Interaction among Teachers and Children” and “Curriculum” seem to point out to the importance of teacher education and training.

The limited financial resources available for early childhood education programs, in general, are mainly responsible for the lack of high-quality kindergartens in Sudan. The government of Sudan represented by the Ministry of Education does not take on sole responsibility of early childhood education services in the country. Present early childhood education funding is from international and regional donors and from local initiatives.
Kindergartens base their fund raising activities on individual efforts and imposing tuition fees on families (Khattab, 1995). A solution for financial constraints could lie in making early childhood education part of the national educational system in Sudan. That being the case, the government of Sudan would hopefully allocate more financial funds for early childhood education, expand coverage and improve the quality of children’s early childhood experiences.

Results of this study also revealed that low adult-child ratio and group size are related to high-quality kindergartens. Again, the researcher suggests that regulations regarding adult-child ratio and group size should be established and enforced. The Ministry of Education should expand its role as a licensing figure to cover regulations that mandate kindergartens to adhere to specific standards of adult-child ratio and group size.

With regard to the National Early Childhood Curriculum, results of the study overwhelmingly documented the shortcomings of the curriculum as per teachers’ perceptions and negative correlations with quality as measured by the ECCOS-A total scores. Therefore, recommendations are strongly made to modify the curriculum to incorporate developmentally appropriate practices.

Finally, results of this study provided the Sudanese literature with empirical evidence of the quality of kindergartens in the State of Khartoum. Future research, however, needs to address the quality of early childhood education in other parts of Sudan. Future research also needs to examine the role of administrators, especially program directors, in relation to overall program quality.
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As it is always true, this work could not have been accomplished without the participation of subjects. I offer all involved in the Sudanese private and governmental kindergartens who participated in the study my special appreciation and gratitude. I am also deeply thankful to all the early childhood professionals in Sudan who participated in the execution of this study.

Most importantly, I would like to express my deepest love to my family, my number one motivators. Without their love and encouragement throughout the years of my education and my life, this work would not have existed. My mother, my brothers Waleed and Ahmed, and my sister Amel were, are, and will always be great. I find no appropriate words to express my feelings than “I love you all.” I also would like to acknowledge Wail who practically proved that brothers and sisters do not have to be biologically related. Wail was, and I know he will always be, the mirror in my life. Thank you, Wail for being the brother I needed to help me through the overwhelmingly difficult times.

I may not have made it this far without the support and encouragement of my excellent support system; Sumaya, Almas, Asiya, and Azza Emam. Sumaya was always there when I needed an encouraging word or when I just needed someone to help me put things back into perspective. I am heartily thankful for her support and understanding, without which the stress and home sickness would have been overwhelming. Thank you, Sumaya, for your endless encouragement when I needed someone to help me regulate my emotions. Almas, Asiya and Azza were always there to offer their support and a shoulder when I desperately needed one. They taught me that a friend in need is a friend indeed.
Although the miles may be numerous between us in the future, the enjoyable memories will definitely remain near.

I would also like to express my gratitude to Rachel Martin who offered her help and welcomed me in her home when I needed someone by my side after the accident. I find no appropriate words to express my feelings than “thank you Rachel for being my family away from my family.”

Above all, I am especially grateful to Allah, for His endless love, guidance, and for blessing me with strength, perseverance, and the virtue of life. Alhamdulillah for giving me and my son a second chance in life.
APPENDIX A:

CORRESPONDENCE
Information for Review of Research Involving Human Subjects
Iowa State University
(Please type and use the attached instructions for completing this form)

1. Title of Project
   Early Childhood Education in Sudan today

2. I agree to provide the proper surveillance of this project to ensure that the rights and welfare of the human subjects are protected. I will report any adverse reactions to the committee. Additions to or changes in research procedures after the project has been approved will be submitted to the committee for review. I agree to request renewal of approval for any project continuing more than one year.

   Azza Habib
   Typed name of principal investigator
   7/10/2000
   Date
   Signature of principal investigator

   HDFS
   Department
   (515) 233-9951
   Phone number to report results

3. Signatures of other investigators
   Carla Petison
   7/10/2000
   Date
   Major Professor
   Relationship to principal investigator

4. Principal investigator(s) (check all that apply)
   ☑ Faculty ☐ Staff ☑ Graduate student ☐ Undergraduate student

5. Project (check all that apply)
   ☑ Research ☐ Thesis or dissertation ☐ Class project ☐ Independent Study (490, 590, Honors project)

6. Number of subjects (complete all that apply)
   # adults, non-students: 65-100
   # minors under 14:
   # ISU students:
   # minors 14 - 17:
   # other (explain):

7. Brief description of proposed research involving human subjects: (See instructions, item 7. Use an additional page if needed.)
   See attached sheet

8. Informed Consent:
   ☑ Signed informed consent will be obtained. (Attach a copy of your form.)
   ☐ Modified informed consent will be obtained. (See instructions, item 8.)

http://www.grad-college.iastate.edu/forms/HumanSubjects.doc GC 09/99
9. Confidentiality of Data: Describe below the methods you will use to ensure the confidentiality of data obtained. (See instructions, item 9.)

The identities of the subjects will not be revealed in any publication, computer data storage, any document, recording photograph, or in any other way which relates to this study. When data protocols are completed, the protocols will be coded with an identification number and all identifying information will be removed. The list of codes and document identifiers will be stored in a place (file cabinet and computer disk) separate from the data files. Only group analyses of the data will be reported.

10. What risks or discomfort will be part of the study? Will subjects in the research be placed at risk or incur discomfort? Describe any risks to the subjects and precautions that will be taken to minimize them. (The concept of risk goes beyond physical risk and includes risks to subjects' dignity and self-respect as well as psychological or emotional risk. See instructions, item 10.)

No risks are anticipated. Teachers will need to devote a small amount of time (approximately 45 to 60 minutes) to complete the required forms, but it is not expected that this will be a stressful situation for the teachers. Observers will make every effort not to intrude on regularly scheduled classroom activities, it is quite possible that the children will be unaware that they are being observed.

11. CHECK ALL of the following that apply to your research:
   A. Medical clearance necessary before subjects can participate
   B. Administration of substances (foods, drugs, etc.) to subjects
   C. Physical exercise or conditioning for subjects
   D. Samples (blood, tissue, etc.) from subjects
   E. Administration of infectious agents or recombinant DNA
   F. Deception of subjects
   G. Subjects under 14 years of age and/or Subjects 14 - 17 years of age
   H. Subjects in institutions (nursing homes, prisons, etc.)

   I. Research must be approved by another institution or agency (Attach letters of approval)

If you checked any of the items in 11, please complete the following in the space below (include any attachments):

   Items A–E   Describe the procedures and note the proposed safety precautions.

   Items D–E   The principal investigator should send a copy of this form to Environmental Health and Safety, 118 Agronomy Lab for review.

   Item F   Describe how subjects will be deceived; justify the deception; indicate the debriefing procedure, including the timing and information to be presented to subjects.

   Item G   For subjects under the age of 14, indicate how informed consent will be obtained from parents or legally authorized representatives as well as from subjects.

   Items H–I   Specify the agency or institution that must approve the project. If subjects in any outside agency or institution are involved, approval must be obtained prior to beginning the research, and the letter of approval should be filed.

http://www.grad-college.iastate.edu/forms/HumanSubjects.doc GC 09/99
Checklist for Attachments and Time Schedule

The following are attached (please check):

12. ☑ Letter or written statement to subjects indicating clearly:
   a) the purpose of the research
   b) the use of any identifier codes (names, #'s), how they will be used, and when they will be removed (see item 17)
   c) an estimate of time needed for participation in the research
   d) if applicable, the location of the research activity
   e) how you will ensure confidentiality
   f) in a longitudinal study, when and how you will contact subjects later
   g) that participation is voluntary; nonparticipation will not affect evaluations of the subject

13. ☐ Signed consent form (if applicable)

14. ☐ Letter of approval for research from cooperating organizations or institutions (if applicable)

15. ☑ Data-gathering instruments

16. Anticipated dates for contact with subjects:

<table>
<thead>
<tr>
<th>First contact</th>
<th>Last contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 15, 2000</td>
<td>December 15, 2000</td>
</tr>
<tr>
<td>Month/Day/Year</td>
<td>Month/Day/Year</td>
</tr>
</tbody>
</table>

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:
   December 20, 2001

18. Signature of Departmental Executive Officer

   Signature: [Signature]
   Date: 7-10-00
   Department or Administrative Unit: NDFS

19. Decision of the University Human Subjects Review Committee:

   ☑ Project approved
   ☐ Project not approved
   ☐ No action required

   Name of Human Subjects in Research Committee Chair
   Patricia M. Keith

   Date: 11-1-00
   Signature of Committee Chair: [Signature]
June 5, 2000

Ms. Habib.

Please see the enclosed permissions policy, which applies to your request to use the observation form and teacher survey for your study. Please provide a proper citation for all materials, and be sure to indicate where you have made any changes from the originals.

If you have any further questions, please contact me at 1-800-424-2460, ext. 465.

Sincerely,

Lucy Thompson
Editorial Assistant, NAEYC
On March 1, 1999, the National Association for the Education of Young Children modified its permissions policy to state:

No permission is needed for individuals or non-profit organizations to excerpt or make copies of NAEYC-copyrighted material for personal use, for library reserve, or to share as handouts with students, teachers/staff, parents, or policymakers, as long as credit is given.

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*To obtain copyright information, refer to the copyright page of the book or last page of the Young Children article. If NAEYC is not the copyright holder, please contact the person or persons listed as the copyright holders.

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Danvers, MA 01923
phone: (978) 750-8400
fax: (978) 750-4470
http://www.copyright.com
Date: ____________________

Dear Director,

You are invited to participate in a study examining the quality of kindergartens in Sudan. Research has documented that high quality programs have long-term positive effects on children’s development. For example, children who attended quality early childhood programs were rated as having fewer behavior problems in elementary school than peers who had been enrolled in low quality early childhood programs. The proposed study will provide insight into our understanding of the quality of our kindergartens and will provide information that will strengthen programming for young children in our country.

The study involves observing a classroom of five-year-old children in your kindergarten for a period ranging from two and a half to three and a half hours for one day. The head teacher will also be interviewed regarding their attitudes toward the National Early Childhood Curriculum. No special activities or interactions will be expected for the children in the classroom during observation.

I am seeking your permission to participate in the study. Observations for the selected classroom and teacher interviews will be concluded in the same day. Participation in this study is completely voluntary. The study presents no risks to the teacher, kindergarten, or children. All information will be kept confidential, only group data will be presented. No kindergarten, teacher, or child will be identified by name in the final research report. Results of the study will be presented in a doctoral dissertation, in future journal articles, and presentations at professional meetings.

Thank you in advance for your support of the study. If you have any questions, please contact me at 224500.

Sincerely

Azza Habib
Graduate Student
KINDERGARTEN DIRECTOR PERMISSION FOR THE STUDY OF EARLY CHILDHOOD EDUCATION IN SUDAN TODAY

The purpose and the general nature of the research procedures have been explained to me. I understand that a classroom in the kindergarten will be observed for no more than four hours. I understand that neither the program, the head teacher, nor the children will be identified by name and all information will be kept confidential. Finally, I understand that I am free to withdraw from this study at any time.

I am willing for __________________ to participate in (Name of kindergarten) this study as described in the accompanying letter.

I am not willing for __________________ to participate in (Name of kindergarten) this study as described in the accompanying letter.

Director’s Signature __________________________ Name of Kindergarten __________________________

Date __________________________
Dear Teacher,

You are invited to participate in a study examining kindergarten programs in Sudan. The proposed study will provide insight into our understanding of kindergarten programs, as well as the experiences of teachers and children participating in kindergarten programs. This information could assist with enhancing the quality of programming for young children and teacher training in our country.

The study involves observing your classroom of five-year-old children for a period ranging from two and a half to three and a half hours for one day. No special activities or interactions will be expected for the children in your classroom during the observation. You will also be interviewed regarding your attitude toward the National Early Childhood Curriculum.

I am seeking your permission to participate in the study. Observations for the selected classroom and your interview will be concluded in the same day. Participation in this study is completely voluntary. The study presents no risks to you, the kindergarten, or the children in your classroom. All information will be kept confidential; only group data will be presented. No kindergarten, teacher, or child will be identified by name in the final research report. Results of the study will be presented in a doctoral dissertation, in future journal articles, and presentations at professional meetings.

Thank you in advance for your support of the study. If you have any questions, please contact me at 224500.

Sincerely

Azza Habib
Graduate Student
KINDERGARTEN TEACHER PERMISSION FOR THE STUDY OF EARLY
CHILDHOOD EDUCATION IN SUDAN TODAY

The purpose and the general nature of the research procedures have been explained to me. I understand that any questions regarding the study will be answered. I understand that neither the program, the head teacher, nor the children will be identified by name and all information will be kept confidential. Finally, I understand that I am free to withdraw from this study at any time.

_____ I am willing to participate in this study as described in the accompanying letter.

_____ I am not willing to participate in this study as described in the accompanying letter.

Teacher’s Signature ______________________ Name of Kindergarten ______________________

Date ______________________
APPENDIX B:

THE EARLY CHILDHOOD CLASSROOM OBSERVATION SCALE-ADAPTED
**General Administration Guidelines**

1. This scale is to help you observe and rate the level of quality of early childhood programs. Each item is related to the Criteria for High Quality Early Childhood Programs set forth by the National Academy of Early Childhood Education Programs (NAECP). The letters and numbers to the left of each item refer to a specific criterion that is found in the accreditation criteria and procedures of the NAECP.

2. Each boldface statement is the criterion to be rated. Many criteria are followed by a list of indicators that *must* be considered in the rating. Indicators (important points to look for) are listed next to a box □. Put a check mark in the box as you observe the indicator. Examples are sometimes provided to help define the Criteria. These specific examples do not have to be observed, but something similar should be seen.

3. Changes or modifications to the original Early Childhood Classroom Observation Scale are identified with an asterisk (*). For the purposes of this study, only items covering children from the age of three years through five years are included in these materials.

4. Read over the entire observation form before beginning to rate a classroom.

5. Spend 10 to 15 minutes becoming familiar with the classroom before beginning to assign ratings.

6. The items do not need to be completed in order. Some criteria are rated more easily than others and these can be done first. Start with the criteria observed most easily such as items for Physical Environment (G) and Health and Safety (H).

7. If children move among more than one teacher (e.g., between learning centers), follow the children and base your rating on the quality of the children’s overall experience.

8. When more than one teacher is observed in the classroom, base ratings on all adults who interact with the children. Rule of Thumb: rate criteria on the quality of the children’s experience.

9. If there are no clearly defined groups in separate spaces, follow what is happening to a sample of an age group of children.
10. Do not feel pressured to rate a criterion too quickly. If you relax, observe, and gain a sense of what is happening, it is easier to make a rating decision.

11. Rate each criterion using the following scale:

<table>
<thead>
<tr>
<th>□</th>
<th>Not met</th>
<th>The Criterion is not met.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>You observe little evidence that this statement accurately describes the program.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The behavior happens rarely or seldom.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>□</th>
<th>Partially met</th>
<th>This Criterion is partially met.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>You observe some evidence that this statement accurately describes a program.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The behavior happens some of the time.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>□</th>
<th>Fully met</th>
<th>The Criterion is completely met.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>You observe a great deal of evidence that this statement accurately describes the program throughout the day.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The behavior happens most of the time.</td>
<td></td>
</tr>
</tbody>
</table>

12. Rate the criteria checking one of the boxes not, met partially met or fully met.

   Explain your ratings under the “Comments” column if the criterion is either not met or partially met. No explanation is needed if the criterion is fully met.

13. In some cases, the criteria do not apply to the program; please check the box marked “Not applicable”.

Specific Observation Guidelines
A. Interactions among Teachers and Children

A-1. Teachers interact frequently with children showing affection, interest, and respect.

☐ Teachers interact nonverbally by smiling, touching, holding
☐ Teachers talk with and listen to individual children during activities and routines (arriving/departing, eating).
☐ Teachers actively seek meaningful conversations with children.

☐ Not met ☐ Partially met ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-2. Teachers are available and responsive to children.

☐ Listen to children with attention and respect.
☐ Respond to children’s questions and requests.
☐ Teachers are aware of the activities of the entire group even when dealing with a smaller group; teachers position themselves strategically and look up often from involvement.
☐ Teachers spend time observing each child without interrupting and actively involved child.

☐ Not met ☐ Partially met ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-3a. Teachers speak with children in a friendly, courteous manner.

☐ Speak with individual children often.
☐ Teachers include child in conversations; describe actions, experiences, and events; listen and respond to children’s comments and suggestions.
☐ Speak with children at eye level.
☐ Call children by name.

☐ Not met ☐ Partially met ☐ Fully met
A-3b. Teachers talk with individual children, and encourage children of all ages to use language.
For example,
Ask children open-ended questions.
☐ Not met  ☐ Partially met  ☐ Fully met
Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-4a. Teachers treat children of all races, religions, family backgrounds, and cultures equally with respect and consideration.
For example,
Teachers initiate activities and discussions to build positive self-identity and teach the value of differences.
Teachers provide books, dolls, toys, dress-up props, photos, pictures, and music that reflect diverse images children may not likely see elsewhere, as well as those that reflect lives of those in the classroom.
Teachers make it a consistent practice that a person's identity (age, race, ethnicity, family life, physical appearance, and ability) in valued, acknowledged, and represented in images and activities.
Teachers talk positively about each child's physical characteristics and cultural heritage.
Teachers react to teasing or rejecting among children by intervening to discuss similarities and differences.
☐ Not met  ☐ Partially met  ☐ Fully met
Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
A-4b. Teachers provide children of both sexes with equal opportunities to take part in all activities. 
For example, 
Provide models, props, and visual images the counter traditional sex-role limitations (i.e., female firefighters, male nurses). 
Value positive levels of noise and activity involving both girls and boys. 
When acknowledging individual children, avoid gender stereotypes in language references (i.e., use words such as strong, gentle, pretty, helpful for both girls and boys). 
If small groups are designated, avoid dividing by gender.

☐ Not met ☐ Partially met ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-5. Teachers encourage independence in children as they are ready. 
For example, 
Threes and fours: dressing, picking up toys. 
Five: setting table, cleaning, acquiring self-help skills. 

☐ Not met ☐ Partially met ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-6a. Teachers use positive approaches to help children behave constructively. 
Guidance methods include:
☐ Redirection. 
☐ Planning ahead to prevent problems. 
☐ Encouragement of appropriate behaviors. 
☐ Consistent, clear rules developed in conjunction with children and discussed with them to make sure they understand. 
☐ Teachers describe the situation to encourage children’s evaluation of the problem rather than impose the solution. 
☐ Logical or natural consequences applied in problem situation. 

☐ Not met ☐ Partially met ☐ Fully met
A-6b. **Teachers do not use physical punishment or other negative discipline methods that hurt, frighten, or humiliate children.**
For example,
Teachers help children recognize another child’s feelings before apology is delivered.*
Food or beverage is never withheld as discipline device.

☐ Not met  ☑ Partially met  ☑ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-7. **Overall sound of group is pleasant most of the time.**
For example,
Happy laughter, excitement, busy activity, relaxed talking.
Adult voices don’t dominate.

☐ Not met  ☑ Partially met  ☑ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

A-8a. **Children are generally comfortable, relaxed, happy, and involved in play and other activities.**

☐ Not met  ☑ Partially met  ☑ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
A-8b. Teachers help children deal with anger, sadness, and frustration by comforting, identifying, reflecting feelings and helping children use words to solve their problems.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

A-9. Teachers encourage prosocial behaviors in children such as cooperating, helping, taking turns, talking to solve problems.

For example,
Adults model the desired behavior.
Adults identify, describe, and offer strategies to develop prosocial behaviors.
Adults initiate opportunities for exploring and valuing similarities and differences.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

A-10. Teachers expectations of children's social behavior are developmentally appropriate.

For example,
Children are encouraged to cooperate in small groups.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
A-11. **Children are encouraged to talk about their feelings and ideas instead of solving problems with force.**

For example, adults intervene quickly when children’s responses to each other become physical and discuss the inappropriateness of such responses. Adults discuss alternative solutions with children 2 years and older. Teachers must be on the alert to observe and identify any kind of inappropriate behavior (i.e., name calling, fist fighting) to intervene and eliminate it.*

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

_________________________________________

_________________________________________

_________________________________________

_________________________________________

B. **Curriculum**

B-3a. **Modifications are made in the environment, staffing pattern, schedule, and activities to meet child’s special needs.**

☐ Indoor and outdoor environments are accessible to special needs child including ramps, bathrooms, and playground access as needed.

☐ Schedule is modified as needed, such as shorter day or alternative activities.

☐ Program is modified as needed, such as provision of special materials and equipment, use of supportive services, individualization of activity.

☐ Individual education plans are developed and implemented in a developmentally appropriate manner.

☐ Therapy is developed appropriately and incorporated within classroom activities as much as possible, rather than removing the child from the classroom.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

_________________________________________

_________________________________________

_________________________________________

_________________________________________

_________________________________________
B-4. The daily schedule provides a balance of activities in consideration of the child’s total daily experience - what happens before, during, and after the program with attention to following dimensions:

B-4a. All age groups play outdoors daily, weather permitting.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

B-4b. The schedule provides alternating periods of quiet and active play.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

B-4c. More than one option for group activity (individual, small group, or large group) is available most of the day.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

B-4d. A balance of large muscle/small muscle activities is provided in the daily schedule.

☐ Not met  ☐ Partially met  ☐ Fully met
B-4e. A balance of child-initiated/teacher-initiated activity is provided while limiting the amount of time spent in large group, teacher-initiated activity.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B-5a. Multicultural, nonsexist, nonstereotyping pictures, dolls, books and materials are available.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B-5d. Developmentally appropriate materials and equipment are available for children.

☐ Active play equipment for climbing and balancing.
☐ Unit blocks and accessories.
☐ Puzzles, manipulative toys.
☐ Picture books, and records, musical instruments.
☐ Art material such as finger and tempera paints, crayons, scissors, and paste.
☐ Dramatic play materials such as dolls, dress-up clothes and props, child-sized furniture, puppets.
☐ Sand and water toys.

☐ Not met  ☐ Partially met  ☐ Fully met
B-6. The use of media, such as television, films, and videotapes, is limited to the developmentally appropriate programming.
- Programs are previewed by adults prior to use.
- Another option for activity is always available.
- No child is required to view the program.
- Teachers discuss what is viewed with children to develop critical viewing skills.
- Media are used as special events, rather than as regular, daily routine.

[Checkboxes] Not met ✔ Partially met ❌ Fully met ❌ Not applicable

Comments:
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
B-7b. **Develop social skills.**

For example,

- Create space and time for small groups of children to build blocks together or enjoy dramatic play.
- Provide opportunities for sharing, caring, and helping, such as making cards for a sick child or caring for pets.
- Explore ways to respond to biased comments and behaviors.

    □ Not met  □ Partially met  □ Fully met

Comments: ______________________________

B-7c. **Encourage children to think, reason, question, and experiment.**

For example,

- Plan activities for labeling, classifying, sorting objects by shape, color, size.
- Discuss daily and weekly routines in terms of time concepts, season of the year.
- Extend children’s thinking and learning during activities by adding new materials, asking open-ended questions, offering ideas or suggestions, joining in their play, and providing assistance in solving problems.
- Observe natural events such as seeds growing, life cycle of pets.
- Create opportunities to use numbers, counting objects.
- Take walks around building or neighborhood.
- Plan trips to provide new learning experiences for preschoolers.
- Encourage water and sand play.

    □ Not met  □ Partially met  □ Fully met

Comments: ______________________________

B-7d. **Encourage language and literacy development.**

For example,

- Read books and poems, tell stories about experiences, talk about pictures, write down experience stories children dictate.
- Provide time for conversation; ask child questions that require more than a one-word answer.
- Answer children’s questions.
- Add more information to what a child says.
- Label things in room, use written words with pictures and spoken language, provide a print-rich environment.
- Use flannel board, puppets, songs, finger plays.
- Encourage children’s emerging interest in writing (scribbling, drawing, copying, and inventing own spelling)

    □ Not met  □ Partially met  □ Fully met
B-7e. Enhance physical development.
For example,
Provide time and space for active play such as jumping, running, balancing, climbing, riding tricycles.
Provide creative movement activity using obstacle course or activity songs and records.
Provide fine-motor activities such as stacking rings, pop-beads, pegboards, puzzles, lacing cards and woodworking.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B-7f. Encourage and demonstrate sound health, safety, and nutritional practices.
For example,
Cook and serve a variety of nutritious foods.
Discuss good nutrition.
Do activities to develop safety awareness in the center, home, and community.
Encourage health practices such as washing hands, brushing teeth, getting regular exercise and enough rest.
Talk about visiting doctor, dentist.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B-7g. Encourage creative expression and appreciation for the arts.
For example,
Do creative art activities as brush painting, drawing, collage, and play dough.
Provide time and space for dancing, movement activities, creative dramatics.
Do musical activities such as singing, listening to records, playing instruments.
Most art activities are offered as an exploratory process rather than to produce a product.
Adult-made models, patterns, and pre-drawn forms are used infrequently.
Provide materials representative of a variety of cultures.

☐ Not met  ☐ Partially met  ☐ Fully met
B-7h. **Respect cultural diversity.**

For example,

Provide materials, images, and experiences that reflect diverse cultures that children may not likely see, as well as those that represent their family life and cultural group.

Initiate discussion and hand-on activities to build appreciation of differences and counter biases.

Talk positively about each child’s physical characteristics, family, and cultural heritage.

Avoid stereotyping of any group through materials, objects, language.

Cook and serve foods from children’s various contemporary cultures.

Celebrate holidays of various cultures reflected in the group.

Read books, display pictures of various cultures.

Invite parents and other visitors to share arts, crafts, music, dress, and stories of various cultures.

Take trips to museums, cultural resources of community.

Infuse all curriculum topics with diverse cultural perspectives, avoiding a “tourist” approach.

☐ Not met ☐ Partially met ☐ Fully met

Comments:

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B-8. **Teachers provide materials and time for children to select own activities during the day.**

☐ Several alternative activities are available for children’s choice.

☐ Teachers respect the child’s right not to participate in some activities.

☐ Teachers pick up on activities that children start, or interests that children show.

☐ Not met ☐ Partially met ☐ Fully met

Comments:

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B-9. Teachers conduct smooth and unregimented transitions between activities.
☐ Children are told to get ready for transition ahead of time.
☐ Children are not always required to move as a group from one activity to another.
☐ The new activity is prepared before the transition from the completed activity to avoid waiting.
☐ Not met ☐ Partially met ☐ Fully met

Comments:
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B-10. Teachers are flexible enough to change planned or routine activities.
For example,
Teachers follow needs or interests of the children.
Teachers adjust to changes in weather or other unexpected situations in a relaxed way without upsetting children.
☐ Not met ☐ Partially met ☐ Fully met

Comments:
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B-11. Routine tasks such as toileting, eating, dressing, and sleeping are handled in a relaxed and individualized manner.
☐ Routine tasks are used as opportunities for pleasant conversation and playful interaction to bring about children’s learning.
☐ Self-help skills are encouraged as children are ready.
☐ Routines are tailored to children’s needs and rhythms as much as possible.

For example,
Providing alternatives to children who are early risers.
☐ Not met ☐ Partially met ☐ Fully met
G. Physical Environment

G-1a. There is enough usable space indoors so children are not crowded.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
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G-1b. There is enough usable space for outdoor play for each age group.

For example, Age groups use different areas or are scheduled at different times.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:
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G-2. Space is arranged to accommodate children individually, in small groups, and in a large group.

☐ There are clear pathways for children to move from one area to another without disturbing activities.

☐ Areas are organized for easy supervision by teachers.

☐ Teachers have access to the designated space in sufficient time to prepare the environment before children arrive.

☐ Not met  ☐ Partially met  ☐ Fully met
G-3. **Space is arranged to facilitate a variety of activities for each age group.**
- Children have space arranged for a variety of individual and small group activities including block building, dramatic play, art, music, science, math, manipulatives, quiet book reading.
- Sand and water play and woodworking are available on regular occasions.

- Not met [ ] Partially met [ ] Fully met

Comments:

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G-4. **A variety of age-appropriate materials and equipment are available for children indoors and outdoors.**
- A sufficient quantity of materials and equipment is provided to avoid problems with sharing or waiting.
- Materials are durable and in good repair.
- Materials are organized consistently on low, open shelves to encourage independent use by children.
- Extra materials are accessible to teachers to add variety to usual activities.
- Materials are rotated and adapted to maintain children’s interest.

- Not met [ ] Partially met [ ] Fully met

Comments:
G-5. **Individual space is provided for each child's belongings.**

- There is a place to hang clothing.
- There are places for storing extra clothing and other belongings such as art work to be taken home.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

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G-6. **Private areas where children can play or work alone or with a friend are available indoors and outdoors.**

For example,

- Book corners, tunnels, or playhouses that are easy for adults to supervise.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

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G-7. **The environment includes soft elements.**

For example,

- Rugs, cushions, soft furniture, soft toys, comfortable chairs for adults to hold children in their laps.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

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G-8. **Sound-absorbing materials such as ceiling tile and rugs use to cut down noise.**

- [ ] Not met  
- [ ] Partially met  
- [ ] Fully met

Comments:

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G-9a. **A variety of activities can go on outdoors throughout the year.**

- [ ] Balance of shade and sun.
- [ ] Variety of surfaces such as hardtop for wheel toys, grass for rolling, sand and soil for digging.
- [ ] Variety of age-appropriate equipment for riding, climbing, balancing, individual playing.

- [ ] Not met  
- [ ] Partially met  
- [ ] Fully met

Comments:

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G-9b. **The outdoor play area is protected from access to streets and other dangers by fences or by natural barriers.**

- [ ] Not met  
- [ ] Partially met  
- [ ] Fully met

Comments:

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H. Health and Safety

H-7a. Children are under adult supervision all the times.
For example, Children are supervised by sight and sound.

☐ Not met ☐ Partially met ☐ Fully met
Comments:
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H-12. Children are dressed appropriately for active play indoors and outdoors.
☐ Extra clothing is kept on hand.
☐ Protective clothing such as smocks is kept on hand.

☐ Not met ☐ Partially met ☐ Fully met
Comments:
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H-13a. As children use the facility, teachers and children keep areas reasonably clean.
☐ Tables are washed and floors are swept after meals.
☐ Toys are picked up after use.
☐ Children participate in cleaning and discard their remaining items in waste bins.*

☐ Not met ☐ Partially met ☐ Fully met
Comments:
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H-13b. Toileting areas are sanitary.
□ Toilet area is sanitized daily.
☐ Not met  ☐ Partially met  ☐ Fully met
Comments:

H-14a. Teachers wash their hands with soap and water at appropriate times.
□ Before preparing or serving food.
□ After assisting children with toileting or nose wiping.
□ After handling pets or animals.
☐ Not met  ☐ Partially met  ☐ Fully met
Comments:

H-14b. A sink with running water of comfortable temperature is very close to toileting areas.
☐ Not met  ☐ Partially met  ☐ Fully met
Comments:
H-15a. The building, play yard, and all equipment are maintained in safe, clean condition and in good repair.
☐ No sharp edges, splinters, protruding or rusty nails, or missing parts.
☐ Glass, trash is removed from children’s play areas.
☐ Outdoor sandboxes are covered when not in use.
☐ The water play table is cleaned and sanitized with a bleach solution daily, when in use.
☐ Not met ☐ Partially met ☐ Fully met

Comments:
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H-17a. Toilets, drinking water, and handwashing facilities are easily accessible to children.
For example, Facilities are either child-sized or made accessible by non-slip stools.
☐ Not met ☐ Partially met ☐ Fully met

Comments:
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H-17b. Soap and disposable towels are provided.
☐ Not met ☐ Partially met ☐ Fully met

Comments:
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H-17c. Children wash hands after toileting and before meals.

☐ Children are educated by teachers concerning handwashing procedures: use of running water, soap, rubbing, and single use of disposable towels.

☐ Children wash their hands before using the waterplay table or separate wash bins are provided.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

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H-18a. Areas used by children are well-lit and ventilated and kept at a comfortable temperature.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

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H-18b. Electrical outlets are covered with protective caps.

☐ Not met  ☐ Partially met  ☐ Fully met

Comments:

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H-18c. Floor coverings are attached to the floor or backed with non-slip coverings.

☐ Not met  ☐ Partially met  ☐ Fully met  ☐ Not applicable
Comments:

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H-19a. Cushioning materials such as mats, wood chips, or sand are used under climbing equipment, slides, and swings.

☐ Not met ☐ Partially met ☐ Fully met

Comments:

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H-19b. Climbing equipment swings, and large pieces of furniture are securely anchored.

For example, Permanent equipment outdoors, tall storage shelved indoors. Heavy piece of furniture such as video monitors are secured so they cannot be climbed on by children.

☐ Not met ☐ Partially met ☐ Fully met

Comments:

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H-20a. All chemicals and potentially dangerous products such as medicines or cleaning supplies are stored in original, labeled containers in locked cabinets inaccessible to children.

☐ Not met ☐ Partially met ☐ Fully met
I. Nutrition

1-3. **Mealtime is a pleasant social and learning experience for children.**
- Mealtimes promote good nutrition habits.
- At least one adult sits with children during meals to provide good role model and encourage conversation.
- Children are encouraged to serve and feed themselves and assist with clean-up.
- Chairs, tables, and eating utensils are suitable for the size and developmental levels of the children.
- Children eat their meals indoors and under direct supervision of teachers.*

  □ Not met  □ Partially met  □ Fully met

Comments:

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The Arabic Version
ارشادات عامة للتطبيق

1. هذا المقياس لمساعدتك في الملاحظة والتقدير لدرجة الجودة في برنامج الأطفال التعليمية. كل فقرة ذات صلة
   وثيقة بالمعايير الموضوعة من قبل الأكاديمية الوطنية الأمريكية لبرامج الأطفال التعليمية لتقييم الجودة بها.
   الأرقام والحروف الموجودة التي يبين كل فقرة تشير إلى المعيار الخاص بها حسب معايير التقييم الموضوعة من
   قبل الأكاديمية الأمريكية لبرامج الأطفال التعليمية.

2. كل جملة مكتوبة بالخط الداكن عبارة عن المعيار الذي يسعى لتقديمه. اغلب المقاييس مصحوبة بأوامره من
   المؤلفات التي يلزم الاعتزاز بها عند التقييم. هذه المؤلفات مصاحبة لهذا الشكل . وضع علامة داخل الشكل
   أثناء ملاحظتك. الإمثلة في بعض الأحيان موجودة لتعريف المقاييس. هذه الإمثلة ليس بالضرورة ملاحظتها، بل
   يمكن رؤية أي شيء مثلك.

3. التغييرات والتحديات التي أحدثت في المقاييس الأصلي مشتركة بعلاقة (6). لغرض هذا البحث، فقط
   الفقرات التي تتعلق الأطفال من عمر ثلاث سنوات إلى خمس سنوات متضمنة في هذه المادة.

4. أقرأ المحتويات كاملة قبل بدء تقييم الفصل.

5. عرف نفسك بالفصل لمدة 10 إلى 15 دقيقة قبل البدء بالتقدير.

6. ليس بالضرورة أخذ المراجع بالترتيب. بعض المقاييس يمكن تقييمها بينما يصغ تقييم البعض الآخر. أبدأ
   بالمقاييس السهلة كالمؤسس في مقاييس البيئة الداخلية والخارجية ومقياس الصحة والسلامة.
   عند تحرك الأطفال بين أكثر من استاد/استاذ وبين المرتكز المختلفة، اتبع الأطفال وضع تقييمك على أساس
   جودة تجارب الأطفال.

7. عند ملاحظة أكثر استاذ/استاذة في الفصل ضع تقييمك على أساس كل الكثير الذين يتعاملون مع الأطفال. وضع
   ملاحظة وفقاً للتكيفات التي يمر بها الأطفال.

8. عندما لا توجد مجموعات مفصلة في معايير مفصلة، تابع ما يحدث مع عينة من مجموعة عمرية من
   الأطفال.

9. لا تضمن النتائج لتقييم أي مقياس بسرعة. سيكون الأمر سهلًا لاتخاذ قرار تقييم عندما تكون مفرغة، وملاحظًا
   وعابرة لما يحدث.

11. أعطي كل مقياس على حسب الجدول التالي:

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<td>نلاحظ وجود كثير من الأدلة على وجود هذا المقياس في الفصل.</td>
<td>نلاحظ وجود بعض الأدلة على وجود هذا المقياس في الفصل.</td>
<td>النشاطات تحدث في بعض الأحيان.</td>
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<tr>
<td>النشاطات تحدث في معظم الأحيان.</td>
<td>النشاطات تحدث في بعض الأحيان.</td>
<td>النشاطات تحدث نادراً.</td>
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12. وضع علامة داخل المربع الذي يعكس تقييمك. أشرح سبب اختيارك لهذا التقييم في الجزء المخصص للتعليق.
    عندما تقييمك "لا يوجد" و "لا يوجد جزئياً" ليس هناك ضرورة لاتخاذ تعليق عندما يكون التقييم "لا يوجد" كاملاً.

13. في بعض الأحيان لا يمكن تقييم المقياس على الفصل أو البرنامج. في هذه الحالة وضع علامة في الجزء "لا يمكن تقييم".
لا يوجد نص يمكن قراءته بشكل طبيعي من الصورة المقدمة.
للاستاذ/الأساتذة يشجعون الاستقلالية عند الأطفال عندما يكون الطفل مستعداً لها.

1. على سبيل المثال:
الأطفال ذو الثلاثة والأربع سنوات: يلعبون تأسيسًا لSEL، ويشتركون الآباء والأمهات.
الأطفال ذو الخمس سنوات: يجهزون الطاولة للأكل، ينظّرون، ويعكسون السلوك المساعد للفرد.
لا يتتوفر □ يتتوفر جزئيًا □ يتتوفر كاملاً

التعليم:

الاستاذ/الأساتذة يستعملوا طرق ايجابية للمساعدة على السلوك البشري.

2. على سبيل المثال:
الطرق التوجيهية تشمل على:

□ إعادة التوجيه.
□ التخطيط المسبق لمنع المشكل.
□ التشجيع على السلوك المناسب.
□ القواعديات الواضحة عند التعامل مع الأطفال ومشاركتهم في فهمهم للتضمن.
□ الاستاذ/الأساتذة يصفوا المواقف المختلفة لتشجيع الأطفال على تنفيذ المشكل أكثر من إقحام الحلول لها.
□ تطبيق النتائج المنطقية أو الطبيعية في المواقف المتاحة.
لا يتتوفر □ يتتوفر جزئيًا □ يتتوفر كاملاً

التعليم:

3. على سبيل المثال:
الأطفال/الأساتذة أن لا يشتركوا العقاب البدني أو أي طرق توجيه سلبية يمكن أن تؤذى أو تخيف أو تهين الأطفال.

* لا يمنع الأكل أو المشروبات كوسيلة للتذكير. 
لا يتتوفر □ يتتوفر جزئيًا □ يتتوفر كاملاً

التعليم:
الصوت الكلي للمجموعة مبهم معظم الوقت.

على سبيل المثال:
- مضحكة بسعادة، أثراء، تشغيل بالنشاط، استرخاء في الكلام.
- أصوات الكبار لا تكون ممتعة استمتعة والتحكيم.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليق:

الاطفال عامة مرتاحين، مسترخين، سعاد، ومنهمkids في اللعب والنشاط الأخرى.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليق:

الأستاذة/الأستاذ يساعدون الأطفال عند التعرض للغضب والحزن والإحباط وذلك باراحتهم والتعرف على مشاعرهم ومساعدتهم على استعمال الكلمات التي تعبر على حل مشاكلهم.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليق:

الأستاذة/الأستاذ يساعدون الأطفال على السلوكي الاجتماعي كالتعاون ومساعدة الآخرين وانتظار الدور والتحدث لحل المشاكل.

على سبيل المثال:
- الكبار يكونون نموذجاً للسلوك المرغوب.
- الكبار يعرفون، يصفو، ويعطوا استراتيجيات لتنمية السلوكي الاجتماعي.
- الكبار يتبادلون في إيجاد الفرص لاستكشاف وتقييم التشابه والاختلاف.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليق:
تكون توقعات الأساتذة/الاستاذات لسلوك الأطفال الاجتماعي مناسبة لمناهجهم.

على سبيل المثال:
تشجيع الأطفال على التعاون في المجموعات الصغيرة.
لا توفر □ توفر جزئيا □ توفر كاملا

التعليق:

تشجيع الأطفال على الكلام عن مشاعرهم وأفكارهم بدلاً عن حل المشاكل بالقوة.
على سبيل المثال:
الكبار يدخلون بسرعة في حالة شتك الأطفال جسدياً ومناقشة هذا السلوك غير اللائق معهم.
لكنهم يشجعون الحوار البناء مع الأطفال.
addListener هيئة التدريس يجب أن يكونا يقيمان التعرف على أي نوع من السلوك غير المناسب (كانتاذا باللقب والشجار بالايدي).
لمنعه والحد منه.
لا توفر □ توفر جزئيا □ توفر كاملا

التعليق:

المنهج

ب-3 أ. تعديل التحديات في البيئة من حيث نمط التدريس، الجداول والمناشط حتى تلبية الاحتياجات الخاصة للأطفال.
البيئة الداخلية والخارجية مناهجة للطفل ذوي الاحتياجات الخاصة وتشمل سلم المعالجين والحمايات واتصال الملاعبة حسب حاجتهم.
الجدول يمكن تعديله على حسب الاحتياج كمتصدر أو تطوير اليوم الدراسي أو تبديل المناشط.
البرنامج يبدأ على حسب الحاجة وذلك بإعطاء مواد خاصة ومعدات بغرض تدريب الخدمات وانفرادتها.
خدمة الاحتياج الفردي للأطفال.
الخطط التربوية للفرد تطور وتطبق في نظام تطوري على النهج المناسب.
العلاج يقوم على اكمل وجه داخل الفصل ومع المناشط المقدمة على قدر المستطاع أكثر من أراحة الطفل من داخل الفصل.
لا توفر □ توفر جزئيا □ توفر كاملا

التعليق:
الجدول اليومي يعني توازن في المناشتات باعتبار التجارب اليومية الكلية للطفول - ماذا يحدث قبل، أثناء وبعد النشاط:

|- A. كل الاعمار يلعبوا خارج الفصل على اساس يومي حينما يسمح الجو بذلك.
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|- B. الجدول يعطى بدلاء ما بين اللعب الهادي واللعب النشط.
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|- C. هناك أكثر من خيار للنشاط متوفر في أغلب اليوم للمجموعة (فردي، مجموعة صغيرة، أو مجموعة كبيرة).
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|- D. توازن بين مناشط تتضمن العضلات الكبيرة والعضلات الصغيرة متوفرة في الجدول اليومي.
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**التعليق:**

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|- E. توازن بين مبادرة الطفل ومبادرة الاستاذة/الاستاذ للنشاط بينما تقتصر كمية الزمن المستهلك في المجموعة الكبيرة ومبادرة الاستاذة/الاستاذ.
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التطبيق:

لا يوجد معلومات واضحة تتعلق بالتطبيق.

ب-5.1. توفر الألعاب والكتب والمواد متعددة الاجناس ولا توجد بها تميز جنسي ولا تقيد لللادوار.
لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لالا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا لا ل
التعليقات:

الأسئلة/الاستماع: يوفر نشاطات متنوعة على حسب التطور النموي المناسب للطفل للوصول للأهداف التالية:

ب-7.1 تدعيم مفهوم الذات الإيجابي.
على سبيل المثال:
- اعطاء الأطفال الزمان الكافي للتعبير على ما يرونه ويعمونه ويعمونه.
- استعمال أساليب الأطفال في الكتابة والألعاب.
- عرض أعمال الأطفال وصورهم وصورهم.
- تشجيع الأطفال على رسم وحكي قصص عن أنفسهم، وسرهم ومشاركتهم التانية.
- اعطاء فرص للأطفال في إعطاء الأمينهم في إعطاءهم ومهاراتهم التي تساعدهم.
لا تتوفر □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

ب-7.3 تにしてة المقدر الاجتماعية.
على سبيل المثال:
- خلق مساحات لرفقة وساعية للأطفال تمكينهم من اللعب في مجموعات صغيرة بدون المكعبات والاستمتاع باللعب الدائم.
- استغلال فرص المشاركة والاستمتاع ومساعدة الأطفال الآخرين كمكروت للأطفال المرضي والاهتمام بالحيوانات الآلية.
- استغلال طرق لاستغلال التعليمات والنصائح المحدودة.
لا تتوفر □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

ب-7.4 تشجيع الأطفال على التفكير، أعمال الفكر والأسئلة، التساؤل، التجريب.
على سبيل المثال:
- مشاركة الأطفال في السماحيات وتوزيع الفروض للإجابة المختلفة عن طريق الشكل، اللون، الحجم.
- مشاركة الأطفال في عملية الإجابة المختلفة على أساليب النظر والمساءسة والستة.
- مشاركة الأطفال في التفكير أثناء مشاكلهم وذلك بإبراز مواقف جديدة، إعطاء أفكار وملاحظات، مشاركة ومشاركة الآخرين في العناصر، ومساءستهم في حل المشاكل.
- مشاهدة الأطفال على استعمال الألوان ودراسة حياة الحيوانات الآلية.
- خلق فرص للاستعمال الإفرازات وما إذا كان الأداء.
- منهج حول المثل والشاهدات المجاورة.
- تشجيع اللعب بالآلات والرمال.
لا تتوفر □ يتوفر جزئيا □ يتوفر كاملا
التعليم:

ب-7. تشجيع وتنمية اللغة والكتابة والقراءة.
على سبيل المثال:
قراءة الكتب والإخبارات، سرد القصص عن التجارب الشخصية، التحدث عن الصور، كتابة قصص التجارب التي يعدها الأطفال.
أعداد الوقت للقراءة، سؤال الطفل أسئلة تحتاج الإجابة عنها أكثر من كلمة.
الإجابة على أسئلة الأطفال.
أعداد معلومات إضافية لما يقوله الأطفال.
تسمية الأشياء في الصلب، استعمال الكلمات المكتوبة مع الصور واللغة المسموعة، توفير بيئة غنية بالمعلومات المرئية.
استعمال السيرة المصورية، العروض المتحركة، الأغاني، العاب الإصبع.
تشجيع اهتمام الأطفال بالكتابة عن طريق النشاطات المختلفة كأبرسم وألفل وآلي وفترة مختلفة.
لا يوجد □ توفر جزئيا □ توفر كاملا

التعليم:

ب-7. تنمية المقدرة الجسمانية.
على سبيل المثال:
توفر الوقت والماسحة للعب النشط كнапример، والجري، والتنقل وركوب العجلات.
توفر النشاطات البدنية الخلاقة كإحارات للكتابة، والنشاط المحسوب، الحركة، والحركة.
توفر النشاطات البدنية الصغيرة كتجريبي النشاطات، الامتحانات، والعمل الفعلي.
لا يوجد □ توفر جزئيا □ توفر كاملا

التعليم:

ب-7. ف. تشجيع واعطاء الأمثلة للجسم السليم، السلامة والممارسات الغذائية.
على سبيل المثال:
طعام وقيد موارد غذائية متنوعة.
لقائية الأطعمة المحسوب.
القيام بنشاطات تعليمية على تربية جسم السالم، في المنزل، والاجتماع.
تشجيع العادات الصحية ككاملة البدن، وفرض الأسرة، الحصول على التمارين والراحة الكافية.
الكامل عن زيادة الطبيب، وطبيب الأسنان.
لا يوجد □ توفر جزئيا □ توفر كاملا
ب.7. تنمية التعبير الخلاق وتقدير الفنون.

على سبيل المثال:

• ممارسة نشاطات فنية خلاقة كالرسم بالغرشة، الرسم الكلاسيك، وطين الصلصال.
• توفير الوقت والمساحة للقراءة، النشاطات الحركية والنشاطات البدنية الخلاقة.
• ممارسة التعليمات الموسيقية كالغاء والاستماع للشريك الموسيقي واستخدام الآت الموسيقية.
• معظم النشاطات الفنية تعاني على أساس الاستكشاف بدلًا من الحصول على النتائج الدقيقة.
• النماذج المنتجة من قبل الكبار، التسلسل، وإشراحك المرسوم بسيطًا لا تستخدم دائمًا.
• توفير مواد تمتلك ثقافات متعددة.

لا يوجد ❌ توفر جزئيًا □ توفر كاملاً

ب.7. احترام التنوع الثقافي.

على سبيل المثال:

• توفير موارد وخبرات تعكس تقاليد مختلفة قد يرافق الأطفال بالإضافة إلى الثقافات التي تمثل حياة الأطفال الأسرية والمجموعة الثقافية.
• المبادرات الثقافية والأنشطة التي تنمي احترام الاختلافات بين الأطفال وتقاليد التجزئة.
• الحد من التحديات عن الصفات الجنسية لكل طفل، وأسرة، وثقافة المرونة.
• تجنب حب الأفراد للتخلد إلى أي مجموعة وذلك من خلال عرض المواد والأنشطة، واللغة.
• الطبق وتغذية الأطعمة التي تمثل ثقافات الأطفال الحضارة المتنوعة.
• الحضارة بين الأعشاب من الثقافات المختلفة المكوّنة في المجموعة الموجودة من الأطفال.
• قراءة الكتب وعرض الصور من الثقافات.
• دعوة أولاء الأهل وزواج الأخون للمشاركة في الفنون الموسيقية، والملامس، والفصول ضمن الثقافات المتنوعة.
• القيام برحلات إلى المناخات والصحراء الثقافية للمجتمع.

صرفاتب.7. تنوير القناع الثقافية في مواضيع المنتج مع تجنب منهج "السلاج".

لا يوجد ❌ توفر جزئيًا □ توفر كاملاً
الاستاذة/الاستاذ يوفران المواد والوقت للأطفال لاختيار نشاطاتهم أثناء اليوم.

- لا يوجد دليل متعدد من النشاطات يختار منها الأطفال.
- الأطفال/الاستاذات يحترمون حق الطفل في عدم المشاركة في بعض النشاطات.
- الأطفال/الاستاذات يتبعون على النشاطات التي يبدأ بها الأطفال، أو يظهر الأطفال الاهتمام بها.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

الاستاذة/الاستاذات يقومون برحلات تغييرية سلبية وغير مقطعة بين النشاطات.

- يخبر الأطفال/الاستاذات الأطفال لاستعداد المرحلة التغييرية مسبقا.
- الأطفال غير مبتدئون دائما للتحرك كمجموعة من نشاط لآخر.
- يحضر النشاط الجديد قبل نهاية المرحلة التغييرية للنشاط السابق لتتجنب الانتظار.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

الاستاذة/الاستاذات تتبنين كفاية لتغيير الأنشطة المخططة والروتينية.

على سبيل المثال:

- الاستاذة/الاستاذات تتبعون احتياجات وأهميات الأطفال.
- الأطفال/الاستاذات يحولون بين النشاطات غير المتاحة على نحو هادئ و من دون مضايقة الأطفال.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

العمال الروتينية كقضاء الحاجة، الآكل، اللباس، والليوم تقام بطريقة هادئة ومفتوحة.

- العمال الروتينية تستعمل كفرص للأنشطة الطفيفة والتفاعل المرح لمساعدة الطفل على التعلم.
- تشجع مهارات مساعدة النفس مع استعداد الأطفال.
- تخطط الأعمال الروتينية على حسب احتياجات الأطفال على قدر المستطاع.

على سبيل المثال:

- توفر بدلًا للأطفال الذين يستيقظون مبكرا.

لا يوجد □ يتوفر جزئيا □ يتوفر كاملا
التعليم:


البيئة الداخلية والخارجية

ج.1. مساحة الفصل الداخلية كافية للاستعمال وتضمن عدم ازدحام الأطفال.

لا توفر □ يتوفر جزئيا □ يتوفر كاملا

التعليم:


ج.1. في البيئة الخارجية المستمدة كافية للعب الخارجي لكل مجموعات الأطفال العمرية.

على سبيل المثال:

المجموعات العمرية تستعمل مساحات مختلفة وتجول في وقت متناوبة.

لا توفر □ يتوفر جزئيا □ يتوفر كاملا

التعليم:


المساحة ت_RTب بحيث تستوعب الأطفال فردية، في مجموعات صغيرة، وفي المجموعة الكبيرة.

هل هناك ممارسة واضحة تمكن من خلالها الأطفال المرور من مساحة إلى أخرى دون إزعاج الالتزام?

المساحات تنظم بحيث تمكن الأساتذة/الاستاذات من الإشراف بسهولة.

الأساتذة/الاستاذات يصلون إلى المساحة في وقت كاف لتحضير البيئة قبل وصول الأطفال.

لا توفر □ يتوفر جزئيا □ يتوفر كاملا

التعليم:
المساحة ترتب بحيث تسهل وجود نشاطات متنوعة لكل مجموعة عمرية.

- المساحة ترتب لاستيعاب نشاطات متنوعة فردية وفي مجموعات صغيرة وتتضمن وحدة مكبات، الرباعيات، الفنون، الموسيقى، الرياضيات، القيادة، قراءة،_handwriting
- العاب وسياقية ونجارة متفرقة بانتظام.

لا يتوفر □ يتوفر جزئيا □ يتوفر كاملا

التعليق:

المواضين والمواد على حسب التطور النمووي المناسب للطفل متوفرة ومتنوعة في البيئة الداخلية والخارجية.

- كميات كافية من المواد والمواد متوفرة لمنع مشاكل المشاركة والانتظار.
- المواد متينة في حالة جيدة.
- المواد موضع دائم في أرفف مفتوحة ومنخفضة لتشجع الاستعمال المستقل لها من قبل الأطفال.
- المواد إضافية متوفرة للاستدامة/استخدامها حتى يستعينوا بها لإضافة التنوع النشاطات.
- المواد متواجدة بين الأطفال تتم لكون محور اهتمام الأطفال دائم.

لا يتوفر □ يتوفر جزئيا □ يتوفر كاملا

التعليق:

مساحات فرانية متفرقة لكل طفل لحفظ الممتلكات.

- يوجد مكان لتعليق الملابس.
- يوجد مكان لحفظ الملابس الزائدة والممتلكات الأخرى كأعمال الفنون التي تؤخذ للبيت.

لا يتوفر □ يتوفر جزئيا □ يتوفر كاملا

التعليق:

مساحات خاصة متفرقة داخلية وخارجية يمكن للطفل اللعب فيها بمفردتهم أو مع صديق.

على سبيل المثال:
- زوايا القراءة، انفقت، أو بيوت اللعب مساحة الأشراف من قبل الكبار.

لا يتوفر □ يتوفر جزئيا □ يتوفر كاملا
البيئة تتضمن عناصر لينة.

على سبيل المثال:
سجاد صغير، مسادة، ثالث لين، العاب لينة، مقاعد مريرة بمساء عليها الكبار أثناء حمل الأطفال على أحضانهم.

لا يوجد لا يوجد لا يوجد

المعلق:

لا يوجد لا يوجد لا يوجد

تستعمل مواد ماصة للصوت كتلقيح السقف والمساجد للتكليل من الأصوات العالية.

لا يوجد لا يوجد لا يوجد

المعلق:

لا يوجد لا يوجد لا يوجد

الأنشطة متنوعة يمكن القيام بها خارجياً على دوام العام.

لا يوجد لا يوجد لا يوجد

استخدم متنوعة كاستراح صلبة لألعاب المجلة، عشب للعب، رمل وطين لأعمال الحفر.

لا يوجد لا يوجد لا يوجد

المعلق:

لا يوجد لا يوجد لا يوجد

المساحة الخارجية للعب محمية بسور صناعي أو طبيعي حتى لا يمكن الأطفال من الوصول إلى الشارع والمخاطر الأخرى.

لا يوجد لا يوجد لا يوجد
الصحة والسلامة

الاطفال تحت اشراف الكبار في كل الأوقات.

على سبيل المثال:
يشرف على الأطفال بالسمع والنظر.
لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

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<tr>
<th>التعليق</th>
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ملابس الأطفال مناسبة للعب النشط داخلياً وخارجاً.

ملابس احتياطية موجودة عند اللزوم.
ملابس للحماية كالحذاء موجودة عند اللزوم.
لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

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عندما يستعمل الأطفال المبنى كل من الأسلوب/الأدوات والاطفال يحافظون المكان نظيفاً.
الطواولات تتغسل والإرضية تنظف ببعيد الوجبات.
الألعاب ترفع بعد الاستعمال.
الاطفال يشاركون في النظافة ويخصصون من البقايا في سلاط المهملات.
لا يوجد □ يتوفر جزئيا □ يتوفر كاملا

التعليقات:

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<th>التعليق</th>
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</tbody>
</table>
د-13 ب. دورات المياه مظهرة.
لا يتوفر □ يتوفر جزئي □ يتوفر كاملاً

التعليق:

د-14 أ. الاستاذة/الاستاذ يغسلون أبادهم بالماء والصابون في الأوقات المناسبة.
قبل تحضير الطعام □
بعد مساعدة الأطفال في دورات المياه ونظافة الأطفال □
بعد التعامل مع الحيوانات □
لا يتوفر □ يتوفر جزئي □ يتوفر كاملاً

التعليق:

د-14 ب. حوض لغسل اليد مع درجة مياه مناسبة موجود قريبًا من منطقة دورات المياه.
لا يتوفر □ يتوفر جزئي □ يتوفر كاملاً

التعليق:

د-15 أ. المباني، ساحة اللعب، وكل المعادت تبقى منظفًا، نظيفة، وفي حالة جيدة.
لا وجود لزوايا حادة، مسامير مصددة، وجزء مفقودة □
الزجاج والواسم تراوح من المنطقة التي يلعب فيها الأطفال □
مصانيف الرمل الخارجية تغطي في حالة عدم الاستعمال □
طاولة لعب المياه تنظف وتظهر يوميا عند الاستعمال بمحال مطر □
لا يتوفر □ يتوفر جزئي □ يتوفر كاملاً

التعليق:
158

د-17. أ. دورات المياه، مياه الشرب، احواض غسل اليدين في متناول الأطفال.
على سبيل المثال:
الاحواض على مقاس الأطفال أو يمكن الوصول إليها مقبعاً غير قابل للنزول.
لا يتوفر □ يتوفر جزئياً □ يتوفر كاملاً

التعليق:

د-17. ب. الصابون والمنشفيات احادية الاستعمال متوفرة.
لا يتوفر □ يتوفر جزئياً □ يتوفر كاملاً

التعليق:

د-17. ج. الأطفال يغسلون اليدين باستخدام ماء وقبل الوجبات.
□ يعلم الأطفال من قبلي الأساتذة والاستادا دة على كيفية غسل اليدين: استعمال المياه الجارية، صابون، ذلك،
واستعمال وبدلاً منشفيات إحداية الاستعمال.
الاطفال يغسلون اليدين قبل استعمال طاولة لعب المياه أو احواض منفصلة متوفرة لكل طفل.
لا يتوفر □ يتوفر جزئياً □ يتوفر كاملاً

التعليق:

التهوية والإضاءة جيدة ودرجة الحرارة مريحة في المساحات التي يستعملها الأطفال.
لا يتوفر □ يتوفر جزئياً □ يتوفر كاملاً

التعليق:
د-18. ب. وصلات الحائط الكهربائية مغطاة لحماية الأطفال.

لا يوجد □ يتميز جزئياً □ يتميز كاملاً □

التعليق:

د-18. ج. أغطية الأرضية مثبتة على الأرض أو مثبتة باغطية غير قابلة للتخلص.

لا يوجد □ يتميز جزئياً □ يتميز كاملاً □ لا ينطبق

التعليق:

د-19. أ. مواد المساعدة كالعفشات ونشرة الخشب والرمل يستعملون تحت معدات التسلق والتزلج والمراحيح.

لا يوجد □ يتميز جزئياً □ يتميز كاملاً □

التعليق:

د-19. ب. معدات التسلق، المراحيح، وقطع الأثاث الكبيرة مثبتة بساقين إلى الأرض.

على سبيل المثال:

المعدات الخارجيّة الدائمة، ارتخى التخزين العائليّ الداخليّ قطع الأثاث التقليديّة كاملاً الديو مثبتة حتى لا تسكن عليها الأطفال.

لا يوجد □ يتميز جزئياً □ يتميز كاملاً □

التعليق:

د-20. أ. كل المواد الكيميائية والمواد التي تمثل خطرًا كالدواء وادوات النظافة تخزن في حافظاتها الأصلية وفي دواليب مغفولة لا يمكن للأطفال الوصول إليها.

لا يوجد □ يتميز جزئياً □ يتميز كاملاً □

د-20. ب. مواد التزلج، الهدوء، الأثاث، والزراعة توضع في أماكن آمنة بعيدة عن الوصول للأطفال.

لا يوجد □ يتميز جزئياً □ يتميز كاملاً □

التعليق:
التغذية:

- و-3. وقت الوجبات مناسبة اجتماعية سعيدة وتجربة تعليمية للأطفال.
  - يوجد شخص كبير واحد على الأقل أثناء الوجبات حتى يوفر المثال الطيب للأطفال.
  - يشجع الأطفال على تقديم وتناول أنفسهم ومساعدة في عملية النظافة.
  - المقاعد والطاولات معدات للأكل على حسب مقاس المرحلة النموية للأطفال.
  - الأطفال يأكلون داخلًا.

لا يوجد □ يتوفر جزئيًا □ يتوفر كاملاً

التعليقات:
APPENDIX C:

CLASSROOM DEMOGRAPHY INFORMATION SHEET
Classroom Demography Information Sheet

Name of Program: ________________________________

Location of Program:

☐ Khartoum
☐ Khartoum North
☐ Omdurman

Program Type:

☐ Private Kindergarten.
☐ Governmental Kindergarten.

Religious Affiliation:

☐ Religiously affiliated
☐ Not religiously affiliated
☐ Cannot decide

Age range of Children (in years/months):

Minimum age___________
Maximum age___________

Number of children in classroom (Group Size):

☐ Boys
☐ Girls
☐ Total

Adult-Child Ratio: _________ child per adult

Prints on Walls:

☐ Almost none
☐ Few
☐ Adequate

Accessibility to Materials:

☐ Not accessible
☐ Partially accessible
☐ Fully accessible
APPENDIX D:

THE TEACHER QUESTIONNAIRE
Part One

Please inform us about you.

Age:
☐ 21 – 30
☐ 31 – 40
☐ Above 40

Education:
☐ High school
☐ Partial college, enrolled in college, specialized training
☐ College degree
☐ Post-graduate

Area of Specialization:
☐ No specialization (no degree)
☐ ECE or related field
☐ Other

Total years of experience in early childhood education (birth – 6 years) including this year:
☐ less than one year
☐ one year
☐ 2 – 5 years
☐ 6 – 10 years
☐ 11 – 20 years
☐ more than 20 years

Years working at present kindergarten:
☐ less than one year
☐ one year
☐ 2 – 5 years
☐ 6 – 10 years
☐ 11 – 20 years
☐ more than 20 years

Training Opportunities:
☐ None
☐ One opportunity
☐ Two opportunities
☐ Three opportunities
☐ More than three opportunities
Part Two

Please inform us about your classroom.

Length of School Day:
- Four hours
- Five hours
- Six hours

Enrollment Fees per Month:

__________________________ Sudanese Dinar

Age range of Children (in years/months):
- Minimum age__________
- Maximum age__________

Number of children in classroom (Group Size):
- Boys
- Girls
- Total

Adult-Child Ratio:

_________ child per adult

Part Three

Please respond to the following items by circling the number that most nearly represents how often you engage with families in the following activities.

<table>
<thead>
<tr>
<th>Almost Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Regularly</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1) I communicate with parents when they bring their child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) I communicate with parents when they pick up their child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) I share with parents day-to-day happenings that may affect the child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) I report to parents changes in the child’s physical state.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) I report to parents changes in the child’s emotional state</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6) I communicate with parents regarding kindergarten/home rearing practices | 1 2 3 4 5  
7) I encourage parents to be involved in the program in various ways | 1 2 3 4 5  
8) I inform parents about the classroom regularly by means of newsletters, bulletin boards...etc | 1 2 3 4 5  

9) I communicate with parents in other ways: ___Yes ___No  
If Yes, please Specify:  
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Part Four**  
Please respond to the following items by circling the number that most nearly represents your views regarding the National Curriculum:  

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1) The curriculum is sensitive to individual differences in ability. | 1 2 3 4 5  
2) The curriculum is sensitive to individual differences in interests. | 1 2 3 4 5  
3) The curriculum is sensitive to individual differences in development | 1 2 3 4 5  
4) The curriculum is sensitive to individual differences in learning styles. | 1 2 3 4 5  
5) The curriculum stimulates physical development. | 1 2 3 4 5  
6) The curriculum stimulates social development. | 1 2 3 4 5  
7) The curriculum stimulates emotional development. | 1 2 3 4 5  
8) The curriculum stimulates cognitive development. | 1 2 3 4 5  
9) The curriculum is based on knowledge of child development. | 1 2 3 4 5  
10) The curriculum provides children with concrete and real experiences that are relevant to their own life experiences. | 1 2 3 4 5  
11) The curriculum offers children choices of many activities and materials to explore through active involvement. | 1 2 3 4 5  
12) The curriculum involves minimum direct teaching. | 1 2 3 4 5  
13) On a whole I would grade this curriculum as good. | 1 2 3 4 5  
Part Five

Please respond to the following item by choosing the response that represents how often you use the National curriculum; and provide us with comments you think would be useful for our study.

How often do you use the National Curriculum when planning your activities?

☐ Never  ☐ Three times a week
☐ Monthly  ☐ Four times a week
☐ Twice a month  ☐ Five times a week
☐ Once a week  ☐ Daily
☐ Twice a week

Do you have any final comments?

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