

DOCUMENT RESUME

ED 386 661

CG 026 487

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 TITLE Improving Developmentally Appropriate Practices in the Kindergarten Program by Introducing Therapeutic Sensory Motor and Play Activities.  
 PUB DATE 95  
 NOTE 137p.; Ed.D. Practicum, Nova Southeastern University.  
 PUB TYPE Dissertations/Theses - Practicum Papers (043)  
 EDRS PRICE MF01/PC06 Plus Postage.  
 DESCRIPTORS Active Learning; \*Child Development; Discovery Learning; Educational Games; \*Experiential Learning; \*Inservice Teacher Education; Instructional Development; Kindergarten; Learning Activities; Learning Centers (Classroom); Learning Strategies; \*Perceptual Motor Learning; Play; Primary Education  
 IDENTIFIERS \*Developmentally Appropriate Programs

ABSTRACT

This practicum was designed to increase teacher knowledge base in developmentally appropriate practices and increase understanding of the need for play and sensory motor activities in the kindergarten program. The primary goal was that the kindergarten teachers would use more developmentally appropriate practices in achieving curriculum objectives. A variety of strategies were employed to assist teachers in developing a clearer understanding of how the use of play and sensory systems impact learning. Strategies included collaboration with the physical and speech therapists to provide weekly sensory motor play activities, recommendations for learning centers/changes, and techniques for including special needs students. Seven in-service programs were provided to address some of the concerns for appropriate practices with kindergartners. The results of the practicum were positive. Four of the four kindergarten teachers participated in all of the sensory motor play activities. All of the special needs students participated in the program. Four of the four kindergarten teachers attended the in-service programs. Three of the four classrooms implemented developmentally appropriate practices. Appendices include a participation log; criteria checklist; kindergarten proposal; open house presentation; early childhood resources/references/recommended readings (34 readings and 5 videos); room arrangement; teacher evaluation; sensory systems; and classroom implications. Contains additional references.  
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# Improving Developmentally Appropriate Practices in the Kindergarten Program by Introducing Therapeutic Sensory Motor and Play Activities

by

Doris Blakes-Greenway

Cluster 52

A Practicum II Report Presented  
to the Ed. D. Program in Child and Youth Studies  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor Of Education

NOVA SOUTHEASTERN UNIVERSITY

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May 27, 1995  
Date of Final Approval of Report

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## ACKNOWLEDGEMENTS

The completion of this report would not be possible without the proper recognition of those who contributed towards its fruition. Dr. Roberta Schomburg deserves my special gratitude for her patient direction and support throughout the practicum process. Gretchen Leja provided much support and encouragement also.

I am also grateful for the work of my translator, Febe Herrera, and to Charlotte Laliss who let us practice in her class until we got it right. The technical support provided by Donna McDougall, a fellow Nova Southeastern student was helpful. Florence Barker, another fellow student and good friend, sustained me with her constant support and delightfully sardonic humor.

Mention also must be made of Diana Woods and Abby NcNeil who willingly "picked up the slack" and without whom this project would not have been possible.

My deepest gratitude, however, goes to my husband, Arthur Lynell Greenway, III, who has not only provided technical support and encouragement during this project, but has been a source of sustaining calm throughout the entire quest for a doctorate.

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## ABSTRACT

Improving Developmentally Appropriate Practices in the Kindergarten Program by Introducing Therapeutic Sensory Motor and Play Activities. Blakes-Greenway, Doris, 1995: Practicum II Report, Nova Southeastern University, Ed.D. Program in Child and Youth Studies. Descriptors: Developmentally Appropriate Practices/ Primary Education/ Sensory Motor Activities/ Play / Inclusion/ Kindergarten/ Preschool/ Occupational/ Physical/ Speech Therapy.

This practicum was designed to increase teacher knowledge base in developmentally appropriate practices and increase understanding of the need for play and sensory motor activities in the kindergarten program. The primary goal was that the kindergarten teachers would use more developmentally appropriate practices in achieving curriculum objectives.

A variety of strategies were employed to assist teachers in developing a clearer understanding of how the use of play and the sensory systems impact learning. Strategies included collaboration with the physical and speech therapists to provide weekly sensory motor play activities, recommendations for learning centers/changes, and techniques for including special needs students. Seven in-service programs were provided to address some of the concerns for appropriate practices with kindergartners.

The results of the practicum were positive. Four of the four kindergarten teachers participated in all of the sensory motor play activities. All of the special needs students participated in the program. Four of the four kindergarten teachers attended the inservice programs. Three of the four classrooms implemented developmentally appropriate practices.

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## CHAPTER I

### BACKGROUND

#### Description of the Community

The work setting is located in a small southwestern rural community on the outskirts of a large metropolitan area. The socioeconomic status varies from upper middle class to migrant workers. The population is primarily Caucasian with a minority population of Hispanic, Native American, and Asian American. The upper middle class population are those who are employed in the city as managers, middle managers, corporate business officers, attorneys, and physicians. Agriculture is another predominant economic base for this community. As a result of the strong emphasis on agriculture there is a significant migrant population. Since many of the people work in the groves and fields harvesting the crops, they live in the undeveloped desert and in the orange groves in the outlying areas. The wages are extremely low with poverty and unemployment often prevailing.

In excess of 40% of the student body are economically disadvantaged, as evidenced by over 40% participation in the school's Free and Reduced Meal Program, as well as the school's eligibility for Chapter 1 Concentration Grant. Forty percent of the student body are Hispanic and 25% are limited English proficient. Some of the parents are unable to read and write.

#### Writer's Work Setting and Role

The school district offers a full range of special services for eligible students. Approximately 40% of the student population receive assistance through the various programs. Programs include Gifted (SATS), English as a Second Language (ESL), Special Education, Developmental Preschool, Speech Handicapped, and Supplemental Assistance Programs (Chapter I). The various programs are funded through a variety of sources, including Federal and State entitlements, grants, and district contributions. All programs operate in accordance with State and Federal Guidelines regarding evaluation, placement, and instruction.

The school district is growing so rapidly that it has limited funding needed for additional or improved resources such as appropriate supplies, toys, and playground equipment. There are six

classes at this time; however, there will be seven to eight classes by the time implementation of this practicum occurs. There are approximately 20 students in each class. There are four classes for the A.M. session and three to four classes for the P.M. session. There are presently four kindergarten teachers with a varying number of volunteer parents. Kindergarten children at the work site are both typical and atypical including those who have been identified as at risk or as having special needs. As a result of the mandate of the Least Restrictive Environment (LRE) law or inclusion, the special needs students are integrated into the regular classroom setting. Failure to provide developmentally appropriate practices in the kindergarten program can have an adverse affect on the typical children, but can have a profound affect on the special needs children. There is an aide assigned to each of the more severely multiply handicapped students.

The role of the writer in this program is to serve as an occupational therapist consultant. The writer's primary function is to assist in identifying children who are at-risk and provide direct and consultative services. As an educationally related service, occupational therapists assess the student's ability to adapt to and to function in school. Areas of focus are developmental skills, gross and fine motor skills, perceptual and sensory motor abilities, and

functional living skills. The therapist consults with parents, teachers, and other professionals concerning the classroom and home application of procedures which emphasize and/or extend recommendations. It is the responsibility of the therapist to screen and/or evaluate each student referred from a therapy perspective for treatment. This includes, but is not restricted to, direct therapeutic intervention, designing or constructing adaptive equipment/devices for the student and/or classroom, presenting in-service training to staff and parents, attending student study team meetings and setting up home programs.

The current *Standards of Practice for Occupational Therapy* (AOTA, 1992) reflect family involvement and, in comparison with the 1983 *Standards* (AOTA, 1983), suggest expanding family involvement in occupational therapy services. According to the 1992 *Standards*, contact with families starts with the occupational therapist sharing information during the assessment phase about purpose and procedures. Family-therapist collaboration continues in the intervention planning process. Current *Standards* recognize that occupational therapy services may involve and educate family members about activities to support intervention. Finally, the family's goals are addressed as part of the discharge planning.

In many instances for the occupational therapist, the role of

the family as nurturer and change agent is so central that the family becomes the focus of intervention. Provision of family-centered services in occupational therapy is endorsed for pediatric services (Baum, 1991; Hanft, 1989). Intervention at the family level in medical services is not new, but the range of application is increasing, particularly in the educational arena (Bredenkamp & Rosegrant, 1992; Doherty, 1985).

One of the most important and crucial aspects of occupational therapy in pediatrics is communication with the parents as well as teachers as part of the team. Involvement by the teacher and parents in the therapeutic process can make the difference between success and failure.

## CHAPTER II

### STUDY OF THE PROBLEM

#### Problem Description

The problem was that teachers were not implementing developmentally appropriate practices in their kindergarten classrooms. It was quite obvious to even the casual observer that few learning/discovery centers exist. In-seat workbook activities and teacher-directed activities were prevalent, and poor integration of the special needs students occurred. Emphasis was placed on handwriting, writing journals, completing alphabet letter workbooks, and beginning math problems with actual computation. Little, if any, child-directed activities were permitted in the class with the exception of seven minutes of free time. There was no established gross motor, physical education, or recess time. This was left up to the discretion of each of the four kindergarten teachers. The kindergarten classes were engaged in what is commonly referred to as a "push-down curriculum." Preschoolers have a kindergarten curriculum and the kindergarten program has a

first grade curriculum, etc.

### Problem Documentation

The evidence to support the existence of the problem includes writer observation in all six of the classrooms for a period of two hours each on a random basis for one month to determine the amount of time spent on developmentally appropriate sensory motor and play activities. On the average, a total of seven minutes was designated for free time in each class with few opportunities provided for child-initiated, child-directed practice of skills as a self chosen activity. Further, observation in the classes revealed that they were dominated by academic, teacher-directed, in-seat, large group, and product oriented activities including: workbooks, dittos, Curriculum Reference Measures standardized tests (CRM's), and homework assignments; all of which are deemed inappropriate practices in the National Association for the Education of Young Children (NAEYC) guidelines. No changes in the few existing learning centers had been observed over the entire previous school year based on the following criteria: centers are not static, centers change as the interest of children change, and as the adult facilitators select new learning experiences. No provisions were made to help integrate special needs students into classroom activities, as it was noted that these

students were sent to the resource room. When these children were in the classroom the teachers relied solely on the specialists and aides to work with them.

All of the kindergarten students, including the special needs students, were placed on STEPS, a behavior modification program, for talking too loudly or not sitting still in their seats.

### Causative Analysis

The causes of the problem at this writer's work site were multifaceted. Administration and parents encouraged the staff to engage in "push-down" curriculum, namely the practice of introducing curriculum previously reserved for first grade into kindergarten, and sometimes preschool, classes. The parents pressure the teachers to be more academic in the classroom, utilizing more reading and writing techniques. The administration advises the teachers to be compliant with the parents' demands to prevent dissension. Thus, they have developed the present Kindergarten Handbook Guide and curriculum which emphasize academic abilities and achievement testing. There was even a homework and discipline policy included.

This writer believes that these inappropriate practices occurred because the staff had inadequate backgrounds in early

childhood education. Unfortunately, even the principals and other administrators had a limited background in early childhood education. As a result, some parents' demands for early academics had undue influence.

Another important factor was the staff's perceived difficulties in conducting a developmentally appropriate classroom. Such a classroom was thought to be too unstructured, arbitrary, aimless, and disorganized. The teachers at the work site viewed outdoor time as interfering with instructional time and viewed gross motor activities as too chaotic to be held in the classroom.

Having "control" in the classroom appeared to be another factor of concern. As noted, there was even a discipline policy in place. It appeared important to have the children quiet, in their seats, and paying attention at all times. Anything short of this implied that the teacher did not have control over the classroom.

Finally, it was felt that some of the teachers didn't understand the importance of play, movement, and sensory motor development in relation to developmentally appropriate practices in the classroom.

#### Relationship of the Problem to the Literature

For educating young children, determining appropriate program goals, content, structure, and instructional strategies is a critical,

substantive, and divisive issue in the field (Kostelnik, 1992). Early childhood education programs are typically characterized as "academic" or "developmental," depending on whether the stated focus is growth in academic skills or growth across a broad range of developmental areas, including the cognitive, physical, social, and emotional domains (Elkind, 1993; Greenberg, 1990). Such labels are of little use, however, in determining program appropriateness. A high-quality early childhood program supports the growth of academic skills as an integrated part of the child's total development (Peck, McCaig, & Sapp, 1988).

Proponents of the developmental focus emphasize that their programs fit the way young children learn in general and accommodate the specific developmental needs, abilities, and interest of individual children. Knowledge about how young children learn is the key to employing this standard (Kantrowitz & Wingert, 1989; Seefeldt, 1985). Seefeldt (1985) contends that the kindergarten classroom must involve a curriculum that has play and language activities that accommodate different rates of child growth and development. She asserts that young children begin to construct meaning from concrete experience with the materials, objects, and people in the world around them. Seefeldt (1985) contends that children learn primarily through sensory experience

and action-exploring, manipulating, creating, dismantling, and reconstructing things in their environment. Children grow cognitively and socially through collaborating with others, discussing their actions, restructuring and analyzing their actions to discover "why" and "how," and applying what they are learning in ways that are personally meaningful. Knowledge and concepts develop through reconstruction of actions, activities, and interactions.

The learning activities within developmental programs are highly experiential, involving active exploration of the classroom environment, guided discovery, rich creative concrete experiences, and structured and unstructured play (Day, 1988; Drake, 1986). Academic skills are developed within this framework, and a variety of formats are used for the learning activities including independent activity and teacher-led, small group instruction (Day, 1988). The role of the child in such a program is active/initiating: choosing activities of interest and working with teacher guidance and facilitation in planning, carrying out, and evaluating learning activities (Greenberg, 1990).

Some early childhood educators and therapists have long believed that play makes important contributions to children's development and, therefore, must have a key role in primary

programs and curriculums (Ayres, 1985; Krofta, 1990; Bredekamp, 1987). Those who know and understand the importance of play also know that play is a rich, varied, and complex process that requires ample time, resources, and materials (Rogers & Sawyer, 1988). As a result of the mounting pressure from parents and administrators to provide structured, formal in-seat instruction in the basics in education, the importance and amount of time allotted to play has been severely diminished in many early childhood programs (Greenberg, 1989; Nourot & VanHorn, 1991).

Krofta (1990) contends that when the sensory-motor and perceptual-motor skills of a child are developed adequately, the result will be academic learning, abstract thinking ability, and behavioral stability. Competence in these skills depends upon the level of integration of previous phases. Further, she suggests that therapists employ activities involving movement to facilitate normal functioning in all of these phases. She stresses the importance of movement and sensory stimulation, not only for motor development, but also for intellectual, emotional, and social development.

Casey and Lippman (1991) feel that educators can facilitate children's planning during play in developmentally appropriate ways. The NAEYC is cited as a resource for guidelines for developmentally

appropriate practices. They recommend incorporating specific strategies to make planning a fun and integral part of the developmental curriculum. These strategies are influenced by a Piagetian child centered approach (Bredekemp, 1987). This premise is based on the belief that four and five year old children have the ability to plan as they play and to be effective problem solvers in implementing these plans. Casey and Lippman (1991) assert that educators should encourage children to first identify problems, then try to remedy the problems, and finally to move on to the successful completion of the planned activity. Further, they contend that encouraging this behavior means asking the children to be thoughtful, organized, sequential, and responsible.

The goal for the early childhood classroom is to make planning, decision making, and organization an automatic part of the children's behavior patterns. Casey and Lippman (1991) suggest trying to incorporate planning in at least one play activity a day whether as an individual project, as part of a group problem solving, or just as a simple question or prompt made in passing. Modeling behavior, classroom conversation, and even the physical classroom environment are important parts of the program. These factors can either encourage or interfere with children's planning.

Missiuna and Pollock (1991) strongly believe that self-

initiated free play experiences are vital for the normal growth and development of all children, including those with special needs. These researchers feel that if play is believed to be an important component of the child's life, then time must be built in to allow for free play experiences in the classroom, the therapeutic setting, the home, and the community. In any play situation, a child needs to have the opportunity to choose, to explore, to create, and to respond to change if the result is truly to be called free play (Rogers & Sawyers, 1988).

Free play has been proposed as a vital element in the development of the whole child in much of the literature (Peck, McCaig, & Sapp, 1988; Greenberg, 1990). The experiences derived from childhood play include exploration, mastery, decision making, achievement, increased motivation, competency, development of gross, fine, and sensory motor skills (Ayres, 1985; Krofta, 1990). All of these qualities will eventually help children to develop occupational roles and to become more productive members of society. Missiuna and Pollock (1992) suggest that children already restricted by special needs who are not given adequate opportunities to engage in free play may be acquiring secondary disabilities, including diminished motivation, imagination, and creativity; poorly developed social and motor skills; and increased dependence.

Further, they suggest that the therapist may be able to prevent some of these secondary problems by enhancing free play opportunities and providing accessibility for the child who has special needs.

Other educational researchers have concluded that it is essential that all children be given time and freedom to explore, experiment and engage in hands-on activity alone or with others (Elkind, 1987; Shepard & Smith, 1988).

The National Association for the Education of Young Children, The Association for Childhood Education International, and virtually all of the professional education organizations have published major policy statements reaffirming the central role of child directed activities which are based on children's developmental needs, interests, and prior knowledge base for the healthy development of children (National Association for Early Childhood Specialists in State Department of Education, 1991; National Association of State Boards of Education, 1988; National Education Association, 1990). Many of the practices at the writer's work site are deemed inappropriate by the National Association for the Education of Young Children (NAEYC), in the Position Statement of Good Teaching Practices for 4- and 5- Year-Olds, (Bredenkamp, 1987, 1991). This Position Statement recommends that children should have daily opportunities to engage in large muscle outdoor activities. Outdoor

time should be an integral part of the curriculum and requires planning for content and objectives. Planning is also necessary to provide opportunities for small muscle skills through play activities such as pegs, puzzles, beads, painting, and cutting. Learning centers should hold a great deal of intrinsic interest for children. Centers of interest, arranged throughout the room, are one way teachers can provide children with first hand experiences. Ayres (1985) and Fiske (1992) echo this sentiment.

Numerous research articles support the premise that play is essential for developing the capacity to motor plan and is an effective vehicle for promoting learning in young children (Ayres, 1985; Bissell, 1988; Cratty, 1970; Quirk & DiMatties, 1990; Young, 1988). Through play, the child obtains the sensory input from his body and from gravity that is essential for both motor and emotional development (Ayres, 1985).

One of the most reliable principles implied by developmental research is that young children's learning is facilitated when they are engaged in interactive processes that involve all of the senses and sensory/motor components (Kantrowitz & Winger, 1989). In addition to learning through trial, error, and observation, young children gain a great deal cognitively, socially and emotionally, by interacting with each other, adults, and their environment (Boyer,

1991; Healy, 1990; Katz & Chard, 1989; McCracken, 1993; Neugebauer, 1992).

This trend in research also implies that children's learning is facilitated when they are involved in active rather than passive activities (Greenberg, 1990). One of the weaknesses of having conventional academic tasks included in the "pushed-down" elementary school curriculum is the resulting reduction of the extent to which children are engaged in interactive processes (Shepard & Smith, 1988).

Elkind (1993) and Peck, McCaig, & Sapp (1988) suggest that causes of teachers engaging in developmentally inappropriate practices can include poor knowledge of early childhood education and how children learn. There is a belief that a developmentally appropriate curriculum is a "watered down" version of the traditional program and that an unrealistic scope of changes is required in implementing developmentally appropriate programs, as well as confusion about what developmentally appropriate practices entails (Day & Drake, 1986; Kostelnik, 1992). Some educators believe that developmental appropriateness is just a "fad" (Kostelnik, 1992). Accepting and promoting the "earlier is better" educational philosophy for the wrong reasons is another argument for kindergarten teachers feeling that they must prepare children

for first grade and that teacher-directed work is the most efficient way for children to learn (Elkind 1993; Peck, McCaig, & Sapp, 1988; Rogers & Sawyers, 1992).

Elkind (1993) proposes that we as educators should take a closer look at our society for the causes of inappropriate practices in education. Our society is becoming increasingly more complex, competitive, and fast paced, with changing values, size, structure and style of American families. This has resulted in the willingness of school boards, legislators, and voters to spend money for tests and workbooks rather than for materials and toys appropriate to needs of the students. Some schools are being influenced by some parents' demands for early academics and learning fundamentals and some schools pressure to teach children to read in kindergarten (Peck, McCaig, & Sapp, 1988). With this, comes the need for educational accountability and standardized testing, academic preparation/school readiness and the absence of the true understanding of developmentally appropriate programs (Goffin & Stegelin, 1992; Kantrowitz & Wingert, 1989). There is also a need for organizational efficiency and a failure to apply sound principles of child development (Doremus, 1986).

Walsh (1989) contends that current kindergarten practice, especially as it relates to screening and assessment, is based more

on an older, outdated, maturational definition of child development rather than the more current and accepted interactionist interpretation.

As a therapist working within sensory integrative, neurodevelopmental, and developmental perspectives, this writer has recognized the sensorimotor, social, and constructive benefits of play and has justified its use in therapy as a treatment modality. Play activities are frequently used to achieve treatment objectives or classroom objectives such as fine and gross motor skill development, perceptual and sensory motor integration, postural control, balance skills and concept development. As children move around and explore their world, they receive information through their senses, gain knowledge about the nature and properties of objects, and develop rules about their own location in time and space (Engstrom, 1991). The skills that are developed during play permit children to interact with and respond to the demands of their environment (Rogers & Sawyers, 1988). This, in turn, leads to motor, perceptual, conceptual, intellectual, and language development. It has also been argued that the integration of cognitive abilities will eventually occur through play (Ayers, 1985).

The literature suggests that free play provides a forum for children to explore their own capacities, to experiment with

objects, to make decisions, to understand cause-and-effect relationships, to learn to persist, and to understand consequences (Rogers & Sawyers, 1988). This type of play also fosters creativity and allows a child to develop social skills when the play involves peers. In addition to developing competence through play, the child also learns to cope with anxiety, frustration, and failure (Chenfeld, 1993).

A review of the research on treatment programs suggests that the primary premise on which therapists base treatment programs is the theory that the development of basic sensory systems and the integration of their information in the brain is necessary before higher level skills will appear and develop normally (Ayres, 1985). The main systems are believed to be vestibular (information about gravity and space), proprioceptive (information about muscles and joints), and tactile (information about things in the environment that touch you). In this theory of sensory integration it is proposed that if these three systems are working well, motor development and higher level functions such as academic skills will automatically build on this base and develop normally, assuming that there are no organic factors involved (Ayres, 1985). Since society is placing more emphasis on language, academic, and intellectual development, and less on building the sensory foundations for these

higher functions, therapists have been forced to become more creative with activities to satisfy both the needs of the child and the needs of the school. For therapists, movement is one of the best known strategies to mesh elements of motor and cognitive development. Movement, which occurs during play, is important because it reinforces any learning that is taking place. Children learn about their environment by moving in and through it. In order to feel free to explore new environmental situations, children need to know how their bodies move and have confidence in their movement skills (Ayres, 1985). There are some children who have sensory and/or motor problems who also experience learning problems (Ayres, 1985). This may be due in part to the fact that they cannot move freely through space and learn from the environment as do other children. When movement activities are used therapeutically, progress can be determined by looking for changes in body concept in drawings, in fine motor skills (these tend to build on large muscle control), the use and understanding of prepositions related to space, and the initiative to investigate new activities (Krofta, 1990).

Ayres (1985) theorizes that good planning or self-organization are indicators of an intact sensory processing system. This involves integrated motor planning, sequencing and spatial relations. Play is

essential for developing the capacity to motor plan and self-organize (Quirk & Dimatties, 1990). A child is considered neurologically self-organized when he can play at one thing in a constructive manner for a reasonable amount of time. He is not self-organized if he starts doing one thing and then almost immediately goes to something else. He is not self-organized if his play is nonconstructive; if he just throws blocks around rather than building with them. He is not self-organized if the teacher has to remind him to sit at his desk and do a specified task already requested of him within reasonable time limits (Bissell, 1988). Children learn to organize themselves through play, provided the nervous system is able to do so. The child who has deficits in this area is seen by therapists as having poor motor-planning skills (dyspraxic), poor organizational skills, poor sequencing and often times poor self concept (Quirk & Dimatties, 1990).

Many therapists work with children who have motor impairments. For those children who are physically involved, therapists must make changes in the child's environment and toys, both in school and at home to enable him to maximize the benefit from play (Chandler, 1994; Kranowitz, 1992). This population of children is quite obvious to society. It is more readily accepted that adaptations be made available so that these children can engage in

play. There is, however, another population of children who often go unnoticed in play until they begin to fail in academics in the classroom and become identified and labeled as having learning disabilities, attention deficits, and developmental delays (Quirk & Dimatties, 1990). In addition to the learning problems, therapists find that sensory processing problems also exist. The dyspraxic child's play is very limited because he has trouble motor planning and so he must stick to simple and familiar games. The child with a vestibular problem is restricted by his postural responses or by the anxiety caused by vestibular input or movement that he cannot modulate. The tactilely defensive child may avoid playing with others because he does not like them touching him. Some children with poor sensory processing are embarrassed when other children see their clumsiness, and some simply cannot organize their behavior well enough to play productively (Ayres, 1985).

Many educators and therapists are intuitive about using play to foster the development of healthy children (Young, 1988; Blau, Zavitkovsky, & Zavitkovsky, 1989; Nourot & VanHoorn, 1991). Play is the medium by which a child is able to follow his inner drive to produce physical activity and movement. In doing so, he masters his environment and his body. Through large full-body movements, he learns how to relate himself to the space around him. Through

manipulation of small playthings, he learns to use his hands and fingers efficiently (Rogers & Sawyers, 1988). Learning is promoted through free play. Children learn through freely choosing and using a variety of learning centers all around the classroom, determining how things work, interacting with each other, trying out new roles, experimenting with their own ideas, building on their own experiences, and solving real problems (Bredekemp, 1987).

For reasons discussed earlier kindergarten becomes a critical and sometimes difficult transition period from preschool to 1st grade. Kindergarten sets the stage for the child's school career and influences many other aspects of the child's life. Educators vary in their beliefs about what should happen during this transition. Some would like kindergarten to be more child-centered like preschool; others advocate a more content-centered approach (Elkind, 1987; Peck, McCaig, & Sapp, 1988). The resolution may be less crucial for typical children than for special needs children or children who learn differently (Baum, 1991). Some educators believe that without a well planned transition from a child-centered environment, some children may not be successful in the first grade. It is important to establish continuity between kindergarten and first grade. If the kindergarten program is developmentally appropriate and the first grade is academically based, the children

will have a difficult time adjusting and may lose any developmental gains from kindergarten once they are exposed to an inappropriate first grade curriculum. It is believed that first and second graders also need to continue to learn through concrete experiences as they make the transition into primary school (Day & Drake, 1986; Peck, McCaig, & Sapp, 1988). A major challenge for educators is to focus on how learnings in kindergarten programs can be the foundation for later grades.

Recent support is being offered by a diverse array of national organizations, including the National Association for the Education of Young Children (NAEYC) (Bredekamp, 1987), National Association of Elementary School Principals (NAESP) (1990), the National Education Association (NEA) (1990), and the National Association of State Boards of Education (1988). Each of these groups has endorsed the importance of developmentally appropriate practice for all children through the early primary grades.

The NAESP (1990) has developed recommended standards to assist schools and school districts in meeting their obligations to parents of young children. There is a high degree of congruence to the NAEYC's (1987) position statement, including the premises that schools should adapt to the children, hands on experiences provide sensory input which enhances, learning, appropriate class ratios are

2:20 for three- and five- year olds and 1:15 for six- to eight-year olds, and assessment should be based on observation and not formalized testing.

CHAPTER III  
ANTICIPATED OUTCOMES  
AND EVALUATION INSTRUMENTS

Goals and Expectations

The following goal and outcomes were projected for this practicum. The goal was that the kindergarten teachers would use more developmentally appropriate practices in achieving curriculum objectives.

Expected Outcomes

The following objectives were identified:

1. Four of four of the kindergarten classes will participate in developmentally appropriate sensory motor or play activities.
2. Four of four kindergarten teachers will implement developmentally appropriate activities for at least 30 minutes a week as determined by the writer (OT), physical (PT) and speech (ST) therapists.
3. Observation will reveal that learning centers will be set up in each of the classes every three to four weeks with changes that

reflect the sensory motor or play concepts appropriate to the class theme based on the established criteria.

4. Special needs students will participate in the sensory motor and play activities as observed and recorded by the writer and team.

### Measurement of Outcomes

In order to address unexpected issues and concerns that arose during the duration of the practicum, the writer kept a weekly participation log recording teacher participation, learning centers/changes, and special needs student participation in the developmentally appropriate sensory motor and play activities, as well as all practicum related activities. This included the coverage of any and all unexpected events. (See Appendix A.)

Outcome one was measured by the number of kindergarten teachers who participated in the sensory motor or play activity as determined by the weekly plan. Success was demonstrated if three of the four kindergarten teachers participated. A weekly participation log was used to record actual participation. (See Appendix A)

Outcome two was measured by review of weekly plans, which included goals and objectives, materials needed, and techniques for each activity developed. Success was demonstrated if all of the

activities adhered to the NAEYC and the American Occupational Therapy Association (AOTA) guidelines. A checklist of criteria was developed. (See Appendix B.)

Outcome three was measured by the number of times the teachers set up or changed learning centers in the classroom to reflect the sensory motor or play concepts appropriate to the class theme based on the established criteria. A weekly participation log was used to record actual participation and frequency of change. Success was demonstrated if learning centers were set up in three of the four classes and changed at least once a month by a collaborative effort of the team members. (See Appendix A)

Outcome four was measured by the number of special needs students who were permitted to participate in the sensory motor and play activities. A weekly participation log was used to record actual participation. Success was determined if all of the special needs students participated. (See Appendix A)

## CHAPTER IV

### SOLUTION STRATEGY

#### Discussion and Evaluation of Possible Solutions

The kindergarten teachers were not implementing developmentally appropriate activities in their classrooms. The kindergarten teachers did not possess a solid knowledge base of the use of developmentally appropriate practices to achieve curriculum objectives by incorporating play activities. The writer considered a variety of strategies to assist teachers in developing a clearer understanding of how the use of play and the sensory systems impact learning.

An ideal situation for the kindergarten teachers would be to return to school to acquire an education in early childhood development. Since it was clearly understood that this was an impossibility, it was established by the kindergarten team that there was a need to share knowledge of appropriate theory and its implications for practice. Mooney (1992) suggests providing the

teachers with articles to read related to whole language and active learning. Further, she suggests in-service training at the building level designed to strengthen the staff's knowledge base for theory and practice.

Murawski (1992) suggests inviting the superintendent, administrators, primary teachers and parents to attend a presentation on developmentally appropriate practices in the classroom. Overhead transparencies and handouts could be used to provide an overview on the latest research on child development and teaching young children. A short videotape showing kindergartners involved in developmentally appropriate activities: using a wide variety of manipulatives for math, building a structure in the block area, role playing in the housekeeping or kitchen area, using language experience stories to learn language arts, and children dictating a story written on a large easel or typed by the teacher on the classroom computer. A proposal for making the school's kindergarten program more developmentally appropriate could be presented at this time. The information provided should stimulate ideas and concepts that might facilitate or inhibit implementation of such a program. The goal is to have all involved voice opinions, generate ideas, have staff develop ownership in the project and attain administrative support.

Peck, McCraig, & Sapp (1988) recommend that the staff be provided with copies of the NAEYC's position statement on the topic of contrasts between appropriate and inappropriate practices for young children.

In order to help educators become more proficient in establishing programs that are more developmentally appropriate, Greenberg (1991) suggests that one should join one or more professional organizations, such as the NAEYC. Another suggestion is to share readings that would be of greatest interest to the teachers, as well as the director of special education and principal. One might include a list of references and resources so that a library could be established for the staff and parents. This is one sure way to include collaboration with parents. Asking parents to assist with locating and securing items needed for the play and sensory motor activities helps to ensure ownership. Because parents are vital to the early childhood program, participation and information gathered from the parents can help staff evaluate how effective they are in making parents feel like partners in the education process as well as in meeting parental needs. Parents can also give insights about their child's learning and attitudes toward school.

When developing activities and centers which are

developmentally appropriate, Schickendanz, Chay, Gopin, Sheng, Song, and Wild (1990) recommend embedding academic skills learning in meaningful experiences, integrating written language into common kindergarten activities, and to providing literacy materials for exploration and play. The way a teacher arranges materials and organizes space in the classroom reflects the teacher's philosophy and practices. Routine assessment of the environment and children's reaction to the environment will give insight into the teacher's decision making and application of theory (Showers, Joyce & Bennett, 1987).

Children need a wide variety of interesting concrete and sensory materials and experiences in order to learn effectively (Bissell, 1988; Cratty, 1970; Quirk & Dimatties, 1990; Young, 1988). The activities should focus on exploration, discovery, and experimentation with hand-on materials. This can be done with experiential learning centers that allow for differences in learning styles that encourage children to explore a variety of materials and make decisions. The activities must be flexible enough to help each child learn according to individual needs, interests, and abilities. Included in these experiences should be creative outdoor play in order for the children to gain an understanding of their world and how they relate to it (Henniger, 1994). Since play is the most

effective and appropriate means for children this age to learn, the occupational therapist's goal is to work with the teachers to help design program activities and environment to meet specific learning and developmental goals of individual children through active involvement, hands-on, and self-directed play. Children learn to learn by organizing or categorizing the information they receive. The first information that one receives is sensory (skin, muscles, joints, gravity, smell, vision, and hearing). This information is organized physically first. Ayres (1985) emphasizes that children get ready to learn from touching, thinking, moving muscles, and balancing, not by being still and listening. Educators can help young children to be physically efficient by facilitating appropriate play (Ford, 1993). Play through sensory motor activities and development serves as a fundamental base for higher learning outcomes and has a significant impact in the overall program planning for the child.

All of the solution strategies taken from the literature are designed to increase the teachers' knowledge base about developmentally appropriate practices, demonstrate how to model these practices in the classroom, and bring about positive changes.

#### Description of Selected Solution

While this writer has identified numerous causes for the

problem at the work site, it has been suggested that effectual change can only occur in small increments (Boss,1994). Boss recommends perhaps only one or two gradual changes over a period of a school year, especially when the problems are multifaceted as well as controversial and opposed by many.

Ayres (1985) suggests that the primary focus of the writer in this early childhood setting should be to provide young children with play and exploration options through sensory motor activities to facilitate growth and development. The writer had the task of helping to organize an environment to promote the child's choice of activities. The writer assisted the teachers in organizing the options to enhance the play and sensory motor experiences available to children. Sensory integration serves as a basis for motor, cognitive, language, and social development. This writer believes that by utilizing sensory input and introducing the children to play activities based on sensory motor principles, normal development might be enhanced. Educators can be effective facilitators in children's play. The writer and team attempted to help the kindergarten teachers become more effective facilitators by establishing a carefully thought-out physical environment (Ford, 1993; kritchovsky, Prescott, & Walling, 1991). Non-static learning/discovery centers are an excellent medium for facilitating

growth and development in all sensory motor areas (Schickendanz, Chay, Gopin, Sheng, Song, & Wild, 1990; Showers, Joyce & Bennett, 1987).

Other ideas that this writer has generated are as follows:

To invite the superintendent, administrators, primary teachers and parents to attend a presentation on developmentally appropriate practices in the classroom developments in the kindergarten program (hand-outs, dates of video presentations, notification of appropriate workshops/in-service trainings provided outside the school etc.) (Greenberg, 1991; Mooney, 1992; Murawski, 1992.) The writer planned to provide the staff with copies of the NAEYC's position statement on the topic of contrasts between appropriate and inappropriate practices for young children (Peck, McCraig, & Sapp, 1988).

The writer planned to encourage the parent helpers to participate in the weekly sensory motor or play activity and to ask them to assist with locating and securing items needed. A copy of the weekly activity with a brief explanation of the purpose and an open invitation to visit the school during the activity were planned to be sent home in the classroom newsletter (Greenberg, 1991; Stipek, Rosenblatt, & DiRocco, 1994.)

The writer determined that for each sensory motor or play

activity developed, a weekly activity sheet would be provided including activity procedures, materials needed and rationale, resulting in a handbook upon which the teachers could build, modify and add appropriate activities.

Throughout the practicum the writer planned to provide lunchtime in-service training sessions for those who were interested. Invitations were sent to both the kindergarten team and the first grade team as well as the principals at both sites. An attempt was made to hold one session per month. Videos, hand-outs and books/references of interest will be presented (Mooney, 1992; Murawski, 1992).

This writer was prepared to try all of the listed strategies given as well as attempt to develop appropriate activities using their present curriculum, which was seen as one of the problems of changing their present mode of teaching.

It was felt that by implementing the proposed program the attitudes of parents, teachers and administrators would at least be more open and objective to alternative suggestions for attaining classroom objectives through the medium of play and sensory motor activities.

By presenting a positive activity model in the classroom on a weekly basis the teachers would be able to observe and participate in

using techniques for handling and redirecting potential behavior problems without actually implementing an established discipline policy for "control."

The monthly informal in-service training sessions would hopefully help dispel some of the myths associated with developmentally appropriate programs, particularly those that address the difficulty in conducting such a classroom (Kostelnik, 1992). Finally, through the in-service training sessions and classroom modeling it is believed that the teachers would have a clearer understanding of the importance of play, movement, and sensory motor development in relation to the developmentally appropriate practices in the classroom.

#### Report of Action Taken

The steps taken in implementing the practicum included meeting with the physical and speech therapists weekly to develop appropriate sensory motor and play activities according to themes/concepts suggested by the classroom teachers at the monthly meeting. The writer provided inservice training, references, resources, videos, and literature to support developmentally appropriate practices. The writer and team demonstrated and modeled how curriculum objectives can be met

using developmentally appropriate practices in the medium of play and discovery/learning centers. The writer made recommendations for outside in-service training and workshops available.

Prior to the start of the practicum, the writer submitted a proposal to the administration and teachers describing the planned program (Murawski, 1992). (See Appendix C) The OT/PT/ST well expected a great deal of opposition from at least two of the kindergarten teachers. The other two kindergarten teachers had already voiced their support for the program and were quite interested in learning more about developmentally appropriate practices and how they could change their classrooms. These two teachers strongly urged the OT/PT/ST to provide them, as well as the administration with as much literature and resources to corroborate what was considered best practices in other kindergarten programs and the need for more developmentally appropriate practices in the kindergarten program in this school district.

The writer met with the Director of Special Services two days after the proposal had been submitted. It should be noted here that the Director had a background in early childhood education and needed no validation for her support in the proposed program. She offered unconditional support and acknowledged the difficulty of the

task that was about to be undertaken. She offered to place the resources of her office at the disposal. Further, she pledged her commitment to attend as many of the team meetings as possible. She felt that her presence at the team meetings would show her support of the need for developmentally appropriate practices in the kindergarten program.

The OT/PT/ST met with both of the above groups the following week to discuss the proposal as well as answer questions and make modifications in the plan. The director, the principals from both of the elementary sites, the four kindergarten teachers, the community education kindergarten teacher, seven first grade teachers, and the OT/PT/ST were in attendance for this first meeting. The director commended the OT/PT/ST's efforts in attempting to improve programming for the school district. The principal at the kindergarten site was noncommittal. He made it quite clear that he was not very interested in what went on in the kindergarten classes, since this was more than anything just a "baby sitting" service. He implied that the kindergarten program was expendable. Also, he felt that he "turned out okay" despite the fact that he didn't have a developmentally appropriate program when he went to kindergarten years ago. He did, however, express an interest in how monies could be saved by reducing the number of inappropriate therapy referrals.

The principal at the first grade site was much more receptive and interested in what was being presented. This may have been partially due to the fact that she had children who attended the kindergarten program in this school district. For whatever reasons, she agreed that some changes were needed in the kindergarten program and that the OT/PT/ST should be given the opportunity to implement the proposed program. She was particularly curious about the techniques that might be utilized for inclusion of the special needs students.

The kindergarten teachers and the first grade teachers both agreed that some changes were necessary and that they were willing to take part in the proposed program. At this time they decided that another meeting was needed to discuss realistic expectations from the proposed program and determine how it would impact each grade level.

At the closing of this meeting the director and the principals stated that the program would begin as soon as the writer could get it organized.

The writer arranged a meeting with the kindergarten team and the first grade team to determine their expectations of the kindergarten students. The kindergarten team teachers were all in agreement regarding the realization that they were performing a

first grade curriculum. Both teams acknowledged that they were aware of the fact that they were engaged in a "push down curriculum." They voiced a number of concerns regarding why they felt compelled to continue in this manner. One of the kindergarten teachers expressed frustration about parents who are pushing for more academics. Another kindergarten teacher expressed concern about what skills the first grade teachers expected the kindergarten students to have attained. Another teacher complained that until now administration never provided support for anything but a pure academic program. Also, they didn't feel that the kindergarten and first grade students should be required to take district wide curriculum pre and post tests. The most resistant kindergarten teacher felt that only the special needs students should be involved in the proposed program. It was even stated that the views expressed by the NAEYC were "only one person's opinion." That statement, of course, was met with ridicule and laughter from the entire group. This particular kindergarten teacher even went so far as to accuse the writer of attempting to single handedly change the system. She warned that this was an impossibility for someone of this writer's status. To say that this meeting became very heated and emotional was quite an understatement.

Surprisingly, it was at the time of this verbal attack that the other

teachers decided that the program was worth implementing and that this one particular teacher should listen for once rather than trying to run the show. This teacher's outburst served to strengthen the solidarity of the other teachers in trying something new. The teachers asked the writer to share any written materials and texts with them to help validate the proposed program.

There were other concerns expressed at this meeting but the OT/PT/ST indicated to the teachers that many of these were not issues that could be addressed at this forum nor by this team. The issues that the OT/PT/ST agreed to help the teachers with included: demonstrating the importance of the use of sensory motor play activities in the kindergarten classes, providing information for parental education, presenting an overview and video at the parents orientation night, providing information to administration to support change to a developmental curriculum, with discontinuation of standardized tests and letter workbooks for kindergarten.

The OT/PT/ST had additional issues on the agenda but felt that initially it would be prudent just to win acceptance on the kindergarten team and later hope that they would embrace the premise of developmental appropriateness.

At the close of the meeting two of the kindergarten teachers apologized for their team member's outbursts and negative

behaviors. They indicated that it should not be taken personally and that she routinely attacked all of them. They further warned the writer that this teacher became extremely hostile and vindictive when she felt that her domain was being threatened. The writer thanked these teachers for their concern and support and requested that they keep open minds for the next school year.

The following week the writer met with PT/ST and kindergarten team to develop appropriate activities and activity sheets for the kindergarten classes for the upcoming weeks. All of the sensory motor play activities were planned and developed in accordance to the established checklist of criteria for developmental appropriateness. (See Appendix B.) The OT/PT/ST became the sensory motor team. All of the sensory motor activities have been compiled to make a handbook that could be further developed by building, modifying, and adding appropriate activities. Many of the activities have been taken from sources unknown, some passed on from therapist to therapist, some a combination or modification of several established activity resources, and some developed by the writer. All have been deemed appropriate for the population served by the writer, in collaboration with the sensory motor team. (See Sensory Motor Activity Handbook.)

During weeks one and two of the practicum the sensory motor

and kindergarten teams met in preparation for the kindergarten parents' open house night. The writer suggested a video on developmentally appropriate practices in the classroom, hand-outs, and resource/reference list (Greenberg, 1991; Mooney, 1992; Murawski, 1992; Peck, McCraig, & Sapp, 1988). The writer provided a video, Teaching the Whole Child in kindergarten, (NAEYC, 1991) for the sensory motor and kindergarten teams to preview. The kindergarten team agreed to have the sensory motor team show the video as well as make the entire presentation. The writer, in collaboration with the PT/ST prepared the open house presentation. (See Appendix D.) Handouts for each parent included the Position Statement of the NAEYC for Good Teaching Practices for Older Preschoolers and Kindergartners, the NAEYC early childhood resource catalog, and a copy of two sample sensory motor activities.

On the night of the open house the Director introduced each member of the sensory motor team and asked that each tell a little something about themselves. The writer had the dubious honor of presenting the Sensory Motor Program. At the end of the video tape the questions were answered by the sensory motor team. The presentation was favorably received with several parents asking the days and times that the sensory motor team would be in their child's classroom so that they might come in to observe and assist. Some

of the parents reported that their children had come home earlier in the day and had described the fun activity that they had done in class with the "therapy ladies." Fortunately, there were no complaints from any parents about time taken away from academics in the classroom.

On this day also, the sensory motor team provided the first of many developmentally appropriate sensory motor play activities to all eight of the kindergarten classes. (See Sensory Motor Activity Handbook.) Four of the classes were done in the AM session and the other four in the PM session. All four of the kindergarten teachers participated at varying levels. In all of the classes the special needs students were allowed to participate in the activity. Each special needs student was accompanied by his/her own aide. A sensory motor activity sheet was provided for each teacher in advance so that the classroom could be prepared for the specific activity. Also, at this time the writer provided a three ring binder to each of the kindergarten teachers, including the extended kindergarten teacher, the preschool class, and the first grade team leader. The binder was intended to hold all sensory motor activity sheets, handouts, and inservice information provided during the course of the practicum.

During the first month of the practicum the writer developed a

resource and reference list for the kindergarten team as requested. (See Appendix E.) This list included suggested readings in early childhood for staff and parents. Many were books and videos that the writer had available that could be loaned out. The writer also recommended obtaining a membership to the NAEYC and possibly starting a school library in early childhood development and developmentally appropriate practices.

A copy of this list was sent to each kindergarten team, extended kindergarten, preschool and first grade team member as well as the director and both principals. It should be noted at this time that a copy of all materials provided to the kindergarten team, including the sensory motor activity sheets, handouts, any resource information and presentations were also provided to the preschool, extended kindergarten, first grade team, both principals and the director. All team members were invited to attend any and all of the meetings and inservice training sessions. Whenever video tapes were used in the inservice trainings, the video was made available to others for use at another time if they were not able to attend the meetings.

The sensory motor team held an end of month meeting with the kindergarten team to develop appropriate sensory motor play activities, discuss the program thus far, success of the open house,

and set up thematic learning play centers in each of the classes that wanted them. The meeting was an informal lunch session with the writer providing inservice training on room arrangement. The inservice training included a video, The new room arrangement as a teaching strategy, (Duffy & Dodge, 1991) and handouts on the possibilities for centers. Included were tactile exploration, quiet corner, gross motor area, dress up center, and snack time. Suggestions for each of the centers with goals were provided. (See Appendix F.)

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the month. (See Appendix G.) These were to be completed at the teacher's convenience.

During month two the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play activity sheets, and plan for the monthly meeting with the kindergarten team. The writer expressed concerns about the non-English speaking students in the classrooms. After some discussion it was decided that the ESL teacher would be consulted with the sensory motor play activity sheets for recommendations for instructions and translations. The ESL teacher agreed to assist the sensory motor team with translations and instructions as needed.

The sensory motor play activities were implemented weekly with corresponding activity sheets provided. (See Sensory Motor Activity Handbook.) At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. Inservice training was offered to those who were interested at this time. The inservice training session was on the importance of play and alternative positions for play. Handouts included "Values of Play" in both English and Spanish. Also an article from the Young Children entitled "Play is...." by Blau, Zavitkovsky, & Zavitkovsky (1989) and a chart on children's work (Sensory Integration International). Pictures of the alternative positions (Knight & Decker, 1989) were also provided. (See Appendix H.) These could all be sent home to parents.

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the second month. (See Appendix G.) These were to be completed at the teacher's convenience. This writer also provided copies of the training and conference event information pages from the AzAEYC (the local chapter of the NAEYC) Newsletter Update. It contained information for the next seven months. Also provided was a handout with notification of the annual conference on learning

styles approach for all students, early years through primary grades to be held by the local chapter of the NAEYC. (See Training and Conference Event handouts.)

During month three the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play activity sheets, and plan for the monthly meeting with the kindergarten team. The sensory motor play activities were implemented weekly with corresponding activity sheets provided. (See Sensory Motor Activity Handbook.) At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. Inservice training was offered to those who were interested at that time. The inservice training session was on the sensory systems and how they impact daily living, learning, and the problems that might be seen in the classroom. Handouts included the vestibular system, body concept/body awareness and proprioception, and the tactile system. (See Appendix I.) Also, handouts were provided on the Ayres sensory integration development chart, and classroom implications for appropriate referrals for therapy screenings. (See Appendix I.)

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for

the end of the third month. (See Appendix G.) These were to be completed at the teacher's convenience. This writer also provided a handout with notification of a workshop entitled Attention Deficit Disorder: How to Identify and to Manage It, to be held by the local chapter of the NAEYC. (See Training and Conference Event handouts.)

During month four the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play activity sheets, and plan for the monthly meeting with the kindergarten team. The sensory motor play activities were implemented weekly with corresponding activity sheets provided. (See Sensory Motor Activity Handbook.) At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. Inservice training was offered to those who were interested at this time. The inservice training session was on appropriate curriculum for young children. The inservice training included a video tape entitled: Appropriate curriculum for young children: The role of the teacher (NAEYC, 1993). Handouts included a brochure on the Position Statement of the NAEYC (1989): Appropriate Education in the Primary Grades and an article from the Young Children entitled "Moving from traditional to developmentally appropriate Education: A work in progress" by

Passidomo (1994).

Teacher #3 shared a letter that she sent home to parents explaining that it was not developmentally appropriate to expect kindergartners to be able to read and do math problems. She further explained that if the child was drawn to such activities it was certainly acceptable to facilitate these areas. She reported that several of the parents had expressed concern over the fact that their children were not doing academics. Teacher #3's response to this problem clearly indicated an increased understanding and responsiveness to the use of developmentally appropriate practices.

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the fourth month. (See Appendix G.) These were to be completed at the teacher's convenience. This writer also provided a handout with notification of a workshop entitled New Appropriate Ideas to Enrich Children's Learning Experiences, to be held by the local chapter of the NAEYC. (See Training and Conference Event handouts.)

During month five the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play activity sheets, and plan for the monthly meeting with the kindergarten team. The sensory motor play activities were

implemented weekly with corresponding activity sheets provided. (See Sensory Motor Activity Handbook.) It was during one of these weekly sensory motor play activities that one of the Caucasian students said, "Mrs. G what's that brown stuff all over your face and arms?" The writer began explaining that people have different skin colors and that it depends upon the amount of a special chemical called melanin that each of us has. The writer further explained that this depends on the amount of melanin our parents have in their skin.

At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. Inservice training was offered to those who were interested at that time. The inservice training session was more a discussion on cultural differences and the need to expand the curriculum to include topics on ethnic diversity. The writer provided a brochure entitled Teaching Young Children to Resist Bias by Derman-Sparks, Gutierrez, & Phillips (NAEYC, 1989) and a brochure on African American Literature for Young Children (NAEYC, 1992). The writer suggested referring to the NAEYC resource catalog for additional materials on the topic of diversity, equity, and inclusion.

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the fifth month. (See Appendix G.) These were to be completed at the teacher's convenience. This writer also provided a handout with notification of a conference entitled Antibias Education for the 21st Century sponsored by the Arizona Council of Parent Participation in Schools. (See Training and Conference Event handouts.)

During month six the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play activity sheets, and plan for the monthly meeting with the kindergarten team. The sensory motor play activities were implemented weekly with corresponding activity sheets provided. (See Sensory motor Activity Handbook.) At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. Inservice training was offered to those who were interested at that time. The inservice training session was on sensory play and how this promotes learning by enabling children to become independent thinkers and trust the importance of their senses. The inservice training included a video tape entitled: Sensory Play: Constructing Realities (NAEYC, 1994).

Handouts included a brochure entitled Play is FUNdamental by McCracken (NAEYC,1987) and a Valley of the Sun Association for the Education of Young Children (VSAEYC) Public Policy Update which included 1995 legislative reference information.

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the sixth month. (See Appendix G.) These were to be completed at the teacher's convenience. This writer also provided a handout with notification of a workshop entitled Week of the Young Child sponsored by Mesa Community College's Children's Center. (See Training and Conference Event handouts.)

During month seven the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play activity sheets, and plan for the monthly meeting with the kindergarten team. The sensory motor play activities were implemented weekly with corresponding activity sheets provided. (See Sensory Motor Activity Handbook.) At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. Inservice training was offered to those who were interested at that time. The inservice training session was on how to choose appropriate toys for

classroom use. The sensory motor team provided information and tips for making wise, economical toy choices. Since one of the teachers expressed an interest in planning an environmental theme for her class, the sensory motor team presented and demonstrated ideas for making toys from recycled items such as milk/juice jugs and styrofoam pieces. The writer suggested referring to the NAEYC resource catalog for additional materials on the topic of play. Handouts for included a listing for VSAEYC library of NAEYC videos, a listing for Core Resources for developmentally appropriate education and a list of 20 resources for the happy, healthy development of young children in the schools (NEA).

At the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the seventh month. (See Appendix G.) These were to be completed at the teacher's convenience. This writer also provided a handout with notification of a conference entitled "A morning with Janet Gonzalez-Mena," sponsored by the National Coalition for Campus Childcare, Inc. and Scottsdale Community College. The keynote address: Multicultural Issues in Early Childhood Education. (See Training and Conference Event handouts.)

During month eight the writer met with the PT/ST on a weekly basis to discuss possible activities, develop sensory motor play

activity sheets, and plan for the monthly meeting with the kindergarten team. The sensory motor play activities were implemented weekly with corresponding activity sheets provided. (See Sensory Motor Activity Handbook.) At the end of the month the sensory motor team met with the kindergarten team to arrange a set up or change thematic learning play centers as well as plan for the next unit of sensory motor play activities. This meeting was initially intended to be the wrap up session for the sensory motor play program, however it was decided by a vote of the kindergarten team and sensory motor team to continue the program on through the remainder of the school year, summer and the 1995-96 school year. The kindergarten team suggested that the sensory motor team arrange a year end meeting with the kindergarten team and administration to discuss success and future needs of the program. Most of the kindergarten team members felt that additional administrative support could strengthen the program and help with the struggle to become more developmentally appropriate. The kindergarten team requested that the sensory motor team continue with their efforts to provide sensory motor play activities on a weekly basis, as well as providing what they considered informative inservice training sessions during the monthly lunch meetings. It was during this meeting that the kindergarten team announced their

plans to have a "field day." They reported that they had requested and received permission from the administration to have all the kindergarten students in school for the entire day with transportation provided for both the AM and PM students. The kindergarten team asked if the sensory motor team would help organize this project, as well as develop several of the play stations. This clearly demonstrated an increased awareness on the teachers' part as to the importance of sensory motor play involvement in the development of young children. It should be noted, however that teacher #4 continued to feel that too much time was allotted for gross motor and what she considered recess type activities. She stated that the children have plenty of time for recess before and after school. She further stated that, "if you are spending 10-15 minutes a day on recess, then you're not doing your job." The other kindergarten team members did not respond to this.

As in the past, at the end of the meeting the sensory motor team provided each of the kindergarten team teachers with evaluation forms for the end of the eighth month. (See Appendix G.) These were to be completed at the teacher's convenience. Also, as in the past the writer provided a handout with notification of a workshop entitled: 1995 Week of the Young Child, sponsored by the VSAEYC. (See Training and Conference Event handouts.)

Both the kindergarten team and the sensory motor team decided that the director and principals should be invited to the next meeting so that a request for permission and possibly even funding to attend at least one day of the VSAEYC conference on the 1995 Week of the Young Child. All felt that this might be a positive way of demonstrating solidarity as a unified team of professionals in early childhood education wanting to provide what is best for children.

CHAPTER V  
RESULTS, DISCUSSION, AND RECOMMENDATIONS

Results

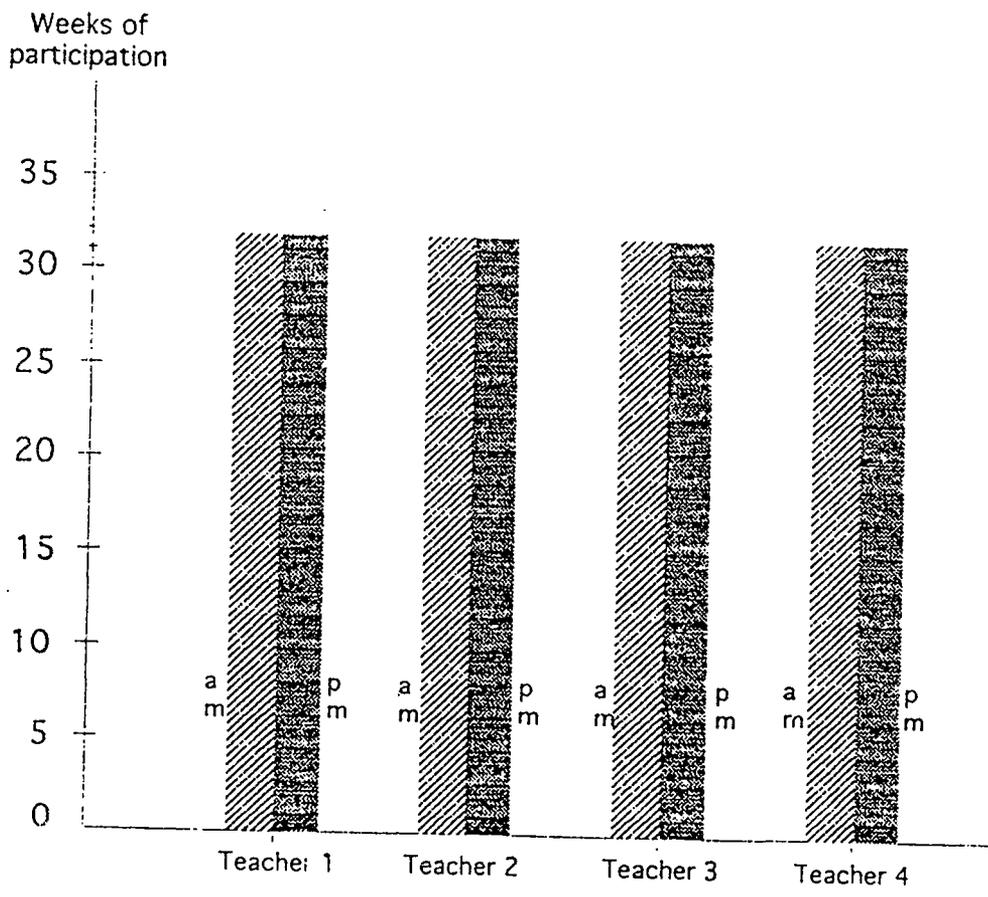
The teachers were not implementing developmentally appropriate practices in their kindergarten classrooms. In-seat workbook activities and teacher directed activities were prevalent, and poor integration of the special needs students occurred. Emphasis was placed on handwriting, writing journals, completing alphabet letter workbooks, and beginning math problems with actual computation. Little if any child-directed activities were permitted in the class with the exception of seven minutes of free time. Only a few static learning/discovery centers existed in any of the classrooms. There was no established gross motor, physical education, or recess time. This was left up to the discretion of each of the four kindergarten teachers. The kindergarten classes were engaged in what is commonly referred to as a "push-down curriculum."

The purpose of this practicum was to provide a variety of approaches to ensure that all kindergarten staff had an equal opportunity to successfully achieve an increased teacher knowledge base in developmentally appropriate practices and the need for play and sensory motor activities in the kindergarten program. Weekly developmentally appropriate sensory motor play activities, monthly inservice training sessions, techniques for special education student inclusion, recommendations for learning/discovery centers and information about conferences/workshops were all strategies utilized by this writer, in collaboration with the physical and speech therapists, to encourage and facilitate the teachers in using more developmentally appropriate practices in the kindergarten program.

Outcome one was measured by the number of kindergarten teachers who participated in the sensory motor or play activity as determined by the weekly plan. Success would be demonstrated if four of the four kindergarten teachers participated. A weekly participation log was used to record actual participation. (See Appendix A.) Four of four kindergarten teachers participated in all of the sensory motor play activities 30 minutes/ week. (See Figure 1). This outcome was achieved.

Figure 1

### Participation In Sensory Motor Activities

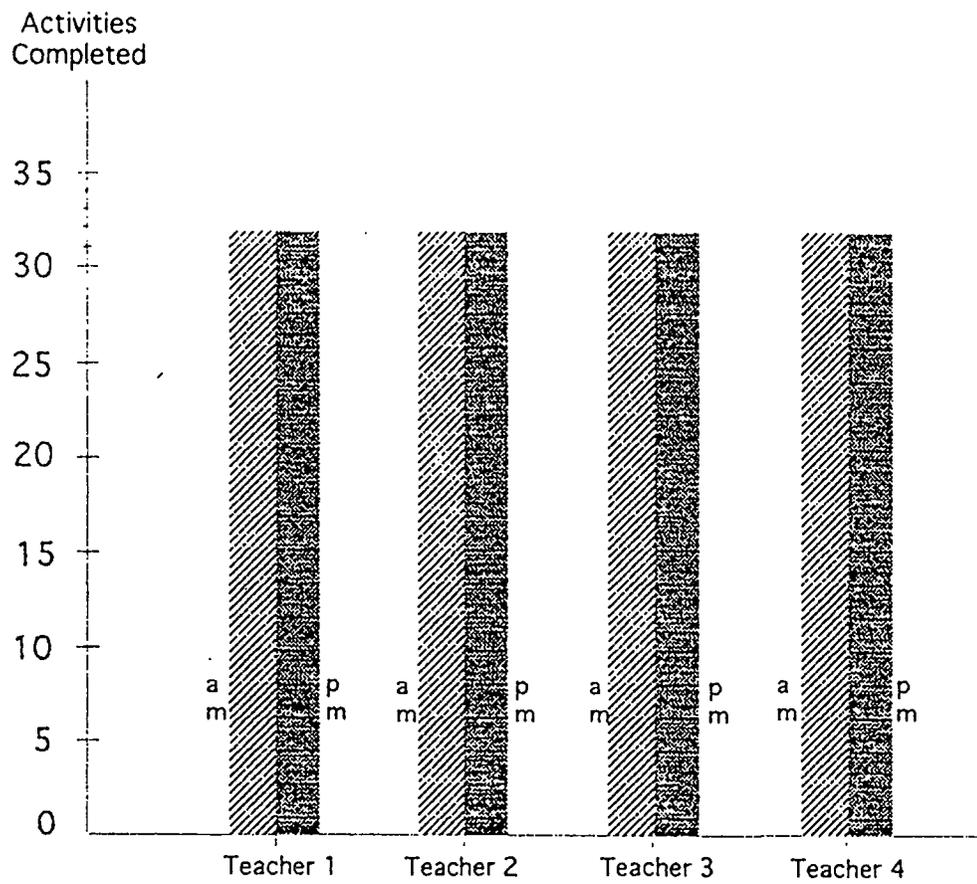


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Outcome two was measured by review of weekly plans, which included goals and objectives, materials needed, and techniques for each activity developed. Success would be demonstrated if all of the activities adhered to the NAEYC and AOTA guidelines. A checklist of criteria was developed. (See Appendix B.) All of the sensory motor play activities were planned and developed in accordance to the established checklist of criteria for developmental appropriateness. (See Figure 2). This outcome was achieved.

Figure 2

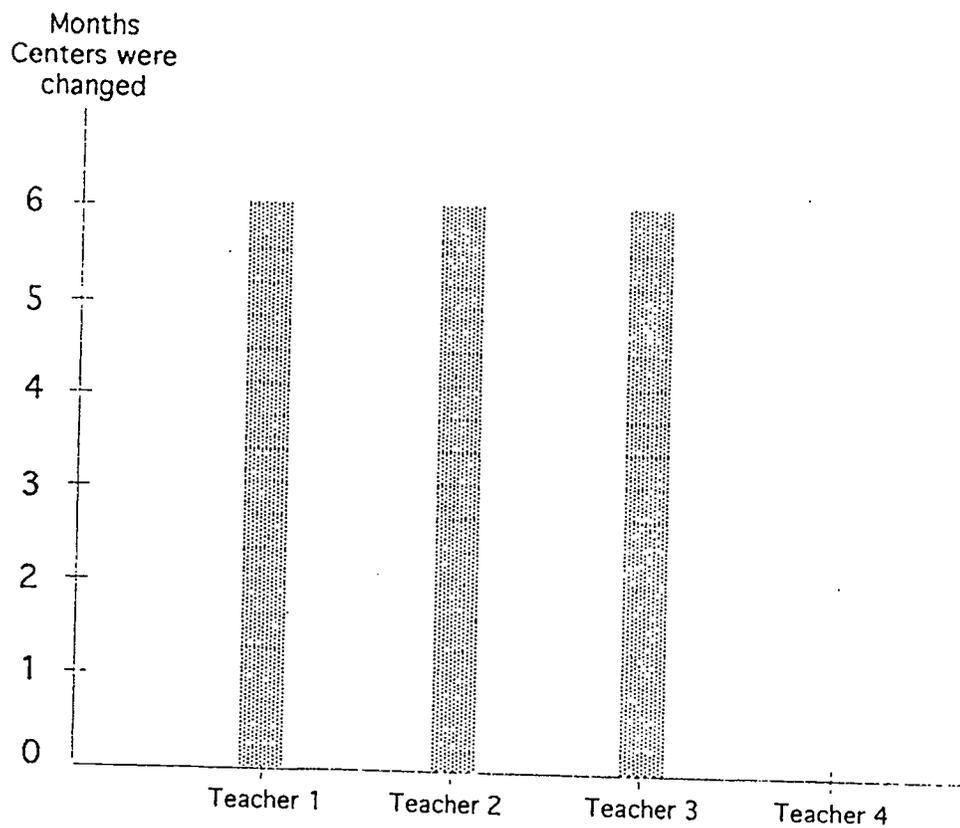
## Completion of Developmentally Appropriate Activities



Outcome three was measured by the number of times the teachers set up or changed learning centers in the classroom to reflect the sensory motor or play concepts appropriate to the class theme based on the established criteria. A weekly participation log was used to record actual participation and frequency of change. (See Appendix A.) Success was demonstrated if learning centers were set up in three of the four classes and changed at least once a month by a collaborative effort of the team members. Three of the teachers participated in setting up learning/discovery centers with changes on a monthly basis to reflect theme changes. (See Figure 3.) This outcome was achieved.

Figure 3

### Monthly Learning Center Change



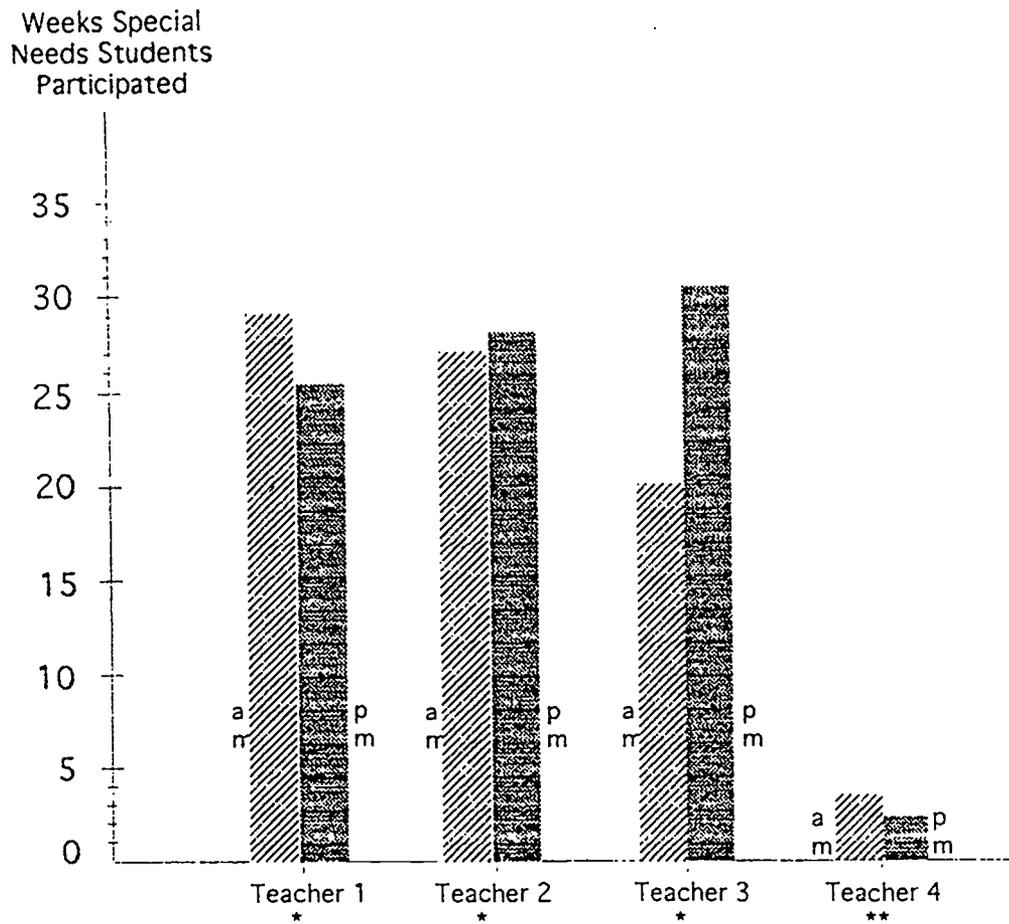
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Outcome four was measured by the number of special needs students who were permitted to participate in the sensory motor and play activities. A weekly participation log was used to record actual participation. (See Appendix A.) Success was determined if all of the special needs students participated. Initially, all four teachers had one special needs student in each of their AM and PM classes. After the first month both special needs students were removed from teacher #4's classes by the principal. It was reported that the parents requested transfers for their children because the teacher was unable to make the necessary adjustments to have them present. These two special needs students were placed in the other classrooms where they were in fact permitted to participate in the sensory motor play activities. Success was demonstrated if eight of eight special needs students participated in the program. (See Figure 4.)

Success was attained on all four of the objectives.

Figure 4

Participation Of Special Needs Students

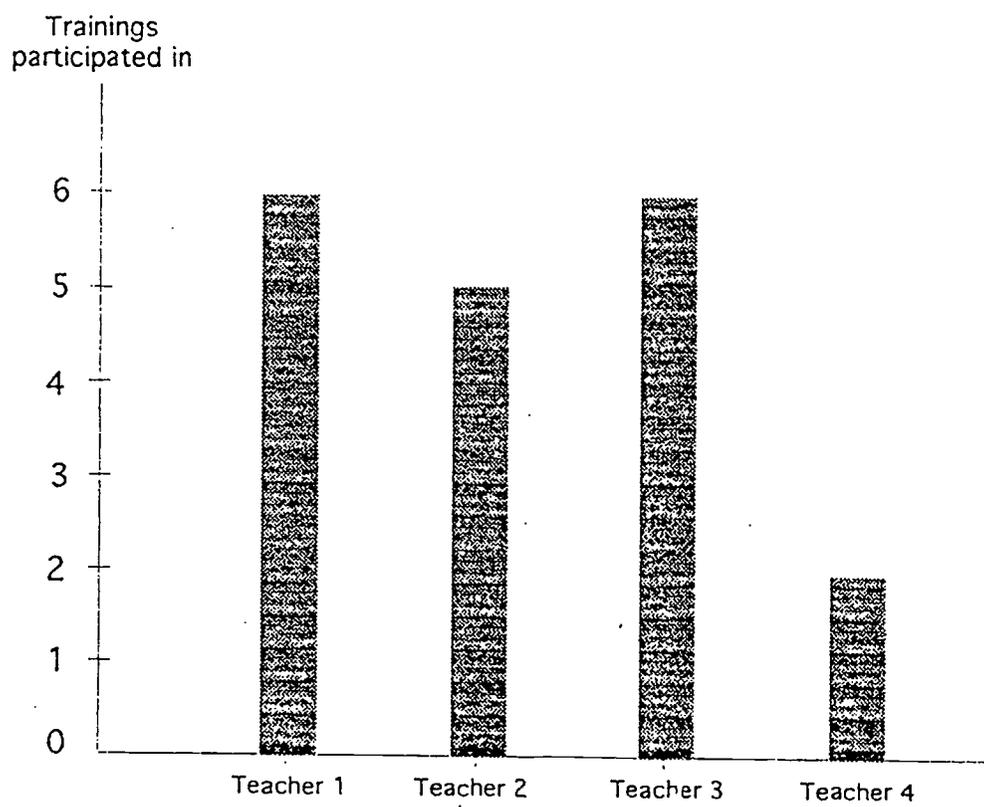


\* absent  
 \*\* Special Ed students were removed from this teacher's class

Data was collected on the weekly participation log to reflect the teacher's participation in the monthly inservice training. (See Appendix A.) Teacher #1 attended six of six inservice trainings. Teacher #2 attended five of six inservice trainings. She was absent from school on the date of the inservice training, but did request copies of the handouts and asked to borrow the video tape at a later date. Teacher #3 attended six of the six inservice trainings. Teacher #4 attended two of six inservice trainings. (See Figure 5.)

Figure 5

## Participation In Inservice Trainings



\* III; requested information later

### Discussion

Methods implemented to help increase the kindergarten teachers' knowledge base in developmentally appropriate practices and the need for play and sensory motor activities program were successful. Without the diligent support and teamwork of the staff this practicum would have been impossible. The director, who was responsible for curriculum, personnel, and budget in addition to special education, was open to all suggestions for helping this school district become more developmentally appropriate. More importantly, she sincerely wanted what was best for children. In having to wear so many administrative hats, the writer believes that the director was somewhat relieved that someone else took the initiative and assumed the responsibility to institute changes in the school district that would result in positive growth toward best practices for young children. The writer and the physical and speech therapists were strongly encouraged to continue in efforts despite the numerous outrageous attempts by one of the kindergarten teachers to sabotage the program.

Success in implementation was significant in that all of the kindergarten teachers were actively participating in the sensory motor program. Willingness to participate was of course more difficult for some than others. The kindergarten team, in order to

provide equal programming for the children, decided that it was necessary for all teachers to take part in the activities as this was a team effort. The teacher evaluation surveys were favorable for the most part, with positive feedback as well as suggestions for future activities.

There were several unexpected events to occur during the first half of implementation. Two of the teachers have included the sensory motor program in their Career Growth Plans (CGP). This also meant that these two teachers would have to develop a sensory motor play activity to be carried out in all of the eight classes. In addition, this writer would be the person responsible for their evaluations. Since this involved the determination of whether these two teachers received their supplemental achievement pay, this writer felt somewhat confident in that the school district entrusted a judgment such as this to her. This should be occurring some time in mid-May.

Incredibly, another exciting, unexpected event to occur was that the \$6000 Scribner-Laidlow Letter book Program has been deleted from the curriculum as a result of the information provided to administration concerning developmentally appropriate practices. All, but one teacher, were delighted! Even the more traditional teachers were happy not to have to follow the rigors of this program

any longer. Teacher #4 was so resistant to change that she went so far as to photocopy the entire letter book program so that she could continue with the worksheets, as well as send them home for homework as supplemental activities. Lastly, because of the heightened awareness and increased understanding of the need for developmentally appropriate practices, the administration concluded that the kindergarten teachers no longer had to administer the district wide CRMs test.

Progress made at during this practicum clearly surpassed this writer's expectations, especially since one of the kindergarten teachers voiced so much opposition to developmentally appropriate practices. It was also unfortunate that this teacher was the team leader. The writer was surprised to see that the other three teachers voted her views down routinely, without exception. In the past this teacher dominated what occurred in the kindergarten program. At this time the team meetings are more often characterized by a democratic vote on what is considered best practices for children.

The sensory motor play activities continue to be done on a weekly basis with regular meetings to discuss themes and recommendations for centers. In-service training continues to be provided with lots of written materials from reputable resources

made available by this writer and the sensory motor team. All of the special needs students are presently participating in the sensory motor play activities, but, unfortunately, rarely does this writer observe anyone other than the special education staff or the sensory motor team working with these youngsters. This is yet another battle to be won. Teacher #1 did include a comment on one of her monthly evaluations that stated that, through the modeling during the sensory motor play activities she had become more aware of the students that needed to be worked with differently. Further, she stated that she needed more help in terms of how to revise activities to facilitate more effective learning.

The ESL teacher has, and continues to, enthusiastically provide suggestions and translations for the sensory motor team to aid in carrying out the activities with the limited/non English speaking youngsters.

This writer was pleasantly surprised at the amount of parental support offered during the sensory motor play activities in the classrooms. The parent volunteers always offered their assistance and willing took part in the activities to act as adult facilitators. Many embraced the idea that children need to be self directed and encouraged to be risk takers. Taking an active part in the activities provided these parents with a sense of empowerment and ownership

of the educational experience that their children were exposed to. Some parents even voiced opinions that echoed the sentiment of the NAEYC without ever having heard of the organization. Instinctively, some parents recognized that young children learn by doing and need opportunities to explore, create and experiment with sensory motor play activities. Numerous times the sensory motor team took these opportunities to solicit assistance and educate these few parents in order to form alliances. The writer and the sensory motor team expressed to the parents that the goal for every child is to promote the desire to be a life long learner and discoverer. Constant reminders of the importance of process versus product elicited positive feedback. Also, that enrichment activities such as the ones being provided facilitated competencies in all areas of life.

Many expressed pleasure in being invited to the school to actively take a role in helping out in the classroom when possible. Some were surprised by suggestions made for things that could be done in the home and incorporated in the daily routines to facilitate healthy growth and development. Recommendations for toys and the importance of play for kindergartners was information that many found quite useful.

It was important for parents as well as staff to understand that developmentally appropriate experiences include curriculum

decisions based on children's social, emotional, physical, and intellectual development and adjusting teaching so that all children experience success.

Equally important for both the teachers and the parents to understand was that the process is more important than the product. That is, at this point in the child's development and learning, how the child performs the activity is of greater significance than the actual outcome of what he/she does. The manner in which the child accomplishes the task should be the focus of attention with praise and acknowledgement of an attempt to perform a task as facilitated, serving to keep interest and motivation working to the child's benefit. The quality of the product will then improve with practice. Each child should be left with the success of having learned more efficient and appropriate methods to carry with them in play and in classroom work.

Educators and/or therapists working with young children need to be able to identify how a child learns best, then provide that opportunity through the use of a variety of modalities. Parents should be viewed as partners in this process. Identifying strengths in these area will ensure equal opportunity for each child to learn from his or her maximum potential. Teaching techniques that address a variety of learning styles will be most effective in

reaching all children. Teaching should build upon strengths while introducing opportunities to experience and explore learning through developmentally appropriate practices in sensory motor and play activities. Key components include curriculums with early childhood content and skills, which offer children choices. Opportunities should be provided for social interaction and language development. Lastly, all involved with children need to be aware of the cultural and linguistic needs of children from a range of backgrounds.

It became clear to all involved with this program that the therapists had indeed addressed more than just motor issues and techniques to include special needs students into the daily classroom activities. Just as evident was the fact that both teachers and therapists are charged with more than just educating students.

All of the strategies employed were found to be helpful and enhance the understanding of the needs of the kindergarten teachers. It strengthened the early childhood education knowledge of the staff. Another by product of the practicum was that the staff and parents involved in the sensory motor play activities became more familiar with one another. This provided and encouraged increased interaction between the home and school. Staff attitudes changed dramatically after they saw that the parents were in fact willing to

be active participants and vital components in their children's learning.

While it is understood that the success of this practicum was measured by the number of kindergarten teachers who actively took part in the sensory motor play activities, the success should be measured by the attitudinal changes that occurred in both the staff and of some of the parents. Both became more willing to make the necessary accommodations to meet the needs of the children. Many parents rely on the educators to make good choices for their children, but this writer believes that informed parents can help the teachers make informed decisions for the children. This could only be a win-win situation. By all standards this represents a positive effort on the part of all involved to open the lines of communication between the home and school. As it is well known and documented dynamic parental involvement is a key in any good program for children.

In terms of spin-offs, the extended kindergarten teacher, who is given the activity sheets along with the regular kindergarten teachers, carries out the activities in her classes sometimes even before the sensory motor team has a chance to. The students often come to class and say things like: "we did that yesterday in Mrs. C's class, it was fun." The extended kindergarten program is for those

students who remain on campus either before or after regular kindergarten is in session. The extended kindergarten teacher has requested that the sensory motor team continue to provide sensory motor play activities and inservice training.

The first grade teachers have requested in depth information regarding the sensory motor play activities and how they might be upgraded for higher functioning children.

There will be two elementary sites next school year with two kindergarten teachers at each . The principal at one of the schools, who incidentally will have teacher #4, has requested that this writer along with the physical and speech therapists prepare a presentation on the sensory motor play program to the curriculum committee in May to foster parental support at her school.

Two of the resource teachers requested applications for NAEYC membership in order to receive literature. They have also requested to receive copies of the weekly sensory motor activities. They want the sensory motor team to help them develop a "play program" during recess for the special needs students. Both did in fact join the NAEYC, as well as the local chapter.

The development preschool program is presently modeling the sensory motor play program and receives the weekly activity sheets as well. They too, have requested to continue the program with

input and guidance from the therapists, especially for the special needs students who have motor involvements.

The kindergarten teachers are talking about modifications and additions that they would like made for the program next year. One would have to assume that they are planning on the sensory motor play component to be a permanent part of their curriculum.

In addition to the benefits listed in the Kindergarten Proposal (See Appendix C.) as a therapist, this writer found that there were additional personal benefits to completing this practicum. This writer had increased contact with the administration, regular education staff and parents, which otherwise would not have occurred. This resulted in an increased awareness of the role of occupational therapy and role definition in the school setting. This writer was able to develop some leadership skills in the school district, as well as establish rapport with many staff members. As a rule, occupational therapists exist on the school campus as an enigma that only services special needs students or who helps identify children who are at risk.

Additionally, the writer can continue to build on the sensory motor play program along with modifying and adding appropriate activities to the sensory motor activities handbook.

Lastly, a longitudinal follow up study would be possible to

determine the benefits of the program and reduce the number of referrals for direct therapy services. With this in mind one might be interested in performing a pre-test and post-test skills summary to determine the impact of the program on motor skill development.

### Recommendations

The writer has several recommendations based on the results of this practicum.

1. The definition of sensory motor and play involvement should be expanded to include all levels of learning. A combination of the two is what makes children problem solvers and life long learners.

Continued creative efforts should be utilized to encourage and establish an individualized relationship with each of the teachers and as many parents as possible to help them understand and embrace the need for developmentally appropriate practices in the classroom.

2. Communication is the one key ingredient needed to help personalize good home-school relations. Speaking the language and knowing the culture are major factors in making minority parents feel comfortable. This was the one area that the writer felt truly inept. It is strongly recommended that some level of proficiency be attained in speaking the language and understanding the culture. Any

attempt at speaking the language was viewed as a positive gesture and indicated that one really did have an interest in communication about their children.

3. A suggestion for next year would be to expand the K team to include the ESL teacher. Perhaps she could provide ESL services during the sensory motor play activities to aid in language and communication. This would also establish another adult facilitator in the classroom.

4. Significant changes can occur in the kindergarten program if the teachers are willing to continue their education and expand their knowledge base of early childhood development. A broad range of developmentally appropriate activities, including sensory motor play, must be offered to encourage learning.

#### Dissemination

The preschool, extended kindergarten and first grade teachers are especially interested in this practicum as they are already modeling the sensory motor program. They would like very much to continue and expand this developmentally appropriate initiative. All have requested that they continue receiving the activity sheets to add to their handbooks.

The resource teachers have also requested to receive copies of

the weekly sensory motor activities. They want the sensory motor team to help them develop a "play program" during recess for the special needs students.

This writer, in collaboration with the physical and speech therapists, has been asked to prepare and make a presentation of the success of the sensory motor play program to the curriculum committee in May in preparation for next school year. At this time the program will continue through the school year, as well as through the summer.

Another reason the program will continue to grow and be successful is that there are no funding issues to be considered. The cost of the program is minimal to the school district. The only fees incurred are those to pay for the services of the therapists, which are fees already paid, as therapy services are mandated by law.

The writer has been invited to present this material at other area schools. She also has plans to publish this material in a more formal format in the near future.

Developmentally appropriate activities will continue to be added to the existing sensory motor handbooks. At this time the writer would like to personally thank all those therapists whose activities were borrowed, modified, or synthesized to help make the Sensory Motor Activity Handbook such a success for this practicum.

The writer at no time makes claims of ownership for the activities used; only the modifications needed for this group of youngsters. They have been compiled and may be obtained from the writer.

## REFERENCES

- American Occupational Therapy Association. (1983). Standards of practice for occupational therapy. American Journal of Occupational Therapy, 37, 802-804.
- American Occupational Therapy Association. Chart: "Caution children at work." Torrence: Sensory Integration International.
- American Occupational Therapy Association. (1992). Draft revision: Standards of practice for occupational therapy. OT Week, 6 (5), 9-12.
- Ayres, A. J. (1985). Sensory integration and the child. (7th printing). Los Angeles: Western Psychological Services.
- Baum, C. (1991). Addressing the needs of the cognitively impaired from a family policy perspective. American Journal of Occupational Therapy, 45, 594-606.
- Bissell, J. (1988). Sensory motor handbook. Torrance: Sensory Integration International.
- Blau, R., Zavitkovsky, A., & Zavitkovsky, D. (1989). Play is.. Young Children, 45(1), 30-31.
- Blakes-Greenway, D. (1995). Sensory Systems. Scottsdale, AZ: Author.
- Boyer, E. (1991). Ready to learn: A mandate for the nation. Princeton: Carnegie Foundation.
- Bredenkamp, S. (Ed.). (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.

- Bredenkamp, S. & Rosegran, T. (Eds.). (1992). Reaching potentials: Appropriate curriculum and assessment for young children. (Vol. 1). Washington, DC: National Association for the Education of Young Children.
- Casey, M. B., & Lippman, M. (1991). Learning to plan through play. Young Children, 46(4), 52-58.
- Chandler, P. (1994). A place for me: Including children with special needs in early care and educational settings. Washington, DC: National Association for the Education of Young Children.
- Chenfeld, M. B. (1993). Teaching in the key of life. Washington, DC: National Association for the Education of Young Children.
- Cratty, B. (1970). Perceptual and motor development in infants and children. Los Angeles: Macmillan.
- Day, B. (1988). Early childhood education: Creative learning activities (3rd ed.) . New York: Macmillan.
- Day, B. & Drake, K. (1986). Developmental and experiential programs: The key to quality care and education of young children. Educational Leadership, 44(5), 25-27.
- Derman-Sparks, L., Gutierrez, M., & Phillips, C. (1989). Teaching young children to resist bias. Washington, DC: National Association for the Education of Young Children.
- Doherty, W. J. (1985). Family interventions in health care. Family Relations, 34, 129-137
- Doremus, V. (1986). Forcing works for flowers, but not for children. Educational Leadership, 44(3), 32-35.
- Elkind, D. (1987). Miseducation: Preschoolers at risk. New York: Knopf.

- Elkind, D. (1993). Images of the young child. Washington, DC: National Association for the Education of Young Children.
- Engstrom, G. (Ed.). (1991). The significance of the young child's motor development. Washington, DC: National Association for the Education of Young Children.
- Fiske, E. (1992). Smart schools, smart kids: Why do some schools work? New York: Simon & Schuster.
- Ford, S. (1993). The facilitator's role in children's play. Young Children, 48(6), 66-69.
- Goffin, S., & Stegelin, D. (Eds.). (1992). Changing kindergartens. Washington, DC: National Association for the Education of Young Children.
- Greenberg, P. (1990, 1992). Why not academic preschool? (Part 1 & 2). Young Children, 45(2), 70-80 and 47(3), 54-74.
- Greenberg, P. (1990). Make a difference! Make your program more developmentally appropriate! Young Children, 47(1), 32-33.
- Hanft, B. (1989). Nationally speaking-Early intervention: Issues in specialization. American Journal of Occupational Therapy, 43, 431-434.
- Healy, J. (1990). Endangered minds: Why children don't think and what can we do about it? New York: Touchstone.
- Henniger, M. (1994). Planning for outdoor play. Young Children, 49(4), 10-15.
- Kantrowitz, B., & Wingert, P. (1989, April). How kids learn. Newsweek, pp. 50-56.
- Katz, L. G. & Chard, S. C. (1989). Engaging children's minds: The project approach. Norwood, NJ: Ablex.

- Knight, J. & Decker, M. (1989). H.A.N.D.S. McHenry: HANDS Press.
- Kostelnik, M. (1992). Myths associated with developmentally appropriate programs. Young Children, 47(4), 17-23.
- Kranowitz, C. S. (1992). Obstacle courses are for everybody. In Neugebauer, B. (Ed.), Alike and different: Exploring our humanity with young children (pp. 20-31). Washington, DC: National Association for the Education of Young Children.
- Kritchevsky, S., Prescott, E., & Walling, L. (1991). Planning Environments for young children: Physical space. (2nd ed.). Washington, DC: National Association for the Education of Young Children.
- Krofta, J. (1990). Facilitating learning through movement. Physical Therapy Forum, 5(36), 1-6.
- McCracken, J. B. (1993). Valuing diversity: The primary years. Washington, DC: National Association for the Education of Young Children.
- McCracken, J. B. (1989). "Play is FUNdamental." Washington, DC: National Association for the Education of Young Children.
- Missiuna, C., & Pollack, N. (1992). Play deprivation in children with physical disabilities: The role of the occupational therapist in preventing secondary disability. American Journal of Occupational Therapy, 45(10), 882-889.
- Mooney, N. (1992). Coming to know: A principal's story. In Goffin, S., & Stegelin, D. (Eds.). Changing kindergartens (pp. 29-50). Washington, DC: National Association for the Education of Young Children.

- Murawski, E. (1992). Changing kindergartens: Teachers as change agents. In Goffin, S., & Stegelin, D. (Eds.). Changing kindergartens (pp. 13-28). Washington, DC: National Association for the Education of Young Children.
- National Association for the Education of Young Children & National Association for Early Childhood Specialists in State Departments of Education. (1991). Position statement: Guidelines for appropriate curriculum content and assessment in programs serving children ages 3 through 8. Young Children, 46(3), 21-38.
- National Association for the Education of Young Children. (1989). "Appropriate Education in the Primary Grades." Washington, DC: National Association for the Education of Young Children.
- National Association for the Education of Young Children. (1990). "Good Teaching Practices for older Preschoolers and Kindergartners." Washington, DC: National Association for the Education of Young Children.
- National Association of Elementary School Principals. (1990). Early childhood education and the elementary school principal: Standards for quality programs for young children. Alexandria, VA: Author.
- National Association of State Boards of Education, Task Force on Early Childhood Education. (1988). Right from the start. Alexandria, VA: Author.
- National Black Child Development Institute. (1992). Washington, DC: National Association for the Education of Young Children.
- National Education Association. (1990). Early childhood education and the public schools. Washington, DC: Author.
- Neugebauer, B. (Ed.). (1992). Alike and different: Exploring our humanity with young children. (rev. ed.). Washington, DC: National Association for the Education of Young Children.

- Nourot, P. M. & VanHoorn, J. (1991). Symbolic play in preschool and primary settings. Young Children, 46(6), 40-50.
- Peck, J., McCaig, C., & Sapp, M. (1988). Kindergarten policies: What is best for children? Washington, DC: National Association for the Education of Young Children.
- Passidomo, M. (1994). Moving from traditional to developmentally appropriate education: A work in progress. Young Children, 49(6), 75-78.
- Quirk, N. & Dimatties, M. (1990). The relationship of learning problems and classroom performance to sensory integration. Cherry Hill, NJ: Author.
- Rogers, C. & Sawyers, J. (1988). Play in the lives of children. Washington, DC: National Association for the Education of Young Children.
- Schickendanz, J., Chay, S., Gopin, P., Sheng, L., Song, S., & Wild, N. (1990). Preschoolers and academics: Some thoughts. Young Children, 46(1), 4-13.
- Seefeldt, C. (1985). Tomorrow's kindergarten: Pleasure or pressure?" Principal, 64(5), 12-15.
- Shepard, L. & Smith, M. (1988). Escalating academic demand in kindergarten: Counter-productive policies. Elementary School Journal, 89, 135-146.
- Showers, B., Joyce, B., & Bennett, B. (1987). Synthesis of research on staff development: A framework for future study and a state-of-the-art analysis. Educational Leadership, 45(3), 77-87.
- Stipek, D., Rosenblatt, L., & DiRocco, L. (1994). Making parents your allies. Young Children, 49(3), 4-9.

Walsh, D. (1989). Changes in kindergarten: Why here? Why now? Early Childhood Research Quarterly, 4, 377-391.

Young, S. (1988). Movement is fun. Torrance: Sensory Integration International.

## VIDEOS

Boss, B. (Producer), & Holmes, P. (Director). (1994). Starting at square one [Videotape]. Los Angeles, CA: Turn the Page Press, Inc.

Duffy, C. (Producer), & Dodge, D. (Director). (1991). The new room arrangement as a teaching strategy [Videotape]. USA: Teaching Strategies, Inc.

National Association for the Education of Young Children (Producer), (1993). Appropriate curriculum for young children: The role of the teacher [Videotape]. Washington, DC: National Association for the Education of Young Children.

National Association for the Education of Young Children (Producer), (1985). How young children learn to think with Constance Kamii [Videotape]. Washington, DC: National Association for the Education of Young Children.

National Association for the Education of Young Children (Producer), (1991). Teaching the whole child in kindergarten [Videotape]. Washington, DC: National Association for the Education of Young Children.

APPENDICES

APPENDIX A  
WEEKLY PARTICIPATION LOG

# WEEKLY PARTICIPATION LOG

## TEACHER # 1-2-3-4

	SENSORY MOTOR/PLAY ACT.	SPECIAL ED. STUDENTS	LEARNING CENTERS/CHANGE	IN-SERVICE TRAINING
WEEK #				
1				
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APPENDIX B  
CRITERIA CHECKLIST

### CRITERIA CHECK LIST

THE FOLLOWING ARE SOME QUESTIONS TO HELP GUIDE IN DETERMINING IF AN ACTIVITY IS DEVELOPMENTALLY APPROPRIATE IN ACCORDANCE WITH THE NAEYC AND AOTA GUIDELINES

1. Are you using big/small muscles?
2. What other positions could you be in to do this activity? (on tummy, half kneel, side sitting)
3. When you do this activity what sensory systems are involved?
4. What benefits are attained by engaging in this activity?
5. How could this activity be changed or modified to include special needs children?
6. How could this activity be set up to accomplish other goals?
7. Can this activity be self-directed and/or result in an open ended art project?
8. Is the child permitted to watch the activity rather than participate?
9. Are time and sequence concepts presented as part of concrete experiences and learning/play centers?

10. Are discipline and guidance managed through redirection, verbal encouragement, and arrangement of space?
11. Are readiness concepts presented through learning /play centers, stories, and a whole language approach using concrete experiences?
12. When drawing/writing activities are presented do you have a variety of utensils available?
13. Will you prepare and assist with changes and transitions during activity?
14. Are music, chants, and large motor activities encouraged?
15. Will the children be given the opportunity and encouraged to problem solve independently and in a group situation?
16. When art activities are presented are the children encouraged to experiment and be creative rather than being shown what to do?
17. Are a variety of art materials and mediums available?
18. Can limits be set in a positive manner?
19. Are the children encouraged to converse among themselves as well as with the adult facilitators?
20. What is more important the end product or the process?

APPENDIX C  
KINDERGARTEN PROPOSAL

## KINDERGARTEN PROPOSAL

Since play is the most effective and appropriate means for children this age to learn, the therapists' goal is to work with the teachers to help design program activities and environment to meet specific learning and developmental goals of individual children through active involvement, hands-on, and self-directed play. The therapists propose a weekly sensory motor period for each class provided by the therapists working collaboratively with the classroom teachers, aides and volunteers to model appropriate developmental practices in the classroom. Play and discovery/learning centers will be the medium utilized in these classes.

Sensory motor participation lays the necessary foundation for future success in gross motor, fine motor, perceptual motor and academic skills (Bissell, 1988; Cratty, 1970; Quirk & DiMatties, 1990; Young, 1988). Ayres (1979, 1985), contends that when these skills are ignored children will experience failure in competence in life skills. As therapists, we strongly support this philosophy and have personally treated children who lack this strong sensory motor foundation who are faltering in the classroom.

The National Association for the Education of Young Children (NAEYC), in the Position Statement of Good Teaching Practices for

4- and 5- Year-Olds, (1987, 1990) recommends that children have daily opportunities to engage in large muscle outdoors activities. Outdoor time should be an integral part of the curriculum and requires planning by adults to facilitate motor learning. Opportunities for small muscle skills through play activities such as pegs, puzzles, beads, painting, and cutting should be provided. Learning centers should hold a great deal of intrinsic interest for children. Centers of interest, arranged throughout the room, are one way teachers can provide children with first hand experiences. Ayres (1979, 1985) echoes this sentiment. Children must be given time and freedom to explore, experiment and engage in hands-on activity alone or with others (Elkind, 1987; Shepard & Smith, 1988). Play is essential for developing the capacity to motor plan and is an effective vehicle for promoting learning. Through play the child obtains the sensory input from his body and from gravity that is essential for both motor and emotional development (Ayres, 1979, 1985; Greenberg, 1990, 1992; NAEYC, 1990).

The therapists will provide a weekly activity for each of the K- classes. The therapists will be available for weekly collaboration with the teachers to determine activities to possibly correspond with concept, theme, or curriculum objective of the week. Weekly activity sheets will be provided including activity

procedures, materials needed and rationale. This will develop an activities handbook upon which one can build, modify and add appropriate activities. Monthly evaluations of the activities for the four week unit will be developed.

**Benefits of such a program:**

1. Provide model for developmentally appropriate sensory motor and play activities.
2. Facilitate inclusion principles in regular education as it deals with likenesses opposed to differences.
3. Therapists can provide additional treatments for students who receive direct services.
4. Therapists can service those students who are on consult and monitor programs at same time.
5. Therapists will have first hand contact with all of the students and can identify those at risk in the classroom.
6. Hopefully, this will cut down on the number of students referred for direct therapy services.
7. Curriculum objectives can be met through developmentally appropriate practices in the medium of play.

**As a team we can make a significant impact on the lives of our students.**

## REFERENCES

- Ayres, A. J. (1985). Sensory integration and the child. (7th printing). Los Angeles: Western Psychological Services.
- Bissell, J. (1988). Sensory motor handbook. Torrance: Sensory Integration International.
- Bredenkemp, S. (Ed.). (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.
- Cratty, B. (1970). Perceptual and motor development in infants and children. Los Angeles: Macmillan.
- Elkind, D. (1987). Miseducation: Preschoolers at risk. New York: Knopf.
- Greenberg, P. (1990, 1992). Why not academic preschool!? (Part 1 & 2). Young Children, 45 (2), 70-80 and 47 (3), 54-74.
- Quirk, N. & Dimatties, M. (1990). The relationship of learning problems and classroom performance to sensory integration. Cherry Hill, NJ: Author.
- Shepard, L. & Smith, M. (1988, September). Escalating academic demand in kindergarten: Counter-productive policies. Elementary School Journal.
- Young, S. (1988). Movement is fun. Torrance: Sensory Integration International.

APPENDIX D  
OPEN HOUSE PRESENTATION

## OPEN HOUSE PRESENTATION

I. HANDOUTS (Position Statement, Sensory motor acts., NAEYC list)

II. WELCOME/INTRODUCTION

III. DEVELOPMENTALLY APPROPRIATE PRACTICES IN THE K PROGRAM

DAP programs are both age appropriate and individually appropriate; that is, the program is designed for the age group served and implemented with attention to the needs and differences of the individual children enrolled.

As therapists we don't intend to change our present K curriculum, but rather enhance and enrich it. We know from extensive research and experience that young children learn best by doing. By doing, we mean having a hands-on approach to learning. Children learn best when provided with the opportunity to be self directed in a facilitated environment that is meaningful to the child and that promotes exploratory behavior, risk taking behavior, problem solving skills, social skills, communication, physical development, aesthetic development and cognitive development. We propose that by offering our youngsters a half hour of sensory motor activity time per week to be modeled and carried out throughout the rest of the week in the classroom, we will be helping to lay the necessary sensory motor foundation upon which all of the above skills can be built.

IV. VIDEO-NAEYC (Teaching the Whole Child in the Kindergarten)

V. QUESTIONS

APPENDIX E  
RESOURCE/REFERENCE LIST

**EARLY CHILDHOOD RESOURCES/REFERENCES/RECOMMENDED****READINGS**

The following list are suggested readings in early childhood for staff and parents alike. Many are books and videos that we might want to consider for purchase to start a school library in early childhood development and developmentally appropriate practices.

Attaining a membership to the National Association for the Education of Young Children (NAEYC) provides a monthly subscription of the *Young Children* journal, as well a copy of some of the latest editions of books published by the NAEYC. Many of these resources can be purchased by members for a nominal fee.

An NAEYC early childhood resource catalog will be provided to each of the K team and 1st grade team teachers. Feel free to contact me if you would like to discuss any of these resources.

- Bredekamp, S. (Ed.). (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, DC: National Association for the Education of Young Children.
- Bredekamp, S. & Rosegran, T. (Eds.). (1992). Reaching potentials: Appropriate curriculum and assessment for young children. (Vol. 1). Washington, DC: National Association for the Education of Young Children.
- Casey, M. B., & Lippman, M. (1991). Learning to plan through play. Young Children, 46(4), 52-58.
- Chandler, P. (1994). A place for me: Including children with special needs in early care and educational settings. Washington, DC: National Association for the Education of Young Children.
- Chenfeld, M. B. (1993). Teaching in the key of life. Washington, DC: National Association for the Education of Young Children.
- Day, B. & Drake, K. (1986). Developmental and experiential programs: The key to quality care and education of young children. Educational Leadership, 44(5), 25-27.
- Elkind, D. (1987). Miseducation: Preschoolers at risk. New York: Knopf.
- Elkind, D. (1993). Images of the young child. Washington, DC: National Association for the Education of Young Children.
- Engstrom, G. (Ed.). (1991). The significance of the young child's motor development. Washington, DC: National Association for the Education of Young Children.
- Fiske, E. (1992). Smart schools, smart kids: Why do some schools work? New York: Simon & Schuster.
- Ford, S. (1993). The facilitator's role in children's play. Young Children, 48(6), 66-69.

- Goffin, S., & Stegelin, D. (Eds.). (1992). Changing kindergartens. Washington, DC: National Association for the Education of Young Children.
- Greenberg, P. (1990, 1992). Why not academic preschool? (Part 1 & 2). Young Children, 45(2), 70-80 and 47(3), 54-74.
- Greenberg, P. (1990). Make a difference! Make your program more developmentally appropriate! Young Children, 47(1), 32-33.
- Healy, J. (1990). Endangered minds: Why children don't think and what can we do about it? New York: Touchstone.
- Henniger, M. (1994). Planning for outdoor play. Young Children, 49(4), 10-15.
- Kantrowitz, B., & Wingert, P. (1989, April). How kids learn. Newsweek, pp. 50-56.
- Katz, L. G. & Chard, S. C. (1989). Engaging children's minds: The project approach. Norwood, NJ: Ablex.
- Kostelnik, M. (1992). Myths associated with developmentally appropriate programs. Young Children, 47(4), 17-23.
- Kranowitz, C. S. (1992). Obstacle courses are for every body. In Neugebauer, B. (Ed.), Alike and different: Exploring our humanity with young children (pp. 20-31). Washington, DC: National Association for the Education of Young Children.
- Kritchevsky, S., Prescott, E., & Walling, L. (1991). Planning Environments for young children: Physical space. (2nd ed.). Washington, DC: National Association for the Education of Young Children.
- McCracken, J. B. (1993). Valuing diversity: The primary years. Washington, DC: National Association for the Education of Young Children.

National Association for the Education of Young Children & National Association for Early Childhood Specialists in State Departments of Education. (1991). Position statement: Guidelines for appropriate curriculum content and assessment in programs serving children ages 3 through 8. Young Children, 46(3), 21-38.

National Association of Elementary School Principals. (1990). Early childhood education and the elementary school principal: Standards for quality programs for young children. Alexandria, VA: Author.

National Association of State Boards of Education, Task Force on Early Childhood Education. (1988). Right from the start. Alexandria, VA: Author.

National Education Association. (1990). Early childhood education and the public schools. Washington, DC: Author.

Neugebauer, B. (Ed.). (1992). Alike and different: Exploring our humanity with young children. (rev. ed.). Washington, DC: National Association for the Education of Young Children.

Peck, J., McCaig, C., & Sapp, M. (1988). Kindergarten policies: What is best for children? Washington, DC: National Association for the Education of Young Children.

Rogers, C. & Sawyers, J. (1988). Play in the lives of children. Washington, DC: National Association for the Education of Young Children.

Schickendanz, J., Chay, S., Gopin, P., Sheng, L., Song, S., & Wild, N. (1990). Preschoolers and academics: Some thoughts. Young Children, 46(1), 4-13.

Seefeldt, C. (1985). Tomorrow's kindergarten: Pleasure or pressure?" Principal, 64(5), 12-15.

Shepard, L. & Smith, M. (1988). Escalating academic demand in

kindergarten: Counter-productive policies. Elementary School Journal, 89, 135-146.

Walsh, D. (1989). Changes in kindergarten: Why here? Why now? Early Childhood Research Quarterly, 4, 377-391.

Young, S. (1988). Movement is fun. Torrance: Sensory Integration International.

### VIDEOS

Boss, B. (Producer), & Holmes, P. (Director). (1994). Starting at square one [Videotape]. Los Angeles, CA: Turn the Page Press, Inc.

Duffy, C. (Producer), & Dodge, D. (Director). (1991). The new room arrangement as a teaching strategy [Videotape]. USA: Teaching Strategies, Inc.

National Association for the Education of Young Children (Producer), (1993). Appropriate curriculum for young children: The role of the teacher [Videotape]. Washington, DC: National Association for the Education of Young Children.

National Association for the Education of Young Children (Producer), (1985). How young children learn to think with Constance Kamii [Videotape]. Washington, DC: National Association for the Education of Young Children.

National Association for the Education of Young Children (Producer), (1991). Teaching the whole child in kindergarten [Videotape]. Washington, DC: National Association for the Education of Young Children.

APPENDIX F  
FOR INSERVICE #1  
ROOM ARRANGEMENT

## Room Arrangement

- I. On the piece of paper provided to you, draw a sketch of your current room arrangement. (5 min).
  
- II Quick poll: Raise your hand if you have had any of the following situations in your classroom.
  - Children fighting over toys.
  - Children who have difficulty making choices.
  - Children easily distracted or have difficulty sticking to a task.
  - Running in the classroom.
  - Any other difficulties I haven't mentioned.
  
- III In this section we will be discussing how room arrangement and general classroom strategies can:
  - minimize classroom behavior problems.
  - be used as effective teaching and therapeutic intervention strategies.
  - address special needs of children in the classroom.
  
- IV Video (15 min)
  
- V. I will be discussing, at this point, centers/activity areas we recommend as OT's which focus on special needs. You may find that you already have some of these activities or centers in your room. I will be discussing components which address specific needs or areas of development. You may think about your goals in setting up these activities.

## Tactile Exploration Centers

**Water Table** which may contain water, sand, wet sand, packing peanuts, tubs of cornstarch and water (slim).

**Shaving Cream** may be set up at table or in water table; include tray of water/sponges/small towels.

Goals: Sensory input for tactile hypersensitivity or hyposensitivity.

Secondary: Fine motor. Attending. Language.

### Quiet Corner

This may contain large pillows or bean bag chairs. It may be set up with a large cardboard box with cutouts. You may include in this area a tray with pieces of materials such as silk, velvet, carpet pieces, other textures, or weighted cuffs, vests, or stretch armstrong, grip balls.

Goals: Helps children with tactile deficits with body awareness, difficulty with organizational skills, difficulty with self control/self calming, focusing.

### Gross Motor Area

May include a mirror, hoola hoops and/or other large shapes and may include a simple map to follow, bean bag toss, scooter board obstacle course, large blocks, balance beam.

Goals: Development of large muscle groups, balance, motor planning; all of which contribute to body awareness, visual motor coordination, vestibular.

Note: We always encourage use of outdoor play.

### Dress Up Center

Set up to focus on one objective at a time.

IE.: Hats, masks--shirts, vests, decorative tops--shoes, boots, slippers---

Only theme clothes from cultures, home and family members, community workers

Goals: Body perception, motor planning

### Snack - The Whole Activity is Part of the Process

## Room Arrangement

- I. **Teachers and occupational therapist working together to set up room arrangement, establish general classroom strategies, and select materials/activities to address specific objectives**
  - minimize difficult behaviors due to sensory integration deficits
  - be used as effective teaching and therapeutic intervention strategies
  - address special needs of children in the classroom
  
- II. **Four principle goals of a well organized environment with attention to room arrangement and carefully displayed materials:**
  - establish trust and cooperation
  - develop independence by encouraging making choices and being responsible for clean up
  - maintain focus and stay involved
  - acquire skills and concepts as they select and use materials
  
- III **Four key elements that make up a well organized environment:**
  - clearly defined activity areas
  - well established daily routine
  - attractively displayed materials
  - creative and continually adapted and enhanced environments

APPENDIX G  
TEACHER EVALUATION

## TEACHER EVALUATION

1. Did the children show an increase in attention or time on task during the sensory motor activities?    yes    no
  
2. Did it carry over during the day?    yes    no
  
3. Did the sensory motor activities increase socialization, spontaneous language, motor abilities, and self esteem?  
yes    no
  
4. Did the sensory motor activities facilitate retention of thematic concepts?    yes    no
  
5. Did the sensory motor activities expand your own abilities to create a wider variety of classroom activities or select activities which encompass movement, hands-on experiences, and whole child experiences?    yes    no
  
6. Did the sensory motor activities enable you to include the special needs students more readily in your classroom activities?  
yes    no

COMMENTS:

APPENDIX H  
FOR INSERVICE # 2  
VALUES OF PLAY

## VALUES OF PLAY

INTELLECTUAL

Play holds an important place in the development of the cognitive domain of the child. Through the play experience, the child can:

- a. develop decision making/problem processes.
- b. improve his cognitive life skills.
- c. learn basic life skills.
- d. learn directionality and directional concepts.
- e. develop knowledge in leisure activities.
- f. learn to follow directions.
- g. develop an interest in various subject areas.
- h. be motivated to learn through doing.

PSYCHOLOGICAL

Through the play experience every child learns skills which have an effect upon his psychological development. The play environment provides the perfect mechanism to coordinate the value and maximize on the child's development. Among the psychological values are:

- a. enhancement of self-esteem.
- b. recognition of personal worth.
- c. development of emotional control.
- d. development of the ability to express feelings of self-

expression.

- e. creation of positive attitudes and values toward self and others.
- f. recognition of how actions affect others.
- g. adjustment to and acceptance of their disability.
- h. assistance in reality orientation.

### PHYSICAL

The play experience naturally contributes to the physical development of the child. In the physical area, the values of play include:

- a. development of muscle strength and endurance.
- b. development of muscular coordination in both gross and fine motor area.
- c. improvement of balance.
- d. ability to move in and change directions.
- e. development of eye-hand coordination
- f. development of play activity skills.
- g. enhancement of body awareness in relation to strengths and limitations.
- h. development of the sensory domain such as sight, sound (receiving and sending), touch and smell.
- i. prevention of muscle deterioration.

SOCIAL

Play also has value in contributing to the child's social development. The social values of the play venture include:

- a. learning appropriate behavior for social situations.
- b. learning to control emotions and express them in a socially acceptable manner.
- c. learning to interact with peers, adults and authority figures.
- d. development of social consciousness/awareness.
- e. development of interpersonal communications and interaction skills.
- f. development of an awareness and knowledge of social morals and attitudes.
- g. development of a sense of belonging.
- h. recognition of the worth of others.

## LA IMPORTANCIA DE JUGAR

INTELECTUAL

Jugar es muy importante para el desarrollo del dominio cognoscitivo del niño, por parte de la experiencia de jugar. El niño puede:

- a. desarrollar los procesos de hacer decisiones y resolver problemas.
- b. mejorar el proceso de reconocer los conocimientos básicos.
- c. aprender los conocimientos básicos.
- d. aprender los conceptos de dirección.
- e. desarrollar conocimientos de actividades de descanso.
- f. aprender a seguir instrucciones.
- g. desarrollar el interés en diferentes materias.
- h. haciendo algo para motivar al niño a aprender.

PSICOLOGICO

Por la experiencia de jugar cada niño aprende los conocimientos básicos que afectan su desarrollo psicológico. El ambiente de los juegos provee un excelente mecanismo para coordinar el valor y ampliar el desarrollo del niño. Existen los siguientes valores psicológicos:

- a. aumentar la apreciación de sí mismo.
- b. reconocer el mérito de sí mismo.
- c. desarrollar el control emocional.

- d. desarrollar la habilidad de expresar los sentimientos de expresion.
- e. crear actividades positivos y valores para otros y si mismo.
- f. reconocer como las acciones de uno afecta otros.
- g. ajustar y aceptar las inhabilidades de uno.
- h. asistir en la orientación de la realidad.

### FISICO

La experiencia de jugar contribuye naturalmente al desarrollo fisico del niño dentro de la area fisica las razones positivos. De jugar incluyen:

- a. desarrollar la fuerza de los musculos y la resistencia.
- b. desarrollar la coordinacion muscular en la area de movimientos fisicos.
- c. mejorar el equilibrio.
- d. habilidad de mover y cambiar direcciones.
- e. desarrollar la coordinación de ojos y manos.
- f. desarrollar las habilidades de actividades de juegos.
- g. aumentar el conocimiento del cuerpo en relación a la fuerza y limitación de uno.
- h. desarrollar los sentidos de ver, oír (recibiendo y mandando), tocar y oler.
- i. la prevencion del perdido musculo

**SOCIAL**

Jugar también tiene valor en contribuir en el desarrollo social del niño. Los valores social de jugar incluyen:

- a. aprender comportarse bien para cualquier situación social.
- b. aprender controlar emociones y expresarse en una manera socialmente aceptable.
- c. aprender a interactuar con otros niños, adultos y personas de autoridad.
- d. desarrollar conocimiento personal social.
- e. desarrollar comunicaciones y la habilidad de interactuar.
- f. desarrollar el conocimiento de los morales y actividades sociales.
- g. desarrollar el sentido de pertenecer.
- h. reconocer el valor de otros.

APPENDIX I  
FOR INSERVICE #3  
SENSORY SYSTEMS  
CLASSROOM IMPLICATIONS

## VESTIBULAR

This system tells us where we are relative to gravity. If we are moving, how fast, and what direction.

## HELPS

- develop awareness of body in space
- muscle tone
- development of smooth eye muscles
- posture
- joint stability
- body scheme

## PROBLEMS

Overactive System

impulsive behavior  
poor judgment  
craves motion  
puts self in danger  
motion sickness

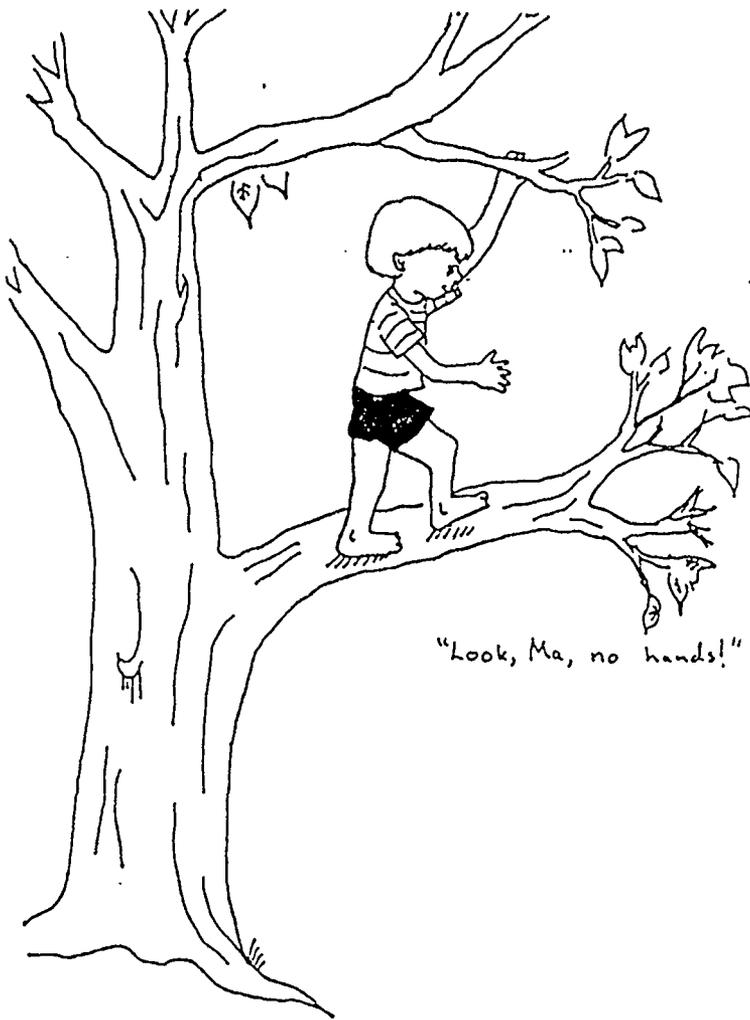
Underactive System

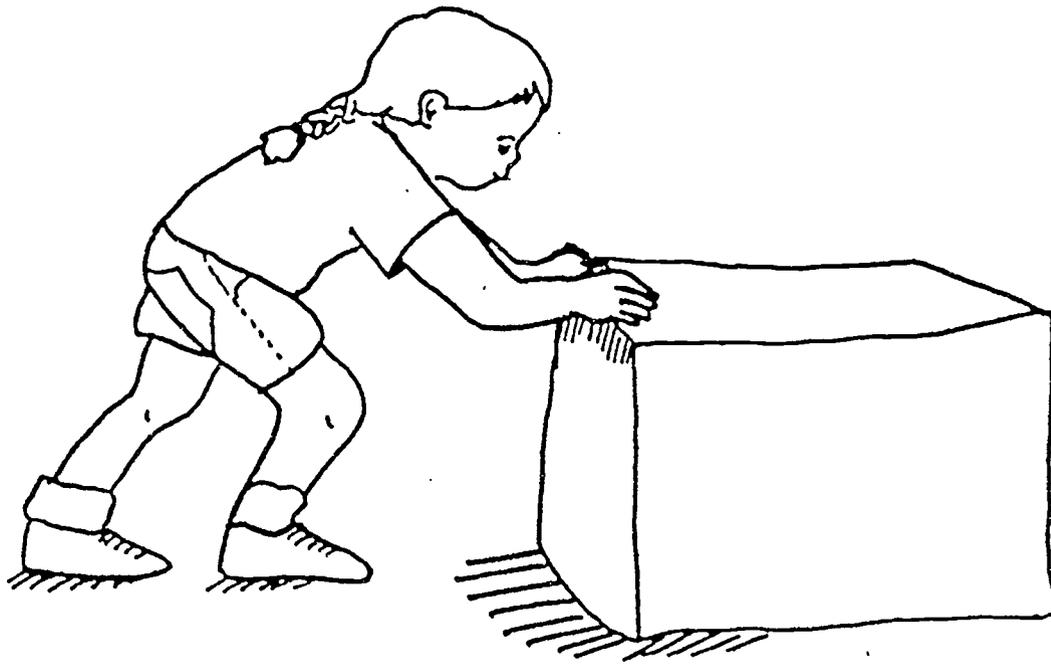
fearful of movement  
low tone  
poor awareness about body in space  
gravitational insecurity

visual and perceptual problems

Illustrated by Chris Glenn

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## BODY CONCEPT/BODY AWARENESS

### PROPRIOCEPTION

This system lets us know when and how our body parts are moving. The receptors are located in our muscles and our joints.

### PROBLEMS

poor sense of where our body is  
generalized weakness  
often goes with low muscle tone  
poor judgment/poor gradation of movement  
poor judgment of the force of movement  
lack of awareness of how hard to hold crayon, cup, cracker  
problems with oral motor control, chewing  
poor gradation of touch, how hard to hold, how tightly to hug

Illustrated by Chris Glenn



## TACTILE

Two parts of this system. One lets us know where we are touched and if it is safe or if we are in danger.

The second helps us learn about our world. It discriminates for things like size, shape, texture. These two systems need to be in balance with one another.

## PROBLEMS

Overactive System

has trouble in line  
trouble in groups  
touches everything  
picky eater  
picky with clothing  
hates hair cut  
hates nails cut  
dislikes being touched  
bonding difficulties  
wears inappropriate clothing  
hugs too tight

Underactive System

problems with toileting, may not sense  
poor response to pain  
unable to say where hurt  
no awareness of personal space  
may lack ability to discriminate, size, etc  
drooling  
wears inappropriate clothing

Illustrated by Chris Glenn

**BEST COPY AVAILABLE**

## CLASSROOM IMPLICATIONS

1. When eyes do not work together, you may see an increase in fatigue, squinting, rubbing eyes.
2. When eyes do not track together, a child may miss words, skip lines, lose his place.
3. When general body muscle tone is low, a child may display poor posture, slump in chair, head on arm or desk, reducing alertness and ability to complete classwork.
4. When muscle and joint receptors don't give proper feedback so child knows how hard to press pencil, you may see extreme pressure, very light pressure, or fluctuating pressure.
5. When a child lacks spontaneous midline crossing, you may see incomplete work, and increase in body shifting, or switching hands during a task.
6. A child with motor planning problems may appear to be very clumsy or inept—unable to do what you perceive as very simple motor activities, e.g. use of tools, opening different types of fasteners, managing new movement activities.
7. A child with "gravitational insecurity" (grounded to the earth) may appear to have silly or unreasonable fears—stepping on/off bus, playing on playground equipment.
8. A child who lacks integration of early reflex patterns may appear clumsy.
9. A child with sensory defensiveness may appear as if he/she does not listen.
10. A child with tactile defensiveness may have a very hard time in close contact situations, e.g. in a line, sitting in a group on the floor, desk too close, people coming up unexpectedly, especially from behind.
11. A child with tactile defensiveness may have trouble with certain textures—clothing, foods, even temperatures; may be very fidgety, may want to have a jacket on all day (even when it is hot).
12. A child who lacks trunk and neck stability will have less success with written work since hand function depends upon shoulder-trunk stability.
13. A child with poorly developed hand grasp will have extreme difficulty with paper/pencil tasks.
14. A child with figure ground perception difficulties will have a hard time seeing the important information from the rival or unimportant background; may have difficulty with too many problems on a work sheet, too much information on a book page, a cluttered blackboard.

15. A child who lacks the internal sense of L-R (laterality) will have difficulty learning L-R in objects in the environment and will lack necessary L-R progression for reading and writing.
16. A child with sequencing problems may hear only the last direction given, or only the first, and may appear not to listen.
17. A child with poor muscle tone may appear lazy—since he/she has to use so much energy to try to complete activities and so much effort to keep his/her body together.
18. It is important to remember a child with poor sensory integration has to use 9 times the amount of energy to complete what others can do so easily. One hour of work for us can be like 9 hours for this child...1 minute to us/9 minutes for him/her.
19. When a child has directionality problems (L-R problems), he may start in the middle of a page or work in a random manner.
20. A child whose internal arousal/alerting system is not working well may seem very lethargic or overly fidgety—unable to focus in on what is relevant in class.
21. A child who has poor hand control may tire quickly during written work and may get sloppier as he works on a task.
22. A child who is disorganized internally (poor sense of control over his own body) will have extreme difficulty organizing externals in the environment (his desk, papers, school tools, time).
23. A child who has difficulty with smooth eye function may have real difficulty copying work from the board or from a book to paper.
24. When a child has visual/spatial problems he/she may have trouble copying from the board—may lose his/her place.
25. A child with visual-spatial problems may have difficulty with size, shape and spacing.
26. A child with visual-spatial problems may have trouble locating things in desk, classroom—equipment, supplies, jacket, lunchbox.
27. A child with visual-spatial defects may be unable to do worksheets that are filled—too much on a page.
28. A child with problems with his tactile (touch) system may always seem to chew on his clothes, put things in his mouth.
29. A child with tactile problems may seem to touch everything.

30. A child who is tactually defensive may have difficulty standing in a line, sitting near others in a group.
31. A child with hyperresponsiveness or sensory defensiveness may have a startle or fear of toilet flushing, school bell, sirens, fire drill, intercom, buzz of fluorescent fan, air conditioners.
32. A child super sensitive visually may react aversely to fluorescent lighting or bright colors.
33. A child whose vestibular system (inner ear mechanism reacting to movement, gravity, speed, direction) is under-active may seek out extra input by head rocking, head shaking, body rocking.
34. A child with under-active vestibular system may appear weak, lethargic, floppy tone, with low endurance.
35. A child whose vestibular system over reacts may arrive "carsick" from the bus ride.
36. A child who is fearful of movement or is "earth bound" may stay with adult instead of playing on playground.
37. A child (after age 8-9) who continues to reverse letters may have a problem with position in space.
38. a child who lacks good integration of early reflex patterns may appear clumsy on playground, P.E., riding toys.
39. A child with poorly developed protective responses may have difficulty catching himself when falling.
40. A child with poor fine motor development may have difficulty using classroom tools: scissors, rulers, pencils, crayons, hole punch.
41. A child who has not developed hand preference may use left hand sometimes and right hand sometimes.