

KINDERGARTEN CHILDREN'S INITIAL EXPERIENCES IN
PHYSICAL EDUCATION

by

Stephen W. Sanders

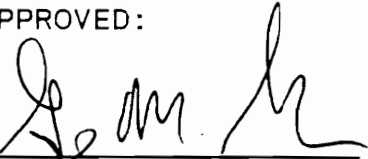
Dissertation submitted to the Faculty of the Virginia
Polytechnic Institute and State University in partial
fulfillment of the requirements for the degree of

DOCTORATE OF EDUCATION

in

Curriculum and Instruction

APPROVED:


Dr. George Graham, Advisor


Dr. Jan Nespor


Dr. Mike Metzler


Dr. Janet Sawyers


Dr. Jerry Niles

June 22, 1993

Copyright by Stephen W. Sanders 1993

All Rights Reserved

(ABSTRACT)

KINDERGARTEN CHILDREN'S INITIAL EXPERIENCES IN
PHYSICAL EDUCATION

by

Stephen W. Sanders

Committee Chairman: George Graham

This study was conducted to describe the initial physical education experiences of two less skilled (LS) and two more skilled (MS) kindergarten children, to gain insights into children's feelings about those experiences, and to suggest their educational significance. Data for this study were triangulated through the use of observations, fieldnotes, and interviews. A narrative description of the setting, program, and teacher were written along with descriptive profiles of each the four children's experiences in physical education.

The results of this study indicated that there were both similarities and differences in the experiences of LS and MS kindergarten children as they participated their initial physical education classes. LS children appeared hesitant in get involved in activity while the MS children appeared more confident in their participation. LS children appeared to learn about classroom procedures by observing their classmates while the MS children appeared to learn about procedures from the teacher or simply figured out what to do on their own. Children were similar in their feelings about participating with partners. They

all reported they would rather work by themselves than with a partner. Throughout their initial experiences all four children appeared to possess a "relentless persistence for play". Whenever physical education tasks were too easy, too difficult, or uninteresting, the children were observed to change the activities to be more play-like. The teacher's "zone or appropriate responses" provided children the opportunity to change some tasks to be more play-like while other tasks required a specific non-play-like structure.

ACKNOWLEDGEMENTS

First, I would like to thank the teachers and especially the children who volunteered to participate in this investigation. Their willingness to be observed and interviewed helped me to gain a better understanding of what it must be like to participate in kindergarten physical education.

Second, thanks to committee members Dr. Mike Metzler, Dr. Jerry Niles, Dr. Jan Nespor, and Dr. Janet Sawyers. Their willingness to read and challenge my work has added not only to this dissertation but also to my growth as a teacher educator.

I am especially grateful to Dr. George Graham, who has served as not only a mentor, but also as a friend. His help over the years has been invaluable. His leadership in elementary physical education suggests that one person can make a difference.

Finally, and most of all, I want to thank Vicky for her support and patience. Without her love and support I might still be transcribing, watching videotape, or sitting in front of the computer.

DEDICATION

This dissertation is dedicated to my parents, Frank and Irene Sanders, for their love and support of all the endeavors I have selected to pursue.

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER 1. INTRODUCTION	1
Children's Interpretations of School Experiences	2
Children's Initial School Experiences.	9
Children's Experiences in Physical Education	11
Statement of the Purpose	13
Guiding Research Questions	14
Significance of the Study	14
Delimitations	15
Limitations	15
Initial Research Assumptions	16
Summary	16
CHAPTER 2. Review of Literature	18
Summary of Measures of Physical Activity.	19
Attitudes Toward Physical Activity	21
Skill Level Differences in Children	23
Identification of Less Skilled Children	24
Characteristics of Less Skilled Children	26
Gender Appropriateness of Physical Activity	29
Theoretical Foundations	31
Developmentally Appropriate Practices.	32
Cognitive-Stage Theory	33
Play	35
Theory of Flow	37
Zone of Proximal Development	39
Interview Studies	43
Value of Interviewing Children	49
Guidelines for Interviewing Children	51
Summary	52
CHAPTER 3. METHODOLOGY	53
Setting	53
Participants	54
Data Collection	56

TABLE OF CONTENTS (continued)

	<u>Page</u>
Data Analysis	59
Summary	63
CHAPTER 4. DESCRIPTION OF CHILDREN AND SETTING . .	64
General Description of the Participants . . .	65
Charlie	65
Holly	70
Tabitha	73
Brett	76
Physical Education Setting	80
Physical Education Teacher and Program . . .	83
Daily Class Structure	86
Stretching Activities	88
Children's Experiences In Stretching	90
Tabitha	90
Brett	94
Charlie	98
Holly	100
Locomotor Activities	102
Children's Experiences in Locomotor	104
Tabitha	104
Brett	107
Charlie	109
Holly	111
Manipulative	113
Children's Experiences in Manipulative . . .	114
Tabitha	114
Brett	120
Charlie	129
Holly	133
Summary	140
CHAPTER 5. RESULTS	141
Kindergarten Children's Approach to Physical Education.	142
Less Skilled Approach	142
More Skilled Approach	144
Summary of Approach Methods	146
Learning the Ropes.	147
Summary of Learning the Ropes.	151
Cooperating With a Partner.	153
Zone of Acceptable Responses.	155
Structure Imposed on Stretching Activities	156

TABLE OF CONTENTS (continued)

	<u>Page</u>
Structure Imposed on Locomotor Activities	158
Structure Imposed of Manipulative Activities	160
Model of the Zone of Acceptable Responses	163
Relentless Persistence for Play	165
Flow	172
Acquiring the Student Role	178
Summary	181
 CHAPTER 6. SUMMARY, FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH	
A Summary of the Study	182
Findings	185
Implications	188
Recommendations for Future Research	192
 BIBLIOGRAPHY	 197
 APPENDICES	 205
A Informed Consent Form	206
B Daily Class Activities	208
C Sample Interview Questions	213
VITA	216

LIST OF TABLES

	<u>Page</u>
Table 1 Kindergarten Physical Education Class Structure	87
Table 2 Children's Experiences in Stretching Activities	91
Table 3 Children's Experiences in Locomotor Activities	105
Table 4 Tabitha's Experiences in Manipulative Activities	119
Table 5 Brett's Experiences in Manipulative Activities	128
Table 6 Charlie's Experiences in Manipulative Activities	132
Table 7 Holly's Experiences in Manipulative Activities	139

LIST OF FIGURES

	<u>Page</u>
Figure 1 Model of the Flow State	38
Figure 2 Progression Through the Zone of Proximal Development	40
Figure 3 Model of Mrs. Brooks Zone of Acceptable Responses in Kindergarten Physical Education	164
Figure 4 Model of Kindergarten Children's Responses to Teacher Prescribed Tasks Within Csikszentmihalyi's Model of Flow	174

CHAPTER 1

Introduction

"Children have been written about from many perspectives, and for a multitude of purposes. Rarely have they been asked to speak for themselves...(Davies, 1982)."

It is September and the third day of classes at Blue Ridge Elementary School. Tom Bernstein, the kindergarten classroom teacher, quietly escorts Holly, Brett, Tabitha, and Charlie, along with 18 of their kindergarten classmates, from their kindergarten classroom down the 100 foot long hallway to the multipurpose room for their first ever physical education class.

What we know and do not know about children ought to have a real impact on how we go about educating them (Parker, 1984). In order to find out more about children early childhood researchers have recently begun to observe and record the experiences of children in school. These observations, when combined with children's interviews, serve to chronicle the voices of children and provide researchers with rich descriptions of the different ways children interpret their daily experiences in school. Observing children participate in school life and then talking with them about those experiences can be useful to educators concerned with improving not only the teaching strategies and curriculums utilized in educating young children in

general, but, with also improving those experiences specific to children's participation in physical education. As of yet, however, the school experiences of children have not received adequate scrutiny by researchers (Amunds, 1989; Erickson & Shultz, 1992; LeCompte & Stewart, 1979), and reliable research data concerning the experiences of children as they participate in physical education classes are virtually non-existent.

Children's Interpretations of School Experiences

It is clear that children, even very young children, develop an understanding of the events that give structure to their lives (Reifel, 1988). However, children's perceptions about schooling have rarely been studied nor have children been consulted with regard to what they experience. Reifel (1988) suggests that current "educational and developmental research may not represent the meanings of the subjects we study in the contexts we study them. The child's knowledge and understanding of phenomena are not really considered as we attempt to describe those phenomena (p. 62)."

Erickson & Shultz (1992) write that perhaps children's interpretations of school are absent from contemporary discourse in education simply because they have not been asked to speak. Another explanation may be that, as Waksler (1986) suggests, "what seems clear at the present time is that adults... display a clear reluctance to take children's ideas seriously and often even express actual hostility toward those ideas (p. 72)."

In the past one rationale for not permitting children to be heard may have been the lack of acceptance of an ethnographic/qualitative research paradigm in education. The recent trend in this area, however, is to accept qualitative research in collecting empirical data in education. Qualitative research provides appropriate methodologies for collecting quality educational research data (Bowman, 1993). In combination with observations and fieldnotes the qualitative research method used most often for gathering data about what children know is some variation of the interview (Lythcott & Duschl, 1990).

Another reason for this dearth of empirical evidence is the unfounded notion that children, and especially young children, could not speak for themselves. There is recent evidence, however, that children can reliably describe events and experiences within the school setting (Amunds, 1989; King, 1979; LeCompte & Stewart, 1979; Reifel, 1988; Rogers, 1987; Wood & Wood, 1983).

The major reason, however, for the scarcity of student's insights documented through research, may simply be that gathering accounts from children concerning their perspective is both difficult and time consuming.

We know little about student experience because it is technically difficult to study. It must be probed for in ways that are not yet fully conceived and that seem likely to be labor intensive and costly if they were to be developed further (Erickson & Shultz, 1992, p. 481).

Nonetheless, a few researchers appear to be addressing the topic of children's interpretations of school in educational research. Davies (1982) suggests that a common thread running through the work of each of these researchers is the idea that:

Children interpret the world differently from adults, not because they have not yet learned to see the world properly, but because they are viewing it in their own terms, terms which some of these researchers have come to view as the culture of childhood (p. 2).

Thus, one of the major reasons for an investigation of what children have to say about their school experiences is simply that children comprehend the world differently than do adults and their interpretations should be heard so that we as adults can better understand the unique culture of children (Fine & Sandstrom, 1988).

A second reason for talking to children about their school experiences is that it is largely through language that children begin to learn about the world outside their own personal experiences. Through talk, with an interested and responsive adult, children may find an avenue to discover things about other people and through their reactions to them, to find out things about their own social selves (Wood & Wood, 1983).

A third, equally compelling reason for listening to what children have to say about their experiences in school is that we must take children's interpretations and understanding of school into account if we are going to help each child develop fully. Teachers and students might be inhabiting, and constructing,

profoundly differing subjective worlds as they encounter what the school presents as a standardized curriculum. Teachers need to know more about how children interpret their school experiences if they are to educate a wide variety of students really well (Erickson & Shultz, 1992). Reifel (1988) suggests that "what children know about their school experience can be seen as an index of the meaning that experience has for them; it can provide us with their understanding of the programs and experience we intend for them to have (p. 62)." A teacher may plan an activity designed to assist children in learning a particular skill or concept, however, children may experience something completely different than what the teacher intended. For example, a teacher in physical education class may introduce tasks which are designed to help children catch a ball. Some of the children in the class might be able to do the catching tasks while others may spend most of their time chasing their ball because they are less skilled in catching. These children may be having distinctly different experience than those children who are already skilled in catching a ball. Thus, for the proper planning and presentation of curricular activities for children a clear understanding of the meanings children have of their school experiences would seem to be fundamental (Erickson & Shultz, 1992).

Research does suggest that a new understanding of children's views may help to influence a variety of decisions regarding the development and implementation of appropriate curriculum experiences for children (Klien, Kantor, Fernie, 1988). Recognizing and understanding the child's point of view is seen as a

critical element in helping teachers develop appropriate instructional programs for their pupils (Brooks & Fusco, 1984).

Cullingford (1988), Carpenter, Fennema, Peterson, Chiang, & Loef (1989), and Bondy (1990), all reported that when teachers gained insights into how children thought, felt, and learned about particular subjects they changed the way they taught. Cullingford (1988) for example, conducted extensive interviews with over 60 pupils in both primary and secondary schools in England. Children were interviewed about their views on the purpose of schools. The evidence that emerged from the interviews suggested that children feel a need to talk about the purpose of what they are learning. In addition, they feel a need to not only talk about school with their peers but also with adults. The researcher concluded that by talking about connections between school and what children think of as relevant is a good way of creating a sense of real understanding between students and teachers. One implication for teachers is that they may want to pay more attention to discussing with children the purpose of the curriculum and the purpose of schools.

Through the use of interviews and other techniques (classroom observations and questionnaires) Carpenter, et al. (1989) found that teachers who were provided knowledge on how children learn and think about math not only were more effective in their instruction, but also focused more on the process of how they presented math problems to children. A control group of teachers who were not provided knowledge on how children learn and think about math focused more frequently on the

answer to the problem than on the process of obtaining the answer. The researchers concluded that providing teachers access to explicit knowledge derived from research on children's thinking did influence their instruction and their students' achievement.

Bondy (1990) discovered, through interviews with first grade children, that they had different definitions of reading. She found that children had constructed six definitions of reading. Although no single definition was shared by all children, most children constructed and used more than one definition of reading. For example, the definitions of reading common to the low group readers were: reading is saying words correctly, reading is schoolwork, and reading is a source of status. The definitions of reading to the high group readers in contrast were: reading is a way to learn things, reading is a private pleasure, and reading is a social activity. From these definitions the teacher in the study changed her instruction by basing it more on children's interests. The researcher concluded that teachers who are attuned to children's perceptions and who can adjust instruction to be congruent with their ways of thinking take a big step toward creating learning environments in which readers thrive (p. 43).

One of the most compelling arguments for collecting the insights of children about their school experiences is that each of those insights may be different. Twenty-five children participating in the same teacher-designed-classroom-task may each have a different personal experience. One child's meaning may be completely different than that of another even

though both children complete the task with the same learning materials while sitting side by side in the same classroom. It is certainly inappropriate to merely assume that every child in a class is having the same experience. They each bring to their school experience different skills and knowledge and may approach the same tasks in very diverse ways. Weiland (1985), in a study focused on children's thinking about division problems in math, concluded that "If time is spent interviewing children individually, instruction can be matched to the way each individual thinks (p. 35)."

It has been suggested that the evolution of student experiences with curriculum should be studied across the entire student career in school (Erikson & Shultz, 1992). For various reasons, student experience of curriculum may be far more diverse than previously contemplated. The diversity of student experiences have been enumerated by Erikson and Shultz (1992) who write:

We know relatively little about the social and cognitive ecology of student experience of curriculum. How does this vary with the social backgrounds of students and teachers, and by the types of schools in which they learn and teach? Presently we do not understand at all clearly how intellect, will, culture, and politics meet at the intersection of curricular materials, classroom arrangements, pedagogical approaches, and students, within whose subjective experience learning presumably takes place (P. 478).

Finally, in the past 30 years educators' and researchers' concept of classrooms has changed significantly (Weinstein, 1983). The current trend to view children as active learners in the social environment of the classroom is much different than viewing children as the passive recipients of knowledge. Discovering children's feelings about their classroom experiences has numerous important implications for improving the effectiveness of teaching and the learning capacity of individual children. It is essential then for teachers to come to know the world of school from the perspective of children.

Children's Initial School Experiences

Children have not been consulted with regard to what they experience in school, and this is especially true with regard to children's initial experiences in school. These first years have been largely unexplored by researchers (Amunds, 1989; Kantor, 1988; LeCompte & Stewart, 1979). Based on the assumption that initial school experience may have both long-lasting negative and positive effects on students, it seems reasonable to assume that finding out what children's experiences are will provide valuable insights for teachers who are committed to planning appropriate learning experiences (Parker, 1984).

In one of the few studies conducted in this area LeCompte & Stewart (1979) examined how a group of kindergarten children viewed their first days of kindergarten and then documented how those views changed over time. They found that children appeared

more able to tell what teachers were to do in school than what they themselves were to do. They also reported that children tended to refer to the process of learning in kindergarten while the teachers referred to the product. Children most often defined their role as play and tended to describe the teachers role as a worker. The teachers described the very same children as learning ABC's by playing with blocks, and acquiring notions of spatial relations by putting puzzles together. It was clear that, to the children, the important aspect was the process, or play. Over time, however, children's perceptions of their role as students changed toward a more disciplined behavior and greater orientation to cognitive activity. The longer children spent in school the less they tended to describe the student role as play.

In another study of kindergarten children's initial school experiences Amunds (1989) observed and interviewed 22 junior kindergarten children during the first 3 weeks of school in order to determine their perceptions of their first experiences as students. Particular attention was given to the way in which children reacted to, described, understood, and interpreted the events they encountered. Her analysis indicates that children may not behave appropriately during initial prescribed routines because they possess insufficient procedural information, are exploring rule limits, or are delaying participation until they feel more competent in performing the routines. She suggests that children's reactions to early school experiences have important implications for the planning of educational programs.

Most assuredly, children will leave their first school experience with coherent images of school that will influence the way they approach their subsequent school experiences. The importance of gathering accounts from children concerning their perspectives on initial school experiences may have been best summarized by Hammersley & Woods (1984) when they wrote:

There can be little doubt that pupils' own interpretations of school processes represent a crucial link in the educational chain. Unless we understand how pupils respond to different forms of pedagogy and school organization and why they respond in the ways that they do, our efforts to increase the effectiveness, or to change the impact, of schooling will stand little chance of success.

Unfortunately, for reasons alluded to previously, early childhood education researchers, until recently, haven't heeded their recommendations.

Children's Experiences In Physical Education

Early childhood researchers are not the only educational investigators who have not adequately explored children's early experiences in school. In fact, and for the same reasons, physical education researchers are no different. In a review by Smith (1991) he asks "Where Is the Child in Physical Education Research?", and concludes that there is little evidence of the child in research dealing with the school curriculum of physical education or the teaching-learning processes of the gymnasium or

sportsfield (p.37). Research dealing with children's early experiences in physical education is additionally important because physical education is unique as it is one of the few experiences in which children participate outside of the classroom.

A few studies have been recently conducted which were specifically designed to learn more about children's experiences in physical education. Lawson, Lawson, and Stevens (1982) interviewed 298 students from kindergarten to grade seven to determine the functions and meanings they attributed to physical education. Some important differences emerged among the views of students and teachers. Teachers shared the perception that fitness testing was important and that there was value to exercise sessions. Physical education to the students meant playing games and playing games meant exactly that, with minimal if any instruction. Another important response from students was that teachers should stop taking away gym class because of misbehavior in the classroom or failure to complete lessons. "Why don't they take away math or social studies?" was a typical comment from the students. The researchers suggested that these differences in meaning and function could serve as guidelines for reform in physical education.

In another study Portman (1992), interviewed thirteen low-skilled sixth graders who reported that their experience in physical education class was humiliating, frustrating, embarrassing, and barely tolerable. She found that these students devised a number of behaviors to reduce continued failure, from announcing failure in advance, to avoiding the learning

task altogether. She concluded that in light of the students experiences and their feelings about those experiences that the professional rhetoric of "providing a positive learning environment for all" and "having fun in physical education class" must be re-examined. In two other recent studies, which results are not yet available, Hopple (1993, in progress) interviewed elementary children on their feelings about fitness, and Manross (1993, in progress) interviewed 5th grade students to determine what they knew and how they felt about the skill of throwing.

No studies were available which focused on providing kindergarten children with the opportunity to discuss their interpretations of their experiences in physical education. This study, thought to be the first one to be completed in physical education, seeks to provide kindergarten children with the opportunity to provide their insights into their initial physical education experiences. This study has the potential to somewhat narrow a gap not only in the physical education literature but also in the early education research literature by helping to provide a better understanding of how children view a portion of their world.

Statement Of the Purpose

The first purpose of this study was to describe the initial physical education experiences of two less skilled and two more skilled kindergarten children. The second purpose was to gain insights into these children's feelings about those experiences and to suggest their educational significance.

Guiding Research Questions

Traditionally physical education researchers have focused much of their attention examining pedagogy and curriculum without exploring physical education from the child's perspective (Smith, 1991). In order to facilitate an investigation of the child's perspective this study was guided by the following research questions:

1. What were the initial physical education experiences of the less skilled and more skilled kindergarten children in this study?
2. Are there apparent similarities and differences in the initial physical education experiences of the less skilled and more skilled kindergarten children?
3. Does the skill level of kindergarten children appear to influence their initial experiences in, and interpretations of, physical education? (Do more and less skilled children have different experiences in physical education and do they interpret those experiences differently?)
4. What are the initial physical education experiences which are the most and least popular with kindergarten children? Why are initial physical education experiences liked or disliked by the children?

Significance of the Study

This study will focus on describing the initial physical education experiences of four kindergarten children. In addition it is the purpose of this study to gain insights into those children's feelings about

those experiences to suggest their educational significance. Currently, there are few studies reported in the literature which have examined the experiences of children in physical education. No studies were found which examined the physical education experiences of kindergarten children. This research has the potential to somewhat fill a gap not only in the physical education literature but also in the educational research literature concerning children by helping to provide a better understanding of how children view a portion of their world.

Delimitations

The study was delimited to four kindergarten children who attended the same physical education class in a two day per week physical education program in one elementary school.

Limitations

1. The four kindergarten children described in this study may not be representative of the total population of kindergarten children.

2. The four kindergarten children commenced their initial physical education experiences with varying amounts of physical skill.

3. Children were videotaped and observed only during the first eight weeks of school and their experiences and interpretations of those experiences may not be representative of experiences encountered during the entire school year.

4. The teacher and the physical education program which she designed and implemented may not represent

all kindergarten teachers and programs.

Initial Research Assumptions

Qualitative research dictates that the researcher attempt to examine the setting and participants with no initial preconceptions or biases. Although the researcher attempted to keep an open mind, his knowledge of, and experience in, working with kindergarten children dictated that the following initial research assumptions be specified at the onset of this study:

1. It was assumed that the four kindergarten children would not have the same physical education experiences even though they participated side-by-side in the same physical education class.

2. It was assumed that the four kindergarten children would each interpret their experiences in different ways.

3. It was assumed that the four kindergarten children would have different likes and dislikes regarding their physical education experiences.

Summary

This chapter provided a review describing the current literature on children's interpretations of school experiences, their initial experiences in school, and their experiences in physical education. This information provided a foundation which was helpful in conducting this study. The first purpose of this study was to describe the initial physical education experiences of two less skilled and two more skilled kindergarten children. The second purpose was

to gain insights into these children's feelings about those experiences and to suggest their educational significance.

CHAPTER 2

Review of Literature

The first purpose of this study was to describe the initial physical education experiences of two less skilled and two more skilled kindergarten children. The second purpose was to gain insights into these children's feelings about those experiences and to suggest their educational significance. Few studies could be found that were directly related to describing the experiences of kindergarten children and no studies were found related to kindergarten children's physical education experiences. In order to provide a foundation of knowledge that would be helpful in designing, conducting, and analyzing this research the literature review encompassed six areas. The first section, is a review of literature relating to children's activity preferences which provided background information helpful in examining previous quantitative studies of children's experiences and preferences for physical activity. The second section, provided a literature review of children's attitudes toward physical activity. Sections three and four provided information on skill level differences and gender appropriateness of physical activities. Section five provided a review of several theories enveloping the nature and characteristics of kindergarten children. These theories were helpful in analyzing the data collected in this study. Because this study emphasized obtaining information from children through the use of interviewing, this review also concentrated

on summarizing studies using interviews to obtain information from children and on the value of interviewing children. Those topics are reviewed in section six.

Summary of Measures of Physical Activity

Little is known about the activity preferences of young children. The focus of current research on the physical activity of children has been on the quantification of physical activity patterns (LaPorte et al, 1982). In these studies, for example, researchers record the time children participate in activity and/or monitor the rise in heart rate during physical activity. These studies have use a variety of measurement techniques, however, there has been no consensus on which is the most valid (LaPorte et al, 1982).

The most commonly used methods for recording and assessing physical activity are self reports (diaries or activity recall logs), mechanical devices (electronic motion sensors and heart rate monitoring devices) and observations (Noland, Danner, Dewalt, McFadden, and Kotchen, 1990; O'Hara, Baranowski, Simons-Morton, Wilson, and Parcel, 1989).

Personal logs, while the most popular method of recording the amount of time and types of physical activity one participates in, produce an extremely poor measure of actual physical activity. This is true because children may have difficulty in recalling activity (O'Hara et al., 1989). In addition, children as well as adults, have a tendency to overestimate the amount of time they spend in physical activity.

Noland et al., (1990) report that mechanical devices, including electronic motion sensors and heart rate monitoring devices are also popular methods of measuring physical activity, however, they have limitations. Motion sensors can be easily be damaged and have low correlations with other measures of physical activity. When using heart rate monitors it is difficult to determine what activities are responsible for elevated heart rates. In addition the monitors may interfere with children's play. On the other hand, validation experiments conducted by LaPorte et al. (1982) indicate that motion sensors 1) do not interfere with behavior; 2) are simple to use; 3) are directly related to measures of energy expenditure as determined by specific logging or activity; and 4) can discriminate individuals and populations having different activity levels (p. 788). One additional strength of rating systems for observing physical activity of children is that they have been validated using heart rate monitors. Physical activity rating systems use a minute by minute rating of children's movements as a record of the amount and level of physical activity. Using the observation instrument Children's Physical Activity Form, O'Hara, Baranowski, Simons-Morton, Wilson, and Parcel (1989) found moderately high correlations between heart rate and observed activity.

In addition to these methods, several studies have used questionnaires to obtain information on children's preferences and attitudes for physical activity (Pritchard, 1988; LaPorte, 1982; Magill & Ash, 1979). Generalized questionnaires are a widely used method of

obtaining information from children about their physical activity. However, as indicated by LaPorte et al., (1982) questionnaires can serve to discriminate individuals who are extremely active from those who are inactive but it is unclear whether they can provide other useful information. While questionnaires have provided little information that would help measure physical activity in children they have been successfully used to obtain information on children's attitudes toward and attraction to physical activity.

Children's Attitudes Toward Physical Activity

Attitude can be defined as a like or dislike that has behavioral consequences. It has been hypothesized that for a person to participate in physical activity, the person must be both interested in and attracted to physical activity (Sonstroem, 1978). Sonstroem (1978) developed the Physical Estimation and Attraction Scales (PEAS) to help develop a model for physical activity. The PEAS scales employ attitude statements involving a True-False response format. The assumption is that physical activity produces physical ability which in turn leads the person to believing he/she is more capable of achieving a measure of success at the activity (Estimation). Success in the physical activity leads to high self-esteem. Because the person is successful and their self-esteem has been increased there is more interest in and attraction to the physical activity (Attraction). Attraction to a physical activity leads toward participation in the physical activity. Thus, the cycle is completed and started again.

Most instruments used to assess children's attitudes toward physical activities have used Likert-type scales to discriminate between positive and negative attitudes toward physical activity. From using these instruments researchers have developed several conclusions about children's attitudes toward physical activity. Some of these conclusions are based on replicated studies, others simply indicate a direction for additional study.

1. Children will participate in those physical activities in which they hold the most positive attitudes and which are most enjoyable to them personally (Smoll, Schutz, & Keeney, 1976; Simons-Morton, O'Hara, Simons-Morton, & Parcel, 1987).

2. Participation in frequent enjoyable physical activity as a youth increases the likelihood of such participation as an adult (Simons-Morton, O'Hara, Simons-Morton, & Parcel, 1987).

3. Involvement in physical activity is influential in promoting and maintaining attitudes (Smoll, Schutz, & Kenney, 1976).

4. Attitudes toward physical education are not associated with level of physical fitness (Sherrill, Holguin, & Caywood, 1989).

5. Self-perceptions of physical ability are positively related to interest in vigorous physical activity (Sonstroem, 1978).

6. Interest in vigorous physical activity is positively related to level of voluntary physical activity (Sonstroem, 1978).

Attitudes toward physical activity appear to play an enormous role in whether or not children actually

participate in physical activities. Certainly, there are other factors which have an influence on participation. An additional factor which emerges in the literature is the perceptions children have of the gender appropriateness physical activities.

Skill Level Differences of Children

It has been suggested that the acquisition of motor skills is fundamental to human life, and that the ability of a person to acquire with practice or experience the proficiency to execute coordinated motor actions enables that person to have a wide range of human experiences (Winstein, 1991). Part of this study will be directed toward describing and gaining insights into those experiences kindergarten and third grade children go through in acquiring motor skills in physical education. "Skill may be viewed as an aspect of the ongoing function of an individual in his or her daily encounters with the world. A person's skill is his or her degree of competence in handling those encounters. That is, skill is an individual's ability to consistently achieve a goal(s) under a wide variety of conditions (Higgins, 1991)."

For the purposes of this study the term "less skilled" will be used to describe children whose level of competence in motor skills is significantly below the norm, but who show no evidence of disease of the nervous system. In the motor development research literature the term "clumsy" has the same meaning (Henderson & Hall, 1982). It has been reported that clumsy children make up anywhere from 6% to 20% of the population and that more boys are labeled clumsy than

are girls (Keogh, Sugden, Reynard, & Calkins, 1979). These children can be observed to be inconsistent in their ability to achieve motor skill goals. Haubenstricker (1982) defines clumsy children as those whose motor responses do not fit the situation in which they find themselves. On the other hand, "more skilled" will be used to describe children whose level of competence in motor skills is consistent enough to achieve goals under a wide variety of conditions.

Identification of Less Skilled Children

Identification of "clumsy children" has been undertaken using several different methods. Since there is at present no absolute measure of clumsiness this review will concentrate on teacher identification of clumsy children. Teachers have been found to be reliable in identifying children who are clumsy.

In a study by Weiss and Horn (1990) the researchers "were confident that physical education teacher's ratings of children's physical performance ability were reliable indicators of children's ability levels (p. 252)." In their study physical education professionals observed children for six weeks before rating children.

In a study by Henderson & Hall (1982) classroom teachers were asked to identify any child in their classrooms who they considered (a) had poor motor coordination for their age and (b) whose lack of coordination was significantly affecting school progress. The group of children identified as "clumsy" scored significantly poorly in relation to a control group on general measures of motor performance. The researchers

concluded that "a group of well informed teachers recognized motor impairment accurately in their pupils (p. 459)."

In a study by Keogh et al (1979), the researchers suggested that a "lack of agreement among different identification procedures indicates the need to use a multiple measurement process and demonstrates the difficulty in characterizing the nature of movement problems (p. 32)." Movement skills and movement-related behaviors of kindergarten and first grade boys were measured using a 29 item teacher checklist, teacher observations, and a motor performance test. Both classroom teachers and physical education teachers participated in the study. Classroom teachers used the teacher checklist to rate clumsy children, physical education teachers simply observed children in physical education activities, and the motor performance test was administered by the researchers. Results indicate that there was a lack of agreement among the identification procedures. Each measure identified a somewhat different set of boys as clumsy. The researchers concluded that "clumsiness is an arbitrary performance range on a continuum, which precludes a definitive incidence estimate, particularly if different samples and different identification procedures are used (p. 39)."

The above mentioned studies suggest that it is reasonable to base the identification of children as being less skilled or clumsy on observations by teachers. The characteristics of less skilled children are easily identified by those physical education teachers who work with children on a daily basis.

Characteristics of Less Skilled Children

Less skilled children may have different experiences than their more skilled peers, not only in physical education but in daily activities. These different experiences can be directly linked to immature and substandard performance in motor skills. Haubenstricker (1982) describes the experiences of clumsy or less skilled children as follows,

In the classroom, they bump into classmates, desks and chairs. They collide with objects or drop them. In the gymnasium, they have difficulty learning motor skills and usually are ineffective in their play with peers. They are usually the last ones chosen for competitive games. When given a choice, they usually avoid physical activity or prefer to play with younger children whom they can dominate...thus, inadequate or inappropriate motor behavior distinguishes clumsy children from their more coordinated peers (p. 41).

Haubenstricker and Seefeldt (1974) have identified ten characteristics of clumsy or less skilled children. These characteristics are summarized by Haubenstricker (1982, p. 42-43) below. Individual children may exhibit one or more of these characteristics, but not necessarily all of them.

1. Inconsistency in performance is evidenced by greater trial-to-trial variation in performing a specific motor task. Clumsy children often vacillate among developmental levels while throwing a ball or in jumping for distance. While such inconsistency

generally occurs during early skill learning and in young children, it persists in clumsy children well into the school years.

2. Perseveration involves the continuance of a task or behavior when circumstances no longer require it. This characteristic is manifested in several ways. A clumsy child, once having achieved success in a skill such as bouncing a ball, will continue to bounce it even though requested not to do so by the teacher. Other manifestations include the continuation of a dribbling motion with the hand and arm after control of the ball has been lost or taking a series of jumps when requested to take only one.

3. Mirroring is a characteristic exhibited by some clumsy children. These children are unable to separate their directional movements from those of a leader. This dependency persists beyond the age when most children can respond independently to verbal cues, even in the presence of conflicting visual cues.

4. Asymmetry of body parts in activities that normally require bilateral use of the limbs is another characteristic associated with clumsiness. Frequently, one of the body limbs is stabilized in a rigid fashion rather than assisting with force production or in maintaining dynamic balance in skills such as hopping and skipping.

5. Loss of dynamic balance or the inability to maintain postural control of the body in relation to gravity may be a major reason why clumsy children bump into objects and people, and why they appear uncoordinated when performing gross motor tasks. Its effect is particularly apparent on skills requiring

accuracy and control.

6. Falling after performance of gross motor skills such as hopping, jumping, throwing, and striking can often be observed in clumsy children, particularly those at younger ages. In some instances, falling to the floor or ground after completing a motor task may be due to a true loss of balance. However, in other instances, such behavior seems to be learned. It may result from inadvertent reinforcement by adults or peers while a skill is being learned.

7. Extraneous movements incorporated into the schemata of gross motor skills also give children the appearance of clumsiness. The inclusion of unnecessary movements disrupts both the temporal and serial organization of motor skills so that their execution no longer appears smooth and efficient. An example of such behavior is flailing the arms and legs laterally and simultaneously rotating the head from side to side while running for speed.

8. Inability to maintain a rhythmical pattern has been observed in some children with motor dysfunction. On tasks where the rhythm is self imposed, such as performing a series of hops, these children may be able to perform three or four hops before the pattern of movement is disrupted. They also have difficulty following the pace established by a leader on rhythmical tasks like the Jumping Jack. The tendency is to accelerate the pace progressively so that their movements do not match those of the leader.

9. Inability to control force is a critical deficiency in motor skill learning. Clumsy children tend to generate too much force on skills requiring

control such as dribbling a ball and jumping rope, or too little force on tasks that require power.

10. Inappropriate motor planning is one of the most distinguishing traits of clumsy children. Appropriate motor responses depend on the proper integration of sensory input with past experiences. The lack of antecedent experiences and/or integrative ability in clumsy children is evidenced by the misapplication of force, by the prematurity or delay of response, and by inappropriate responses to complex sequences of stimuli.

These ten outlined characteristics provide educators with a base from which to identify children who may be less skilled. As suggested by Haubenstricker (1982) less skilled children may have different experiences than their more skilled peers. If this is true it may be beneficial in educating these children to find out what those different experiences are and how children feel about those experiences. Interviewing children is one way of finding out about how children feel about their experiences. The remainder of this review will concentrate on the topic of interviewing children.

Gender Appropriateness of Physical Activity

Girls and boys acquire their early sex-role identity through their experience in their family, their play-group, and their schools. Although few studies dealing with gender appropriateness of individual physical activities were found it can be suggested from available literature (Havighurst, 1983) that (1) as early as age three there is a noticeable

difference in behavior between boys and girls; (2) boys and girls differ in the toys they prefer; (3) males show more initiative and are more active than girls; (4) females tend to be more dependent and are more nurturant. All these factors play a part in the differences young children may have in their preferences toward physical activity.

A series of studies conducted by Eisenberg, Murray & Hite (1982) focused on those differences in behavior between boys and girls. In one study toys were designated to be either masculine (transportation toys, sandbox, large blocks, carpentry tools), feminine (dolls, dollhouse, kitchen toys, feminine clothing, felt pens and crayons), or neutral (puzzles, board games). Each child was asked by the researcher "What is it you like about the toy?" or "Why do you like that toy?" In another study children were asked to pretend that they had a birthday party and had received four toys which were placed in front of them: two masculine toys (a truck and large blocks); two feminine toys (a doll and a teapot). They were asked, "Which of these toys do you like best, and why?" They were also asked to pick the worst toy, and to tell why they did not like it. These studies found that children's choices for playing with toys were sex-typed about 92% of the time.

It should come as no surprise, then, that the activity preferences of girls would be different than those of boys. Ignico & Mead (1990) suggest that physical activities are commonly gender-typed, and compliance by both children and adults is the norm. To determine to what extent children give gender labels to

physical activity Ignico & Mead (1990) developed the Physical Activity Stereotyping Index. The Index uses 24 pictures of physical activity (8 feminine, 8 masculine, and 8 neutral) in a Likert-type format. Children in grades first through fourth were shown a picture and asked "Is this game a lot more for boys, a little more for boys, for both boys and girls the same amount, a little more for girls, or a lot more for girls?" Ignico and Mead concluded that both boys and girls categorize activities by gender, but, "boys tended to categorize activities by gender more than did girls (p. 1280)". This study was conducted in two parts of the country, the midwest and the southeast, making it possible to compare the two regions. The study found a significant difference between the two areas--children in the southeast selected the gender specific activities to a much greater extent than those in the midwest.

In conclusion, it appears, from the few studies reviewed, that gender differences are a factor when children choose the physical activities in which they like to participate. These differences seem to be cultural, and for the most part accepted as the norm with little question.

Theoretical Foundations

Because this study sought to observe and interpret kindergarten children's initial physical education experiences it was imperative to first begin to understand what an appropriate program of physical education looked like and then to understand the nature and characteristics of kindergarten children as they

entered school for the first time and began participation in physical education activities. A recent document entitled *Developmentally Appropriate Physical Education Practices For Children* provides a look at acceptable physical education practices. A number of consequential theories of child development as put forth by Piaget, Csikszentmihalyi, Vygotsky and others, were found to be most helpful in describing kindergarten children as they participated in their initial physical education experiences. This section will review Piaget's stage theory, Csikszentmihalyi's theory of flow, Vygotsky's theory of the Zone of Proximal Development, as well as review the prevailing definition of play. These theories are presented as a foundation from which the results of this study can be described and understood.

Developmentally Appropriate Practices

Discovering children's feelings about their initial experiences in physical education should help assist physical education professionals in providing developmentally appropriate programs for children. In recent years a growing body of research, theory, and practical experience has sharpened our understanding about the beneficial aspects of physical education programs for children--and those that are counterproductive (COPEC, 1992; Bredekamp, 1988). Physical education is a subject matter offered in the kindergarten and elementary school because it has important educational consequences for children (Portman, 1992). Children who participate in an appropriately designed and implemented program of

physical education should become physically educated.

As defined by the National Association for Sport & Physical Education (1990), physically educated persons possess certain characteristics. According to this definition a physically educated person (1) has learned skills necessary to perform a variety of physical activities, (2) is physically fit, (3) does participate regularly in physical activity, (4) knows the implications of and the benefits from involvement in physical activity, and (5) values physical activity and its contribution to a healthful lifestyle. Many children who participate in physical education have experiences which contribute to the development of these characteristics. Unfortunately, there are children who do not develop these characteristics based on their experiences in physical education. Many of the components of a developmentally appropriate program of physical education for children were developed from a practical foundation, other components have strong theoretical underpinnings which take into account the nature and characteristics of children.

Cognitive-Stage Theory

Jean Piaget is most widely known for his theory of cognitive development. In Piaget's view, children's specific encounters with their environment lead to general ways of understanding the world. This understanding changes during development as thinking progresses through various stages from birth to maturity (Miller, 1989). Piaget outlined four major stages of cognitive development which have been useful in describing the development of children. These

stages include the sensorimotor period from roughly birth to 2 years, the preoperational period from 2 to 7 years, the concrete operational period from 7 to 11 years, and the formal operational period from 11 to 15 years. To better understand the nature and general characteristics of kindergarten children it is essential that the characteristics of children in the preoperational period be reviewed. The main characteristics of preoperational thought are (Miller, 1989, pp. 45-69):

(1) Egocentrism - Egocentrism does not refer to selfishness or arrogance, and Piaget does not use it in a derogatory way. Rather, the term refers to the incomplete differentiation of the self and the world including other people, and the tendency to perceive, understand, and interpret the world in terms of the self. One implication is that the child cannot take another person's perceptual or conceptual perspective. Because the child cannot easily take another person's role, he makes little effort to tailor his speech to meet the needs of the listener. It would not be unusual to observe children at this stage having a conversation with peers where everyone talks and no one listens.

(2) Rigidity of Thought - Piaget characterizes preoperational thought as frozen. One example is centration, the tendency to attend to or think about one salient feature of an object or event and ignore other features. If two identical containers have equal amounts of water and the contents of one container are poured into a taller, thinner container the child centers on the heights of the liquids, while ignoring

their widths. Consequently, he erroneously concludes that there is now more liquid because the water level is higher.

(3) Semilogical Reasoning - Semilogical reasoning refers to the child's inability to link thoughts together in a logical relationship. For example, a child in physical education class might say that his friend fell down because he got hurt instead of saying his friend got hurt because he fell down.

(4) Limited Social Cognition - Piaget suggests that children in the preoperational stage judge the wrongness of an act according to external variables, such as how much damage was done and whether the act was punished. He ignores internal variables, such as the person's intentions. Thus, the boy who breaks fifteen cups while trying to help his mother set the table is considered to be more guilty than the boy who breaks only one cup while trying to steal cookies from the cabinet.

Play

All over the world children Play. Even in the face of disappointment and sadness, illness and hunger, children play. Children are by nature playful. They enjoy playing, and will do so whenever they can latch onto the opportunity (Rogers & Sawyers, 1988). Scarfe (1974) suggests that play is one of the ways children as well as adults become educated:

Play is Mother Nature's clever way of ensuring that young people (and old) become educated of their own accord. The urge to play is exactly the same as the urge to undertake research. It is

part of man's persistent desire to know more about himself and the universe. Play is spontaneous desired research activity carried on for its own sake. It is always a form of experimental inquiry, and the very business and lifeblood of childhood. Play is also the characteristic quality of all adult activity whenever adults really wish to learn p. 5).

Child-initiated, child-directed, teacher-supported play is an essential component of any developmentally appropriate program designed for young children (Bredekamp, 1990). There are six important ingredients, referred to as the disposition of play, which are necessary for an activity to be considered play (Rubin, Fein, & Vandenberg, 1983; Rogers & Sawyers, 1988). These elements include: (a) play is intrinsically motivated; (b) play is relatively free of externally imposed rules; (c) play is carried out as if the activity were real; (d) play focuses on the process rather than any product; (e) play is dominated by the players; and (f) play requires the active involvement of the player.

Many early childhood educators believe that play provides the mechanism whereby children explore and try to make sense out of their world. Theorists Gibson and Piaget (Miller, 1989) considered children to be "inherently motivated creatures who actively explore their environment in an attempt to make sense out of their world (p. 410)." This exploration typically takes the form of play.

Theory of Flow

Mihaly Csikszentmihalyi has been recognized for developing the theory of flow. The concept of flow is simple and primarily deals with the motivational aspects of play. Much of Csikszentmihalyi's work dealt with attempting to find out what makes play such a liberating and rewarding activity and then applying this knowledge to other activities outside the traditional realm of play. Flow activities allow people to concentrate their actions and ignore distractions. More specifically, activities that reliably produce flow experiences are similar in that they provide opportunities for action which a person can act upon without being bored or worried (Csikszentmihalyi, 1975).

Figure 1 provides an illustration of the flow theory model. A flow activity is one which provides optimal challenges in relation to the persons skills. However, when a person believes that his action opportunities are too demanding for his capabilities, the resulting stress is experienced as worry and frustration. On the other hand, when skills are greater than opportunities for using them, the state of boredom results. The state of flow is felt when opportunities for action are in balance with the persons skills. For example, if a kindergarten child is throwing a ball from a distance of three feet in an attempt to strike a target, and the child hits the target every time the ball is thrown, the child may become bored and stop the activity. If on the other hand, the student throws from 15 feet and misses the target every time the ball is thrown the child may

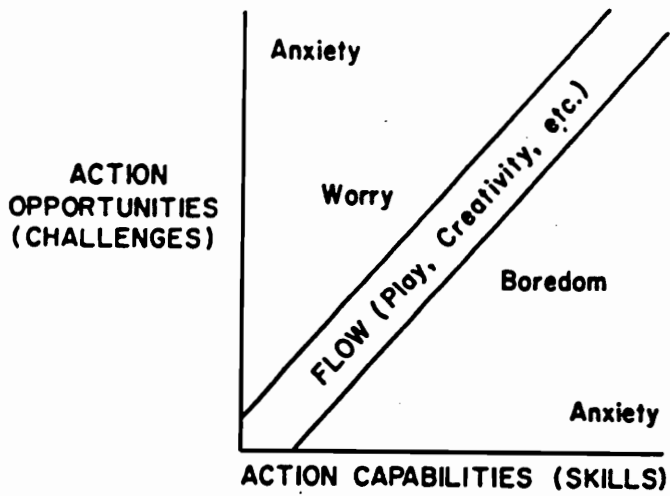


Figure 1. Model of the Flow State (Csikszentmihalyi, 1975).

become frustrated and again stop the activity. For each child flow is different depending on the child's skills and the particular challenge. One kindergarten student may be in flow when throwing at the target from 6 feet, another child may need a more difficult challenge of throwing from 10 feet to be in flow. Flow is experienced when people perceive opportunities for action as being evenly matched by their capabilities.

The Zone of Proximal Development

Unlike Piaget who described development as an interaction between the child and the environment in Vygotsky's theory of development he regarded learning as "the quintessential sociocultural activity" (Moll, 1990). That is, he considered development to be dependent upon the social interactions between children and their peers and between children and adults. To describe his theory, Vygotsky proposed the concept of the zone of proximal development (Figure 2).

Vysotsky outlined four stages of the zone of proximal development (Gallimore and Tharp, 1990). During the initial Stage I, children are assisted by more capable others by being provided tasks and activities to assist them in improving their skills. During Stage II the performance is assisted by the self. This is where children use the skills in play or structured practice in order to improve on the task. In this stage the child carries out a task without assistance from others. However, this does not mean that the performance is fully developed or automatized. In stage III the child develops, automatizes and fossilizes the performance. At this stage task

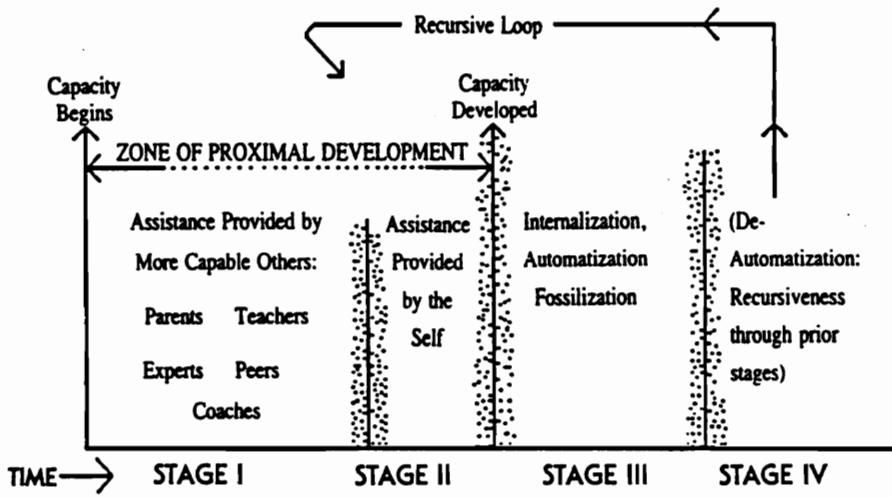


Figure 2. Progression through the zone of proximal development (Moll, 1990)

execution is smooth and integrated. It has been internalized and automatized. Assistance from adults is no longer needed. At this point the child has emerged from the zone. Stage IV refers to movement back through the zone of proximal development, obtaining assistance from others and from self in order to develop new skills based on the ones just acquired. Vygotsky saw the zone as lifelong learning by individuals and not merely as a phase in which one passes during a particular stage of development. It should be noted that a child (or adult) could be out of the zone (Stage III or IV) for a task such as throwing a ball but still in the zone (Stage I or II) for the activities of reading.

Hedegaard (1990) suggests that Vygotsky's zone of proximal development connects a general psychological perspective on child development with a pedagogical perspective on instruction. The underlying assumption behind the concept is that psychological development and instruction are socially embedded. Vygotsky explained the zone of proximal development as follows:

The child is able to copy a series of actions which surpass his or her own capacities, but only within limits. By means of copying, the child is able to perform much better when together with and guided by adults than when left alone, and can do so with understanding and independently. The difference between the level of solved tasks that can be performed with adult guidance and help and the level of independently solved tasks is the zone of proximal development (Hedegaard, 1990, p.349).

When children enter school, the teacher confronts them with the zone of proximal development through the tasks of school activity, in order to guide their progress toward the stage of formal learning. These tasks help children acquire motives and methods for mastery of the adult world, as mediated by the teacher (Hedegaard, 1990). In kindergarten physical education children come into class possessing a certain level of skill in, for example, throwing a ball. The teacher provides various tasks and activities for the children and in addition provides them with specific feedback about throwing. Children then practice those tasks and activities and eventually formalize their learning into a greater level of skill in throwing.

Kindergarten physical education class provides a unique setting in which to deepen our understanding about the nature of children as they participate in physical education. Children's initial experiences in physical education are important in that they influence the way children approach subsequent physical education experiences. If initial experience in physical education, framed by developmentally inappropriate curricular activities and teaching strategies which ignore the nature of children, turn children off to physical activity then it is time to rethink the content and teaching strategies currently used in kindergarten physical education classes. To find out if initial experiences are developmentally appropriate, clearly, researchers must both understand the nature of children, and observe and talk with children in the natural settings of the gym.

Summary of Interview Studies

Recognizing and understanding the child's point of view is seen as a critical element in helping teachers develop appropriate instructional programs for their pupils (Brooks & Fusco, 1984). This is one reason for the recent trend toward conducting educational studies involving interviewing children. Children have a culture much different than that of adults and in order for adults to better educate children they must be willing to listen to children and better understand their world.

Children have been written about from many perspectives, and for a multitude of purposes. Rarely have they been asked to speak for themselves. Children are generally not asked to make an account of the social world as they perceive it. To approach children from an ethogenic orientation, and to ask them to give an account of their world, involves taking children more seriously than we have been used to doing, as people with a perspective of their own and strategies of their own for dealing with the social world that they perceive; as people who have, in fact, a culture of their own (Davies, 1982, p.1)

This section reviews the few recent interview studies which have asked children to give an account of their world.

It must be noted that a number of studies are available that proclaim to be interview studies but upon closer examination turn out to be verbal questionnaires. Studies of this type are conducted in

such a manner that the researcher asks children a number of closed-ended questions giving them choices for responses but no opportunity to further respond on the questions. One example of this type of study (Frey, & Ruble, 1987) professes to interview children about their, and their peers, classroom performance in reading. A closer examination, however, shows the children selecting from a number of responses with no opportunity to really discuss their own feelings and thoughts about the topic. Another study (Watkins, & Montgomery, 1989) uses only a few open-ended questions in asking 232 students in grades 3, 6, 9, and 12 about their beliefs regarding athletic excellence and the source of athletic ability. The majority of the study was dependent on responses to a checklist containing various physical, cognitive, emotional, and interpersonal traits. These studies also use a quantitative approach in analyzing the collected data. Studies of this type certainly add to the knowledge base relating to children but they should not, however, be considered as interview studies.

Interview studies focus on obtaining a better understanding of the culture of children by asking for their thoughts, perceptions, and feelings on specific topics. These studies provide children the opportunity to answer open-ended questions where the number and types of responses are limited only by their own experiences. Researchers in disciplines such as reading, psychology, family and child development, mathematics, and physical education have recently begun to conduct formal and informal interview studies gaining important and interesting insights about what

children think, feel, and know.

Cullingford (1988), Carpenter, Fennema, Peterson, Chaing, & Loef (1989), and Bondy (1990), all reported that by gaining insights into how children thought, felt, and learned about particular subjects caused teachers to change the way they taught. Cullingford (1988) for example, conducted extensive interviews with over 60 pupils in both primary and secondary schools in England. Children were interviewed about their views on the purpose of schools. In discussing their attitudes towards school some very consistent and significant attitudes towards schools and teachers emerged, including strong beliefs in the purpose of schools. The researcher concluded that by talking about connections between school and what children think of as relevant is a good way of creating a sense of real understanding, especially as children are so clear about the purpose of school (p. 41). One implication for teachers was that more attention would be paid to discussing with children what schools were for.

Through the use of interviews and other techniques (classroom observations and questionnaires) Carpenter, et al. (1989) found that teachers who were provided knowledge on how children learn and think about math not only were more effective in their instruction, but also focused more on the process of how they presented math problems to children. Bondy (1990) discovered, also through the use of interviews, that first grade children have different definitions of reading. Through her interviews she found that children (9 high group readers, 6 low group readers) were able to

construct six definitions of reading. Although no single definition was shared by all children, most children constructed and used more than one definition of reading. From these definitions the teacher in the study changed her instruction by basing it more on children's interests. The researcher concluded that teachers who are attuned to children's perceptions and who can adjust instruction to be congruent with their ways of thinking take a big step toward creating learning environments in which readers thrive (p. 43).

An ethnographic study conducted in Australia by Davies (1982) was based on conversations over a period of one year with a group of 10 and 11 year old children. Davies examined the contextual framework of their accounts as they described friends and fights, and attitudes about teacher organization and discipline. The study examined how and why children's interactions with one another are so important. A major conclusion by the researcher was that children do have a culture of their own and if adults are able to listen they will find that the children are very willing to teach that cultural knowledge to adults (p. 172).

A study by Adler and Adler (1984) also used ethnographic techniques including interviews to find out about the socializing influences of the carpool experience. The researchers conducted 40 taped interviews with carpool parents and 23 interviews with carpooling children. Children interviewed ranged in age from 4 to 10. The researchers attempted to shed some light on carpooling as an important socializing influence and more than simply a mode of

transportation.

Interviews were also used by King (1979) to describe how kindergarten children define play in the classroom. The children's interview responses revealed that they had no difficulty describing their classroom activities as either work or play. These categories were distinct and separate in their minds. This is an important study in that the findings indicate "that the private realm of children's play cannot be used to serve the goals of the school. Teachers may use play activities to make schoolwork seem relevant to the children and to entice them to participate in it, but it can no longer be assumed that play activities disguise the coercive or academic nature of school tasks" (p. 87).

In an interview study dealing with children's thinking about family characteristics (Fu, Goodwin, Sporakowki, & Hinkle, 1987) the researchers used cut out drawings of men, women, and children as props to be used by preschoolers. The children were asked to use the props to display and identify the members of the family they lived with at the time and to stimulate conversation. The study attempted to determine the difference between kindergarten and fourth grade children in their understanding of the multiple roles of parents and the multiple roles of family. A similar study by Amato & Ochiltree (1987) focused on whether primary school children, which have sometimes been considered too immature, inarticulate, or shy to serve as useful sources of data on their families, could provide useful data. The researchers conclude that the quality of data was significantly higher for

adolescents than for primary school children, but that primary school children were able to provide high quality data. These findings are encouraging for researchers who wish to interview young children.

A number of recent studies using interview techniques have been conducted in physical education (Hopple, 1992; Manross, 1992; Lawson, Lawson, & Stevens, 1982; Portman, 1992). Lawson et al. (1982) suggested that changes be made in physical education programs as a result of insights gained from talking with 298 children about their physical education experiences. They found that a majority of the children saw few differences between recess and their physical education class.

Manross (1992, in progress) conducted a study to gain a deeper understanding of children's thoughts, feelings, and perceptions concerning their experiences with the skill of throwing. A total of 64 fourth and fifth grade students from two different types of physical education programs were interviewed. A group of high throwing skill ability and a group of low throwing skill ability students was selected to help the interviewer determine if there were differences in the two groups. The researcher used a protocol which included interviewing two students at a time while asking probing questions as to their knowledge about throwing. A similar study (Hopple, 1992, in progress) attempts to describe what fourth and fifth graders think, feel and know about physical fitness tests. Subjects in this study were labeled "less-fit" and "more-fit" based on fitness scores recorded by the teacher. They were then interviewed to gain insights

on their feelings about the fitness test activities and fitness in general. As these studies are in progress no results can be discussed.

One other recently conducted study provides an additional look at the culture of elementary school children in physical education. Portman (1992) interviewed thirteen low-skilled sixth grade students to find out how they felt about their physical education experience. Being low skilled was an unhappy experience for the students interviewed in this study. Low-skilled students were rarely successful in any of the units contained in the physical education program, received little assistance in developing skills from the physical education teacher or other students in the class, were left alone during skill practice and yet received the brunt of critical comments in all competitive situations. Interviews revealed that students developed various coping patterns for seeking minimal forms of success and, more notably, for avoiding public failure.

Value of Interviewing Children

The success of any qualitative research project depends on the researcher's ability to gain clear understandings of the knowledge that "insiders" use to make sense of their world (Hatch, 1990). This is particularly true when investigating the world of children. Obtaining a clear understanding of the child's unique culture can be difficult through quantitative research methods. Quantitative research methods, such as questionnaires, simply don't give researchers the whole story about the child's world.

One way to obtain a clearer understanding of the child's world is through interviewing.

A primary contribution educational researchers can make to the education of children is to do the kinds of research that will reveal important characteristics about how children learn and develop (Parker, 1984). Interviewing children is an important way for adults to obtain information (Tammivaara, & Enright, 1986; Garbarino, & Stott, 1990) and receive feedback (Wood, 1983) to help improve and plan for effective instruction. "Recognizing and understanding the child's point-of-view is seen as a critical element in helping teachers develop appropriate instructional programs for their pupils" (Brooks, & Fusco, 1984). Young children simply do not think the same way as adults, they perceive the world differently, and if teachers are to be successful in providing a meaningful education they must attempt to discover the child's perceptions of the child's world (Yonemura, 1974). Properly managed, the interview can be a sensitive and revealing tool in building adult understanding of children (Parker, 1984). Through interviews with children teachers can gain and use knowledge of the child's perspective to structure appropriate curriculum and facilitate transitions to later school experiences (Klein, Kantor, & Fernie, 1988).

Interviewing children not only provides research information to investigators and teachers but also is a valuable process for children. Conversations where children are asked to describe their thoughts, feelings, and perceptions on a particular topic provide children with the knowledge that their thoughts are of

value. "In order to adapt and to prosper, children need to develop a strong sense of self-worth and social commitment. By soliciting and acting upon their thoughts, we can assist children in developing these traits" (Kurth-Schai, (1988). In addition, it is largely through conversations with more experienced adults that children come to learn about the world outside their own personal experiences. Interviews and extended conversations with adults provide children with that opportunity to learn about and develop insights into worlds other than their own (Rogers, 1987).

Guidelines for Interviewing Children

No all inclusive source of guidelines for interviewing children could be found. Many sources provide valuable information to those interested in interviewing children. Guidelines for interviewing children, supplied by Yarrow (1960), have provided a foundation for education researchers for over thirty years. These guidelines are still referred to in current literature reviews of research involving interviewing children. However, much has been learned about interviewing since Yarrow first outlined guidelines. This section will review some general guidelines that have become useful to researchers who currently conduct interview studies.

Parker (1984) argues that a checklist of guidelines is impractical when conducting interviews with children "because each interview must be tailored to the unique research problem at hand" (p. 27). Interviewing children is unique and depends in part on

the purpose and setting of the interview, the characteristics of the researcher, and the age of the children. Hatch, (1990) suggests that in general, when interviewing children, the interviewer needs to take time to establish personal relationships, emphasize informal rather than formal interviews, ask questions children can answer, expect them to answer, and accept their answers.

Summary

Interviews with children are indeed a reliable way for researchers to gather important information about the world of children. Conducted properly, significant and important insights can be gained. Interviewing children not only provides research information to investigators and teachers but also can be a valuable process for children.

It is the intent of this study to gain a more thorough understanding of kindergarten children's experiences in physical education. This review of literature assists in that task by providing a foundation from which to begin.

CHAPTER 3

Methodology

The first purpose of this study was to describe the initial physical education experiences of two less skilled and two more skilled kindergarten children. The second purpose was to gain insights into these children's feelings about those experiences and to suggest their educational significance. Qualitative research methods including the use of interviews, fieldnotes, and participant observations, were used to collect data for this study. These methods are further described in the following sections.

Setting

One elementary school was selected to serve as the data collection site for this study. Blue Ridge Elementary school, a small (250 children in grades K-5) elementary school located in a southeastern state served as the setting. Blue Ridge is a fictitious name used to protect the school's anonymity. All children at Blue Ridge Elementary participated in physical education class with a physical education specialist two times each week for 30 minutes. No additional physical education classes were conducted by the classroom teachers or any other persons involved with the school. Blue Ridge Elementary school was selected because it's physical education program represented a program in transition. Program content reflected many characteristics of what could be considered a

traditional physical education program as well as some attributes of a more contemporary approach to teaching physical education. A detailed description of the setting is included in Chapter 4.

Participants

Four kindergarten children were selected as participants in this study. Kindergarten children were selected because this was their first experience in physical education and with a structured program of physical activity. Before participant selection began parental permission forms (Appendix A) were obtained from all 22 children in one kindergarten classroom. The four participants were chosen based on two weeks of observations of both kindergarten classroom and physical education class activities.

During this two week observation period all 22 children were observed by the researcher, and, based on those observations, grouped into one of two categories. In one group the researcher placed the names of those children he observed to be more skilled, in terms of motor development, as compared to their kindergarten classmates. In the other group he placed the names of those children he observed to be less skilled. It is common practice in physical education to conduct research which examines the similarities and differences of high and low skilled students (French, Rink, Rikard, Mays, Lynn, & Werner, 1991; Haubenstricker, 1982; Portman, 1992; Silverman, 1985). Without seeing the researcher's list, both the kindergarten classroom teacher and the physical education teacher were then asked to group the children

into one of the two groups of less or more skilled. The teacher's groupings helped to verify that the children were placed into the appropriate skill groupings by the researcher. According to recent literature, the accuracy of teacher's rating of children's abilities has been found to be reliable (Henderson & Hall, 1982; Keogh, Sugden, Reynard, & Calking, 1979; Weiss & Horn, 1990). The more skilled group contained 15 children and the less skilled group contained 7 children. There were no conflicts among the two teachers or the researcher as to which children belonged in which group. It should be noted that this observation/selection process was used as opposed to using a skills test to select participants. Skill tests were not used because of the concern that young children might misunderstand the skill testing procedure and think it part of their physical education class and thereby provide conflicting responses to interview questions concerning their actual physical education experiences.

From those two groups the researcher then selected a less skilled girl and boy, and a more skilled girl and boy to serve as participants in the study. It is common practice in physical education to conduct research which examines the similarities and differences of boys and girls as they participate in physical education class (Corbin & Nix, 1979; Ignico & Mead, 1990; Watkins and Montgomery, 1989). At this point the selection of the four participants from the two groups was arbitrary and somewhat subjective based not only on skill level but also on the researcher's observations of the children he felt were at the

extremes as far as their motor abilities. It should be noted that one less skilled child was selected and then dropped from the study because he was unable to verbally communicate his feelings to the researcher.

The two more skilled children selected to participate in this study were Tabitha and Brett. The two less skilled children were Holly and Charlie. These are pseudonyms used to protect their anonymity. A detailed description of the children is included in Chapter 4.

Data Collection

Data for this study were collected using an ethnographic or qualitative approach (Bogdan & Biklen, 1982). Qualitative research embraces a wide range of strategies including, but not limited to, collecting fieldnotes, participant and nonparticipant observations, and conducting interviews. A combination of observations, fieldnotes, and interviews were employed as data collection methods for this study.

Fine and Sandstrom (1988) suggest that there is a "need for observational and in-depth research with children to learn more about their culture (p. 9)." Research on various cultures requires using research methods that provide information unobtainable through quantitative methods. By observing children adults can begin to understand the child's culture. When adults observe the world of children they can gain important insights through those observations (Fine & Sandstrom, 1988). The four selected participants were observed by the researcher each time they participated in physical education class during the first eight weeks of school

(total of 16-30 minute observations). Observations began in the kindergarten classroom with children lining up to walk to the multipurpose room for physical education class and ended when children returned from physical education class back to the kindergarten classroom. Each physical education class was videotaped for subsequent review as part of the data triangulation process, and field notes were recorded during each observation. Field notes were also recorded during recurrent observations of the children as they participated in the kindergarten classroom. This information was also used in the triangulation process.

Fieldnotes refer to a written log which produces a running account of events being observed (Sanjek, 1990). This account is not limited to recording what is observed but can also include the researcher's personal impressions and thoughts. During observations the researcher wrote, in a spiral bound journal, copious, detailed notes on each child and what was happening in the physical education classroom.

In addition to writing fieldnotes, a visual record was obtained by videotaping each class. A video camera was mounted on a tripod and positioned off to the side of the movement area. The camera was always turned on and running when the children began class. During the first few classes children occasionally stopped to look at the camera, but after that, they participated in class as if the camera were not there. The camera appeared to have virtually no influence on the children's experience in physical education.

At the end of each class the researcher, using both the fieldnotes and the videotape record of the class, drafted a detailed description of what occurred during the physical education class. In addition, a written description of the behavior and experiences of each of the four individual children was also drafted.

Interviews also served as an important data source for this study. Strategies, techniques and methods used to interview children and teachers followed the criteria and guidelines set forth by Parker (1984), Tammivarra and Enright (1986), Yarrow (1960), Garbarino & Stott (1990), and Hatch (1990). Two 25-minute interviews were conducted individually with both the kindergarten classroom and physical education teachers. The teacher interviews used a format of conversation, reflective questions (Appendix C) and probes (Manross, 1993, in progress). The focus of the teacher interviews was on gaining information and insights into the physical education program and the teacher's impressions and interpretations of the children's experiences in physical education. These interviews were audio recorded and transcribed for later analysis. In addition to the teacher interviews, to assist in gaining information about the physical education program, photocopies were made of the teacher's lesson plans and of the school's physical education curriculum guide.

The four children were interviewed in pairs for 20-25 minutes on three separate occasions. Interviews were conducted in a small room normally used by the school counselor for small group counseling sessions. Children, along with the researcher, sat in

kindergarten sized chairs at a small table. A VHS TV monitor was placed on the table in order for children to easily view short segments of their physical education classes. These interviews also used a format of conversation, reflective questions (Appendix C), and probes (Manross, 1993, in progress). During the interviews children viewed a number of short (15 to 20 seconds) video taped vignettes of themselves actually participating in physical education classes to help them to stimulate recall of class events. They were then provided time to respond to researcher questions dealing with the individual vignettes.

All interviews were video and audio taped and then transcribed for later analysis. Equipment used to video and audio record the interviews was placed in the background and turned on before children entered the room. Although the children knew they were being recorded, every attempt was made to discount the presence of the equipment contributing to an atmosphere where the camera and recording equipment appeared to have little influence on how children answered questions or responded to the vignettes.

Data Analysis

Part of this study was phenomenological, in that an attempt was made to develop from the children's actual words a sense of the ways they viewed their physical education experiences. All of the interview and observation data were analyzed using ethnographic and case study guidelines as suggested by Bogdan & Biklen (1982), Marshall & Rossman (1989), Spradley

(1979, 1980), and Eisenhardt (1989). Interviews were transcribed and observations and fieldnotes were typed using the Word Perfect word processing computer program. The use of this program allowed each line of typed data to be numbered for subsequent reference and line by line analysis.

Based on observations, fieldnotes, interviews, videotapes, and written descriptions of the 16 physical education classes observed, a description of the physical education program, each of the four children, and each of the four children's various experiences during their initial physical education classes was drafted. Descriptions of children's experiences were written after comparing all the data and selecting only those descriptions which could be verified and triangulated with collaborating data. Those descriptions are included in Chapter 4 and written in narrative form.

Conducting qualitative research dictates a descriptive or narrative approach to reporting findings, insights and implications. The reader may find the results section quite different from the results sections typically found when reporting quantitative research. Qualitative research requires the researcher to provide readers with details that will assist them in comprehension of the findings. In qualitative research it is not only appropriate to report findings but equally important to describe the environment in which those findings were generated.

In qualitative research there are several methods which have been used when reporting findings. It was decided that in this study reporting the researcher's

insights gained from observing and interviewing children could best be reported through the use of narrative. Narrative is a way of characterizing the phenomena of human experience and its study which is appropriate to many social science fields. The use of narrative provides a way to look at how humans experience the world (Connelly & Clandinin, 1990). Narrative inquiry is increasingly used in studies of educational experience. The main claim for the use of narrative in educational research is that humans are storytelling organisms who, individually and socially, lead storied lives. The study of narrative, therefore, is the study of the ways humans experience the world. This study sought to describe the experiences of kindergarten children during their initial physical education classes. The narrative approach was selected in order to provide the reader with a rich description of the setting and the participants, in this case a kindergarten classroom and four kindergarten children participating in their first physical education experiences.

A narrative description of the contextual elements which made up the children's physical education experiences is provided to assist the reader in understanding the results. Contextual elements include a description of the setting, children, teacher, physical education program, and the children as they participated in the program.

Themes describing and comparing children's experiences were then developed from these narrative descriptions. Over 30 initial themes were generated which dealt with the similarities and differences

between the four children regarding their initial experiences in physical education. Each data source was once again searched for instances of confirming and disconfirming support for each of the initial themes. The researcher then compared data sources in an attempt to verify, eliminate, modify, or combine the emerging hypotheses, which were stated as themes. Subsequently a number of themes were eliminated, some appeared to be confirmed, and the remaining were combined. Confirmed themes are included in Chapter 5 as the results of this study. This process, as used by Graham, Hopple, Manross, & Sitzman (1993) provided a suitable approach for analysis of the data.

Confirming and disconfirming support for the descriptions of the children and initial assertions were acquired using the "sketch pad method" (Graham, Hopple, Manross, & Sitzman, 1993). Using this procedure confirming or disconfirming evidence used in describing the children's experiences, or for verification of themes, was cut and pasted onto separate pages of a large artist's sketch pad (16 inches by 24 inches). Although a time consuming process, this provided a rather obvious, and easily accessible, depiction of the evidence used in both describing children's experiences and for verifying each theme. The descriptions of individual children and the resulting themes about their experiences were then developed into a narrative manuscript which succinctly reflects the initial physical education experiences of the four observed children.

Summary

The primary purpose of this study was to describe the initial physical education experiences of two less and two more skilled kindergarten children. The second purpose was to gain insights into these children's feelings about those experiences and to suggest their educational significance. In order to meet these goals qualitative research methods (fieldnotes, participant observations, interviews), were utilized and the data analyzed using generally accepted ethnographic methodologies.

CHAPTER 4

Description of Children and Setting

The first purpose of this study was to describe the initial physical education experiences of two less skilled and two more skilled kindergarten children. The second purpose was to gain insights into these children's feelings about those experiences and to suggest their educational significance. To this end, the participants and setting are described in great detail in this section to provide the reader with a better appreciation of the insights and implications which follow these descriptions.

The four children in this study were Tabitha, Charlie, Holly, and Brett. Their physical education teacher was Mrs. Karen Brooks. These are pseudonyms used to protect their anonymity. The descriptive profiles in this chapter illustrate the children's experiences in physical education class. Descriptions are written in the form of a narrative in order to provide the reader with rich descriptions of the children's experiences. This chapter includes a description of the setting, children, teacher, and kindergarten physical education program. In addition this chapter chronicles Tabitha's, Brett's, Holly's, and Charlie's experiences in physical education during the first eight weeks of school.

General Description of the ParticipantsCharlie

Charlie is known throughout the school as a bright child. He is frequently seen attempting to carry on stimulating, adult like conversations, with his peers-- although to little avail. This characteristic may stem from the fact that he is an only child and his parents enjoy spending much of their leisure time doing activities with him. When not attempting to sustain a conversation with his peers he can be observed staring into space as if to be contemplating some theoretical concept that he may soon present to his classmates in order to revolutionize the way the kindergarten classroom functions.

Charlie's intellectual appearance resembles that of a Nobel Prize winning scientist. One can easily gaze into the future and see Charlie, dressed in his lab coat, pouring chemicals from one test tube to another. Charlie's small face is almost hidden by his large framed, wire rimmed glasses. A cow lick often rises from the back of his seldom combed, short brown hair. At three feet seven inches tall, and 42 pounds, Charlie is one of the smallest children in his kindergarten class. His small size often works to his disadvantage as his larger classmates often pick on him in order to get what they want. Charlie is seldom seen in a fight, however, as he usually selects to walk away or dart off to find the teacher and inform on his more aggressive peers.

Not only does Charlie have an intellectual appearance, but he is also perceived as bright by

teachers throughout the school building. His persistence to talk to adults, and his inquisitive conversations with teachers, has gained him the nickname of "the little professor." His classroom teacher suggests that "He likes the intellectual stimulation more than the physical. Which is not very common for a kindergarten boy" (FKT.L314-317). His classroom teacher also believes he is gifted.

If I were to have a gun put to my head and had to say who in my class was gifted, Charlie would be the first name I would say. He is very quick, he is very analytical for a kid that age, and he is also very directed. Kids this age tend to work on something for 10 to 15 minutes and then want to go on immediately to something else, whereas, Charlie can be very focused, even on thinking things, even when we are talking about something, he can be very focused. In fact, he gets frustrated when I move on to something else if he still has something to say about it (FKT.L286.300).

Charlie's physical education teacher also sees him as being a bright child who she often selects to help her demonstrate an activity (T6G.FK7.L312-316). In addition, he appears to enjoy providing his own definitions for tasks assigned by the physical education teacher, an example being his definition of jogging in place.

Mrs Brooks stopped the children after about five seconds, realizing that they did not understand what to do. Charlie quickly offered his definition of jogging in place by saying "in your place" and then jumping up and landing on both

feet to show where his place was (T9N.F14.L21-27).

Charlie is respected by both his classmates and his physical education teacher as being able to come up with clever, creative ideas. Charlie's classmates frequently watch what he is doing and follow his lead, while his physical education teacher often refers to what Charlie is doing, suggesting to his classmates that they may want to observe and model his idea.

It was Charlie who had the idea of moving his spot back further away from the hoops. He gently kicked the spot so that it was some ten feet away from the hoops. This was a challenge for him as before the spots were so close to the hoops the children were merely dropping them into the target. Brett immediately moved his spot back when he saw Charlie moving his. The boys switched from throwing underhand to throwing overhand (T9O.F15.L170-179).

Tabitha is seen holding her ball with both hands, resting it on top of her head as Mrs. Brooks points out to the class what a good idea Charlie has. Charlie lays on his stomach on the ball and moves using his hands, pulling himself around the outside of the carpet square. Tabitha spots Charlie and imitates what he is doing. So does Brett and most of the rest of the class (T4F.F6.L291-299).

Charlie is both independent and shy. In the classroom he will work alone for long periods of time on a project in which he is interested. When traveling through the building or moving to or from his

kindergarten classroom to physical education, library, lunch, or music class, he usually walks alone, hands in his pockets, head bent, and his eyes focused on the floor in front of his toes (T4E.FK5.L22-31). Charlie, however, likes being with and playing with his classmates, especially the girls. He can occasionally be observed holding hands with one of his female classmates as his class moves from place to place throughout the building.

As Tabitha enters the physical education classroom this morning she is followed by Charlie who holds onto her left hand with both of his hands. As the line of children crosses past the stage he releases her hand and begins to walk on his own (T6G.F7.L13-17).

Charlie appears to have a highly developed sense of right and wrong and will do everything in his power to correct an injustice even at the expense of getting a classmate into trouble. The classroom teacher suggests that he is a "very sensitive child."

If he does things that he perceives hurts somebody else he has a hard time letting go of it. He'll go home and share it with his parents. I've talked with his mom and dad a lot on the phone about this (FKT.L316-322).

During one class Charlie, who was Brett's partner, conspired together to unscrew the cap of a water filled two liter soda bottle that was being used as a target. Brett then rolled a ball at the bottle knocking it over and spilling the water from the bottle. When the two boys were asked what happened Brett attempted to hide his participation in the incident. Charlie, on the

other hand, felt he had to tell the truth (IK3.L40-84).

R: What did you do in p.e. class today?

B: We played bowling. Hey Charlie (leaning over to whisper in Charlie's ear).

C: That's your fault, you bring it up if you want.

R: What did you tell him Brett?
(both boys laugh)

C: Well he was telling....(At this point Brett reaches over to cover Charlie's mouth with his hand).

R: Brett, you can tell me.

B: We, tell him we did something wrong (looking at Charlie).

C: It wasn't serious.

B: Don't tell him, let me (grabbing Charlie's shirt into the fist of his right hand).

R: That's ok, I won't tell anybody.

B: I busted it, one of those, I busted it, I busted one bowling pin.

C: That's not...

R: It leaked the water out?

C: You didn't bust it, you undone the lid, you unscrewed the lid on purpose and threw the ball and made the water spill, the jug spill on purpose.

B: (now with his face only inches away from Charlie's) It was your idea, it was your idea.

R: That's ok Brett. I'm not going to tell anybody. Why did you do that?

B: It was fun, it was silly.

Holly

Holly's curious eyes and questioning facial expressions combined with a look of reserved anxiety set her apart from the rest of her kindergarten classmates. One could easily see that although she was inquisitive about this new adventure called kindergarten she was in an unfamiliar environment and would rather be somewhere else, most likely at home with her mom and baby brother. Her recurring smile was rendered only as a defense in an attempt to hide her fear and apprehension of the unknown.

At the tender age of five Holly was one of the youngest children in her kindergarten class having celebrated her fifth birthday during the first month of school. Her classmates were either already six or would turn six during their year in kindergarten. Holly's younger age, compared to her classmates, seemed to contribute to her inability to quickly adjust to school. This was the first time Holly has been in a structured school environment. Her kindergarten classroom teacher had several concerns dealing not only with Holly's young age but also with her gross and fine motor skills and her slurring speech.

When she first came in I was very, very concerned because there were very poor gross and fine motor skills. She had trouble speaking, trouble making sentences, she seemed to have trouble paying attention and I was very concerned...(IKT.L117-125).

These concerns dissipated only somewhat as time went on and Holly began to adjust to school life.

Physically, Holly's dark brown eyes, rosy cheeks, and plump, stocky physique contribute to the image of her as a cute, cuddly, teddy bear. If on the shelf at a toy store it would be difficult for anyone to resist wanting to pick her up and give her a big hug. Holly's collar length, dark red hair hides her ears and sports random curls while clinging to her head and the sides of her face. Her puffy cheeks frame her face emphasizing a recurrent pensive smile and questioning eyes. These inquisitive eyes frequently dart about the classroom to investigate her classmates activities, inattentive to personal endeavors. Holly frequently displays a need to be close to others by holding out her short vise like arms to be hugged or by sitting with her arm around a classmate.

Holly is noticeably overweight as compared to her classmates, some of whom are almost half her weight. Her short, three foot nine inch frame carries 75 pounds and fills, almost beyond capacity, the small blue chairs used in the kindergarten classroom. When she moves throughout the school environment she lumbers slowly, her weight serving as an albatross around her body shifting from side to side making her appear to walk with a limp. As if in an attempt to hide her plump frame Holly's mother typically dresses her in colorful tent-like dresses which hang loosely from her upper body (T6I.FK9.L88-91).

The first eight weeks of school did not appear to be a lot of fun for Holly as she had many difficulties adjusting to her new environment. Along with being

overweight Holly appeared shy and passive, reluctant to assert herself with her classmates. Some of her classmates frequently teased her about her weight. Holly has acquired an early distaste for these classmates and for school in general "because all the people call me names, like Miss Piggy" (IK5.L284-285). The kindergarten classroom teacher steps in whenever he can to help prevent Holly from being teased and to console her, but he is unable to always be there when the razzing occurs. Holly had little knowledge of experience that would assist her in dealing with such invasions on her self-esteem. She was often seen sitting by herself in the classroom softly sobbing after being beleaguered by a classmate because of her weight.

Holly had great difficulty adjusting to the school environment and in making new friends. In the classroom she would travel from classmate to classmate latching on to anyone who would sit with her, play with her, or tell her they were her friend. Her classroom teachers suggests that;

She attaches herself to who ever the adult is in the situation, and I'm trying more and more to get her to attach to other kinds instead. With peers she's very intense with friendships and they last for a very, very short time, she'll have one friend and will need to sit next to that person, at the exclusion of everybody else, but then when it's over, it's over, and she attaches to someone else (IKT.L147-156).

In addition, Holly was frequently observed during the first several weeks of school crying and telling anyone

who would listen that she wanted to go home (T2B.FK2.L15-33).

In the beginning of the year she was one who would cry a little bit, and then she got better for a few weeks, and then lately she's reverted back a little bit, especially at the end of the day (IKT.L130-134).

Holly's classroom teacher felt that many of the problems she was having adjusting to school could have been avoided if her parents would have waited another year to enroll her in school.

Although Holly had some difficulty adjusting to school and sometimes hesitated to get involved, she was always willing to attempt a new activity. In both the classroom and the gym Holly appeared to be a visual learner. She would listen to directions for classroom tasks as given by the teacher but was seldom observed actually doing a task without first watching her classmates. Sometimes she would observe her classmates for long periods of time before attempting a task. This behavior would typically gain the attention of the teacher who would ask Holly why she was not participating in the activity. This was not to say that Holly was off task in the form of misbehavior, she was not. Holly genuinely appeared to want to please her teachers. It simply took her longer to get started than it did many of her classmates.

Tabitha

Measuring three feet, ten inches tall Tabitha was the second tallest girl in her kindergarten classroom. Her height, along with her slender, muscular physique

contributed to her athletic appearance. She typically wore brightly colored, fashionable clothing. Tabitha was very attractive and appeared to be an astute student. Her cute freckled face was framed by her straight blond hair, usually worn in a pony tail and hanging halfway down her back. Tabitha seemed always ready to provide the correct answer to a teacher's question or to help a fellow classmate who did not understand how to do a task. Teachers frequently called upon her to help demonstrate to her classmates how to do specific activities.

Tabitha is only one of two children who venture into the near half of the gym and Mrs. Brooks recognizes this by saying "Tabitha found her personal space." This comment was made to the whole class as a way of making an example of the appropriate job done by Tabitha (T4E.FK5.L88-93). Tabitha's kindergarten classroom teacher felt that she was "just a good all around popular kid" (IKT.L366-367). If one could project into the future they might imagine Tabitha as an academic leader, athlete, and a popular class trend-setter. As a senior in high school one might picture her as the top scorer on the girls basketball team, the home-coming queen, and the class valedictorian, all rolled into one.

This all-American-girl image also fits with Tabitha's personality and disposition. She always appeared easy going, obeyed her teachers, and was eager to please. Her radiant, beaming smile seldom left her face and highlighted a friendly disposition. She was very popular with her classmates, both boys and girls, but especially the boys. As a result of this

popularity she sometimes found herself unable to accomplish personal endeavors as several male classmates competed on a daily basis to be able to simply sit or stand next to her.

As Tabitha does her arm stretches today she stretches her arm as far as she can behind her head. She is having some difficulty staying on task, however, as two boys keep moving around her trying to get the best position for standing next to her (T6I.FK9.L127-134).

Dusty and Dustin parallel Tabitha today as they do their crab walk. They are like a shadow on both sides of her body as she moves stopping from time to time to wait for them to move from her pathway (T7J.FK10.L66-70).

Though Tabitha appeared to enjoy her popularity she also seemed to enjoy working independently of her classmates and would periodically be seen attempting to be by herself.

Tabitha is in a group of two other girls. They move across the center of the room using the seal walk, their heads perched up above their shoulders. They move together giggling and laughing without speaking a word. Tabitha eventually breaks away from the group moving quickly for a few seconds then taking a momentary rest before continuing to move and again being joined by her female classmates (T7L.FK12.L93-101).

Along with appearing to be popular Tabitha seemed to be a very social being, talking with her classmates at both opportune and inopportune times. Tabitha liked

to socialize and would talk with any and all of her new school friends whenever she had the opportunity. Her kindergarten teacher did not consider this to be a major concern. He, however, would from time to time need to remind her either that she needed to let others talk or that she was talking at an inappropriate time.

Tabitha, to me, is the kind of kid that came into kindergarten not really knowing what it was going to be like, she was very quiet and very withdrawn, but as soon as she realized that there wasn't any danger she came out and just flowered and 90% of that is positive. There's that 10% where she wants to demonstrate her independence by talking when she is not suppose to, but it's nothing that I worry about (IKT.L366-377).

In addition to being well liked by her classmates Tabitha seemed very compassionate and always sympathetic to a classmate who needed a helping hand or a shoulder to cry on. She was typically the first child to come to the rescue of a peer in need.

Holly is at the end of the line. In her right hand she holds a tissue which she periodically uses to wipe her nose and the tears from her eyes. Although she still appears upset she has stopped crying. Tabitha stands next to her clasping her left hand as if to say life is going to be ok (T2B.Fk2.L68-77).

Brett

Although only five, Brett already exhibits the emergence of a muscular, athletic physique. He enjoys physical activity and absolutely loves to play on the

playground where he is free to run across the large grass field with his peers or climb the wooden structures that make up the school's outdoor play environment. He wins all the playful races in which he competes with his classmates, and if asked to race, would be the first kindergarten child to the top of any of the large wooden climbing structures on the playground. Measuring four feet in height he is the tallest boy in his kindergarten classroom by several inches. His 54 pounds are well distributed on his proportionate triangular frame.

Brett's curious eyes and "Dennis the Menace" smile centerpiece his cute, freckled face, and short blondish-brown hair. His eyes appear to take in every episode of activity that occurs within his environment. Brett's twinkling eyes and self-assured smile are not the only attributes of his characteristically "all boy" demeanor. Brett is extremely independent, frequently going off on his own to investigate new circumstances and events within the school's environment. He is also playfully mischievous. One could easily imagine Brett sitting in the back of the classroom, dunking Becky Thatcher's pig tails into an ink well or skipping school to go fishing along the Mississippi with Tom Sawyer.

School is just plain fun for Brett who is entering a structured school environment for the first time and has not yet completely comprehended the seriousness adults place on children's obedience to established school protocols. Each kindergarten endeavor is a playful game for Brett who continually looks for entertaining ways to disrupt established protocols in

order to achieve self-indulgent goals, especially if he knows that his behavior will draw teacher attention toward himself.

Brett enters the room in a playful manner hiding behind a classmate so the physical education teacher might miss seeing him and not call out his name. He is, however, caught by the teacher and told to return to his place in line (T6G.F7.L18-22).

In the classroom Brett intensely concentrates on daily tasks such as painting, cutting, or drawing, doing activities thoroughly but quickly, playfully talking to himself as he goes. In physical education class he is in constant motion, adding to his teacher's frustration and anxiety. His constant motion is not always constructively directed and after only eight short weeks of school Brett developed a well deserved reputation, with both his classmates and physical education teacher, of being an aggressive child.

Brett's classmates often felt the breeze generated by his rapid racing like maneuvers as he passes them, pushing with his hands if need be, to get to the first position in a newly formed line. This happens frequently anytime a line is formed whether it be in the classroom, lunchroom, or in physical education. When competing with a classmate for this treasured "head of the line position" Brett has gone as far as to strike with his fist those classmates who get in his way.

Class ended with children placing their jugs and balls in the hoops and lining up at the door. Kelly and Brett got in an argument at the end of

class as to who was going to be first in line. Brett struck Kelly's shoulder with his hand and Kelly began to cry (T7K.FK11.L54-59).

The physical education teacher provides a general explanation for children who demonstrate a tendency to be aggressive during initial school experiences. She suggests that their parents have spoiled them by not establishing "appropriate behavioral parameters" at home, so, when they attend school for the first time it is up to teachers to mold them into obeying the established guidelines (FPET.L184-200). She places Brett in this category.

The classroom teacher, on the other hand, suggests a more feasible explanation for Brett's aggressive behavior. After discussing his concerns with Brett's mother he submits that Brett's assertive behavior is in part due to a recent addition to his family. For five years Brett has been an only child, and the center of his parents' attention. Now, he has to share that attention with a baby brother. Brett's classroom teacher also suggests that by knowing this information he has changed the way he deals with Brett. He now attempts to approach Brett from a more understanding point of view. Knowing that he is losing attention at home, the classroom teacher attempts to provide "good positive attention at school regardless of how Brett behaves" (FKT.L201-235).

This depiction of Brett's behavior as being sometimes aggressive is not to suggest that Brett is unmanageable, uncooperative, or maliciously disobedient. He is none of these things. He is enthusiastic and eager to learn although sometimes

restless, wanting to get started on an activity before the task is fully explained. He is a "now" sort of a child, desiring to do things quickly in order to get to the next activity.

Brett's insistence toward full participation in an activity, whether it be mental or physical, generates immediate activity which, depending upon the circumstances, may be inappropriate. In the classroom this is not a major concern to the teacher because the children move from station to station participating in one activity and then moving on to the next one. The physical education teacher, however, sees Brett's lack of patience when she is providing instruction as being disruptive, which frequently lands him in "time out". She acknowledges that Brett is anxious to play and that sitting while listening to directions may create boredom for him (FPET.L557-561). She does not, however, tolerate his behavior. This results in two immoveable forces often colliding, the repercussion is that Brett spends a lot of physical education class in time-out.

Physical Education Setting

The children in this study spent two 30-minute class periods each week in physical education. The following is a description of both the indoor and outdoor physical education environments.

The kindergarten children at Blue Ridge elementary school began their day at 9:00 AM each Monday and Thursday morning by walking down the long hallway which extends some 100 feet from their kindergarten classroom to the multi-purpose room which would become known to

all as the "gym". The room was used not only for physical education class but for school plays, breakfast, lunch, PTA meetings, and most other gatherings where a large space was needed. The room would easily hold the more than 250 kindergarten through fifth grade children who went to school at Blue Ridge Elementary. This was the largest open space in the twelve classroom, 30 year old school building. The room was in the shape of a rectangle, with a 15 foot high ceiling which rested on white painted concrete block walls. Brownish-yellow tiles extended from the white tile floor to five feet up on the wall. These tiles framed the room and served to provide color to the otherwise conspicuously white environment.

As children entered the multi-purpose room they could see a stage immediately to their left. The wooden floor of the stage was set three feet above the tile floor of the multi-purpose room and was hidden by red curtains which were normally pulled shut to hide the stored physical education equipment and the teachers office--a small metal desk and file cabinet located at one corner of the stage and surrounded by mats, hoops, paddles, balls, and other physical education equipment.

In front of the children, and across the tile floor along the length of the rectangular room, were a row of windows. The windows began at a height of four feet, rested on the brownish-yellow tiles, and extended nine feet toward the ceiling. The one foot by three foot windows lined the full length of the wall and opened inward producing the room's only source of light and fresh air. Under the windows, sitting on the floor

and stretching the entire length of the wall, were several long metal chair racks on wheels. The racks were filled with brown metal folding chairs. Looking out the windows, only 20 feet from the school, the children could see a number of beef cows and calves grazing in a field.

At the far right end of the room a large clock was centered between the corners of the room and over an open door. This was the entrance to the kitchen. The children could easily smell the unforgettable aromas of school lunch being prepared. The clang of pots and pans along with the voices of the kitchen staff would occasionally be heard as the children attempted to concentrate on their physical education tasks. In the right hand corner of that wall sat two large, six foot high, silver colored freezers, which held the weeks' supply of school lunch ingredients.

Along the length of wall to the children's immediate right were stored ten folding tables and a clutter of physical education equipment including two metal wheeled racks of playground balls which the teacher would roll down the hall and out of the building when the weather was nice enough to have physical education class outside. Two moveable basketball goals and two folding mats could also be found stored against the wall. There was no other place in the small building where the equipment could be stored.

The multi-purpose room included a white tiled floor which had been affixed with two inch wide green, white, blue and red tape lines. The tape lines divided the room into small sections which were used from time

to time by the physical education teacher for various activities.

The indoor space was not the only place where children would participate in physical education experiences. When the weather permitted children would begin class outside behind the school building. A 60 by 60 foot square blacktop area was located immediately outside the kindergarten classroom and was often used for physical education class. The space was bordered by a four foot high silver colored chain link fence. In the middle of the area a 15 foot diameter circle was painted in yellow on the grey, faded by the sun, pavement.

Beyond the blacktop area was the school's playground consisting of a number of wooden climbing structures as well as traditional metal slides and swings. Immediately beyond the playground was a quarter mile cinder track which enclosed a large grassy area. This shortly cut grassy area was frequently used during physical education class when kicking activities were part of the day's agenda.

Physical Education Teacher and Program

Mrs. Karen Brooks (pseudonym) was the physical education teacher at Blue Ridge Elementary School. Mrs. Brooks was experienced as an elementary physical education teacher having taught children in the gymnasium for over seven years--six at this school.

Mrs. Brooks petite five foot six inch athletic frame seemed to tower over the children whenever they sat, legs crossed, waiting for her to provide them with directions. She was thirty-four. On this day she wore

white knee length shorts, covered with a pink, lavender, and blue flower pattern. Her dark blue, long sleeved, sweat shirt fell loosely around her upper body and the sleeves were pulled up to her elbows as if ready to get down to business or to wash the dinner dishes. Her hair was brown with a hint of blond from the summer sun. It was full and fell unbound on her shoulders. Her hair required frequent adjustment and she was continuously flipping her head backward, as if she had a crick in her neck, in order to keep the hair out of her face, her hands habitually brushed her hair back off her shoulder. Her white tennis shoes were tied tightly over a pair of white ankle high socks. She was dressed to teach physical education and appeared at home in the gymnasium. Her comfortable dress, however, would have been out of place in any of the elementary classrooms just down the hall.

Mrs. Brooks voice was soft but stern. She could project it across the gymnasium or playground and no student would question who her words were directed towards. The students knew the voice of Mrs. Brooks. Hers was the voice of authority, it swayed children to listen to instruction and influenced them to remain on task. Her voice amplified an understanding to children--listen to Mrs. Brooks, she means business.

She attended a local regional university where she completed both her undergraduate and masters degrees. After she graduated she was asked by the same university to occasionally teach an activity course or elementary methods course to undergraduate majors.

Mrs. Brooks had developed a physical education program which reflected seven years of personal

struggle to create a program which she felt would benefit all of the over 250 children who she taught twice weekly in the small, rural, elementary school of Blue Ridge. In developing the kindergarten physical education curriculum Mrs. Brooks extracted information from a variety of different sources. Although Mrs. Brooks did not have a written curriculum constructed specifically for kindergarten children, she did have a plan if not written, certainly in her head, as she was very aware of what kinds of activities children were going to participate in at any time during the school year. This plan had been developed by taking what she considered the best ideas from several sources, including the State Standards of Learning, the county physical education curriculum, two textbooks--Dynamic Physical Education for Elementary School Children by Dauer & Pangrazi (1986) and Children Moving: A Reflective Approach to Teaching Physical Education by Graham, Holt/Hale, & Parker (1987), and her seven years teaching experience with kindergarten children. Mrs. Brooks' curriculum also included new games and activities that she would "bring back" after attending conferences and workshops which she was able to do at least one time each year.

A casual observer might have difficulty attempting to understand the goals of Mrs. Brooks' physical education program. It appears to be a hodgepodge of ideas from a variety of dissimilar sources. It is clear, however, to Mrs. Brooks. Her major goal is simply to "get the kids active" (FPET1. L340).

Daily Class Structure

Table 1 summarizes the class structure in which the children participated during each kindergarten physical education class and the approximate time planned for each group of activities. Children would typically come into the physical education environment and proceed to the center of the room and sit in a circle. Mrs Brooks would discuss the days' activities with them and then progress through the days' plan. Class was divided into stretching, locomotor, and manipulative activities. Each of these three areas could further be divided into specific types of activities. Each 30 minute lesson during the initial eight week observation period consistently followed the same structure. Stretching activities were typically completed first, followed by locomotor activities, and the class would conclude with a manipulative activity. From time to time the locomotor and stretching activities would be switched. At the end of each class children were asked to get in a line ready to walk back to the kindergarten classroom. At this time Mrs. Brooks would review with the children the focus of the day's lesson. Appendix B includes a list of the specific activities in which the children participated on a daily basis throughout the observation period.

Table 1. Kindergarten Physical Education Class Structure

<u>Activity</u>	<u>Time (minutes)</u>
Circle Time	1 - 3
Stretching	5 - 8
Locomotor	4 - 6
Manipulative	10 - 15
Review	1 - 2

Stretching Activities

Stretching activities were a consequential part of Mrs. Brooks' physical education program. Children participated in five to eight minutes of stretching every time they went to physical education class. Mrs. Brooks felt that by having the children participate in stretching activities she was meeting some of the requirements of the state imposed Standards of Learning.

In our Standards of Learning we are having to teach the children how to take care of their bodies and this is just the way I have chosen to do it. By taking them through stretching activities I'll get them moving and get their blood flowing and get their muscles warm (FPET2. L240-246).

The stretching activities consisted of four specific activities including arm stretches, leg stretches, crab walk and seal walk. These activities were repeated each time the children participated in physical education class.

Children would complete arm stretches by placing their right hand on the back of their head. With their left hand they would gently push upward on their right elbow. As children stretched their arms in this manner they would count in unison 1, 2, 3, . . . until they got to 15. The other arm would then be stretched.

There were three required leg stretching activities. First the children would sit on the floor with one leg stretched straight out in front of their bodies. The other leg would be bent and the bottom of the foot on that leg would touch the side of the knee

of the child's outstretched straight leg. This positioning allowed children to reach with their hands for the toes of the straight leg in order to stretch the muscles in that leg. The second stretch was just like the first only the position of the legs was reversed. The third stretch involved children, again while sitting on the floor, placing both their legs together and straight out in front of the body. Children then reached out with their hands to touch their toes. Mrs. Brooks always stressed to the children that they should not bend their knees during this exercise but to keep their legs flat on the floor. As with the arm stretches the children counted, in unison, to 15 before doing the next stretch.

The last two stretching activities were actually designed more to strengthen the children's arm and upper body muscles than they were to stretch muscles. None the less, the crab walk and seal walk were grouped with the arm and leg stretches and were always referred to as stretching activities. To do the crab walk the children began by sitting on their bottoms with both their feet flat on the floor and their legs bent at the knees. The children's hands were placed flat on the floor one to each side of their hips. To do the crab walk the children would raise their bottoms up, the front of their bodies facing the ceiling, and walk on their hands and feet around the room. To do the seal walk the children would lay on their stomach and lift their upper body up off the floor using their hands and arms. Children were to try to keep their hands in a position under their shoulders with their arms straight. As they moved the children would drag their

legs on the floor behind them.

Children's Experiences In Stretching

This section describes in detail the children's experiences in stretching activities. Individual children's experiences in stretching activities are summarized in Table 2.

Tabitha

Tabitha appeared to enjoy participating in all the different activities that made up physical education class. "I like everything in p.e. we get to do (IK1.L155-156)." The stretching activities were not the exception. She did, however, express the feeling that the prescribed stretching exercises were always the same, implying that she might also enjoy some different stretching activities. "We might do the same thing. We always have to do the same exercises (IK5.L120-121)." This is not to suggest that she did not enthusiastically participate in all the teacher prescribed stretching activities, simply that she might prefer more diversity in the exercises.

It took Tabitha only one or two class periods to learn how to accurately perform the arm and leg stretching activities. After initially learning these exercises Tabitha always performed them properly and without hesitation. It could be said that she was one of the few children in the class who understood how the exercises were to be done and then actually did them correctly.

Arm stretches were performed as they had been in the past with Charlie and Brett doing only part of

Table 2. Children's Experiences In Stretching Activities

Tabitha

Enthusiastic participant throughout
 Learned quickly
 Performed "flawlessly"
 Reported not enjoying repetition
 Nature of activity provided time to be social

Brett

Initially did not participate, sat and watched
 Articulated that he did not enjoy stretching
 When forced to participate rebelled by doing activities incorrectly
 Appeared to enjoy the seal walk
 After 8 weeks participated correctly but still reported he did not enjoy stretching activities

Holly

Initially slow to participate
 Spent much time observing
 Some difficulty in performing activities correctly because of her weight
 Reluctant participant, however, always attempted what teacher asked

Charlie

Disliked activity, spent time sitting and watching
 Rebelled by doing incorrectly
 When pushed by teacher simply refused to participate
 Changed behavior over time--did activities correctly after 8 weeks

the routine and Tabitha doing her part flawlessly (T7K.FK11.L106-109).

In addition to knowing how to correctly do the stretching activities Tabitha quickly learned the stretching routine anticipating which exercise was to be practiced in which order. Having acquired this knowledge Tabitha was always in a position to begin the next activity. As soon as one stretching exercise was completed she would have her body in position, waiting on her classmates to catch up, to begin the next stretch.

At the end of the arm stretches, Tabitha is the first child down to the pavement with her legs and arms in the correct position for leg stretch activities (T9N.FK14.L118-121).

Tabitha enthusiastically participated in the stretching exercises, doing each stretch as it had been prescribed. Her overall movement, however, was not unlike what was observed as she participated in locomotor activities--constant motion. Although stretching activities required Tabitha to remain in one spot, her movement more dormant than active, she was still in constant motion. Her constant fidgeting, squirming, and wiggling during these activities had it's own cadence which often times resembled a baby chicken trying to peck it's way out of the hard shell of an egg. It was as if the stretching activities did not provide enough movement for Tabitha and she was attempting to expand the exercises to create more activity for herself. Whenever she was not specifically performing a stretch prescribed by the teacher she could be observed keeping beat with some

internal rhythmical cadence, unheard by her classmates of the teacher. This is not to say that Tabitha was off task or misbehaving in any way, she was not. Tabitha's body simply appeared to be in a fantasy world, controlled by some unknown rhythmical force within her.

Tabitha is in constant motion. Even when she is to be still, as in doing the arm stretching routine, some part of her body is twisting, turning or jiggling. This morning it is her feet that are in constant motion. Her arms are on her head doing the arm stretches but her feet are moving up and down to some rhythm on one else can hear (T90.FK15.L69-76).

Tabitha appeared to especially enjoy the crab and seal walk tasks. Although the seal walk was difficult for many of her classmates to perform Tabitha had the ability to easily move like a seal.

Tabitha has the best seal walk in the class. Her hands are directly below her shoulders as she pulls her straightened body with her long outstretched arms across the room (T6H.FK8.L137-140).

The crab walk provided more of a challenge for Tabitha than did the seal walk. Her movement sometimes appeared awkward as her long arms and legs made it more difficult for her to move as quickly as her classmates. When Tabitha did the crab walk she would move quickly but only for short periods of time. As she raised her body off the ground Tabitha could easily be picked out of the crowd, her long arms and legs assisting her in towering over her classmates.

When Tabitha does the crab walk she leads with her feet. This appears to be her way of moving so she can see where she is going. She moves quickly although she appears awkward, her long arms and legs making it more difficult for her to move (T7K.FK11.L136-141).

Tabitha appeared to enjoy practicing the crab and seal walk not only because it was fun to move like crabs and seals but also because it was a time when she could talk and play with her classmates. As children freely moved as crabs or seals throughout the movement space they, almost spontaneously, began to socialize with their classmates.

Tabitha took off as usual leading with her feet and moving quickly to find a classmate to move with, talking to her friend as she moved (T90.FK15.L96-99).

Tabitha moves in a group of two other girls. They move across the center of the room using the seal walk, their heads perched up above their shoulders. They move together giggling and laughing without speaking a word (T7L.FK12.L93-97)

Brett

It was obvious from the first day of class that Brett did not enjoy participating in the stretching segment of physical education class, particularly the arm and leg stretches. He initially declined to participate remarking that the activities were "boring stuff" (FK4.L15). The stretching activities did not appear to provide Brett the potential for movement that he required for lengthy intervals of participation.

While most of the other children were participating in stretching activities Brett spent his time sitting, observing his peers.

Brett is the only child in the room who is not participating, he sits on his carpet with his legs crossed and his elbows resting in his lap (T4F.F6.L148-151).

Brett sits, apparently uninterested, while the rest of the class stretch both their legs out in front of their bodies. He leans back, resting his body on his hands which have been placed on the ground behind him(T6I.FK9.L186-190).

Brett's initial refusal to participate in stretching activities infuriated the physical education teacher who was determined that Brett would take part in the exercises with his classmates.

Children now stretch both legs out, extend their arms forward, and again begin their count to 15. Brett is off-task again sitting with his legs crossed watching his classmates as they count. Mrs. Brooks speaks to him again asking him "What's wrong?" "I just want to sit and watch today" is his reply, "you are not here to sit and watch, you are here to play!" is the teacher's reply (T6G.FK7.L148-156)

The more Mrs. Brooks insisted that Brett do the activities, however, the more he tried to get out of doing them.

After the first count of 15 during the arm stretches, Brett told the teacher he was cold and needed to go in to get his jacket. He then proceeded into the building to get his coat. The

arm stretch activity was over by the time he came back to the circle and sat with the other children to do the leg stretches. He did not stretch, however, as he spent the rest of the stretching time playing with the zipper on his jacket, attempting to zip up his coat. Brett had zipped his coat hundreds of times before. When going to the playground he is usually the first one in line with his coat on ready to go play. His playing with his zipper on this morning was an obvious ploy not to have to do the stretching activities (T90.FK15.L27-47).

When Brett was observed doing the stretching activities he did them incorrectly. This is not to suggest that he did not know how to do the exercises. Doing the stretches incorrectly appeared to be his way of rebelling against the activity.

By the time the children had gotten to the activity where both legs are stretched in front of them, Brett could be observed bending his legs up into the air while holding his toes with his hands. He knows that this is the incorrect way of doing the activity, he has been corrected by Mrs. Brooks on several occasions. He appears to do it incorrectly to see if he can get a reaction from Mrs. Brooks (T7L.FK12.L68-80).

Slowly, but surely, however, as the eight week observation period drew to an end Brett began participating in the stretching activities. Unlike his attitude on non-participation during initial classes, Brett could be observed at least partially participating.

Brett did the first count to 15 of the arm stretch activity without a hitch. The entire class is beginning to resemble robots mechanically performing the stretching activities. Brett sits quietly while the rest of the class stretches the second arm, joining them only after they reach a count of seven (T7L.FK12.L45-52).

Brett's lack of participation in the arm and leg stretching activities did not keep him from enthusiastically participating when asked to do the seal walk.

Brett selects the seal walk when children are given the choice to do the crab or seal. He quickly scurries across the tile floor pairing up with a classmate as he moves (T7L.FK12.L86-89).

Brett would change from doing the crab walk, which appeared too difficult for him, to doing the seal walk whenever the teacher was not watching. This switch always drew the teachers attention toward Brett.

Mrs. Brooks yells at Brett who is not being a seal. Brett says he wants to be a seal and then Mrs. Brooks tells him he cannot always do what he wants to do. Brett turns over and transforms from a seal to a crab (T6G.F7.L184-189).

When forced to do the crab walk activity Brett usually rebelled by doing the movement incorrectly or by changing the activity to be more play-like.

Brett briefly crab walks with his bottom off the ground before he returns to his pattern of the past, scooting his bottom on the ground (T7K.FK11.L149-152).

When the crab walk began Brett did his walk to the left around the circle. He only took a few steps before he turned his body over and spent much of the remainder of the time on this activity on his hands and knees pretending to be a dog (T9N.FK14.L138-143).

The seal walk activity provided Brett with the opportunity to freely move in the physical education environment. Arm and leg stretches and the crab walk did not.

Charlie

It was obvious from the first day of class that Charlie did not enjoy participation in the stretching segment of physical education class. He spent much of the time designated for stretching simply sitting and observing what his classmates were doing.

During this time Charlie sits in one corner of the gym, legs crossed and hands resting in his lap, apparently not interested in doing the activity (T4E.Fk5.L160-166).

Charlie is asked by Mrs. Brooks why he is not participating. His response is "I don't like to do it." Mrs. Brooks response is that she is sorry "but this is what we are doing, we have to stretch our legs out so we don't hurt them." Charlie, half-hearted, stretches his legs out for the next count, his knees are bent. He does not count with the group, simply sits and stares (T6I.FK9,L173-182).

Charlie not only did not enjoy doing the arm and leg stretching activities he rebelled against doing them by

doing them incorrectly.

Charlie did the leg stretch routine with his legs bent, not straight as prescribed. He has been seen doing the routine properly before, he does it incorrectly as if saying to the teacher "I will do it my way or not at all." His emotionless face suggests his less than happy feelings about this activity (T7K. FK11.L115-121).

Charlie participated in the crab and seal walk activities in much the same way as he did arm and leg stretches, uninspired, never truly taking part.

Charlie places little effort into the task occasionally lifting himself up off the ground and moving a few feet before lowering himself and sitting to watch his classmates (T6I.FK9.L214-217).

Charlie, kneeling and sitting back on his heels, watches his classmates crab walk today. He makes no attempt to do the crab walk playing with the small gravel he has found next to his carpet square (T7J.FK10.L82-86).

Although Charlie did not like stretching, "I don't like to put my hand over my head and do that exercise," and would do what ever he could think of to get out of stretching tasks, a remarkable transformation took place toward the end of the eight week observation period. Not only did charlie participate in the activities, he appeared to do them with enthusiasm.

Charlie, chilled from the cool morning air, now sits, ready to do the leg stretch activities, with his grey cotton hood from his jacket pulled over his head. He is dressed more for a below freezing

walk in the snow than for p.e. class. He is smiling and appears happy, though, as he stretches his hands toward his feet, and joins in the count to 15 (T7J.FK10.L53-61).

Charlie was unusually enthusiastic today during the stretching activities as his small voice could be heard above the other children as they counted out their numbers to 15 (T9N.FK14.L108-111).

This remarkable transformation, to participation in stretching exercises, can only be described as a developed tolerance of the fact that he was expected to participate. Charlie's attitude about doing the activities did not appear to change,

Holly

In the beginning weeks of physical education class Holly was slow to understand and participate fully in the stretching routine. She spent much of her time observing the other children in class.

As the children stretch their arms back to begin the stretching activity, Holly still wanders around the room looking for the perfect open space in which to sit. When she finds a space in the far right corner she looks around at her classmates but by this time the children are finishing their arm stretch count to 15 (T6G.FK7.L108-114).

When Holly did attempt to do the activities she had some initial difficulty understanding how to correctly execute the stretches.

Holly places both hands on the back of her head as if yawning (T4D.FK4.L98-99).

Holly stands with one arm behind her head and the other arm laying on her forehead. It is unclear as to exactly what she could be stretching (T6I.FK9.L143-146)

However, after eight weeks of taking part in stretching exercises Holly had learned how to perform the simple repetitive activities and appeared to enjoy the accomplishment of participation.

Holly, although she had some problems in the beginning, now, after eight weeks, knows the stretching routine. She places her legs and arms in the appropriate positions and is observed participating to her fullest (T90.FK15.L83-87).

After learning how to do the arm stretching activities Holly had little difficulty in performing them along with her classmates. The leg stretches took her a little longer to conquer but she eventually was able to also do them correctly. Because of her size holly had initial difficulty first in being able to sit with her legs stretched out in front of her body and second in being able to bend forward to touch her feet with her hands (T4D.FK4.L124-126). Although it took her a few weeks to determine how to perform the leg stretching activities when she did figure it out she appeared to enjoy the tasks.

Holly appears to be really into stretching her legs, she is bent as far forward as she can go, and is smiling as she counts (T6I.FK9.L183-185).

Holly's eventual participation and accomplishment of the arm and leg stretching activities was not to be repeated for the crab and seal walks. Although she attempted both tasks her weight and lack of strength

kept her from being successful. When doing the crab walk Holly would raise her body up off the floor, but when she began to move, little happened.

The children finished their stretching activities with the usual crab walk. Holly remained in her original spot raising herself off the ground, ready to take off, but only moving inches (T90.FK15.L92-96)

The seal walk was even more difficult for holly than was the crab walk. In fact, she really only attempted to do the seal walk during one early class meeting. While other children would be doing the seal walk Holly would turn over into the crab walk position and hold herself up off the floor or she would move around the room on her hands and knees pretending to be a seal but walking like a dog (T4E.FK3.L174-180.

Holly appeared to enjoy participating in the leg and arm stretching activities especially after she understood how to perform the tasks. These exercises were easy and allowed Holly the ability to accomplish a simple task and feel good about her performance. The crab and seal walk activities, however, seemed to frustrate her. During those activities Holly was forced, by her excessive weight, to spend most of her time stuck in one place as her peers were cheerfully moving unrestricted around her.

Locomotor Activities

Locomotor activities in Mrs. Brooks' kindergarten curriculum included marching, walking, running (jogging), galloping, and skipping. Children participated in these activities for a short period of

time (four to six minutes each class) to simply "get their blood flowing and muscles warmed up" (FPET2.L244-246). This was not intended by Mrs. Brooks to be an instructional time. Instructions on how to skip and gallop were not provided. It was apparently assumed that children either already knew how to gallop and skip or that they would pick up the skills by observing the other children. To get the children moving Mrs. Brooks would ask children to, for example, gallop. When she said "go" the children would take off galloping throughout the movement space until Mrs. Brooks asked them to "stop", at which time another locomotor challenge was provided and the children again took off moving.

Children practiced locomotor tasks in two very different ways. On some days children practiced locomotor skills, directed by Mrs. Brooks, by moving independently about the movement space.

Tabitha and Brett move freely throughout the space provided...They gallop darting in and out between classmates...(T6I.F9.L110-116).

On other days children practiced locomotor tasks while participating in a variety of tag games with simple rules and guidelines imposed by the teacher. Although Mrs. Brooks' main purpose for these tag games was to practice locomotor skills, children got very little locomotor skill practice as they typically spent most of their time involved with darting away from the taggers.

Mrs. Brooks asks the children to gallop in an attempt to get away from the taggers. The go signal is given and the children begin galloping

throughout the room. However, when the taggers are given the go signal the children break from their gallop into a run in an attempt to quickly move away from the taggers (T2C.FK3.L464-473).

Children's Experiences In Locomotor Activities

This section describes in detail the children's experiences in locomotor activities. Children's experiences in locomotor activities are summarized in Table 3.

Tabitha

Tabitha appeared to really enjoy her participation in locomotor activities and could be seen bolting quickly and enthusiastically into movement whenever Mrs. Brooks asked the class to perform a particular locomotor skill.

Tabitha moved quickly as she bolted from inside the building onto the paved movement space directly outside the kindergarten classroom and began galloping, leading with her left foot (T7J.FK10.L18-25)

She would smile and laugh as she ran, galloped, or skipped throughout the movement space (T7K.FK11.L65-71). Although skipping was not a skill that was stressed or even taught by Mrs. Brooks, Tabitha knew how to skip and could frequently be seen switching from skipping to running to galloping and then back to skipping depending on her personal preference at the time.

Table 3. Children's Experiences In Locomotor Activities

Tabitha
Enthusiastic, said she enjoyed participation
Could perform all locomotor activities correctly
Possessed a mature running pattern, arms swing in opposition
Mature, fluid galloping pattern
Sometimes off balance when performing, most likely due to her being taller than the other children and her skills in some areas had not caught up with her quick growth
Moved independently of others
Brett
Enthusiastically participated
Typically first child to begin moving, impatient to begin movement
Mature galloping and running patterns
Drifts from being on task to appearing as if in a fantasy world (play) off task to teachers requests
Highly skilled, reported to enjoy locomotor activities
Moved independently of others
Holly
Last child to begin moving
Always observes others before moving
Reported that she enjoyed participation after initial period of getting to know how to perform locomotor skills
Movement patterns inconsistent from one day to the next, switches lead foot when galloping, cannot skip
Focuses eyes on feet of other children
Typically only moves a few steps at a time before stopping
Appeared to enjoy jogging in place the most
Charlie
Half-hearted approach to doing activities
Frequently loose balance when moving, sometimes falling when changing directions
Typically moved alone, slowly, hands in pockets
Switched lead foot when galloping, cannot skip
Reported enjoying locomotor activities but showed inconsistent participation over 8 week period (i.e., would participate during one class and not during another)

Tabitha also exhibited a mature running pattern as she ran throughout the movement environment. Her arms would swing in opposition to her legs and her fluid motion more resembled that of a high school track star than that of a five year old. She appeared to enjoy running fast as she was seldom seen not running at full speed.

Tabitha jogged full speed counter clockwise around the outside of the circle. Her arms pumping in opposition as she darted in and out through the empty spaces left by her classmates. She was smiling and laughing... (T7K.KF11.L65-71).

Tabitha also appeared to have developed a mature and fluid galloping pattern. Many of her less skilled classmates would struggle with which foot to lead with when they galloped. Tabitha was always seen leading with her left foot and traveling smoothly at medium to maximum speed.

Tabitha's gallop appears mature, she gallops, leading with the left foot, without any hesitation. Her movement is fluid... (T4D.FK4.L43-49).

Although Tabitha did appear to have developed mature running, skipping, and galloping patterns it should be noted that she was sometimes seen losing her balance when she moved. This happened only occasionally, but did occur. Her momentary loss of balance seemed more obvious during manipulative activities than it did during locomotor activities and can most likely be attributed to the fact that she was tall for her age. Her physical skill and her physical growth appearing to not have matured at the same pace.

During locomotor activities Tabitha certainly attempted to move independently throughout the environment without being shadowed by one or more of her admiring classmates. This was not always possible as she was sometimes joined by classmates who would enlist her in playful movement. She so much enjoyed playing with her friends that it was difficult for her to move on her own when a classmate wanted to play.

Tabitha gallops on the line and is followed by one of her female classmates who is pulling on her blond pony tail. The two girls are laughing and this seems to be a game that they have just made up and are having fun with. It is though Tabitha is really a horse galloping through the woods, her classmate holding tight to the reins (T4E.FK5.L64-71).

Brett

Brett's participation in locomotor activities was enthusiastic and spirited. Whenever asked to participate in a locomotor activity Brett would be one of the first children to begin moving and one of the last children to stop. He always participated, smiling, apparently happy to be moving. Brett has developed mature movement patterns in both galloping and running (T6I.FK9.L110-116;T9N.FK14.L83-87). His actions appear natural--not needing to think about how to execute these locomotor movements.

Brett's locomotor movement is quick and normally independent of others (T7M.FK13.L69-71). It sometimes appears that his classmates are standing still as his accelerated speed propels him, like a balloon losing

it's air, throughout the movement environment. His tendency to rush, however, does occasionally move him into the path of a classmate resulting in minor confrontations.

Brett moves backward at a fast pace. From time to time he steps backward onto the toes of the classmate behind him. This movement is greeted with a light push by his classmate (T6G.FK7.L42-46).

Although Brett was a full participant in, and appeared to enjoy assigned locomotor activities, he does have a tendency to let his enthusiasm take him away into a land of make believe uncluttered by adult assigned tasks. Just as Alice suddenly finds herself in the fantasy world of Wonderland, Brett sometimes drifts from the teacher's communicated task to another location in a make believe world. His movement is frequently seen to change from an on-task jog or gallop around the outside of the circle painted on the paved movement area, to off-task moving which might be analogous to a barking dog, a clucking chicken, or some other barnyard or prehistoric creature--sound effects included.

Brett and a few of his male classmates took the jogging activity as a time to be creative and play. Instead of jogging the boys galloped in general space acting like chickens with their hands placed under their arm pits and their arms flapping like the wings of chickens. Their chicken like sounds could be heard above the noise of the other children (T7K.FK11.L72-89).

Brett's behavior while participating in locomotor activities, except during his occasional visits to fantasy land, was typically appropriate for the kindergarten physical education classroom. But, Brett appeared to love to move and had little patience for sitting with his legs crossed in his self space, waiting for his physical education teacher to provide the necessary instructions. During these delays in his ability to move he entertained himself by swinging his arms back and forth, walking like a seal, or leading his similarly restless and rebellious classmates in inappropriate adventures. These adventures usually resulted in condemnation and criticism from Mrs. Brooks, or, depending on her mood, being placed in time-out(T6G.FK7.L76-89).

Charlie

Charlie's participation in locomotor activities was originally half-hearted. By the end of the first eight weeks of school little change could be detected in his original attitude.

Charlie could frequently be seen losing his balance and falling when changing directions as he galloped or ran during locomotor activities. As he walked in line through the school hallways, to and from his classroom, he could also be seen losing his balance and grabbing for the arm of a classmate to keep from falling. When walking, galloping, or jogging, he usually moved alone, slowly, with his hands in his pockets.

Charlie moved throughout the space using a half jog and half gallop step. A difficult movement to

describe, though it was to his liking as he smiled and moved on the outside of general space by himself, hands stuck deep in his pockets (T7K.FK11.L90-95).

Because Charlie did not enthusiastically participate in locomotor activities it was initially difficult to determine his locomotor skill proficiency. When galloping Charlie frequently would switch back and forth from leading with his left foot to leading with his right (T6H.FK8.L53-54). In addition to his switching his lead foot, Charlie demonstrated a precontrol gallop pattern, sometimes looking like a gallop but other times looking like a slow run or a trot (T6I.FK9.L104-107).

Charlie was never seen skipping during the locomotor activity time. Mrs. Brooks asked the children to skip, but the skill was never demonstrated. It is difficult, therefore, to determine Charlie's skill in skipping.

Charlie's movement during locomotor activities showed little improvement during the eight weeks of observation. Although children practiced some type of locomotor activity at the beginning of each class there was seldom any formal instruction that would assist Charlie in improvement of his skills. Charlie demonstrated a mixed attitude toward these activities. One class he would be smiling and move quickly throughout the physical education environment, the next class period he would select to sit, legs crossed, elbows on his knees, chin resting in his hands, watching his classmates move swiftly as they passed him by

(T6I.FK9.L104-109).

Holly

Holly's face showed signs of confusion as she participated in locomotor activities. Whenever asked to participate in a locomotor activity, such as galloping or jogging, Holly would be the last child to begin moving. During initial physical education classes Holly would stand and observe her classmates for several minutes before she began to move. As others around her heard the teacher's task and began to move Holly would stand motionless watching her classmates as if she did not understand the task.

Holly stands to the side of the room. Her eyes follow the other children. She sways from side to side, first lifting one foot and then the other as if to take off moving across the room but her little engine never gets started (T2B.FK2.L447-454).

Holly appears to be a visual learner. By observing the other children she would eventually perform the locomotor skills of jogging and galloping. Her initial confusion and reluctance to perform rudimentary locomotor movements would slowly, over a period of eight weeks, be replaced with an enthusiasm to participate. This was true even though her movement was haphazard and inconsistent--her movement on one day might look completely different from her movement on the next. When galloping she focused her eyes on the feet of other children to better help her understand what she was supposed to do.

Holly stands, looking puzzled, her arms hang at her side, and her eyes stare back at the next child behind her as if to say "tell me what I should do next" (T4K.FK6.L41-44).

Holly seldom moved more than a few feet before stopping to observe others and frequently switched back and forth from leading with the left foot to leading with the right.

Holly can be seen galloping today. This is the first time she has shown more than one or two galloping steps in a row. She faces forward and leads with her left foot making it around 1/4 of the room before she stops (T4E.FK5.L31-36).

When asked to jog or run during physical education class Holly moved slowly through the environment. It sometimes appeared that Holly was in slow motion as her classmates moved around her. As classmates whizzed closely by her she would stop, her arms held in front of her body as if blocking off an intruder. She would begin moving again only after she checked in all directions and her selected pathway was clear. When Holly ran her arms hung straight at her sides, legs and arms seldom moving in opposition as required for a mature running pattern. Of all the locomotor activities Holly participated in she appeared to enjoy jogging in place the most.

Her feet moved at a brisk pace up and down, they rarely touched down in exactly the same spot. The smile on her face indicated that she was enjoying the activity (T9N.FK14.L91-96).

Holly was never seen skipping. The coordination of putting several step-hop movements together in a

skipping pattern was too advanced for her inexperienced and immature movement proficiency. While other children were practicing skipping Holly would be seen either standing in one place watching her peers or taking a few galloping steps.

Manipulative Activities

At the completion of the locomotor and stretching activities Mrs. Brooks would typically stop the children and ask them to move toward her and to sit down in front of her in a group so that she could describe the next venture. There was no set area for these brief group rendezvous, it simply depended on where Mrs. Brooks happened to be standing at the time. Manipulative activities, during the children's initial eight week physical education experience, consisted of kicking, throwing, and catching. There were three ways in which children practiced these manipulative skills. Initially children practiced all manipulative or ball handling tasks individually, each having their own ball to kick, throw, or catch. After practicing teacher designed tasks as individuals, children were asked to work with a partner. There were a few classes where children worked as individuals during an entire class period but those were the exception. During most classes children would practice as individuals for about half of the scheduled manipulative time and with a partner for the remainder of the period. The third way that children practiced manipulative skills was in stations divided by the teacher into small groups of three or four children. A station was an area set up by the teacher to assist children in practicing a

skill. Most of the stations involved either throwing or kicking at a target. On a day when stations were to be used children would first complete their locomotor and stretching activities and then be asked to practice a manipulative task at a station. Mrs. Brooks would ask children to "rotate" and move to another station every two to three minutes. Ordinarily there were six stations for children to rotate to and children usually got to participate at each station during the approximately 12-18 minutes allowed for manipulative activities.

Children's Experiences in Manipulative Activities

Tables 4, 5, 6, and 7 summarize the children's experiences during the manipulative activities. One table is included as a part of the description of each child's manipulative experiences. All children reported enjoying their participation in each of the physical education activities which involved manipulation of a ball. Tabitha reported that the most fun in physical education class was "using balls and stuff like that" (FIK1.L75-76). Brett reported his favorite activity to be "kick, kick, kick, kick" (FIK4.L124), while Charlie described his first choice to be to "throw the balls at nets" (FIK4.L131). Holly summarized that the kinds of things she liked to do in physical education class involved "when you get balls" (FKI5.L69).

Tabitha

Tabitha appeared to enjoy all the manipulative activities even though they were more difficult for her

to do than locomotor and stretching activities. She was more skilled at kicking than throwing or catching. Tabitha was enthusiastic about kicking, especially outside where the children had a large grassy field in which to kick (T6I.FK9.L246-252). She could be observed kicking with her left foot and her right foot but usually favored her right. Tabitha was seldomly seen kicking the ball lightly. She seemed to enjoy kicking the ball hard and watching it fly through the air, land on the ground, and roll, coming to a resting spot several yards away.

Tabitha and her classmates kicked their balls five times and Tabitha's ball went the farthest out into the field. She kicked one time with her left foot and then switching to her right foot runs several steps before contacting the ball with her toe. Her ball travels from 8 to 12 of her running strides each time she kicks (T6I.FK9.L297-302).

Although Tabitha appeared to enjoy kicking and participated fully in all kicking activities this was not to say that she was competent at kicking. She could, however, kick better than many of her classmates. Kicking was not necessarily easy for her. Tabitha had to intensely concentrate on making contact with the ball especially when running to kick. She typically got too close to the ball when kicking contacting the ball with her body directly over it as opposed to being behind or to the side of the ball when making contact (T6I.FK9.L306-310). From time to time Tabitha could be seen attempting to kick a ball and would lose her balance, falling to the ground. Tabitha was never seen crying, however. When she would fall

she simply got up, brushed herself off, found her ball, and resumed kicking.

Tabitha takes a running kick and places her foot on top of the ball. As she steps on it she loses her balance, falling flat on her back. It was a hard fall to the ground. A fall that would send some children, holding their backs and running, crying all the way to the teacher for sympathy. Tabitha simply stood up, brushed her bottom off, and went on kicking the ball. She was smiling as if to say "that wasn't so bad, i'm not hurt" (T6I.FK9.L311-321).

Catching and throwing were completely different experiences for Tabitha than was kicking. She was not as successful at those two skills, particularly at catching. Tabitha certainly could toss a ball straight into the air and typically had her arms in the proper position to catch, but when the ball came back to her hands she appeared to have difficulty squeezing her hands around the ball to catch it. Part of the difficulty seemed to be in coordinating her long arms and fingers to catch the ball. Another concern was that it did not appear that Tabitha was tracking the ball with her eyes. She did not watch where the ball was going and thus could not move her hands or scoop under the ball quickly enough to make a successful catch.

Tabitha, holding the scoop in her fight hand, was again seen missing more balls than she caught. Her problem was not that she could not throw the ball straight into the air, she could. Her problem was that she did not watch the ball travel

through the air, however, and thus was not able to move her jug under the scoop in order to catch (T7K.FK11.L221-228).

Tabitha usually throws her ball straight into the air, but her scoop moves slowly as she attempts to place it under the ball. Out of five attempts the ball only touches the scoop one time and did not result in a catch (T7L.FK12.L127-131).

Even though Tabitha was not always successful at the teacher prescribed catching tasks, she was successful at the catching tasks which she created. If the teacher prescribed task was too difficult Tabitha simply changed the task making it easier for her to be successful.

Instead of tossing the ball high in an attempt to catch it Tabitha's ball barely leaves her hands before it returns to be caught, her arms outstretched in front of her body (T7J.FK10.L179-181).

Tabitha's attempts to be successful also carried over to activities that involved throwing. Tabitha participated in several physical education classes in which teacher constructed targets were placed around the physical education classroom. Children would throw balls or beanbags at these targets in an attempt to strike them. Tabitha always placed herself at a distance close enough to successfully strike the target.

Tabitha, although she saw the boys move their restraining line farther away from the target, remained throwing from her spot less than three feet from the hoop (T90.FK15.L180-182).

Tabitha now with a male classmate, stood only two feet from the tic tac toe target. She would gently toss her beanbags toward the target and then quickly jump down to her knees to retrieve the beanbags and to throw again (T90.FK15.L212-217).

Tabitha and her partner rolled the ball gently toward the pins. They seldom got more than three feet from the target (T90.FK15.L258-262).

Tabitha always participated in throwing activities in such a way that she was successful at striking the targets. Her ability to demonstrate age level throwing patterns, however, was difficult to assess. Her desire to be successful at striking the targets superceded the teachers desire for her to practice appropriate throwing patterns while participating in teacher designed tasks. Tabitha did not appear to care how she threw the ball as long as it hit the target.

This same attitude could be demonstrated by Tabitha when she participated in throwing and catching activities with a partner. If the activity was too difficult she would change it so that she and her partner could be successful.

The task being too difficult for Tabitha and her partner they both sat down and completed the remainder of the class tossing the ball back and forth while sitting three feet from each other. At one time Tabitha did get on her knees as her partner, now standing, tossed the ball to her. Rolling the ball back and forth to each other was also a preferred activity (T7M.FK13.L153-161).

Table 4. Tabitha's Experiences in Manipulative Activities

Reported enjoying manipulative activities

Kicking

Favorite activity

Consistently kicked with her right foot

Not easy for her

Had to intensely concentrate

Frequently too close to ball when kicking

Sometimes would lose balance when kick

Throwing

Always changed teacher designed task to be successful

Always moved restraining line to be very close to target (less than 3 feet) even though she could hit target from a farther distance

Hard to determine skill in throwing because frequently used time to socialize with classmates

Catching

Some difficulty tracking the ball

Body typically in proper position but seldom successful with catching tasks

When successful using teacher task she remained on task, if not successful she would create her own task

When not attempting to catch could be observed talking with classmates

In all manipulative activities reported that she would rather work alone than with a partner

Always altered teacher designed partner activities to be more successful

Brett

Brett appears to enjoy participation in activities which involve the manipulation of a ball. Kicking seems to be preferred over throwing and catching and is the manipulative skill with which he is the most successful. His above average skill level is obvious as he kicks his ball during class. He seldom needs to chase a ball that has gotten away from him, he typically has his ball under control. Brett usually kicks with his right foot, firmly planting his left foot beside the ball before kicking (T6I.F9.L251-259).

Children are informed that they can kick their ball harder this time. Brett needs no one to tell him more than once as he begins moving quickly throughout the room. He does not let the ball get away from him. Other children can be seen moving quickly also. As they do and their ball begins to move away from them, many children can be seen bending over to grab their ball with their hands so it will not roll away, but not Brett who is able to maintain control using only his feet (T4E.F5.L331-325).

Brett skillfully kicks his ball moving throughout the room and around his classmates. He switches from one foot to the other on each kick (T4E.F5.L356-359).

Brett moves quickly around the room darting in and out between carpet squares and classmates. Each time his ball is kicked it travels four to six feet before he catches up to it, ready to kick it again (T4F.F6.L387-389).

Although not as skilled at throwing and catching movements, Brett still can be said to be above average in these areas. He appears to enjoy a difficult challenge and will frequently change the teacher's task when it is too easy for him. When throwing at a target Brett has been observed to move back away from the target in order to challenge himself. He normally will stick with a self-imposed difficult challenge even though he may not be successful at hitting the target or catching the ball.

Brett had now moved his spot some 20 feet from the target. Throwing overhanded his throws missed the target. This did not keep him from trying again (T90.F15.L189-195).

Brett could be seen off to the side of the other children, playing by himself, tossing the ball into the air and attempting to catch it in his plastic milk jug. He would catch about one out of every three tosses. This low success rate was enough, however, to keep him on task (T7K.F11.L229-234).

As he did during locomotor activities, Brett also involves himself to the fullest in any activity involving manipulation of a ball. He is always anxious to get started with these activities doing whatever he can to get his equipment and get started as soon as possible.

Brett leads the pack of children who run toward the balls (T6I.F9.L231-232).

As the children with the red shoes go to get their ball Brett also goes after his ball. Brett does not have red on his shoes but goes anyway. This

is not discovered by the teacher (T4F.F6.L230-234).

Brett repeatedly demonstrated an impatient attitude toward getting his equipment and beginning to play. As stated earlier he appears to be a "now" child, selecting to move rather than sit. Because of this behavior, over the course of the observation period, his physical education teacher began to keep a close eye on him, scolding him for not listening and making him wait his turn to get equipment or make him return his equipment and then to retrieve it at a slower pace.

Other colors are called--pink, white and finally black. As children carry their balls back to their carpets they place them between their feet and stand patiently. Except for Brett who is caught bouncing his ball back to his carpet. He is not sent back to start again as he had been during the class before. Karen simply decides it is best to tell him to stop and let him go on his way (T4f.F6.L235-243).

The second time Brett is not so lucky. As the children near the completion of getting their balls, Brett is found standing on his carpet dribbling his ball with his hands. Karen, immediately upon discovery of this breaking of protocol, asks him to place his ball back into the hoop. Brett walks his ball back to the hoop, places it in, picks it up, and walks with it back to his carpet. When he gets to his carpet he places the ball between his feet (T4F.F6.L244-254).

As the observation period proceeded, Brett's small indiscretions, related to his impatience to begin moving, grew to the point that his physical education teacher assigned him to spend lengthy periods of time in time-out. The teachers' reasons for Brett being placed in time-out ranged from not listening to instructions to not doing what he was suppose to do. Brett did not like time-out and rarely sat quietly. He would squirm around on his bottom attempting to be in a different spot each time the teacher looked his way.

During Mrs. Brooks' instruction to the class on how to use the jugs and balls Brett was still playing with the maple seeds. Mrs. Brooks walks over to him and taking him by the arm, leads him to the steps where he is told he is in time out for not listening. Brett hid behind the ball rack sitting next to the steps as if embarrassed for his classmates to see him. As the other children got their scoops and began to throw and catch he began to yell to the teacher. "Can I play, can I play." His voice was not loud at first but as time went on he got to the place where he was almost yelling at her. She ignored him as long as she felt she could before she told him that he could not play yet, he had "five more minutes" (T7K.F11.L153-158).

When Brett was in time-out he rarely sat quietly. As if to remind the physical education teacher that he was waiting to be reinstated into class he would find some type of noise to make.

The task of catching a different levels took about four minutes to explain. During this time Brett

sat in time-out and made racing car noises with his voice (T7M.F13.L149-152).

Brett's behavior during manipulative activities reflected his apparent need to be active and to have the activity reflect his interests. When participating in activities that did not keep his interest he was frequently observed to be off-task according to the teacher. These off-task occurrences did not necessarily mean that Brett was causing a disturbance, he simply was not working on the task assigned by the teacher. Brett, without hesitation will change a task given to him by the teacher if it is not to his liking. He seems creative, and experiments with different uses for the equipment being used. This is true especially if he feels the assigned task is too easy, difficult, or it has become boring.

Brett, having already thrown the ball in the air and caught it two times while Karen was giving directions, threw the ball six feet into the air and then missed catching it in the scoop. After missing he became fascinated with the scoop first placing his face inside and then placing it on top of his head (T7L.FK12.L112-119).

Charlie and Brett spent most of the time they were assigned to the pin and ring station throwing the rings to attempt to have them land over the top of the bottles. The fact that they made very few successful rings did not keep them from remaining interested in the task. After awhile the two boys changed the task to attempt to knock the pins over with the rings. This was to no avail as the bottles were too full of water. This did not,

however, keep them from trying (T9N.F14.L162-177).

From time to time during manipulative activities Brett and his classmates were asked to work with a partner. Although Brett demonstrated no explicit animosity toward the partners he was paired with, he truly would rather work alone stating "I like to work all by myself (IK4.L156)." Brett usually got along with his partners and participated appropriately in the teacher assigned tasks for at least the initial few minutes of the activity.

Charlie and Brett really appeared to enjoy the bowling station. They first rolled the ball but eventually threw it at the bottles, taking turns throwing the ball and sitting the bottles up (T9O.F15.L253-257).

Charlie and Brett took turns tossing their four beanbags onto the target....The two children were smiling and appeared to be enjoying the activity (T9O.FK15.L203-211).

After the initial few minutes of cooperative activity with a partner, Brett typically began to dominate play taking more than his share of turns or entirely taking over the action of the game.

Brett and Charlie have teamed up with another boy at the far end of the room and are destroying the bowling pins. Their kicks are hard. They have devised a game where they place three pins together and then stand back about three feet from the pins. They then all kick their balls at the same time knocking the pins over with a loud noise. After awhile they tired of this game and sat the pins up along the wall about one foot

apart. Brett gets most of the activity as he aims for all the pins and knocks them down placing his ball to one side and kicking the ball down the length of the wall into the pins. Charlie, by this time, has lost most of his interest in this activity as he sits on the floor in front of his station and watches Brett kick the ball (T6H.FK8.L311-328).

Brett was active at the beanbag and hoop station where he and Charlie stood on a round rubber spot and threw beanbags toward the hoops which were laying flat on the ground. Brett took more throws than did Charlie, about twice as many. Charlie spent much of his time observing what Brett was doing (T90.F15.L155-161).

Brett's off-task behavior while participating in partner activities was not unlike his behavior while joining in individual activities. He intensely participated in partner manipulative activities to the point that he would lose sight of the teacher's assigned task. He would be so involved in the activity that he would not stop to listen to the teacher's instructions. This behavior frequently drew the attention of the teacher who would assign him to spend time in time-out.

Shane and Brett together proved to be too much as both boys were placed in time out for kicking the ball back and forth to each other when the teacher asked the group to stop and listen to directions for the next task. Shane was eventually sent into the building for talking back to the teacher. Brett spent the rest of the period sitting out on

the side in time-out (T7M.F13.L138-148).

Table 5. Brett's Experiences in Manipulative Activities

Reported that manipulative activities were his favorite part of physical education

Kicking

Preferred kicking to other manipulative activities

Seemed to always have control of ball
Kicks with right foot

Firmly plants left foot beside ball before swinging right leg to kick

Throwing

Challenges himself to more difficult task when teacher designed task was too easy

Usually moves restraining line back when throwing at target to create more difficult challenge

Catching

Frequently changed catching activity to kicking activity when teacher was not looking

More successful with scoop than with catching with hands

Not observed being very successful with catching activities probably because he liked to throw the ball as high as he could before attempting to catch

Frequently designed his own tasks to work on instead of on teacher tasks

Preferred to work alone instead of with partner

Charlie

Charlie's lack of enthusiasm for stretching activities should not be taken as a total aversion for physical education class. Charlie appeared to like parts of his physical education experience. He especially participated enthusiastically in activities where he could work alone with a ball to either throw, bounce, or especially kick even though he was not as skilled as many of his classmates.

Charlie moves his ball around the carpet square using the bottom of his foot on the top of the ball. This appears awkward for him as his arms flail at his side and as he occasionally falls down to the floor... Charlie takes a path around the outside of the room tapping the ball a few times then nearly falling down as he attempts to place his foot on top of the ball to trap it (T4F.FK6.L348-352).

Although he did not appear to be as skilled in this area as some of his classmates he appeared to be engrossed in any activity involving manipulation of a ball. He was successful in his participation in these activities especially when he changed the task to meet his level of skill.

Charlie is engrossed in kicking his ball. He kicks with his right foot when going at a medium speed. The ball does not travel more than three feet. Each time he kicks the ball a different part of his foot makes contact. From time to time he is seen running past the ball missing the ball all together when he kicks. When the task is changed to kicking alternating feet Charlie kicks

his ball across the entire field (at least 50 yards) without stopping. He switches his kicking leg on every other attempt (T6I.F9.L356-368). Charlie's toss of the ball is seldom straight into the air. The ball may land ten feet to the left or at his feet, there is no way of really knowing where it will land. From time to time he drops the ball from his right hand straight down into the scoop. He will then look at it and hold it out as if showing everyone in the class that he has caught the ball (T7L.FK12.L132-140).

Changing the task was not always acceptable to the teacher which placed Charlie in the position of frequently being labeled as off-task.

One situation in which Charlie was considered by the teacher to be off-task dealt with his enthusiastic participation when playing with a ball. Charlie liked any activity that involved throwing, catching, or kicking a ball. When participating in those activities he would get so involved in the movement that he would forget that he was in physical education class and disregard the verbal instructions of the teacher.

When the children were asked to freeze, they immediately place their balls between their feet. Except for Charlie who is seen throwing his ball into the air and making an attempt to catch it (T7J.FK10.L116-120).

One day Charlie was placed in time-out for his refusal to cease playing when the teacher stopped the class to give instructions. This behavior was not observed to be malicious only a continuation of his enthusiasm and interest for the activity.

Toward the end of the class Charlie was placed in time out because he did not put his jug and ball on a carpet square quickly enough for the teacher. She was waiting on him to place his equipment down in order to discuss the next activity with the class. When he did not comply quickly enough she told him "I'm not waiting for you any longer." She took his equipment and sent him to sit on the step (T7K.F11.L235-245).

During the situations in which Charlie was actually reprimanded for his off task behavior he acquired the label from the teacher of being lazy, spoiled, and hard to deal with.

"I think his situation is that he just tells mom and dad what he is going to do and when he is going to do it. And, they just say okay. Cause he just looks at me and says, I don't want to do this and I'm not going to (FPET2.L224-229)."

Charlie's off task behavior during manipulative activities did not, however, appear to be malicious or even on purpose. His enthusiasm for working with balls seemed to override the teachers need for him to pay attention to what she had to say.

"Now what is it called when you kick the ball with your feet?" asks Mrs. Brooks. A few children can be heard saying "dribble". At the same time, Charlie, picks up his ball and begins to bounce it with his right hand. He dribbles 10 times without stopping before the teacher stops him and asks him to put his ball down and listen.

Table 7. Charlie's Experiences in Manipulative Activities

Reported enjoying manipulative activities

Most successful when he changed the task to meet his own skill level

Would get very involved in manipulative activities even though he was not very skilled--He reported that he did not like that the teacher would stop the class to tell them what to do. He frequently got in trouble with the teacher for not stopping his play when asked to stop.

Kicking

Reported to like kicking the most, especially when he could kick for distance although he could not kick very far

Always kicked with right foot

Sometimes would run past and miss kicking ball

Typically contacted the ball with a different part of his foot each time he kicked

Throwing

Liked to move restraining line back away from the target for more of a challenge

Appeared to like the activity of throwing and demonstrated little concern about hitting the target, which he seldom did

Struggled with the concept of opposition, frequently seen standing behind restraining line with ball in right hand switching his feet back and forth in an attempt to place the proper one forward when throwing

Catching

Usually drops ball from one hand to the other in order to be successful catching

Spends lots of time chasing the ball

Great difficulty tossing ball straight

Reported to prefer to work alone than with a partner

Holly

Holly appeared absorbed in activities which involved the manipulation of a ball, however, the activities, at times, appeared frustrating for her. Although she had little previous experience with throwing, catching, or kicking a ball her face typically radiated with enthusiasm when she had a ball in her hand. Her below average skill level was evident as she was observed attempting to throw, catch, or kick. She frequently stopped to watch others and was typically seen chasing her ball as it rolled across the ground. Kicking appeared to be preferred over throwing and catching as this was fairly easy for her to do. When kicking a ten inch diameter playground ball Holly typically kicks with her toe. There is little attempt to turn her leg to the side and contact the ball with the inside of her foot. If the ball traveled too far away from her she would walk to the ball and bend over, pushing the ball back to the desired location with her hands before kicking it again. Holly's kicking leg, sometimes the left and sometimes the right, always moved through the ball at the same speed--kicking the ball hard and kicking it soft looked exactly the same.

Holly runs to her ball and then stops to position her body directly behind the ball before she kicks it with her right foot. She can periodically be seen bending over to push her ball into a better position in front of her body before kicking. Her ball traveled 5 to 6 of her steps each time she kicks it. After kicking she quickly runs to the ball then stops completely walking the last step or two before kicking it again. As she kicks, her

arms move out from her sides as if to help her balance her body. Holly stops now and then to watch her classmates. She stops very little today, however, as she appears motivated to stay on task (T6I.FK9.L275-290).

Holly dribbles her ball tapping it softly with the toe of first one foot then the other. Each time the ball rolls less than a foot. When asked to kick the ball hard she kicks with her right foot placing her toe under the ball and kicking it so that the ball goes into the air about one foot off the ground before coming to a stop six feet away. She has total concentration on the ball. Her hard kicks look much the same as do her soft kicks (T6I.FK9.L342-352).

Holly seemed to enjoy throwing activities as much as she did kicking although most of her successes came from changing the activity to adhere to her low level of skill. Typically, when Holly's classmates practiced throwing they would have several targets at various stations set up around the physical education classroom. The children would rotate from one station to the next throwing beanbags, yarn balls, and playground balls at the assorted targets. Children would stand on carpet squares or behind a restraining line placed at various distances from the target, distances predetermined by the teacher. The children would then throw the balls and beanbags in an attempt to hit the targets. Holly could seldom strike the targets from the predetermined distances and would typically be seen moving the carpet squares so she would be closer to the targets.

Holly stood in front of the restraining line as she dropped the beanbags onto the tic tac toe board with her left hand, holding two other beanbags in her right hand. A classmate paired with her showed her where she was "suppose" to stand, but that did not influence her position. She moved as close as she could in order to be successful at the throw. Each time she dropped the beanbag onto the target she stepped forward on her left foot, tossing also with her left hand (T9N.FK14.L184-194).

Holly's throwing pattern more resembled that of a two year old than a five year old. She switched back and forth from throwing with her left hand to throwing with her right never exhibiting a preference for one over the other. She could also be observed from time to time throwing with both hands. When throwing with the right hand she would typically step forward with the right foot demonstrating little opposition in her throwing motion. Sometimes she did not step at all when she threw.

Holly stood on her spot about three feet from the hoop target. With both feet together on the spot she held three beanbags in her right hand and, one at a time, switching hands, threw the beanbags left handed into the hoop. She slowly moved to get the bean bags before returning to her spot to throw again. She could be seen switching back and forth from her left to her right hand when throwing (T9O.FK15.L230-238).

Throwing seemed to provide a challenge for Holly. It appeared that she enjoyed the throwing tasks as she

participated in them more than she had any other of her physical education experiences. Adjusting the throwing tasks by moving the restraining line seemed to provide Holly with the success she needed to enjoy and continue to practice the throwing activities.

The small successes Holly experienced when kicking or throwing were not repeated when she attempted to catch. When throwing a ball into the air in an attempt to catch it she had no idea where the ball was, her arms would be held out in front of her body but her eyes could not locate the ball to attempt the catch. Her body was seldom moved to a position to catch the object. Holly spent most of her time looking for her ball or chasing it around the room.

Holly spends most of her time chasing her ball.

Her attempts to catch the ball fall short as she throws the ball over her head too high and in the wrong direction for it to come back down to her outstretched hands. When tossed, her ball usually lands behind her (T7J.FK10.L192-198).

Holly never catches the ball during the entire class and spends most of her time chasing the ball and then returning to her space to throw the ball in the air, attempt a catch, and then chase the ball again. She is rarely even able to place her hand on the ball as it is too far away from her when she attempts to catch (T7J.FK10.L216-223).

Holly was well behaved during manipulative activities, sitting quietly, presumably listening when the teacher was providing instruction, participating in the tasks, and politely letting others have turns before she took hers. This was true even though she

was not as successful at accomplishing stated objectives as were her classmates. Her inability to always accomplish her goals did not compel her to bother classmates or create an off task disturbance. She was not always on task, however, spending much of her time during manipulative activities standing and observing her classmates.

One of the few occurrences when Holly did not spend a lot of time observing others was when she participated in a manipulative activity with a partner. Holly liked playing with her friends and preferred working with a partner to working alone (IK5.L140-160). Holly enjoyed throwing a ball back and forth with a partner even though she was no more successful at accomplishing a manipulative task with a partner than she was working alone. The fact that she was relatively unsuccessful working with a partner did not matter to her as long as she was playing with a friend and not working alone.

Holly and her partner Stevie, spent most of their time chasing the ball as their tosses were not thrown directly toward their partner. Holly did make three catches during the class. All three times the ball was bounced directly in front of her. When Holly catches she wraps her short arms around the ball and catches it against her chest (T7M.FK13.L112-120).

Holly got fewer and fewer attempts at throwing and catching the ball as the class went on. Stevie changed the activity to his liking by spending most of the time attempting to dribble the ball with his hands. When she did get the ball and

tossed it back to Stevie she would hold it in her right hand and throw under handed high into the air. The ball never traveled to the same spot twice, frustrating Stevie more and more, causing him to spend more time dribbling as opposed to throwing and catching with Holly (T7M.FK13.L162-173).

Table 6. Holly's Experiences in Manipulative Activities

Reported enjoying manipulative activities
Frequently stopped to observe others
Spent much of her time chasing the ball
Kicking
Always kicks with toe of foot
Switches back and forth from left to right foot
Usually retrieved ball with hands instead of continuing to kick with feet
Throwing
Frequently changes task to be more successful
Reported to enjoy knocking down targets
Always moved to be as close to target as possible
Inconsistent as to which hand to throw with, frequently switched from left to right
No opposition, frequently step and threw with same side of body
Not unusual to have no step at all
Catching
Very low success rate
Difficulty in understanding how to track ball with eyes
Spent most of her time chasing the ball
Spent much time standing and observing others
Liked working with partner not because they were successful but because she did not like working alone
Partner activities appeared to be a social time for Holly

Summary

The primary purpose of this chapter was to describe the setting, teacher and program at Blue Ridge elementary school. In addition, the chapter chronicled the children's experiences in physical education during the first eight weeks of school. Chapter 5 describes the themes which were generated from this representation of children's experiences.

CHAPTER 5

Results

Chapter 4 provided descriptions of the four kindergarten children as they participated in their initial physical education experiences. This chapter consists of descriptions of the themes which emerged from those narratives. An analysis of observations, fieldnotes and interviews of the children's experiences suggested six themes. This analysis was done by comparing data sources in an attempt to verify, eliminate, modify, or combine emerging themes. Triangulation of transcribed data using the "sketch pad method" (Graham, Hopple, Manross, & Sitzman, 1993) assisted in confirming and disconfirming initial themes.

The first of these themes focuses on the approach children employed in order to learn how to function, either hesitantly or confidently, during participation in physical education. The second theme relates to "learning the ropes" and describes, based on the children's different approaches, from whom they appeared to learn and understand procedural and other important information. Theme three describes how children were observed to work with partners. Theme four describes the "zone of acceptable responses" provided by the teacher to the children. The fifth theme characterizes kindergarten children's initial experiences in physical education as a "relentless persistence for play". The last theme describes the

change observed to take place in the children's participation over the eight week observation period as acquiring the student role.

Kindergarten Children's Approach to Physical Education

The initial physical education experiences of Tabitha, Brett, Holly, and Charlie can be summarized by describing how they approached kindergarten physical education. Based on observations, fieldnotes, and interviews during the initial eight weeks of kindergarten physical education classes it was evident that the less skilled (LS) and more skilled (MS) children in this study took different approaches to learning how to function in physical education. In general, the LS children, Charlie and Holly, appeared hesitant to join into the planned physical education activities. On the other hand, the MS children, Tabitha and Brett, appeared more confident in their ability and joined into activity without hesitation. This is not to say that the LS children did not enjoy being involved in physical education class activities. They simply took a more hesitant approach to physical education.

Theme # 1: The LS children appeared hesitant to get involved in initial physical education class activities whereas the MS children appeared to take a more confident approach to their involvement.

Less Skilled Student Approach

Charlie and Holly generally appeared hesitant to get involved in physical education activities during

their initial experiences in physical education. Although both said that they enjoyed their experiences in physical education, they appeared reluctant to begin tasks, spending time observing others before they themselves got involved.

As the children begin counting Holly is still standing, gazing out over her classmates watching them stretch (T6H.FK8.L93-97).

Charlie, kneeling and sitting back on his heels, watches his classmates crab walk today. He makes no attempt to do the crab walk playing with the small gravel he has found on the pavement next to his orange square (T7J.FK10.L82-86)

When these LS children did get involved they were often observed moving only for short periods of time before stopping to observe others and were frequently seen following a peer, copying the movements of that classmate.

Charlie appears to run out of steam quickly (after about 20 seconds). Kneeling he rests as he observes the movement of his classmates. His head moves back and forth appearing to focus on one classmate for only short periods of time before observing another (T7L.FK12.L102-107).

Holly moved slowly as she attempted to gallop... She would gallop a step or two before stopping to observe other children before attempting another gallop step (T7J.FK10.L26-30).

In addition, LS children frequently only got started with a task as the other children in the class were finishing. It was as though they did not know what to do and they were seeking guidance.

Holly and Charlie never quite get their arms up to their heads until it is too late as the other children had finished counting out numbers reaching 15 (T4D.FK4.L105-110).

The children quickly place their balls in the hoop as their shirt color is called. Holly is one of the last children to put her ball up even though her dress color had been called first (T4F.FK6.L458-462).

The hesitant behavior of both Charlie and Holly did not appear to subside during the initial eight week observation period. Toward the end of this time, however, they were observed to be more adept in understanding and abiding by the protocols and routines established by the teacher in which they were expected to adhere. But, their tendency to observe others before moving, and during involvement in a specific task, appeared as equally strong at the beginning of the observation period as at the end. One can only speculate as to whether this tendency to observe would diminish or grow more prevalent over time. Only a longer observation period could provide such information.

More Skilled Student Approach

Tabitha and Brett, in contrast, appeared more confident in their approach to their initial physical education experiences. They seemed to understand the tasks as described by the teacher and began movement as soon as given permission to do so. As soon as the teacher provided a task for these MS children they were up and moving, eager to get involved. Many times they

began moving before the teacher said to go, anticipating what the instructions might be.

As quickly as the arm stretch activity ends Tabitha is on the ground, legs extended to the front ready to stretch her legs (T90.FK15.L77-79).

Brett and Tabitha were more apt to be able to listen to the teacher and figure out what to do than were Charlie and Holly. They also appeared to move independently of others. They rarely followed their classmates but were the movement leaders, frequently followed by the other children in the class. They learned the routines promptly and moved quickly to activity appearing to be more attuned to what the tasks were.

Brett and Tabitha lead the group across the field. They kick their balls straight and are the first two children to the middle of the field having each kicked their balls six times. When they get to the middle of the field they each turn and go in different directions (T6I.Fk9.L246-252).

Brett and Tabitha, having already acquired a higher level of skill than the other two children, seemed to move with confidence throughout the movement environment. They were also more consistent in their movement patterns than the LS children. Unlike the LS children, for example, who often switched their lead foot when galloping, the MS children were observed always leading with the same foot. These MS children consistently demonstrated this more confident approach to physical education throughout the initial observation period.

Summary of Approach Methods

Kindergarten children face major changes in their lives as they attend school for the first time. Tabitha, Brett, Holly, and Charlie had never been in a structured school learning environment before they attended kindergarten. Initially, adjusting to and learning in this new environment called school was difficult for some and less difficult for others. During the initial weeks of school children were learning all kinds of different things that would help them make decisions on how to approach their new environment.

Amunds (1989) summarizes the kindergarten year as a period of "rapid physical and mental growth". In describing kindergarten children's capabilities she writes:

Physically, kindergarten children are undergoing significant changes. Body proportions change as the torso and limbs lengthen. The children have high energy levels but tire easily. Although they are capable of intense periods of concentration, they are easily distracted. Intellectually, they begin to use subjective language. However, while meaning is obvious to the child, it is not always clear to the listener. Because thought is not always analyzed, action often precedes thought. Past, present, and future terminology presents difficulty, since time is understood as now. Socially and emotionally these children manifest a desire to develop personal autonomy. They frequently play alone or beside but not with, others. They need reasonable limits and controls

and usually conform to avoid the consequences of inappropriate behavior (p. 48).

Understanding that kindergarten children are going through rapid physical and mental growth, and that by attending school for the first time they face much change in their lives, is critical in attempting to understand what initial school experiences must be like for kindergarten children. In order to be successful in this new environment children must learn how to acquire knowledge about the procedures and routines that make up everyday school life. Physical education class is uniquely different from the kindergarten classroom and thus requires children to learn additional procedures and routines in order to successfully function in that environment. Based on data from this study it appears that the less skilled, Charlie and Holly, took a far different, more hesitant, approach to learning how to function in physical education while the more skilled, Brett and Tabitha, were more confident in their approach.

Learning the Ropes

Theme # 2: MS children appeared to be able to comprehend the teacher's instructions on how to function in the gym, whereas, LS children appeared to learn more about how to function in physical education class by observing and following their classmates than by listening to the teacher.

One of the roles played by Mrs. Brooks in this kindergarten physical education class was to provide the children, first with protocols or procedural

information, and second with curriculum activities, in order to contribute to making the learning environment workable, safe, and promote the development of physical skills. Mrs. Brooks did provide the children with guidelines for "learning the ropes" in physical education class, however, those guidelines did not appear to always be understood by all the children, especially the LS children. For example, Holly did not understand that she could get a ball when the teacher called out the color of shoes she was wearing.

Most children are now standing with their ball on the floor between their legs. Holly is still sitting on the floor. Her shoes are black and that color had been called 20 seconds before. She remains seated until Mrs. Brooks, from across the room, asks her "Holly, what color are your shoes?" Holly answers, "black". "Did I call out black already?" asks Mrs. Brooks. Holly shakes her head no and Mrs. Brooks responds "yes I did" (T4D.FK4.L256-265).

During the first several weeks of classes Mrs. Brooks spent a lot of time explaining to the children what they could do, what they were not to do, and generally how they were to participate in physical education. The children, in fact, sat for long periods of time, sometimes up to 10 minutes (T1A.FK1.L122-224), during the first several classes, listening to Mrs. Brooks describe in detail the protocols for functioning in physical education class. She did not, however, spend much time practicing the procedures with the children. It was apparent that she felt that the children should be able to learn what to do simply by

listening to the protocols and participating in class.

Some children did appear to learn the class guidelines from listening to the teacher. Brett and Tabitha appeared to know and understand the teacher's guidelines from the first class. They seemed, for example, to be among the first children to move to activity when the teacher gave the command. They seemed to know what to do before being told. The LS children, however, did not appear to learn what to do in physical education class from the teacher.

While it is traditionally the role of the physical education teacher to guide children in learning the protocols and subject matter in physical education, it did not appear that the LS children in this study used the teacher as their primary source of knowledge in the gym. These LS children sat and listened to the same guidelines as the other children were given but when it was time to move they were slow to action. The LS children did not appear to learn how to function in the physical education classroom from the teacher. They were consistently observed spending time simply observing their classmates in an attempt to understand what to do.

Throughout the eight week initial observation period both Holly and Charlie were observed spending a considerable amount of time observing their classmates. This was not true for Tabitha or Brett. These observations appeared to occur during two specific situations.

First, these LS children were recorded spending time observing their peers whenever Mrs. Brooks finished providing children instructions and asked that

the class begin an activity.

Children place their ball on the floor and begin to dribble it with their feet around their carpet square. Charlie remains seated on the carpet holding his ball and watching his classmates until Mrs. Brooks calls his name and asks him to "let me see you do it" (T4F.FK6.L343-348).

It was as if the children did not understand the instructions so they watched their classmates in order to see and understand how to do the task.

The second situation in which LS children were recorded observing their classmates was during a movement task. LS children appeared to spend a shorter duration of time participating in a specific task. For example, Holly was observed taking only a few galloping steps before stopping to observe what her classmates were doing.

After taking a few galloping steps Holly stands to the side of the room. Her eyes follow the other children. She sways from side to side, first lifting one foot and then the other as if to take off moving across the room but her little engine never gets started (T2B.FK2.L447-454).

Charlie also spent time during activity to stop and watch his classmates.

Charlie's pattern of kicking is to give his ball a few kicks and then stop to observe his classmates or watch a bird fly overhead, before he recommences the process (T6I.FK9.L267-274).

In addition to observing what their peers were doing in physical education class, these LS children also spent time following their classmates as if in an

attempt to copy what they were doing.

Charlie, still following Tabitha, is galloping at maximum speed down the side of the room, he leading with his right leg and she leading with her left (T6G.FK7.L54-57).

Although it cannot be said that the MS children did not observe and learn from their classmates it does appear from the data that the LS children spent far more time observing others than did their MS classmates. It is not clear exactly why the MS children seemed to better understand how the physical education classroom functioned while the LS children seemed unsure. It may be that the MS children learned classroom procedures from the teacher or simply were more skillful in figuring out what to do by themselves.

Summary of Learning the Ropes

The two MS children could be described as confident in their approach, and the two LS children could be considered hesitant in their approach toward their initial physical education experiences. Amunds (1989) described the lack of involvement by children in initial school experiences in a study in which she investigated the manner in which junior kindergarten children learned to adapt to the role of student. She found that students may not behave appropriately during prescribed routines because they possess insufficient procedural information, are exploring rule limits, or are delaying participation until they feel more competent in performing the routine. Amunds' study, unlike this one, did not consider the skill level of children. The results of this study suggest that skill

level may play an important role in the way children approach their initial physical education experiences. Children in physical education may not fully involve themselves in physical education activities for the same reasons Amunds (1989) found kindergarten children had difficulty learning the ropes and acclimatizing to the role of student in the classroom.

Holly and Charlie, for example, did not appear to understand what they were supposed to do when they came to physical education class for the first time. They did not understand the procedural information that was needed for them to fully participate and therefore were observed watching and learning from their classmates. One gets the impression that their difficulty in understanding procedural information, and their lack of competence in performing physical education tasks, were major contributing factors to their hesitancy to be completely involved in physical education class. They both spent a lot of time observing other children in order to determine exactly what they were to do. In the beginning they may have simply lacked the procedural information they needed to participate as the teacher expected. After they gained that procedural knowledge, Holly and Charlie could still from time to time be observed not involved in activity. One explanation for this could be, as Amunds (1989) suggests, that they simply did not feel competent in performing the tasks.

The sociocultural approach to learning as framed by Vygotsky (1978) and further described by Moll (1990), may also be helpful in understanding why Holly and Charlie appeared hesitant in their approach to

physical education. In Vygotsky's theory of development he regarded learning as "the quintessential sociocultural activity" (Moll, 1990). That is, he considered development and learning to be dependent upon the social interactions between children and their more competent peers and between children and adults. In this study the LS children did not appear to be getting the information they needed to learn and to be completely involved in physical education class from their teacher so they relied on their more competent peers. As the LS children observed their MS peers they were learning about physical education. Not only were they learning how to do specific tasks, but also what to do, and what not to do. It appeared that the LS children's initial experiences in physical education consisted of learning as much about procedural information from their peers as it did learning to move and developing skills--perhaps more.

Cooperating With a Partner

Theme # 3: All the children appeared to have difficulty participating in activities which involved working with a partner.

LS children in this study appeared hesitant in their approach to physical education and seemed to want to observe others before committing to movement. In addition, these LS children appeared unsuccessful when a classmate was required to work with them as a partner. In fact, neither the LS or the MS children were able to successfully participate in manipulative activities with a partner. Partner activities were typically done toward the end of the class and usually

involved manipulation of a ball such as in throwing, catching, or kicking. Partner activities resembled individual activities for one of the partners while the other partner stood and watched, impatient to get the ball and a turn to play.

Holly and her partner Stevie, spent most of their time chasing the ball as their tosses were not thrown directly toward their partner. Holly got fewer and fewer attempts at throwing and catching the ball as the class went on. Stevie changed the activity to his liking by spending most of the time attempting to dribble the ball with his hands. When she did get the ball and tossed it back to Stevie she would hold it in her right hand and throw under handed high into the air. The ball never traveled to the same spot twice, frustrating Stevie more and more, causing him to spend more time dribbling as opposed to throwing and catching with Holly (T7M.FK13.L162-173).

Children's inability to participate successfully in partner activities seemed to influence how they felt about working with a partner. Tabitha, for example, when asked if she would rather play with a partner or play by herself said "I'd rather play by myself" (IK5.L159). She went on to further explain that when she worked with a partner all her partner let her do was "...just sit there, she never throws it. The only time she throws it I am down on my knees and she has to throw it over my head" (IK5.L161-164). When asked about working with a partner Holly suggested that working with a partner "Makes you kinda mad" (IK5.L179). Charlie and Brett also stated their

opinions on partner work. Charlie said "We would rather work all by ourselves" (IK4.L154), and Brett remarked that "I like to work all by my self" (IK4.L156).

It should be noted that during their initial eight week physical education experience the four children only participated in partner activities on three occasions (Appendix B). One involved kicking and the other two, throwing and catching. It may be that this short involvement period of working with partners may not be long enough to determine what these children learned from working with partners. It was clear, however, that they did not like partner activities and that they were unsuccessful in their attempts to work with a partner.

Zone of Acceptable Responses

Theme # 4: All four children responded similarly to the structure imposed by the teacher. The more structure imposed on an activity the less children reported to enjoy their participation.

Mrs. Brooks' zone of acceptable responses refers to the range of acceptable responses Mrs. Brooks allowed the children during specific activities in physical education class. Children were observed being allowed more or less freedom to move and participate based on what type of task they were performing. The zone of acceptable responses seemed to be dictated by the structure the teacher imposed on the students during particular types of activities. This range was different for stretching than it was for manipulative or locomotor activities.

Structure Imposed On Stretching Activities

The tasks in physical education class which the children least enjoyed, in fact they described them as "boring", were those tasks associated with stretching. Stretching activities were structured, repetitive tasks with specific outcomes that allowed little movement from the children. For example, during one of the leg stretching tasks children were asked to sit on the floor and place both of their legs straight out in front of their bodies. This was followed by children stretching their hands toward their feet with their knees straight. Children were to stay in this position while collectively counting to 15. Little movement outside the prescribed method of doing the task was accepted by the teacher. The same tasks were expected to be done the same way each day. Children did the tasks together appearing like 22 little robots being controlled by someone at a master switch. The structure imposed on children during the stretching tasks allowed only a small range of acceptable responses by the children because the teacher felt that there was only one correct way to do the tasks.

From observations and interviews it became obvious very early in this study that the children did not enjoy their participation during these stretching tasks. All of the children questioned the necessity of participating in the stretching activities. Brett reported that the stretching activities were "silly and boring stuff" (FK4.L15). Charlie simply did not like to do them. "I don't like to put my hand over my head and do that exercise (FKI4.L17-18)." Tabitha also

voiced her opinion, stating that the stretching tasks were always the same, implying that she might also enjoy some different stretching tasks. "We might do the same thing... We always have to do the same exercises (IK5.L120-121)."

One of the primary reasons for children's dislike of stretching activities appeared to be that during these stretching tasks children were allowed very little opportunity for variation outside the specific structure of how the tasks were to be performed. In addition, those children who did not perform the tasks appropriately often found themselves being scolded by the teacher to conform to the group.

... Charlie sits in one corner of the gym, legs crossed and hands resting in his lap, apparently not interested in doing the activity. Mrs. Brooks spots Charlie's lack of interest as the children finish counting and asks him to put his legs out and stretch them. He does for about five seconds before stopping again (T4E.Kf5.L160-166).

Stretching was to be done in a specific manner and when it was not performed as prescribed the teacher would scold children for their lack of appropriate participation. A major obstruction to the children's enjoyment of stretching activities appeared to be the structure the teacher imposed on the stretching tasks. This structure appeared to be a major reason for children reporting that they did not like participating in the stretching activities.

From this description one might conclude that the individual stretching tasks contributed to the children's dislike of stretching. It was difficult,

however, to determine whether children really disliked the specific stretching tasks. It is more likely that the structure imposed by the teacher during stretching activities was the greatest contributing factor to children's apparent dislike of stretching. These stretching tasks seemed important only to the teacher. She believed that the children needed to go through stretching activities to "get them moving and get their blood flowing and get their muscles warm (FPET2.L240-246)." And, she felt that they had to be performed adhering to specific guidelines. It was certainly apparent from observing the children, and especially from talking with them, that they would have been happy to fill the time allotted to stretching with another activity.

Structure Imposed On Locomotor Activities

Counter to stretching activities, locomotor tasks provided the children with a less structured, less repetitious experience. During locomotor activities children were allowed the freedom to move with far less restrictions than during stretching tasks. They were free to select from a number of locomotor movements acceptable to the successful completion of moving during locomotor time. As long as the children were performing some type of locomotor task they were allowed the freedom to move as they wished. This is not to say that Mrs. Brooks did not have goals which she wanted the children to accomplish during locomotor activities. However, her goals were less specific than they were during stretching. The less structure provided children with more opportunity to move freely

and those activities, although they were not play, were certainly more play-like.

Locomotor tasks provided both the MS and LS children with the freedom to move. This movement was free of the restrictions associated with the stretching tasks. Mrs. Brooks did not intend for participation in locomotor activities to be instructional. The children had the freedom to move with little structure as to how the locomotor skills should specifically be accomplished. Although children might be asked to skip, gallop, or run, other forms of locomotion were considered acceptable. For example, children often drifted in and out of play and fantasy during this time pretending to be a barking dog, a clucking chicken, or some other barnyard or prehistoric creature--sound effects included.

Brett and a few of his male classmates took the jogging activity as a time to be creative and play. Instead of jogging the boys galloped in general space acting like chickens with their hands placed under their arm pits and their arms flapping like the wings of chickens. Their chicken like sounds could be heard above the noise of the other children (T7F.FK11.L72-89).

Tabitha gallops on the line and is followed by one of her female classmates who is pulling on her blond pony tail. The two girls are laughing and this seems to be a game that they have just make up and are having fun with. It is though Tabitha is really a horse galloping through the woods, her classmate holding tight to the reins (T4E.FK5.L64-71).

This is not to say that children could do what ever they wanted to do during locomotor activities. There were restrictions to their movement. They had to stay within the space boundaries and they had to be moving using some type of locomotion. But, other than those restrictions they were generally left on their own to move freely throughout the movement space. This freedom to move with few restrictions was in stark contrast to stretching activities which were structured, rigid, relatively quite times during the lesson. During locomotor activities the class was filled with the movement and laughter of children at play.

Structure Imposed On Manipulative Activities

Manipulative activities were similar to locomotor tasks in the way they were presented to the children. The manipulative activities were different, however, as they apparently provided children with a greater range of appropriate responses than did the locomotor tasks and thus a greater opportunity to be playful. During manipulative tasks each child was always provided with a ball. Mrs. Brooks then challenged the children with some sort of movement task. These tasks were general in nature. For example, a task might be to simply throw a ball into the air and catch it, or to see how far a ball could be kicked. Because these tasks were general in nature, the children were provided the opportunity to respond in many different ways. They appeared not to be restricted during this time by a great deal of structure, or by their level of skill, but only by their imagination.

Manipulative tasks may not have offered more freedom than the locomotor activities but they were more popular because children each got a ball. During manipulation of a ball not only were the children allowed to change the task to make it more or less challenging, for example, from throwing at a target at a short distance to moving closer or farther away, but, they were allowed to change the task entirely, for example, from throwing to kicking. Children were never told they could change the tasks. They appeared to do it naturally. If a task appeared too easy or difficult for them, or if they just were not interested at the time, they were observed to change the task. Children enjoyed a freedom during manipulative activities which allowed them to discover, explore, and extend their manipulative skill capabilities.

It should be noted that it was not unexpected that the children were observed to change the teacher prescribed tasks. In a study conducted by Tousignant & Siedentop (1983), it was found that even secondary students changed the teacher prescribed tasks in order to make them more compatible to their abilities. They discovered that students who found the task too easy or who experienced a low range of success were likely to drift toward a modified task.

They changed the tasks by skipping parts, changing rules, improvising new forms, etc. They also changed the conditions of the task accomplishment by making up games... The modified tasks were generally more challenging because they were better adapted to the student's skills (p. 49).

All the children, both the MS and LS participants, were observed to be fascinated by any activity which involved manipulation of a ball. It should be noted that during manipulation of a ball fewer skill differences could be observed between those children labeled MS and those labeled LS. Manipulation of a ball whether it be through kicking, throwing, or catching, was a difficult task for all of the children. For these children, at age five, one was more likely to observe the ball controlling the movement of the children than any of the children controlling the movement of the ball.

However, manipulation of a ball seemed to captivate children. They appeared to want to throw, catch, and kick the ball in an attempt to understand how it worked. When a manipulation task was too difficult for the children they either changed the task to make it easier to accomplish, or they stuck with the task seemingly fascinated with the movement of the ball.

Brett could be seen off to the side of the other children, playing by himself, tossing the ball into the air and attempting to catch it in his plastic milk jug. He would catch about one out of every three tosses. This low success rate was enough, however, to keep him on task (T7K. FK11. L229-234).

Manipulative activities were the closest tasks to play in which the children were observed participating in during their kindergarten physical education class. When children were asked to describe their favorite activities each of them mentioned some sort of

manipulative task. Holly, for example, reported that "play, play, play with the balls" (IK1.L30) was her favorite thing to do in physical education class. Brett described his favorite part to be "kicking the balls around and bouncing them" (IK2.L38), while Tabitha, referring to balls stated "I like to bounce them and I also like to throw them at targets and roll them and other stuff" (IK5.L74-76). In addition, Charlie recounted that his favorite activity was "kicking balls" (IK2.L42). Manipulative tasks were simply the nearest thing to play that occurred in kindergarten physical education class. The children's participation in these play-like manipulative activities was certainly less structured by the teacher than were the stretching tasks and they appeared to be what made going to physical education class so much fun.

Model of the Zone of Acceptable Responses

Figure 3 represents Mrs. Brooks' zone of acceptable responses as it pertains to this kindergarten physical education class. The far left portion of the zone is smaller indicating more teacher imposed structure to the activity and less opportunity for children to make their own decisions about their movement. These activities were also observed to be less play-like than tasks at the right end of the zone. The far right portion of the zone of acceptable responses illustrates those activities, locomotor and

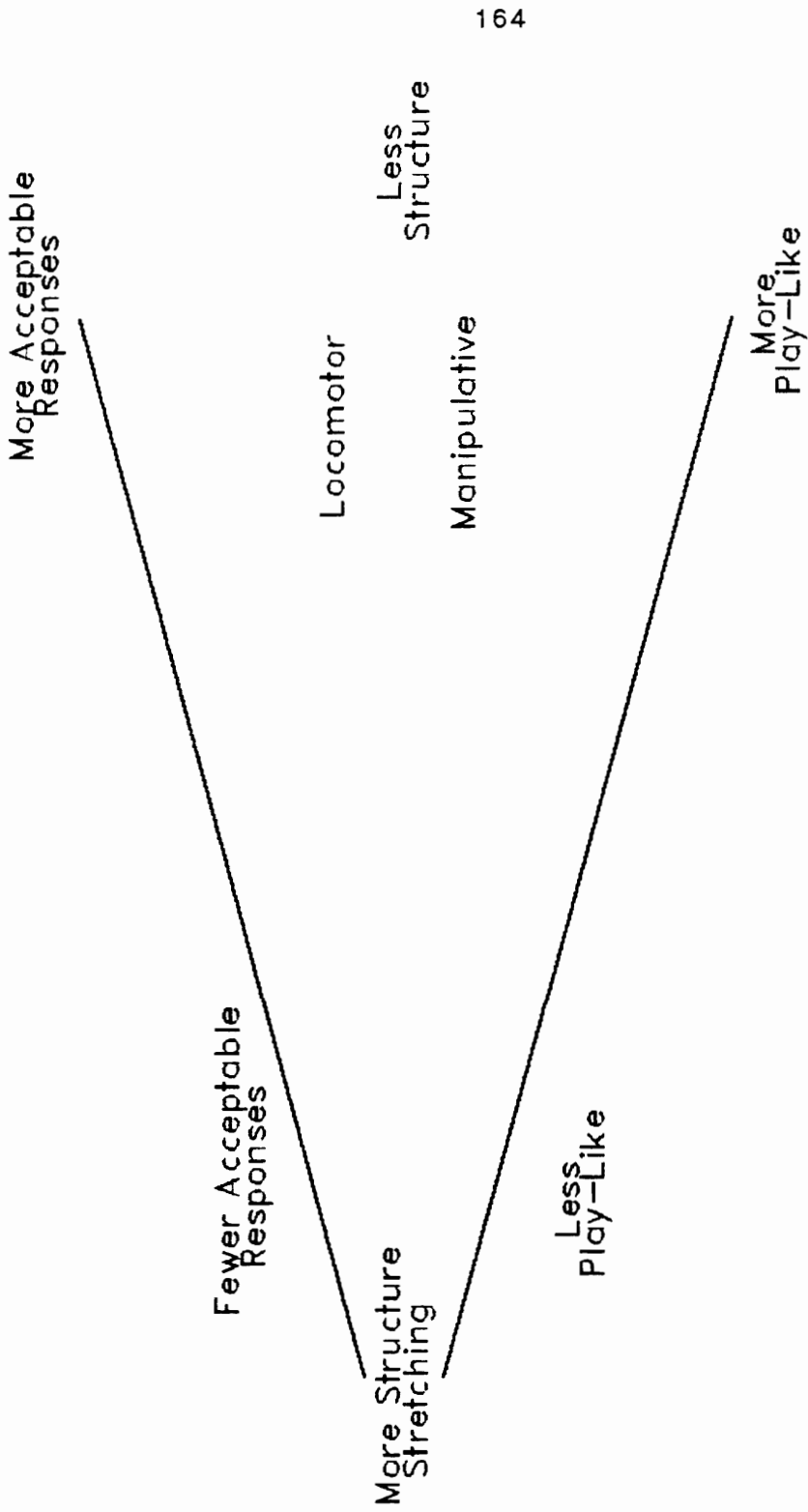


Figure 3. Model of Mrs. Brooks zone of acceptable responses in kindergarden physical education.

manipulative, in which the teacher allowed a greater range of acceptable responses and which provided children more opportunity to make their own decisions about their movement. These activities were observed to be more play-like than the tasks at the left end of the zone.

Stretching activities did not include any of the factors which are necessary for an activity to be considered play (Rogers & Sawyers, 1988; Rubin, Fein, and Vandenberg, 1983). The teacher simply imposed too much structure on the tasks to make them play-like. They were not intrinsically motivated, free of externally imposed rules, dominated by the players, or process oriented. These activities were not carried out as if they were real, nor did they provide active involvement of the children. Although the locomotor and manipulative tasks, as they were presented by Mrs. Brooks, should not be considered play, certainly less structure was imposed by the teacher. The tasks appeared more play-like to the children than did the stretching tasks. These tasks were less structured and free of specific teacher imposed guidelines. Locomotor and manipulative tasks were more general in nature providing children with the opportunity to make changes in the tasks if they felt the activities were frustrating or boring.

Relentless Persistence for Play

Theme #5: Throughout their initial experiences in physical education all four kindergarten children demonstrated a relentless persistence for play.

The relentless persistence for play, as it pertains to this physical education study, is defined as a natural characteristic of children to alter or adapt a physical education activity which is not meeting their current skill or interest level. Tabitha's, Charlie's, Holly's, and Brett's initial experiences in physical education can be summarized by suggesting that their participation in physical education was a relentless persistence for play. The children consistently attempted to change the teacher designed tasks, which were not meeting their skill or interest levels, to be more play-like. The relentless persistence for play can be further illustrated using examples provided by observations of children's initial physical education experiences.

During each physical education class Mrs. Brooks provided a number of different movement tasks or challenges for children to attempt. For example, during stretching tasks a typical challenge was to perform the leg stretch. A common task during the locomotor segment of the class was to skip or gallop throughout the movement space without bumping into classmates. And, a typical task during manipulative activities was to toss a ball into the air and then to attempt to catch the ball. These challenges were the teacher designed tasks which the teacher expected the children to do.

These kindergarten children appeared to find many of the teacher designed tasks to be too difficult and frustrating or too easy and boring for their individual skill levels and interests. This seemed to be more of the rule than the exception as children were just as

frequently observed participating in teacher prescribed tasks which they altered to meet their needs than in the tasks as they were designed by the teacher. Children simply did not participate in the teacher designed tasks for long periods of time if the task did not meet their current needs. They appeared to naturally change the tasks when too difficult or too easy. This movement to change the teacher designed tasks was observed throughout the children's initial physical education experience and, in addition, was observed as a tendency with all four children.

For example, during a class in which the children were participating in manipulative activities one of the teacher designed tasks was to toss a ten inch plastic ball into the air and attempt to catch the ball. Brett spent little time tossing and catching on this day as he appeared more interested in kicking.

Brett is now seen kicking his ball in the grass some 30 feet from the rest of the children. He has discovered that by throwing his ball very high that the wind on this day will carry it over the short three foot fence and into the grassy playground area. He cannot resist kicking the ball through the grass several times before returning to the group to throw the ball over the fence once again (T7J.FK10.L199-207).

In this instance Brett's changing of the teacher's throwing task to a kicking activity was reinforced by the teacher who did not acknowledge that he was off task, or, attempt to bring him back to the group.

Brett's out of bounds kicking of his ball is reinforced as he spends most of the last part of

the class in the grassy area, never being asked by the teacher to return to participate with his classmates (T7J.FK10.L230-234).

During the same class Charlie was observed spending much of his time bouncing his ball up and down on the pavement with his hands rather than risk the continued frustration of tossing the ball into the air and missing the catch.

Charlie tosses his ball up so that it goes to about eye level before returning to his hands. He uses his arms, hands and body to catch the ball, bringing his arms toward his body as if to scoop the ball out of the air. When he does extend his arms to catch a ball with only his hands he is usually not successful as the ball bounces off his fingers forcing him to chase the ball. After retrieving his ball he moves slowly back to his spot, bouncing the ball as he goes, spending more time in this bouncing activity than in attempting to catch (T7J.FK10.L182-192).

Holly found the teacher designed crab and seal walk activities to be very difficult. During those activities Holly was forced, by her moderately overweight body, to spend much of her time stuck in one place as her peers were cheerfully moving unrestricted around her. She was regularly observed changing this difficult teacher designed task to an activity which would be much easier for her to do.

Holly slowly moves, on her hands and knees, not actually having enough strength to do either the crab or seal walk. There is a smile on her face as she pretends to be a dog, growling and barking

as she moves (T6H.FK8.132-240).

Tabitha was also observed changing the teacher's original tasks. Tabitha was observed changing the locomotor task of galloping, which was characterized as an individual task and not a group endeavor, to an activity which involved other classmates and was apparently more fun. On this day the teacher task was to gallop alone but the activity was changed by Tabitha to include a friend.

Tabitha gallops on the line and is followed by one of her female classmates who is pulling on her blond pony tail. The two girls are laughing and this seems to be a game that they have just made up and are having fun with. It is though Tabitha is really a horse galloping through the woods, her classmate holding tight to the reins (T4E.FK.L64-71).

It should be noted that all the children in this study appeared to possess this tendency to adapt the prescribed teacher tasks to activities which they appeared to feel were more challenging or more fun. Their movement to change tasks seemed equally as strong during stretching, locomotor, or manipulative activities. Children's ability to change the activity and still stay within the teacher's zone of acceptable responses, however, was different for stretching than it was for locomotor or manipulative activities. Locomotor and manipulative activities did not require a specific right/wrong response from the children as did the stretching tasks. Mrs. Brooks seemed to understand that children needed a wide range of acceptable responses during locomotor and manipulative activities

in order to learn and develop skills. Changing the teacher prescribed locomotor and manipulative tasks to more resemble play for the children did not appear to trouble Mrs. Brooks. The children frequently adapted the tasks to be more play-like. Mrs. Brooks did not appear to feel the same way about stretching tasks.

As discussed previously, stretching activities, as they were prescribed by Mrs. Brooks, were very structured in nature. Children were asked to do the same leg stretching task, for example, the same specific way during each class. There was little room for varying the way the task was to be done. Mrs. Brooks was very specific about how stretching tasks were to be done and she tolerated little variation in performance of the various stretching activities.

Unlike during locomotor and manipulative tasks, during most stretching activities children's relentless persistence for play came into conflict with the teachers desire that the task be done as prescribed. This does not mean that the children did not make attempts to change the teacher designed tasks to more resemble play, but that they were not allowed to do so. When children were not participating in the designed teacher task during stretching activities they were typically scolded by the teacher to stop what they were doing and do the stretching task "correctly".

Children now stretch both legs out, extend their arms forward, and again begin their count to 15. Brett is off-task again sitting with his legs crossed watching his classmates as they count. Karen speaks to him again asking him "what's wrong?" "I just want to sit and watch today" is

his reply. "You are not here to sit and watch, you are here to play!" was the teacher's reply (T6G.FK7.L148-156).

Charlie is asked by Mrs. Brooks why he is not participating. His response is "I don't like to do it." Her response is that she is sorry "but this is what we are doing, we have to stretch our legs out so we don't hurt them." Charlie, half-hearted, stretches his legs out for the next count, his knees are bent. He does not count with the group, simply sits and stares (T6I.FK9.L73-82).

Children were simply not allowed to play during stretching. The obstruction to their enjoyment of stretching activities was the structure imposed by the teacher. As children learned that play would not be tolerated during stretching tasks many were observed simply sitting and watching as other classmates stretched around them.

Brett sits uninterested while the rest of the class stretch their legs out in front of their bodies. He leans back, resting his body on his hands which have been placed on the ground behind him (T6I.F9.L186-190).

Before suggesting a theoretical perspective on the relentless persistence for play, one final point should be made. Although all four children were observed changing teacher prescribed tasks they did not always make the same changes, they each appeared to adapt the tasks to their own individual skills and interests. A teacher designed throwing task that was challenging for one child may not have been challenging for another.

One child might be participating in the prescribed teacher designed task while another changed the task to be more relevant for his or her individual interests and skills. It is also important to note that a teacher prescribed task which challenged a child during one physical education class might not have been challenging during the next class. In addition, a task that was challenging for a child at the beginning of a class may or may not have been challenging for the same child only a few minutes later.

Flow

Children's unrelenting attraction toward the relentless persistence for play during their initial physical education experiences can be compared to the theory of flow as outlined by Csikszentmihalyi (1975). According to Csikszentmihalyi when a person believes that his or her skills are greater than the demands of a task, boredom will follow. On the other hand, when challenges are too demanding for a person's skills it often results in worry and frustration. A flow activity is one which provides optimal challenges in relation to the person's skills.

When Tabitha, Holly, Brett, and Charlie participated in teacher prescribed tasks in kindergarten physical education class they were sometimes in the flow. Their skills were at a level to successfully complete the tasks without being frustrated or bored. On other occasions however, their skill capabilities were not aligned with the teacher tasks and they fell out of flow. When this occurred children typically were not out of flow for long

periods of time. It was as if their natural tendency to play took over. The tendency was for children to change the teacher prescribed tasks which placed them out of flow to tasks in which they could feel more competent. For example, when Tabitha was not in the flow participating in a teacher throwing task where she was to stand behind a restraining line and throw a beanbag at a target, she changed the activity by moving the restraining line closer to the target so she would be more successful and in the flow (T90.FK15.L180-182). While participating in the same task Charlie moved the restraining line back from the target providing a more difficult challenge. Children were frequently observed adapting the teacher prescribed task to a task that was challenging and placed them in flow, moving from classroom structure to internally motivating play-like activity.

Figure 4 illustrates Csikszentmihalyi's flow model as it applied to this study. The flow portion of the original model (see Chapter 2, Figure 1) has been placed horizontally to better illustrate the five situations which occurred to a teacher prescribed task. This illustration demonstrates that the teacher prescribed tasks placed children both in and out of flow. Five different things were observed to occur during various teacher prescribed tasks. First, a teacher prescribed task which was frustrating might be modified by the child to place him/her in flow (A-->A). Second, a teacher prescribed task which was boring could be modified by the child to place him/her in flow (B-->B). Third, a teacher prescribed task which initially placed the child in flow may be compatible

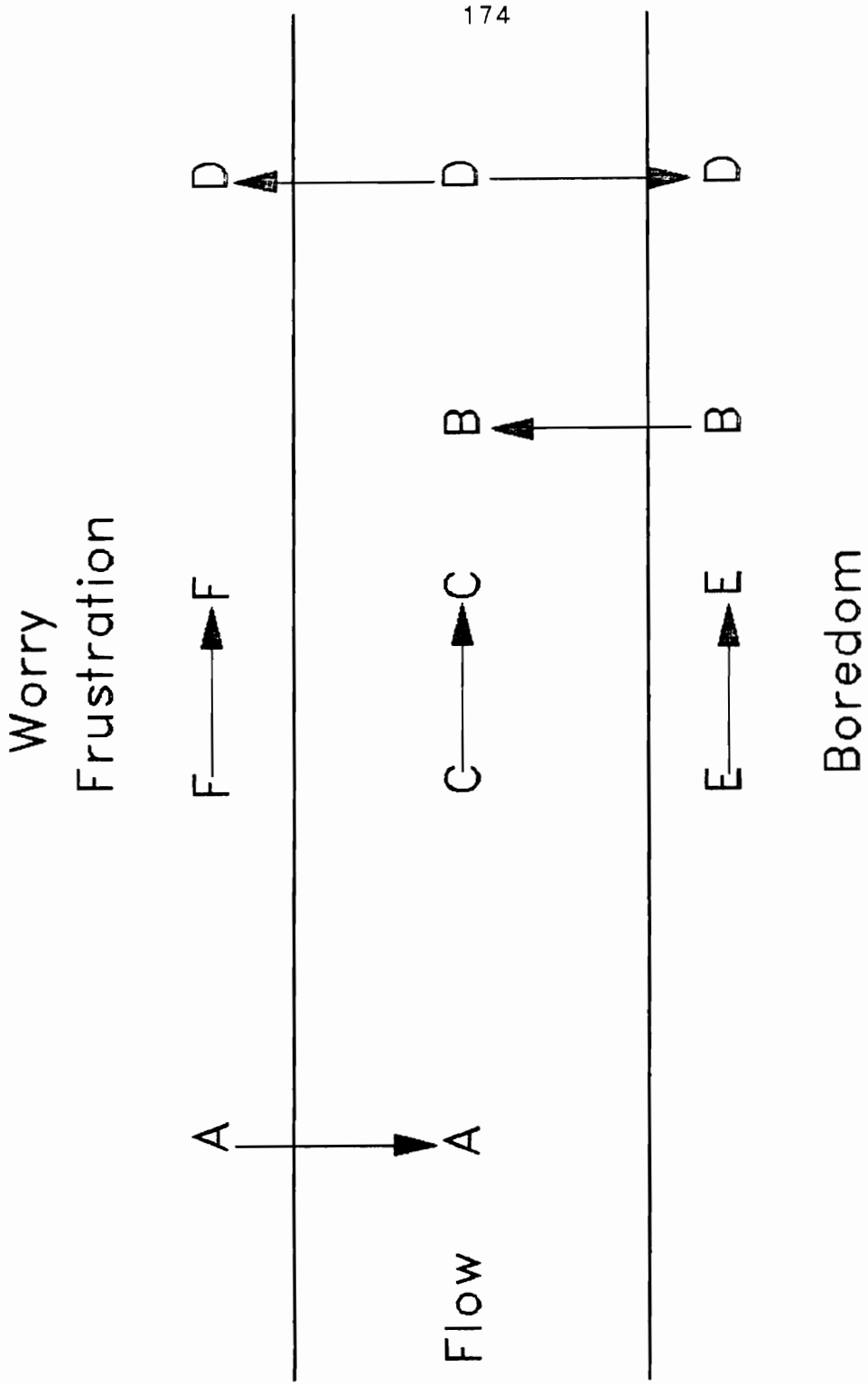


Figure 4. Model of kindergarten children's responses to teacher prescribed tasks within Csikszentmihalyi's model of flow.

with the child's interest and skill level and thus the child remained in the flow (C-->C). Fourth, the child may be in flow participating in either a teacher prescribed or child modified task and be moved out of flow in either direction by the addition of another teacher prescribed task (D-->D). These first four situations were most likely to occur during either locomotor and manipulative activities. In the last situation, a teacher prescribed task might be introduced by the teacher which the children could not modify. In this case (E-->E; F-->F) the children would remain out of flow. This situation was most likely to occur during stretching activities.

The experiences of these kindergarten children in physical education can thus be described as a perpetual movement to be in flow. Kindergarten physical education class for these children can also be described as a struggle to stay in flow. It appeared to make little difference to the children whether the tasks were teacher prescribed or child modified as long as tasks were both individually challenging and interesting providing the opportunity to remain in the flow. During any 30 minute physical education class individual children might take several trips between teacher designed and child modified tasks attempting to find a challenging task that would place them in the flow.

Children in this study did not remain out of the flow for long periods of time. They appeared to create their own flow by modifying teacher tasks or creating their own tasks. Children moved away from those teacher prescribed tasks which were deemed to be boring

or frustrating to tasks modified by them, resembling play. For example, Brett was consistently observed doing a seal walk or moving like a dog when he was frustrated attempting to do the crab walk assigned by the teacher (T9N.FK14.L138-143). Tabitha consistently changed the throwing tasks from standing behind the restraining line placed on the ground by the teacher to moving the restraining line several feet closer to the target (T9O.FK15.L180-182). Holly switched from throwing at the tic tac toe target from a distance of three feet to dropping her beanbag onto the target from directly above (T9N.FK14.L184-194). And, Charlie was observed dropping a yarn ball from two feet into his awaiting scoop as opposed to trying the teacher designed task of throwing the ball into the air to catch it ((T7L.FK12.L132-140). Whenever the teacher prescribed tasks did not provide the children with the opportunity to be in the flow they changed the tasks so they could meet their own interests and challenges. It should be noted that each child's flow was observed to be different. A task that placed one child in the flow may have been too boring or too challenging for another child.

As suggested in Theme 4, the zone of acceptable responses, the teacher provided a range of acceptable responses, ranging from more structured to less structured, during each type of task. Stretching tasks allowed for fewer acceptable responses than did manipulative or locomotor tasks. In this study the structure imposed by the teacher appeared to be extremely important as to children's ability to remain in the flow. Those activities that were heavily

structured provided narrow acceptable response and were thus the activities which provided children the least amount of possibilities to be in the flow. Children out of the flow during stretching activities were usually sitting watching others or placed in time out by the teacher. Brett, in particular, spent several minutes during initial classes in time out specifically for his lack of compliance during stretching activities (T6G.FK7.L76-89). Because of the structure of the stretching tasks children were not allowed to switch from stretching to play and were thus considered to be off task when they attempted to do so. They had to do the activities the way the teacher had them specifically designed. They could not change the way the stretching tasks were to be done.

The locomotor and manipulative activities, which were less structured, allowed children a greater opportunity to be in the flow with a teacher prescribed task. But what was more important to the children was that these less-structured tasks also allowed them to move from the task as it was designed by the teacher to a similar child modified task without spending much time out of flow. For example, Holly could move closer and drop her bean bag onto the target, instead of throwing the bag from three feet away, and spend little time out of the flow. In fact, all of the children were provided the opportunity to move their restraining line closer or farther from a target to assist them in being in the flow (T9N.FK14.122-238), and they all used that opportunity. This allowed them to spend more time in flow and less time being bored or frustrated with the task.

Acquiring the Student Role

Theme # 6: Over the eight week observation period all four children demonstrated a move away from being involved in the process of learning through play-like participation to a more product oriented participation.

By the end of the initial eight weeks of physical education experiences children in this study appeared to have begun to acquire the role of a student in physical education. They were observed to show some tendencies toward changing from a process to product orientation. Initially children were observed approaching physical education as they might approach play. The activity process seemed to be more important to them than what they were suppose to accomplish. The teacher, on the other hand appeared more interested in what the children were suppose to do in physical education and how they were to do it. Apparent changes in attitude seemed particularly true in the structured stretching activities. After only eight weeks of participating in stretching activities children could be observed participating in these teacher prescribed tasks which a few weeks earlier they reported disliking. In this case all four children reported similar attitudes about stretching. When interviewed early in the eight week observation period, Charlie, for example, reported a dislike for the structured stretching. He was observed to spend little time participating and most of the stretching time simply sitting and observing others.

Charlie, having not left the spot he originally selected when stretching activities were started, sits, legs crossed and hands in his lap, watching the other children participate in the stretching tasks (T4E.FK5.L188-192)

By the end of the eight week observation period, however, a remarkable transformation seemed to take place as Charlie was observed participating fully in the stretching activities.

Charlie, chilled from the cool morning air, now sits with his grey cotton hood from his jacket pulled over his head ready to do the leg stretch activities. As he stretches his hands toward his feet, knees bent, he joins in the count to 15 (T7J.FK10.L53-61).

This transformation from rebellious non-participation to moderate participation, can only be described as a developed tolerance of the fact that he was expected to participate in the activities. Charlie's attitude about doing the activities did not change. "I don't like doing this part" was his response to stretching activities (KI3.L156-157), but after only eight weeks, 16-30 minute classes, he had given into the wishes of the teacher, to participate in something in which he did not enjoy and did not want to participate, to give into the structure of the system, to be socialized into physical education.

All four children were comparable in their participation in stretching activities by the end of the eight weeks. They all did what was expected of them. It should be noted that although children did not appear to enjoy the structure imposed upon them

during the stretching activities, they knew that if they wanted to get to the "fun stuff" in p.e. they had to do the stretching first. This could be considered analogous to having to eat your vegetables before you can get dessert. It should also be noted that this transformation was only observed during stretching activities and not when the children participated in locomotor or manipulative activities. It seems apparent that the less structured locomotor and manipulative activities served less as socializing agents than did the more structured stretching activities. The structured stretching tasks were certainly more product oriented and the locomotor and manipulative activities provided children the opportunity to participate in a process.

Although the eight week observation period was too short of a period of time in which to observe what influence the structure of stretching, locomotor, and manipulative activities might have on the children over their first year in school, it does appear that because of the structure imposed during stretching that the children were moving toward a more product oriented participation. Because of the imposed structure the children appeared to demonstrate a change toward more disciplined behavior and greater orientation to adhering to the imposed wishes of the teacher.

In a study by LeCompte and Stewart (1979) it was reported that kindergarten children, during their initial experiences in the classroom, were more involved in the process of participating in an activity than they were in the result or the product of their participation. Teachers, on the other hand were more

committed to the product of children's participation in initial school activities. For example, teachers wanted children to learn their ABC's by playing with blocks whereas the children simply wanted to play with the blocks. Over the period of a year the study reported that children changed from being process oriented to spending more time interested in the product. This socialization of children into what LeCompte and Stewart (1979) refer to as "acquiring the student role" appears to be a movement away from the natural characteristic of young children to learn from participating in the process, from playing, to being more product oriented as were the teachers.

Summary

This chapter described six themes generated from the collected data. The first of these themes focused on the approach children employed in order to learn how to function, either hesitant or confident, during participation in physical education. The second theme related to "learning the ropes" and describes, based on the children's different approaches, from who they appeared to learn and understand procedural and other important information. Theme three described how children were observed to work with partners. Theme four described the "zone of acceptable responses" provided by the teacher to the children. The fifth theme characterized kindergarten children's initial experiences in physical education as a "relentless persistence for play". The last theme described the change observed to take place in the children's participation over the eight week observation period as acquiring the student role.

CHAPTER 6

Summary, Findings, Implications, and Recommendations For Future Research

This chapter summarizes the purpose of the study, the data collection methods employed during the investigation, and the results. It then presents implications before making recommendations for future research.

A Summary of the Study

Recently a dominating question in early childhood education has been "What is developmentally appropriate?" (Bredekamp, 1987). The contemporary trend in early childhood education, and in physical education, has been to develop pedagogy's and curriculums which are considered developmentally appropriate. Conducting the kinds of research which help to further reveal the individual and age level characteristics of children can provide valuable information to educators who are in the process of creating developmentally appropriate learning environments and programs for children. In addition, contemporary researchers have commenced the task of gathering accounts from children concerning their particular perspectives and strategies in relation to school (Davies, 1982). The primary purpose of this study followed those emerging trends and investigated the experiences of kindergarten children in physical education.

This study specifically addressed four research questions:

1. What are the initial physical education experiences of less and more skilled kindergarten children?
2. Are there similarities and differences in the initial physical education experiences of less and more skilled kindergarten children?
3. Does the skill level of kindergarten children appear to influence their initial experiences in, and interpretations of, physical education?
4. What are the initial physical education experiences which are the most and least popular with kindergarten children?

To assist in answering these questions, data were collected on four kindergarten children during their initial eight week physical education experience at Blue Ridge Elementary School in the Fall of 1992. Specific techniques used to gather data included participant observations, fieldnotes, and interviews.

The four selected participants were observed by the researcher each time they participated in physical education class during the first eight weeks of school (total of 16-30 minute observations). Each physical education class was videotaped for subsequent review as part of the data triangulation process, and fieldnotes were recorded during each observation. At the end of each class the researcher, using both the fieldnotes and the videotape record of the class, drafted a detailed description of what was observed during the physical education class as a whole. In addition, a written description of the behavior and experiences of

each of the four individual children was also drafted.

Data were also collected through teacher and children interviews. The physical education teacher and the kindergarten classroom teacher were both interviewed two times. Interviews centered on reflective and probing questions to assist in determining teachers insights on the children's physical education experiences and on the children themselves. The four children were interviewed in pairs for 20-25 minutes on three separate occasions. In order to provide children with a catalyst to stimulate their recall of events, children observed vignettes of their physical education classes and were asked probing questions concerning the viewed events. All interviews were video and audio recorded and then transcribed for later analysis.

A description of the physical education program and of the teacher was drafted from the data sources. In addition, the data from the observations, fieldnotes, interviews, and videotapes were compiled into descriptive profiles of the individual children. Each profile identified the experiences of the individual children as they participated in kindergarten physical education class. Those descriptions were triangulated with each of the data sources to determine if the various data sources corroborated the experiences of the kindergarten children.

Themes describing and comparing children's experiences were then developed from these descriptions. Themes were generated from the descriptions and subsequently a number of those themes

were eliminated, some appeared to be confirmed, and the remaining were combined. Confirmed themes were detailed as the results of this study.

Findings

From the data collected during this study descriptions of the kindergarten physical education program at Blue Ridge Elementary School, along with a description of the teacher, setting, and four children's experiences, were written. These descriptions appear in Chapter 4 and help the reader to visualize what it must have been like for each of these children to participate in their initial physical education experiences. From these descriptions six themes were generated. Following is a brief summary of each of these themes.

Theme # 1: The LS children appeared hesitant to get involved in initial physical education class activities whereas the MS children appeared to take a more confident approach to their involvement.

One major difference found between the LS and MS children in this study was that the two LS children appeared to take a more hesitant approach to their participation in initial physical education experiences while the two MS children appeared to take a more confident approach to their experiences. LS skilled children tended to spend time observing classmates both before and during activity while MS children began activity without hesitation and moved more confidently once participation had begun.

Theme # 2: MS children appeared to be able to comprehend the teacher's instructions on how to function in the gym, whereas, LS children appeared to learn more about how to function in physical education class by observing and following their classmates then by listening to the teacher.

Theme 2 highlights another difference found between MS and LS children. LS children did not appear to be able to gain procedural and skill development information from listening to the teacher. They were consistently slow to move when the teacher gave the go signal and needed to observe their classmates in order to understand what to do. When they did begin participating in an activity they were frequently observed watching their classmates to see how to do the particular activity. MS children either learned procedural information from their teacher or figured out what to do on their own.

Theme # 3: All the children appeared to have difficulty participating in activities which involved working with a partner.

One similarity which emerged from the data was that none of the children appeared to enjoy participation in physical education activities with a partner. During manipulative activities they were often observed changing a partner task to an activity in which one child would work with the ball and the other child would stand and watch. All of the children reported that they would rather work by themselves than work with a partner.

Theme # 4: All four children responded similarly to the structure imposed by the teacher. The more

structure imposed on an activity the less children reported to enjoy their participation.

This theme has major implications for teachers. It appeared that all four of these kindergarten children had a more enjoyable, play-like, experience when they were participating in activities which the teacher imposed less structure. Highly structured activities in which the teacher imposed strict limits on how a task was to be done were less popular and provided the children with a less play-like experience. A zone of acceptable responses (Figure 3) was designed to illustrate the imposed teacher structure.

Theme # 5: Throughout their initial experiences in physical education all four kindergarten children demonstrated a relentless persistence for play.

The relentless persistence for play was defined as a natural characteristic of children to alter or adapt a physical education activity which did not meet children's current skill or interest levels. All children were observed changing teacher prescribed tasks to make them more play-like. This observed relentless persistence for play was compared to Csikszentmihalyi's (1975) theory of flow. A flow activity is one which provides optimal challenges in relation to the person's skills. All children were frequently observed altering teacher prescribed tasks in order to be in the flow.

Theme # 6: Over the eight week observation period all four children demonstrated a move away from being involved in the process of learning through play-like participation to a more product oriented

participation.

Although eight weeks is too short of a period of time to be certain that the children were changing their participation to be less play-like in all activities, it was obvious that their participation in stretching tasks did change over this short time period. Children reported disliking stretching tasks from the beginning of classes throughout the end of the observation period. In the beginning their participation was more play-like, demonstrating a more process orientation to the tasks. By the end of the eight week period, however, children appeared to become more product oriented, wanting to finish the tasks as soon as they could in order to get to other activities they more enjoyed. This socialization of the children appeared to be a part of acquiring the student role.

Implications

It seems appropriate in a study of this kind to suggest the pedagogical significance of the findings. The findings of this study have important implications for teachers who want to create developmentally appropriate learning experiences for kindergarten children.

The kindergarten children in this study appeared to need an initial learning environment which allowed them ample amounts of time to understand what to do in physical education. It is clear that they did not initially understand many classroom procedures. Kindergarten physical education teachers may want to consider an initial environment which allows children

appropriate amounts of time to learn procedural information, and generally learn how to get along in their new environment without being disciplined or scolded for being off task. For example, some of the children in this study were considered off task when they simply did not understand what to do. Instead of reprimanding, teachers might simply allow children the time to sit and observe others. It appeared that the LS children in this study learned about physical education more by watching their classmates than from listening to the teacher. Kindergarten physical education class might best be designed to allow children ample opportunities to observe their peers. Teachers might assist children in adjusting to their environment by verbally encouraging all children who seem unsure to watch their classmates. This study suggests that less skilled children may need more time to adjust than their more skilled classmates, but did not determine what that amount of time might be. It is clear that eight weeks may not be long enough for some children.

Teachers might also utilize children more in demonstrating classroom tasks. Both the LS and MS children in this study were observed sitting, listening to directions, for lengthy periods of time. During this time the teacher told the children everything they needed to know in order to participate in an activity. However, when children, especially the LS children, began moving they appeared not to know what to do. One way to reduce the amount of time children sit and listen is to utilize children to demonstrate activities. Instead of the teacher demonstrating what

the children are to do, teachers may want to utilize three or four classmates in a demonstration of the task.

Another idea to reduce the amount of time children sit and listen to teacher instructions is to have children practice classroom procedures. The children in this study spent very little time practicing classroom guidelines, which may be one factor contributing to their lack of knowledge in always knowing what to do. It does not appear that these kindergarten children were always able to understand what to do simply by being told by the teacher. Classroom procedures might be practiced in a play-like manner in order to provide children an opportunity to learn classroom procedures. For example, teachers might consider making a game out of getting out and putting away equipment or lining up at the end of the class.

It also does not appear that these kindergarten children, at least initially, were very successful when working with partners. Their physical and social skills simply do not appear to be matured to the level where they can be successful working with a partner. It can be suggested that developmentally children were not ready to participate in manipulative partner activities. Partner activities, in this study, resembled individual tasks but with one partner manipulating the ball while the other simply stood and watched. When children worked together to throw or kick a ball with their partner they spent more time chasing the ball than practicing the prescribed tasks. Children themselves reported not wanting to participate

with a partner. This suggests that kindergarten age children simply may not be ready for partner activities, at least during the first eight weeks of school. Teachers may need to exclude partner manipulative activities from kindergarten physical education classes during those initial weeks.

A primary finding of this study has to deal with how children dealt with the structure of their physical education class. It is apparent that these four kindergarten children did not enjoy the structure imposed by the teacher, specifically during the stretching activities. It is equally obvious that these children possessed a relentless persistence for play during their initial physical education experiences. No matter the task, children were observed to attempt to modify any task which they did not feel was interesting or challenging to them at the time. This is an important finding and has important implications for teachers who work with kindergarten children in physical education. If it is true that it is the nature of kindergarten children during the first weeks of school to modify tasks to be more play-like whenever the tasks are boring or frustrating, then it should be apparent that teachers need to structure physical education class, taking into account this developmental characteristic, so that it more resembles play. This does not imply that kindergarten physical education classes should be a chaotic free-for-all, but does imply that the appropriate structure for initial kindergarten physical education activities should be more play-like. It is suggested that teachers design initial kindergarten physical education experiences to

be less structured and more play-like.

Recommendations for Future Research

This study contributed to the limited amount of research conducted not only on children's initial experiences in school but also their initial experiences in physical education, and helped to provide a foundation from which other similar studies can be conducted. The research methodology allowed the researcher to examine evidence of the similarities and differences between selected kindergarten children during their initial experiences in physical education. The focus of this study was on describing those experiences.

Future researchers who examine the experiences of children in physical education will want to consider using qualitative data collection techniques. As in this study, measurement techniques that might be used include participant observation, fieldnotes, and interviews. Video vignettes used as props during the interview process show much promise as a protocol to assist young children in providing answers to researchers questions.

This study found little difference based on gender in the approach to physical education taken by the two girls and the two boys in their initial physical education experiences. Certainly skill level appeared to have a greater influence on their approach to their physical education than did gender. Although gender did not appear to have a major influence on these four children's experiences, gender similarities and differences do deserve further investigation.

It appears from observations and interviews of these four children that all had a fascination with balls. Further investigation is warranted to attempt to determine why manipulative activities so captivated these children. Results of this study indicate that the unstructured atmosphere during manipulative tasks may have contributed to children's active involvement in these activities. Children seemed, however, to also be fascinated with the movement of the ball and what they could do with it.

It seems clear, based on the results of this study, that children's experiences in physical education are influenced by the structure of physical education class activities imposed by the teacher. Further research needs to be completed which investigates how more and less structure influences children's experiences in physical education. This research could be conducted not only on kindergarten physical education classes but on physical education classes through the 12th grade.

Another recommendation would be to study the influence different pedagogical perspectives, such as the one outlined by Vygotsky's zone of proximal development, have on the experiences of children in kindergarten physical education. The current literature in physical education has provided little information on how different pedagogies affect the experiences and perceptions of children about physical education. Certainly highly structured methodologies were not liked by the children in this study. It would be interesting to determine what children feel about different methodologies employed in presenting physical

education.

The results of the present study apply only to the four kindergarten children at Blue Ridge Elementary School. While the conclusions may not be applicable to all kindergarten children, they nevertheless shed greater light on the question "what are the experiences of kindergarten children in physical education?" Further studies are needed, however, so that generalizations can be made regarding children's initial physical education experiences.

There is a great need for future research which examines all aspects of kindergarten children's physical education experiences. This study only included a few stretching, locomotor, and manipulative tasks. In addition to studying other similar activities there is a need to investigate children's feelings and experiences in other parts of kindergarten physical education, including but not limited to, games, dance, gymnastics, fitness, circle time, putting away and getting out equipment, and lining up at the end of class. This investigation needs to be done not only with kindergarten children but also with students in physical education from kindergarten through grade 12 so that comparisons can be made and similarities and differences can be recorded. Having this information may be beneficial in assisting teachers in providing programs which meet the needs of children.

Based on this study, further research might be conducted to determine when or if less skilled children stop observing and depending on their peers for assistance in learning in physical education. This information may assist teachers in planning curriculums

and daily physical education class activities in order to prepare for the individual differences of children.

In addition, further research should be conducted which investigates how children learn from and feel about working with a partner. It is obvious from this study that kindergarten children did not enjoy working with partners. Other age groups may or may not learn by participating in or enjoy partner activities. Research dealing with the affects of working with a partner is needed with all age groups.

Another investigation might take the form of a longitudinal research effort. The primary purpose of that study would be to determine if and how children's experiences and feelings about physical education change over time and to determine what factors might influence those changes. This knowledge may assist teachers who teach a variety of different ages in planning teaching techniques and strategies for the various age groups.

Further research should be conducted concerning how children's developmental characteristics influence the way they approach their physical education experiences. If it is true that kindergarten children possess a relentless persistence for play this characteristic may need to be taken into consideration as teachers plan appropriate curricular experiences. It would then be appropriate to find out, for example, if older children also possess a relentless persistence for play.

Although the research literature is in it's infancy research does suggest that information about children's experiences in school and their perceptions

about those experiences can be helpful to teachers who are interested in providing learning environments in which children thrive (Carpenter, et. al., 1989; Bondy, 1990; Weiland, 1985). Studies which examine how teachers process information about kindergarten children's experiences in physical education would also provide some unique insights. It is critical that teachers understand children's experiences and feelings about those experiences when they develop education programs for children. It would be interesting to learn to what extent teachers currently use the knowledge of children's experiences and perceptions in designing learning activities.

In conclusion, finding out what children experience in physical education class is an extremely difficult task. It is evident that more observational and interview studies are needed in order to fully understand the physical education experiences of children and their feelings about those experiences. It is also apparent that kindergarten children's relentless persistence for play has an influence on the way children approach their initial physical education experiences, and that this concept deserves further scrutiny.

REFERENCES

- Adler, P. A., & Adler, P. (1984). The carpool: A socializing adjunct to the educational experience. Sociology of Education, 57, 200-210.
- Amato, P. R., & Ochiltree, G. (1987). Interviewing children about their families: A note on data quality. Journal of Marriage and the Family, 49, 669-675.
- Amunds, K. M. (1989). "What's happening?": A study of children's earliest experiences in junior kindergarten. Unpublished master's thesis, Queen's University, Kingston, Ontario.
- Bogdan, R. C., & Biklen, S. K. (1982). Qualitative research for education: An introduction to theory and methods. Boston: Allyn and Bacon.
- Bondy, E. (1990). Seeing it their way: What children's definitions of reading tell us about improving teacher education. Journal of Teacher Education, 41(4), 33-45.
- Bowman, B. (1993). Early childhood education. In L. Darling-Hammond (Ed.), Review of Research in Education (pp. 101-134). Washington, DC: American Educational Research Association.
- Bredekamp, S. (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington: NAEYC.
- Brooks, M., & Fusco, E. (1984). A child's brain: Impact on learning behaviors. Haworth Press.
- Carpenter, T. P., Fennema, E., Peterson, P. L., Chiang, C., & Loef, M. (1989). Using knowledge of children's mathematics thinking in classroom teaching: An experimental study. American Educational Research Journal, 26(4), 499-531.
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. Educational Researcher, 19(5), 2-14.

- Corbin, C., Nix, C. (1979). Sex-typing of physical activities and success predictions of children before and after cross-sex competition. Journal of Sport Psychology, 1, 43-52.
- Council on Physical Education for Children. (1991). Developmentally appropriate physical education practices for children: A position statement of the Council on Physical Education for Children (COPEC). Reston, VA: National Association for Sport and Physical Education.
- Csikszentmihalyi, M. (Ed.). (1975). Beyond boredom and anxiety: The experience of play in work and games. San Francisco, CA: Jossey-Bass Publishers.
- Cullingford, C. (1988). Children's views about working together. Education 3-13, (March), 29-34.
- Dauer, V., & Pangrazi, R. (1989). Dynamic physical education for elementary school children (9th Ed.). New York: MacMillan Publishing Company.
- Davies, B. (1982). Life in the classroom and playground. Melbourne: Routledge & Kegan Paul Ltd.
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532-550.
- Erickson, F., & Shultz, J. (1992). Student's experience of the curriculum. In P. Jackson (Ed.), Handbook of research on curriculum (pp. 465-485).
- Filby, N. N., & Barnett, B. G. (1982). Student perceptions of "better readers" in elementary classrooms. The Elementary School Journal, 82(3), 435-447.
- Fine, G. A., & Sandstrom, K. L. (1988). Knowing children: Participant observations with minors. London: Sage Publications.
- French, E., Rink, J., Rikard, L., Mays, A., Lynn, S., & Werner, P. (1991). The effects of practice progressions on learning two volleyball skills. Journal of Teaching in Physical Education, 10(3), 261-274.

- Frey, K. S., & Ruble, D. N. (1987). What children say about classroom performance: Sex and grade differences in perceived competence. Child Development, 58, 1066-1078.
- Fu, V. R., Goodwin, M. P., Sporakowki, M. J., & Hinkle, D. E. (1987). Children's thinking about family characteristics and parent attributes. Journal of Genetic Psychology, 148(2), 153-166.
- Gallimore, R., & Tharp, R. (1990). Teaching mind in society: Teaching, schooling, and literate discourse. In L. C. Moll (Ed.), Vygotsky and education: Instructional implications and applications of sociohistorical psychology (pp. 175-205). New York: Cambridge University Press.
- Garbarino, J., & Stott, F. M. (1990). What children can tell us. San Francisco: Jossey-Bass.
- Graham, G., Holt/Hale, S., & Parker, M. (1987). Children moving: A teachers guide to developing a successful physical education program. Mountain View, CA: Mayfield.
- Graham, G., Hopple, C., Manross, M., & Sitzman, T. (1993). Novice and experienced children's physical education teachers: Insights into their situational decision-making. Journal of Teaching in Physical Education, 12(2), 197-214.
- Graham, G., Metzler, M., Webster, G. (1991). Specialist and classroom teacher effectiveness in children's physical education. Journal of Teaching in Physical Education, 10(4), 321-436.
- Hammersley, M., & Woods, P. (1984). Editor's introduction. In M. Hammersley & P. Woods (Eds.), Life in school: The sociology of pupil culture (pp. 1-4). Great Britian: Open University Press.
- Hatch, J. A. (1990). Young children as informants in classroom studies. Early Childhood Research Quarterly, 5, 251-264.
- Haubenstricker, J. (1982). Motor development in children with learning disabilities. Journal of Physical Education, Recreation, and Dance, 53(5), 41-43.

- Haubenstricker, J., & Seefeld, V. (1974). Sequential progression of fundamental motor skills of children with learning disabilities. Paper presented at the international conference of the Association for Children with Learning Disabilities, Houston.
- Hedegaard, M. (1990). The zone of proximal development as basis for instruction. In L. C. Moll (Ed.), Vygotsky and education: Instructional implications and applications of sociohistorical psychology (pp. 349-371). New York: Cambridge University Press.
- Henderson, S., & Hall, D. (1982). Concomitants of clumsiness in young school children. Developmental Medicine and Child Neurology, 24, 448-460.
- Higgins, S. (1991). Motor skill acquisition. Physical Therapy, 71(2), 123-139.
- Hopple, C. (in progress). A qualitative analysis: What less-fit and more-fit fourth and fifth graders think, feel, and know about physical fitness tests. (Master's thesis in progress), Virginia Tech University, Blacksburg, VA.
- Ignico, A. A., & Mead, B. J. (1990). Children's perceptions of the gender appropriateness of physical activities. Perceptual and Motor Skills, 71, 1275-1281.
- Kantor, R. (1988). Creating school meaning in preschool curriculum. Theory Into Practice, 27(1), 25-35.
- Keogh, J., Sugden, D., Reynard, C., & Calkins, J. (1979). Identification of clumsy children: Comparisons and comments. Journal of Human Movement Studies, 5(1), 32-41.
- King, N. R. (1979). Play: The kindergartners' perspective. The Elementary School Journal, 80(2), 80-87.
- Kirchner, G. (1992). Physical Education for Elementary School Children. Dubuque: Wm. C. Brown.
- Klein, E. L., Kantor, R., & Fernie, D. E. (1988). What do young children know about school. Young Children, (July), 32-39.

- Kurth-Schai, R. (1988). Collecting the thoughts of children: A delphic approach. Journal of Research and Development in Education, 21(3), 53-59.
- LaPorte, R. E. (1982). The epidemiology of physical activity in children, college students, middle aged men, menopausal females and monkeys. Journal of Chronic Disorders, 35, 787-795.
- Lawson, H., Lawson, B., & Stevens, A. (1982). Meaning and functions attributed to elementary physical education. Canadian Association for Health and Physical Education Journal, 48(4), 3-6.
- LeCompte, M. D., & Goetz, J. P. (1982). Ethnographic data collection in evaluation research. Education Evaluation and Policy Analysis, 4(3), 387-400.
- LeCompte, M. D., & Stewart, I. S. (1979, April). Learning the ropes: Children's acquisition of the student role. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.
- Lythcott, J., & Duschl, R. (1990). Qualitative research: From methods to conclusions. Science Education, 74(4), 445-460.
- Magill, R. A., & Ash, M. J. (1979). Academic, psychosocial, and motor characteristics of participants and nonparticipants in children's sport. Research Quarterly, 50,(2), 230-240.
- Manross, M. (in progress). From their perspectives: What children's thoughts, feelings, and perceptions about the skill of throwing can tell us. (Master's thesis in progress), Virginia Tech University, Blacksburg, VA.
- Marshall, C., & Rossman, G. B. (1989). Designing Qualitative Research. Newbury Park, CA: Sage Publications.
- Miller, P. H. (1989). Theories of developmental psychology (2nd ed.). New York: W. H. Freeman and Company.

- Moll, L. C. (Ed.). (1990). Vygotsky and education: Instructional implications and applications of sociohistorical psychology. New York: Cambridge University Press.
- National Association for Sport and Physical Education. (1992). The physically educated person. Reston, VA: NASPE.
- Noland, M., Danner, F., Dewalt, K., McFadden, M., & Kotchen, M. (1990). Research Quarterly For Exercise and Sport, 61(2), 146-153.
- O'Hara, N., Baranowski, T., Simons-Morton, B., Wilson, B., & Parcel, G. (1989). Validity of the observation of children's physical activity. Research Quarterly For Exercise and Sport, 60(1), 42-47.
- Parker, W. C. (1984). Interviewing children: Problems and promise. Journal of Negro Education, 53(1), 18-28.
- Portman, P. A. (1992). The behaviors of low-skilled students in public school physical education classes: The significance of being chosen last. Unpublished doctoral dissertation. University of Massachusetts.
- Pritchard, O. (1988). Attitudes towards physical education in England--An investigation among parents, pupils and teachers. Physical Educator, 45(3), 154-156.
- Reifel, S. (1988). Children's thinking about their early education experiences. Theory Into Practice, 27, 62-66.
- Rogers, D. L. (1987). Encouraging extended conversations with young children. Day Care and Early Education, (Fall), 23-27.
- Rogers, D. L., Perrin, M. S., & Waller, C. B. (1987). Enhancing the development of language and thought through conversations with young children. Journal of Research in Childhood Education, 2(1), 17-29.
- Rogers, C. S., & Sawyers, J. K. (1988). Play in the lives of children. Washington, DC: NAEYC.

- Rubin, K. H., Fein, G. G., & Vandenberg, B. (1983). Play. In P. H. Mussen (Ed.), Handbook of child psychology (pp. 693-774). New York: John Wiley & Sons.
- Sanjek, R. (1990). Fieldnotes: The makings of anthropology. Ithaca: Cornell University Press.
- Scarfe, N. V. (1974). Play: An agent for learning social values. In P. M. Markun (Ed.), Play: Children's Business (pp. 5-11). Washington, DC: Association for Childhood Education International.
- Sherrill, C., Holguin, O., & Caywood, A. (1989). Fitness, attitude toward physical education, and self-concept of elementary school children. Perceptual and Motor Skills, 69, 411-414.
- Silverman, S. (1985). Relationship of engagement and practice trials to student achievement. Journal of Teaching in Physical Education, 5, 13-21.
- Simons-Morton, B., O'Hara, N., Simons-Morton, D., & Parcel, G. (1987). Children and Fitness: A public health perspective. Research Quarterly, 58(4), 295-302.
- Smith, S. J. (1991). Where is the child in physical education research? Quest, 43, 37-54.
- Smoll, F., Schutz, R., & Kenney, J. (1976). Relationships among children's attitudes, involvement, and proficiency in physical activities. Research Quarterly, 47(4), 797-803.
- Sonstroem, R. J. (1978). Physical estimation and attraction scales: Rationale and research. Medicine and Science in Sports, 10(2), 97-102.
- Spradley, J. P. (1979). The ethnographic interview. Chicago: Holt, Rinehart, and Winston.
- Spradley, J. P. (1980). Participant observation. Chicago: Holt, Rinehart and Winston.
- Tammivaara, J., & Enright, D. S. (1986). On Eliciting information: Dialogues with child informants. Anthropology & Education Quarterly, 17, 218-238.

- Tobin, J. J., Wu, D. Y. H., & Davidson, D. H. Preschool in three Cultures: Japan, China, and the United States. New Haven: Yale University Press.
- Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.
- Watkins, B., & Montgomery, A. B. (1989). Conceptions of athletic excellence among children and adolescents. Child Development, 60, 1362-1372.
- Waksler, F. C. (1986). Studying children: Phenomenological insights. Human Studies, 9, 71-82.
- Weiland, L. (1985). Matching instruction to children's thinking about division. Arithmetic Teacher, 33(4), 34-35.
- Weiss, M. R., & Horn, T. S. (1990). The relation between children's accuracy estimates of their physical competence and achievement-related characteristics. Research Quarterly for Exercise and Sport, 61(3), 250-258.
- Winstein, C. (1991). Knowledge of results and motor learning--Implications for physical therapy. Physical Therapy, 71(2), 140-149.
- Weinstein, R. S. (1983). Student perceptions of schooling. The Elementary School Journal, 83(4), 287-312.
- Wolcott, H. F. (1990). Writing up qualitative research. London: Sage Publications.
- Wood, H., & Wood, D. (1983). Questioning the pre-school child. Educational Review, 35(2), 149-162.
- Yarrow, L. J. (1960). Interviewing Children. In P. Mussen (Ed.), Handbook of research methods in child development. John Wiley & Sons.
- Yonemura, M. (1974). Learning what children know. Childhood Education, (Nov/Dec), 64-67.

APPENDIX A
INFORMED CONSENT FORM

September 14, 1992

Dear Parent or Guardian:

My name is Steve Sanders. I am a graduate student at Virginia Tech studying children's physical education. Recently, I have become interested in learning more about children's feelings and attitudes concerning their physical education experiences. To accomplish this, I would like to observe children participating in physical education classes and then talk with them about their experiences. This letter seeks your approval to do so.

My conversations with your child will focus on gaining insights into his/her feelings and attitudes about physical education. These conversations will take place at Blue Ridge Elementary School over the next few months. Our discussions will be approximately 20 minutes in length and scheduled so that your child does not miss any regularly scheduled academic activity. All conversations will be audiotaped and videotaped. These tapes will remain in my possession and will be held strictly in confidence. Furthermore, the names of your child, Blue Ridge Elementary, and the teachers involved will remain anonymous during all aspects of the project. It is also important to mention that if your child wishes, he/she can stop participating in this project at any time.

If you approve of your child's participating in this project, please fill out the form below and return it to your child's teacher by Wednesday, September 16, 1992. If you have further questions regarding this project, please contact Mrs. Brooks or call me at ###-###. I'd like to thank Mr. Smith and Mrs. Brooks for their support of this project.

I am looking forward to talking with your child and I thank you in advance for your cooperation concerning this project.

Sincerely,

Steve Sanders

I hereby grant permission for my child

(Child's Name

to be a participant in the above described physical
education

project.

(Date)

(Parent/Guardian Signature)

APPENDIX B
DAILY CLASS ACTIVITIES

Daily Class Activities

This list includes the activities in which children participated on a daily basis throughout the eight week observation period.

9/14

Rules and Procedures

Locomotor Activities

Walking

Galloping

Skipping

9/17

Locomotor Activities

Walking

galloping

Stretching Activities

Arm Stretches

Leg Stretches

Crab Walk

Tunnel Tag

9/21

Locomotor Activities

Galloping

Walking

Stretching Activities

Arm Stretches

Leg Stretches

Seal Walk

Manipulative Activities

Rolling a Ball

Placing Ball at Levels

9/24

Locomotor Activities

Walking

Galloping

Skipping

Stretching Activities

Arm Stretches

Leg Stretches

Seal Walk

Crab Walk

Manipulative Activities

Kicking

9/28

Locomotor Activities

Walking

Gallop

Stretching Activities

Arm Stretches

Leg Stretches

Crab Walk

Manipulative Activities

Kicking

10/1

Locomotor Activities

Walking

Gallop

Stretching Activities

Arm Stretches

Leg Stretches

Crab Walk

Manipulative Activities

Kicking with a Partner

10/5

Locomotor Activities

Gallop

Walking

Stretching Activities

Arm Stretches

Leg Stretches

Crab Walk

Seal Walk

Manipulative Activities

Throwing at Targets

10/8

Locomotor Activities

Gallop

Skipping

Stretching Activities

Arm Stretches

Leg Stretches

Crab Walk

Manipulative Activities

Kicking

10/12

Locomotor Activities

 Galloping

 Running

Stretching Activities

 Arm Stretches

 Leg Stretches

 Crab Walk

Manipulative Activities

 Throw and Catch to Self

10/15

Locomotor Activities

 Skipping

 Galloping

 Running

Stretching Activities

 Arm Stretches

 Leg Stretches

Manipulative Activities

 Throw and Catch Using Milk Jug Scoops

10/19

Locomotor Activities

 Walking

 Galloping

 Skipping

Stretching Activities

 Arm Stretches

 Leg Stretches

 Crab Walk

 Seal Walk

Manipulative Activities

 Throw and Catch Using Scoops

 Throw and Catch with Partner

10/22

Locomotor Activities

 Skipping

 Galloping

 Running

Stretching Activities

 Leg Stretches

 Arm Stretches

 Push-ups

 Crab Walk

Manipulative Activities

 Throw and Catch with Self

 Throw and Catch with Partner

10/26

Locomotor Activities

 Galloping

 Skipping

 Running

Stretching Activities

 Leg Stretches

 Arm Stretches

 Crab Walk

Manipulative Activities

 Throwing at Targets at Stations

10/29

Locomotor Activities

 Running

Stretching Activities

 Leg Stretches

 Arm Stretches

 Crab Walk

Manipulative Activities

 Throwing at Targets at Stations

APPENDIX C
SAMPLE INTERVIEW QUESTIONS

Sample Interview Questions

Most of the interview questions for this study were generated from the teacher's responses when asked about individual children or from children's responses to the video vignettes of themselves participating in physical education class. The researcher had general questions for both teachers and children but most of the questions were generated during the interviews in response to what was said by a teacher or child. Following are some examples of the questions asked during interview sessions.

Sample Classroom Teacher Interview Questions

1. How do you think children feel about physical education?
2. When children come back after physical education what do they talk about?
3. How do you think children feel about stretching?
4. Describe the personal characteristics of each of the four children.
5. Compare the structure of physical education class with the structure of the kindergarten classroom?

Sample Physical Education Teacher Interview Questions

1. Describe the physical education program?
2. Describe the personal characteristics of the children?
3. Describe the goals of the program?
4. How do children learn about rules?
5. Do kindergarten children understand what physical education is all about?

6. Describe how children participate in stretching activities? locomotor activities? manipulative activities?
7. How do children feel about physical education?
8. How do children feel about working with partners?

Sample Questions for Children

1. Tell me what you are doing in this activity? (This was the major type of question asked to the children. They would view themselves on the video and were then asked to describe what they were doing during individual stretching, locomotor, and manipulative tasks. They were then asked to describe how they felt about participation in each type of activity.)
2. How do you feel about working with partners?
3. How do you feel about being placed in time-out?

VITA

VITA

I was born on June, 21, 1952. I attended public school in Indiana and graduated from North Putnam High School in 1970.

I graduated from Purdue University in 1974, with a BPE degree in physical education. After teaching elementary school for one year I entered the University of Georgia and in 1977 completed my Master's Degree, also in physical education.

After graduating, I was hired by Walker school in Marietta, Georgia where I taught K-12 physical education and coached several sports. In 1982 I started a business called the Children's Movement Center and directed that business for 8 years before leaving to pursue an Ed.D. in Curriculum and Instruction at Virginia Tech. I completed my degree in 1993.

Currently, I am employed at Auburn University.