Preschool Physical Education: A Case Study of the Factors That Influence Movement Instruction to Preschool Children

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PRE-SCHOOL PHYSICAL EDUCATION: A CASE STUDY OF THE FACTORS THAT
INFLUENCE MOVEMENT INSTRUCTION TO PRE-SCHOOL CHILDREN

BY

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This dissertation is dedicated to my mother, Esther Rodríguez Ramos.
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# TABLE OF CONTENTS

List of Tables ........................................................................................................... vii  
Abstract .................................................................................................................. viii  

1. Introduction: Significance, Purpose, Definition of Terms, and Hypothesis ..... 1  
   Classroom teacher’ attitudes and physical education ..................................... 4  
   Statement of the problem ............................................................................. 6  
   Purpose of the study and research questions .............................................. 9  
   Significance of the study ........................................................................... 9  
   Definition of terms .................................................................................... 10  

2. Review of the Related Literature ................................................................. 13  
   Importance of teaching physical education in early childhood programs .... 13  
   The influence of beliefs and attitudes in educational practice .................. 23  
   Factors that may influence movement skill instruction to preschool children 26  
   Factors that influence the implementation of educational practices .......... 39  
   Studying beliefs and attitudes .................................................................. 45  

2. Methodology ................................................................................................... 49  
   Theoretical perspective ............................................................................ 49  
   Case study .................................................................................................. 53  
   Ensuring quality ......................................................................................... 56  
   Researcher’s role ....................................................................................... 60  
   Research site .............................................................................................. 61  
   Subjects ....................................................................................................... 63  
   Data collection methods and procedures .................................................. 65  
   Data analysis ............................................................................................... 77  
   Ethical concerns ......................................................................................... 81  
   Limitations ................................................................................................. 82  

3. Results and Discussion .................................................................................. 84  
   Factors that influence the teaching of movement skills at the University ..... 88  
   Preschool ..................................................................................................... 88  
   What would facilitate more movement instruction at the University ....... 128  
   Preschool?.................................................................................................. 128  

4. Conclusion ..................................................................................................... 139
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical framework</td>
<td>140</td>
</tr>
<tr>
<td>Implications</td>
<td>141</td>
</tr>
<tr>
<td>Towards the goal of increasing movement education</td>
<td>151</td>
</tr>
<tr>
<td>Impact of a movement education program</td>
<td>154</td>
</tr>
<tr>
<td>Future research</td>
<td>155</td>
</tr>
<tr>
<td>Summary</td>
<td>156</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>158</td>
</tr>
<tr>
<td>A Human Subjects approval and informed consent</td>
<td>158</td>
</tr>
<tr>
<td>B Questionnaires and Surveys</td>
<td>160</td>
</tr>
<tr>
<td>C Inventory of movement equipment</td>
<td>166</td>
</tr>
<tr>
<td>D Lesson plan description</td>
<td>168</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>169</td>
</tr>
<tr>
<td>BIOGRAPHICAL SKETCH</td>
<td>181</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1: Percentage of indoor and outdoor activities ........................................ 88
Table 2: Comparison between former and current available physical activity time 109
Table 3: Factors that influence movement skill instruction to preschool children... 128
Table 4: Physical education equipment stored in classrooms ......................... 166
Table 5: Physical education equipment stored on playground ....................... 167
Ample evidence supports the notion that physical education programs contribute to the development of the whole child and in doing so should be an integral part of every school's curriculum (Campbell, 1997). I undertook this case study to investigate the factors that influence movement skill instruction to preschool children in order to explain the insufficient amount of movement education at a preschool. Finding and understanding these factors can facilitate the successful implementation of a movement program that addresses children’s physical activity needs.

The data gathered through document analysis, teacher and parent surveys, participant observation, and teacher and parent interviews revealed several factors that limit the teaching of movement education at the University Preschool. These factors were sorted by each of the elements in Ajzen’s Theory of Planned Behavior (1991): attitudes, subjective norms, and perceived behavioral control. The majority of the codes that emerged related to the element of attitudes. However, because most of the teachers’ attitudes did not match their practices, the other two elements were more critical for pinpointing the barriers to movement education.

The most influential factors were related to teachers' perceived capability to teach movement and support from the administration. Teacher training in movement education seemed to be the most needed and perhaps the most effective way to encourage the integration of movement education into the curriculum. Movement education is a valuable way to provide children with experiences that can facilitate learning in many areas of the early childhood curriculum.

Since most children spend the majority of their day in educational settings, preschool centers and schools are the most likely place to influence and change children’s physical activity patterns. Given this, as educators we must consider the educational possibilities and the benefits that physical activity can bring to the lives of young children and tailor early childhood curriculums with the goal of promoting lifelong participation in physical activity. The findings also led to recommendations for further research in the areas of early childhood and physical education.
Early childhood education research in the areas of cognitive and socio-emotional development is abundant and has supported young children’s need for developmentally appropriate learning experiences and play (Bredekamp & Copple, 1997). Research on physical activity play (Pellegrini & Smith, 1998) and movement education as a content area in early childhood curricula; however, is limited in spite of the importance of physical development. Further research in the area of young children’s physical activity and movement skill learning can enhance the early childhood curriculum. Moreover, it can demonstrate to educators that movement experiences are appropriate, can be easily integrated into the early childhood curriculum, and that doing so can provide children with health, emotional, and intellectual benefits.

Of greatest concern is the alarming state of children’s health in the United States. Researchers agree that obesity has its roots in childhood. Indeed, for many people problems related to obesity originated as a result of their lifestyle during childhood and adolescence (Freedman, Khan, Dietz, Srinivasan, & Berenson, 2001). Lack of physical activity as well as poor nutritional habits among other factors contribute to the obesity epidemic (Centers for Disease Control [CDC], 2002).

The incidence of childhood obesity has tripled in the past 25 years. In 1976, the rate of childhood obesity in the United States was 5%. Currently, 15% of children age 6 to 19 in the United States are overweight and an additional 15% are at risk for becoming overweight. Furthermore, over 10% of preschool children between 2 and 5 years-old are overweight (CDC, 2002; United States Department of Health and Human Services [USDHHS], 2001). Given these trends, national organizations and government agencies that serve as advocates for young children’s physical activity needs have expressed concern about children’s lack of physical activity and the consequential rise in obesity and other health problems associated with inactivity among young children (National
Association for Sport and Physical Education [NASPE], 2004; CDC, 2000). Health and physical education advocates are trying to focus public attention to help schools and families understand the need for young children to engage in daily physical activity (NASPE, 2004). In fact, schools are particularly important because they can have an effect on children’s behavior on a daily basis.

Physical education for young children is also known as movement education. In early childhood the current focus of physical education is on teaching children fundamental movement skills and concepts. These are the building blocks for more complex movements and combination of movements needed for successful participation in recreational and sports activities. These skills should be acquired and practiced during the early childhood years. Young children ages 3-5 years old are believed to be developmentally ready to learn and practice fundamental movement skills and concepts (Gallahue & Ozmun, 1996; Graham, Holt/Hale, & Parker, 1993; Sanders, 2002) through a movement program. Therefore, in this study, the term “preschool children” refers to children ages 3-5 years-old.

Nationally, 49% of children ages 3-4 year old are enrolled in a nursery school, preschool, or kindergarten (Annie Casey Foundation, 2003). In Florida, 55% of 3-4 year-old children are enrolled in some type of early education program (Annie Casey Foundation). Young children who attend public schools are more likely to receive physical education than children who are enrolled in private schools because government funded programs have more resources to hire physical education specialists (Avery, 1994) and most elementary public schools require physical education (CDC, 2001). Moreover, 59.7% of children under 6 years old have both parents in the workforce (Florida Children’s Forum, 2003). Sixty-three percent of Florida children, in comparison, have both parents in the workforce. Based on the number of young children enrolled in child care and early education programs, many young children spend the majority of their waking hours in childcare or at a preschool.

The majority of early childhood programs do not have physical education specialists; therefore, the responsibility for meeting the physical activity needs of young children falls mostly on classroom teachers (Sanders, 2002). Preschool teachers in private settings have more freedom to include or not include physical education in their
curriculum depending on the program’s philosophy. The significance of this is that since many children attend preschool programs and movement education is optional in most early childhood settings, young children may be underserved in physical education. Preschool children can derive substantial physical, health, socio-emotional, and possibly intellectual benefits from learning movement skills at this age (CDC, 2001; CDC, 2002; Gallahue & Ozmun, 1996; Hannaford, 1995; Jensen, 1998; Pate, et al. 1995; Seefeldt, 1980; Shephard, 1997; USDHHS, 1996; Weiss, 1987). Furthermore, children who learn a myriad of movement skills are more likely to be physically active throughout school which facilitates the development of lifetime patterns of physical activity (CDC, 1997; CDC, 2000; Sallis & McKenzie, 1991; Sanders, 2002). Thus, it is recommended that young children should be taught movement skills to help maintain lifetime health and fitness (NASPE, 2004).

School physical education can help young children develop positive attitudes and regular patterns of physical activity (CDC, 1997; Sallis & McKenzie, 1991; USDHHS, 1996). In elementary schools, physical education has been considered the perfect program to promote regular physical activity because most children have to participate (CDC; Sallis & McKenzie). Hence, preschools would also be an ideal location for the early promotion of physical activity.

Through physical activity, children’s health can be enhanced. Regular physical activity can help children maintain healthy muscles, bones, and joints; reduce the risk of heart disease and diabetes; and control their weight (Pate, et al. 1995; USDHHS, 1996). Unfortunately, children in the United States are becoming increasingly less active as they get older (NASPE, 1998) and it is believed that inactivity and sedentarism are the primary factors for the development of childhood and adult obesity (NASPE, 2004a; Mokdad, Serdula, Dietz, Bowman, Marks, & Koplan, 1999). In fact, according to the CDC (2000) inactivity has contributed to the 100% increase in the incidence of childhood obesity in the United States since 1980. Currently, the prevention of childhood obesity is a priority in the United States as childhood obesity is reaching epidemic levels (CDC, 2000; Flegal, Carrol, Kuczmarski, & Johnson, 1998; Troiano & Flegal, 1998). Since obese children are more likely to become obese adults (Freedman,
Khan, Dietz, Srinivasan, & Berenson, 2001), focusing on measures to prevent childhood obesity is indeed important.

Socio-emotional benefits abound for children who engage in physical activity. As children learn and master more movement skills they also develop proficiency and feel physically competent. Young children strive to achieve movement mastery and find delight in physical success. Children use movement to learn about their world and express feelings (Sanders, 2002). Additionally, learning fundamental movement skills can prevent children from experiencing high levels of frustration when they become involved in sports or in activities that require complex combinations of movement skills (Poest, Williams, Witt, & Atwood, 1990). Through movement education experiences, children can learn social skills such as teamwork, discipline, and leadership.

Finally, physical activity may derive intellectual benefits, from creating cell networks that are involved in learning to boosting children’s attention in the classroom (Hannaford, 1995; Jensen, 1998; Shephard, 1997). A definite link between physical activity and academic achievement has not been established, however, studies have revealed that academic performance is not adversely affected in spite of a reduction of daily classroom teaching time in other subject areas to accommodate physical education (Sallis, McKenzie, Kolody, Lewis, Marshall, & Rosengard, 1999).

Classroom Teachers’ Attitudes and Physical Education

Beliefs are the building blocks of attitudes and are shaped through knowledge and experiences (Calderhead & Robson, 1991; Goodman, 1988). Rokeach (1968) proposed that all beliefs are predispositions to action and when beliefs cluster around an object or situation this holistic organization becomes an attitude. Beliefs of how capable a teacher feels and how a teacher perceives the environment supports his/her teaching, can also influence her/his work with young children. In fact, Faucette and Patterson (1989) found that elementary school teachers’ negative attitudes about teaching physical education were congruent with their teaching behaviors while teaching physical education.
Most elementary public schools require physical education, regardless of how a teacher feels about teaching physical education (Faulkner & Reeves, 2000); therefore, he/she is often obligated to teach this subject. On the other hand, curricula in preschools are more flexible and are often determined by the school’s philosophy. Therefore, preschool teachers’ beliefs are important because these beliefs may determine, to a great extent, what the teacher will teach as well as the factors that may be preventing her/him from teaching any area including movement education. In addition, the amount of knowledge and training preschool teachers have on the topic of teaching physical education and its benefits may provide clues about teachers’ attitudes towards teaching physical education.

It has been suggested that young children use movement to understand and make sense of their world (Gallahue & Ozmun 1996). In fact, the teaching of movement skills during physical education or movement time is recognized as being important for the complete development of the child (Bredekamp & Copple, 1997; Sanders, 2002; Council on Physical Education for Children [COPEC], 2000; Avery, 1994). Physical education specialists are generally recognized as best suited for teaching physical education (Ashy & Humphries, 2000; Faucette, McKenzie, & Patterson, 1990; Graham, 1991). However, because physical education specialists are rarely found in private settings it is important to foster positive attitudes in early childhood teachers about teaching physical education to young children.

Past research concerning teaching physical education to young children examines structured versus unstructured (free play) movement experiences (Bohren & Vlahov, 1989; Miller, 1978), and compared teaching effectiveness between classroom teachers and physical education teachers (Faucette, McKenzie, & Patterson, 1990; Graham, 1991). Specifically, research related to teaching physical education to young children and teacher attitudes is scarce and involves elementary school teachers in public schools (Faucette & Patterson, 1989), elementary education preservice teachers (Ashy & Humphries, 2000; Faulkner & Reeves, 2000), and elementary physical education preservice teachers (Curtner-Smith, 1996; Placek, et al., 1995).

The research literature described above is scarce and it delves mostly into elementary public school teachers. Because it has been suggested that movement
education should be an integral part of the preschool curriculum, more research needs to be conducted in early childhood private programs. Investigating preschool teachers and other factors that may influence movement education has the potential to contribute insights towards the betterment of the early childhood curriculum particularly in this vital component of children’s education.

**Statement of the Problem**

Based on preliminary observations, it was determined that the case to be studied is the insufficient movement skills instruction and facilitation at the University Preschool. The National Association for Sport and Physical Education issued guidelines that state that preschoolers should accumulate at least 60 minutes of daily structured physical activity and at least 60 minutes of unstructured physical activity (NASPE, 2002). At the University Preschool children were getting a mere hour of structured physical activity per week plus 60 minutes of unstructured physical activity at the time the study was conducted. Clearly, the University Preschool is not providing their students with adequate movement instruction as part of their curriculum.

Children do not have complete freedom to choose opportunities to be physically active nor can they provide appropriate facilities or equipment to learn movement skills and engage in movement experiences; therefore, the solution to increasing the lack of physical education and physical activity must begin with adults. This study focuses on teachers, as most preschool children spend the majority of their waking hours in child care or early education centers.

In order to implement movement education into the early childhood curriculum, movement education specialists need to be hired or classroom teachers trained. Since preschools seldom have the support of a physical education specialist, classroom teachers are often responsible for meeting the physical activity needs of young children (Sanders, 2002) even if they do not have adequate training for teaching physical education. This additional responsibility, combined with a lack of knowledge about how to teach and the benefits of movement programs and more emphasis on academic achievement, might adversely affect teachers’ attitudes about physical education.
Indeed, elementary school classroom teachers have been found to have negative feelings towards teaching physical education because they feel that the requirement is a burden (Faucette & Patterson, 1989). In the next section other factors that might have considerable influence in the teaching of movement skills and concepts to young children will be discussed.

**Theoretical Framework**

Several factors such as teacher’s attitudes, their perceptions about the administration and parents’ attitudes, and teachers’ perceived control over the context in which teaching takes place are expected to impact the teaching of movement skills and concepts to young children. Additionally, directors and parents’ attitudes are expected to be major influential factors in school changes and thus critical in the implementation of a movement program.

Beliefs and attitudes are a common component of these factors as people tend to act according to what they believe (Bandura, 1986; Rokeach, 1968). Beliefs are instrumental in defining behavior, organizing knowledge, and making decisions. Therefore, it is likely that what a teacher believes about what is important for a child to learn, what others think, and how capable he/she feels about teaching will influence what and how she/he will teach. Likewise, what a program director or school principal believes is important for children to master may have a direct effect on curriculum selection, resources (e.g. training) and materials available, and on classroom/playground management expectations. Parents also may advocate changes in curriculum depending on what they believe is important for their children to learn. Consequently, investigating the above factors may help identify barriers to movement education and physical activity in preschool settings. For this study, the Theory of Planned Behavior (Ajzen, 1991) can be a useful framework to understand the factors that influence the teaching of movement education as it allows for investigating the beliefs teachers report and the context in which practice occurs.

Ajzen (1991) proposed in his Theory of Planned Behavior that other elements besides attitudes also influence individual’s actions. This theory was designed to
predict and explain behavior depending on the context because even though beliefs are a major indicator of actions (Bandura, 1986; Rokeach, 1968) they do not always predict actions as other elements beyond an individual’s control may also influence behavior (Ajzen, 1991). The Theory of Planned Behavior focuses on the intentions people have to carry out a behavior and on people’s perceived control over the behavior.

Intentions, according to Ajzen (1991), are determined from attitudes; however, there are two other elements that influence intentions: subjective norms and perceived behavioral control. Furthermore, all of these elements are influenced by beliefs. The first element, attitudes, refers to an individual’s affective response to something. Ajzen stated that people learn to favor behaviors they believe have desirable consequences and develop unfavorable attitudes towards behaviors associated with undesirable outcomes.

The second determinant of intentions is a social element known as subjective norms, which refers to “the perceived social pressure to perform or not to perform the behavior” (Ajzen 1991, p.188). An individual’s perceptions of what “important others” believe about the behavior might determine whether or not the individual will perform the behavior. “Important others” may be people who have influence over the individual because of their social or professional relationship (e.g. directors/ principals) or because they may be a significantly powerful group (e.g. parents) directly related to them (Kennedy & Kennedy, 1996).

The third contributor to intention is the element of perceived behavioral control. According to Ajzen (1991), perceived behavioral control consists of other enhancing or limiting factors associated with the context in which the behavior is to be performed. In other words, perceived behavioral control describes the degree of control individuals believe they have over an innovation or change. This element may include perceived skills and knowledge, lack of opportunities, resources, and instructional support. The interaction between attitudes, subjective norms, and perceived behavioral control varies depending on the behaviors and situations. However, according to Ajzen, generally, the more favorable the attitude and the subjective norm towards a behavior and the greater the perceived behavioral control, the stronger an individual’s intention should be to perform the behavior.
Purpose of the Study and Research Questions

The purpose of this research study is to understand why there is not more movement skill instruction and facilitation at the University Preschool by identifying and describing the factors that influence the teaching of movement skills to young children. Given the importance of preschool physical education in the early childhood curriculum, the following research questions will guide this study: what are the factors that influence movement skill instruction/facilitation to preschool children? and what are preschool teachers’ attitudes and practices regarding teaching movement skills to preschool children?

Significance of the Study

Mastery of movement skills at an early age increases children’s likelihood of being physically active as they grow-up (CDC, 1997; CDC, 2000; Sallis & McKenzie, 1991). Thus, it is important to incorporate movement skills in the early childhood curriculum and to provide more opportunities for children to be more physically active while they are in school. The present study will attempt to identify and understand the factors that influence the teaching of physical education to preschool children. To better understand the issues surrounding the teaching of movement skills to preschool children, research that specifically involves preschool teachers in non-public school settings is needed.

The educational significance of this study will be to improve educational practices in early childhood education by identifying obstacles that may be preventing preschool teachers from teaching physical education to young children. Only a few studies in public schools have researched these barriers (Ashy & Humphries, 2000; Curtner-Smith, 1996; Faucette & Patterson, 1989; Faulkner & Reeves, 2000; Placek, et al., 1995). Therefore, there is a need to research early childhood teachers in private programs. This study will attempt to fill this gap in early childhood and physical education research literature by contributing to a greater understanding of the barriers to teach movement to young children and thus find ways to integrate movement skills
instruction into the early childhood curriculum. This will greatly help make the early childhood curriculum more complete in all areas of children’s development.

**Definition of Terms**

**Attitudes**

The term “attitudes” refers to an individual’s affective response to something (Ajzen, 1991). More specifically, attitudes are composed of a group of beliefs. Therefore, an attitude can be defined as “a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner” (Rokeach, 1968, p. 112). This research study will focus on teachers’ attitudes about teaching movement to preschool children.

**Beliefs**

There is a wide variety of meanings and conceptualizations of the construct “beliefs” as the educational research community has not been able to adopt a universal scientific definition. For this study, beliefs are “personal convictions and ideas that a person holds” (Haney, Lumpe, Czerniak, & Egan, 2002, p. 171) which can be “Any simple proposition, conscious or unconscious, inferred from what a person says or does, capable of being preceded by the phrase, ‘I believe that’ ” (Rokeach, 1968, p. 113). It is recognized that beliefs are the building blocks of attitudes (Pajares, 1992).

**Fundamental Movement Skills**

Fundamental movement skills include basic movements which are typically divided into the following groups: locomotor (e.g., running, hopping, galloping, skipping, sliding, leaping, and climbing), non-locomotor or stability (e.g., balancing, rolling, transferring weight, turning, jumping and landing, and swinging), and object control skills or manipulative (e.g., striking, kicking, punting, dribbling, and volleying) (Gallahue & Ozmun, 1996; Graham, et al., 1993; Poest, et al., 1990; Sanders, 2002). These fundamental movement skills do not involve a child’s individual style or the combination of basic skills to produce more complex movements.
Movement Concepts

Fundamental movement skills should be combined with movement concepts, which are the “knowledge component of the movement learning curriculum” (Sanders, 2002, p. 35). For example, movement concepts include space awareness (e.g. shared/self, up/down, low/high, straight/curved); effort (e.g. fast/slow, strong/light); and relationships (e.g. round, near, behind, and unison), which can be used to modify movement skills.

Movement Education

Early childhood physical education curriculum includes “movements and combinations of movements that a child is neurologically ready to develop and refine during the preschool years” (Poest, et al., 1990, p. 4). For this reason, physical education for young children is often referred to as “movement education”.

Preschool Children

For the purpose of this research study, young children ages three – five year olds are considered preschool children.

Teachers’ Actions

In this study, teachers’ actions refer to teacher practices (what they do) when they teach movement skills to preschool children.

Teacher’s Beliefs

Generally, teachers’ attitudes about education, teaching, and learning are referred to as “teachers’ beliefs”. Pajares (1992) argues that the term “teachers’ beliefs” is inappropriate because teachers indeed have other beliefs about issues beyond their profession. Therefore, Pajares contends educational beliefs should be distinguished from teachers’ beliefs. One of the factors to be studied is teachers’ educational beliefs that form attitudes about physical education. Although this study will not delve into teachers’ general beliefs, several aspects outside education will be examined (i.e., prior experiences). Since the majority of the beliefs explored in this study will be educational
beliefs, for the purpose of this study the term “teachers’ beliefs” will be equivalent to “educational beliefs”.

In this chapter, a summary of the importance of teaching physical education to young children was presented along with a discussion of the childhood obesity trend in the United States which was the factor that sparked public support for daily physical activity through physical education. Additionally, an overview of how teachers’ experiences related to physical education may affect their beliefs and attitudes towards teaching physical education was outlined. Finally, the problem of the insufficient movement skill instruction at the University Preschool was posed and the Theory of Planned Behavior (Ajzen, 1991) was briefly discussed as a framework for investigating the factors that influence movement skill instruction/facilitation to preschool children and preschool teachers’ attitudes and practices regarding teaching movement skills to preschool children.
CHAPTER 2
REVIEW OF THE RELATED LITERATURE

Within this literature review the following topics will be discussed: the importance of teaching movement skills to preschool children, the influence of beliefs and attitudes in educational practice, the factors that may influence movement skill instruction to preschool children, and the study of beliefs and attitudes.

Importance of Teaching Physical Education in Early Childhood Programs

This discussion of the importance of teaching physical education to young children begins by describing the status of physical education in schools and the efforts national organizations and government agencies have made to promote the teaching of physical education to young children. Then, information about the content of physical education for young children, why children need to learn movement skills, and the health, socio-emotional, and intellectual benefits of physical activity will be discussed.

Status of Physical Education in Schools

Historically, involvement in physical activity has been considered an important part of human activity (Hardman, 1995). This importance explains why physical activity continues to be present in school curriculums in its formal education form, physical education. However, not only in the United States but in other countries as well, physical education is not accepted as having equal importance in the school curriculum among other academic subjects focused on intellectual development (Hardman; Faulkner & Reeves, 2000). Currently in the United States, only 50% of elementary public schools require physical education up to the fifth grade and more alarming, merely 39% of elementary schools in United States require physical education in Kindergarten (Robert Wood Johnson Foundation, 2003).

Academic subjects such as reading, science, and mathematics are highly valued in schools, whereas practical subjects such as physical education, art, and music are
often deemed less important (Hardman, 1995). In addition, many school administrators view physical education as the cause of reduced instructional time in academic subjects (Shephard, 1997). This ongoing resistance to physical education helps explain why “physical education has been pushed into a defensive position, is suffering from severe budgetary controls and reductions and curricular and time allocations” (Hardman, p.5).

To keep the existing physical education programs and to promote the development of new programs for young children, it is necessary to convey to the public, teachers, and policy makers the benefits that physical education in schools can bring to children.

Various organizations and government agencies such as the National Association for the Education of Young Children (NAEYC), the Council on Physical Education for Children (COPEC), the National Association for Sport and Physical Education (NASPE), the Centers for Disease Control and Prevention (CDC), and the United States Department of Health and Human Services (USDHHS) have written position statements and recommendations that explain the importance of involving young children in physical activity and express support for the implementation of physical education programs for young children in schools as well as in early education programs (Bredekamp & Copple, 1997; CDC, 1997; COPEC, 2000; NASPE, 1998; USDHHS, 1992,1996). Furthermore, in many states educational leaders have developed standards that describe what young children should learn while participating in physical education.

Unfortunately, educational policies often present mandates that are contrary to the principles and goals described in position statements and recommendations developed by the above-mentioned national organizations and government agencies. For example, in the state of Florida, the Department of Education published the Sunshine State Standards which the Florida’s public school system uses as the foundation and guide for instruction in the classroom (Florida Department of Education, 2003). For the subject of physical education, students in pre-kindergarten through first grade are supposed to achieve the level one\(^1\) standard in the following three areas:

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\(^1\) The level one standard in the first area states “the student demonstrates competency in many movement forms and proficiency in a few forms of physical activity. (PE.A.1.1)” This standard includes combination of shapes, levels, directions, pathways, and ranges into simple sequences; basic locomotor skills and more advanced movement skills. The level one standard in the second area refers to students
physical education literacy, responsible physical activity behaviors, and advocate and promote physically active lifestyles.

To help children meet the physical education standards, early childhood teachers need to be competent in the aforementioned areas. Therefore, Florida also developed a set of core knowledge and skills that all early childhood professionals should achieve in different subjects including physical education (Florida Institute of Education, et al., 2001). For example, early childhood teachers with a Bachelor’s degree should be competent and proficient in a few forms of physical activity; should advocate active lifestyles and understand the value of physical activity; and should be able to structure activities that promote improvement in the use of motor skills (Florida Institute of Education, et al.).

Even though Florida developed physical education teaching standards and recommends physical education for young children, the State of Florida does not require physical education or recess in elementary schools. Moreover, although the State recommends classroom teachers be competent in movement skill instruction, the State does not require colleges in Florida to offer a physical education course to preservice teachers and does not provide funding to train classroom teachers and physical education specialists in any area of physical education (CDC, 2001).

**Physical Education for Young Children**

A variety of movement experiences provide children with “a wealth of information on which to base their perceptions of themselves and the world about them” (Gallahue & Ozmun, 1996, p. 208). Physical education for young children emphasizes teaching fundamental movement skills and movement concepts as opposed to teaching sports (Sanders, 1992). Learning fundamental movement skills is critical to the motor development of young children. Researchers agree that children ages three to four-achieving and maintaining “a health-enhancing level of physical fitness. (PE.B.1.1).” According to this standard, the student knows how to move through a functional range of motion, understands respiration changes during physical activity, knows warm-up and cool down exercises, and participates in health related fitness assessments. The level one standard in the last area states “the student understands how to participating in physical activity promotes inclusion and an understanding of the abilities and cultural diversity of people (PE.C.1.1).” This standard refers to students understanding the importance of being considerate while engaging in physical activity and knowing how to play with peers with disabilities. (Florida Department of Education, 2003, p. 15-16).
years old are ready to begin learning these fundamental movement skills and concepts (Gallahue & Ozmun, 1996; Sanders, 1992).

Early childhood physical education curriculum involves teaching fundamental movement skills which are basic movements that are typically divided into the following groups: locomotor (e.g., running, hopping, galloping, skipping, sliding, leaping, and climbing), non-locomotor or stability (e.g., balancing, rolling, transferring weight, turning, jumping and landing, and swinging), and object control skills or manipulative (e.g., striking, kicking, punting, dribbling, and volleying) (Gallahue & Ozmun, 1996; Graham, et al., 1993; Poest, et al., 1990; Sanders, 2002). These fundamental movement skills do not involve a child’s individual style or the combination of basic skills to produce more complex movements.

Each fundamental movement skill should be taught separately from all other movement skills until the child masters them. Once mastery is achieved, children are ready to combine the fundamental skills into more complex movements. In addition, fundamental movement skills should be combined with movement concepts as a means to enhance the effectiveness in which children use movement skills (Graham, et al., 1993; Sanders, 2002).

Many educators believe that young children will automatically develop their fundamental movement skills when they are ready. This belief is partially true as maturation allows children to perform certain movement skills at a very low level of performance (Miller, 1978). In addition to maturation, the development of fundamental movement patterns is also influenced by environmental conditions such as opportunities for practice, encouragement, and instruction (Gallahue & Ozmun, 1996). However, it is only with continuous regular instruction and practice that a child’s level of performance will increase to proficiency (Seefeldt, 1984).

Another misconception is equating recess (free play) with physical education. Although recess is an essential component of young children’s educational programs, it is inappropriate to substitute recess for physical education or physical education for recess (COPEC, 2001). Free play periods cannot be substitute for structured movement experiences for helping children develop physical skills (Sanders, 2002). Research has shown that young children do not necessarily develop physical skills simply through play.
(Manross, 2000; Miller, 1978). Furthermore, it has been found that children who are provided with structured movement skill instruction become more proficient in fundamental motor skills than children who engage in free play (Miller). Also, during free play children very seldom voluntarily engage in moderate to vigorous activity, which is necessary to improve fitness levels (Hovell, Bursick, Sharkey, & McClure, 1978). Movement programs enhance free play experiences. During free play or recess children can practice movement skills in a variety of contexts. Children need both structured movement experiences to acquire movement skills and free play opportunities to practice the skills learned (Sanders, 1992).

There is substantial support for the inclusion of fundamental movement skills instruction in early childhood programs (COPEC, 2000; Sanders 2002). It is important for young children to learn these movement skills because they provide the building blocks for future success in recreational activities and sports enjoyed during adolescence and adulthood (Graham, et al., 1993). Complex skills needed for participation in most sports and recreational activities include combinations, adaptations, and refinements of basic movement skills and concepts (Seefeldt & Haubenstricker, 1982). Learning these fundamental movement skills will facilitate the maintenance and improvement of physical fitness not only during children’s school years but also in their adult years. Once the fundamental movement skills are learned, they are retained for life (CDC, 1997; CDC, 2000; Sallis & McKenzie, 1991).

Physical education programs in preschool settings can help young children acquire and refine their movement skills. Young children who participate in a school-based physical education program demonstrate significant improvement on basic motor skills performance (Ignico, 1992a; Ignico, 1992b). Gallahue and Ozmun (1996) explains that once movement control is achieved, movement patterns can be refined in terms of accuracy and force production in what is known as the specialized movement phase in movement skill learning. If proficiency is not achieved in a wide variety of fundamental movement skills, it might “inhibit the development of efficient and effective movement skills that may be applied to game, sport, and dance activities that are characteristic of a child’s culture” (Gallahue & Ozmun, p. 217). The importance of physical education in the
A preschool curriculum can also be justified based on a variety of goals that encompass health, social, and intellectual benefits.

**Benefits of Physical Activity**

**Health benefits.** The topic of health-related fitness in children has caught the attention and interest among public health professionals and researchers. Approximately 70% of U.S. adults are sedentary (Booth & Chakravarthy, 2002). Sedentism, or a pattern of inactivity, is believed to begin early in life; therefore, the promotion of physical activity among children is being considered as a national priority (CDC, 2000). Regular physical activity reduces the risk of developing or dying of cardiovascular disease, hypertension, diabetes, obesity, and other chronic conditions (Pate, et al., 1995; USDHHS, 1996).

Physical activity also helps build and maintain healthy muscles, bones, and joints and it is also an important part in the treatment of certain chronic conditions (CDC, 2000). In addition, physical activity helps control weight and improves mental health (USDHHS, 1996). It is assumed that health-related fitness components (aerobic endurance, muscular strength, flexibility, body composition), improve with regular physical activity. Based on this assumption, the U.S. Department of Health and Human Services (1992) issued a statement, which recommends daily physical education for preschool children.

One of the major problems of an inactive lifestyle is obesity, which is reaching epidemic levels in the United States (Mokdad, et al., 2001). It was estimated that in 2002, a total of 38.8 million of U.S. adults were obese (Mokdad, et al.). Furthermore, statistics indicate that for many people problems related to obesity originated as a result of their lifestyle during childhood and adolescence (CDC, 2000). This obesity epidemic costs the United States an estimated $70 million each year in health-related expenses (Colditz & Mariani, 1995). Similar to adults, the number of overweight children in the U.S. is increasing to epidemic proportions (Flegal, et al., 1998; Troiano & Flegal, 1998).

According to the CDC (2000), since 1980 the percentage of young overweight children has doubled. Physical inactivity has contributed to a 100% increase in the predominance of obesity in U.S. children since 1980. More disturbing is the fact that
60% of overweight five to ten year old children already have one or more risk factors for chronic health conditions (Koplan & Dietz, 1999) such as high blood pressure, hyperlipidemia, and increased insulin levels. Moreover, obese children often have low self-esteem and experience exclusion from their peers (Irwin, Symons, & Kerr, 2004; Seefeldt, 1980).

The level of physical activity an adult engages in is strongly influenced by the attitudes and habits established early in life (Simmons-Morton, Parcel, O'Hara, & Pate, 1988). In elementary schools, physical education has been considered the perfect program to promote regular physical activity because most children have to participate (Sallis & McKenzie, 1991). Preschools then would also be the ideal location to help young children develop patterns of regular physical activity and for the early promotion of physical activity.

**Social and emotional benefits.** Learning fundamental motor skills may have a positive influence on children’s self-concept and social skill development. Learning fundamental movements is critical in early self-concept development as movement plays an important part in a child’s everyday life and because children perceive being competent in physical activity (i.e. play activities, games, sports, and dance) as valuable (Gallahue & Ozmun, 1996; Weiss, 1987). This perception points to a strong link between movement skill level and social status in children (Harter, 1982; Weiss). Children who do not learn fundamental movement skills properly often experience frustration when they are enrolled in sports programs or in activities that require complex combinations of movement skills (Poest, et al., 1990) making them more susceptible to experience peer group relationship and self-esteem problems (Brown, 1982; Seefeldt, 1980). Therefore, it is important for early childhood teachers to help young children develop fundamental movement skills at an appropriate developmental level so that children become and feel physically competent.

The CDC (2000) states that participation in physical activity and sports programs can foster social well-being and promote mental health among children. Physical education can also be an ideal time to teach children valuable social skills such as teamwork, self-discipline, leadership, and socialization. These social skills can be developed while engaging in a variety of physical activities during physical education.
Moreover, the social skills that children learn while participating in physical education can be used in the classroom while teaching academic subjects. This is an example of how physical education can enhance children’s learning.

**Intellectual benefits.** Physical education advocates are constantly trying to justify physical education programs to avoid the elimination of programs and to obtain funding (Sallis, et al., 1999). The relationship between physical education and intellectual development is one area in which advocates are focusing their efforts to demonstrate the importance of physical education for children. Many links between mind and body have been documented and it is likely that physical activity could facilitate learning (Jensen, 1998). Human and animal studies have shown that brain areas involved in movement and learning are intimately connected and that physical activity could increase those neural connections (Hannaford, 1995; Jensen; Shephard, 1997).

Brain experts agree that the functions of the mind cannot be separated from the body because movement is an essential part of learning, thinking, and mental processing (Hannaford, 1995; Jensen, 1998). According to Hannaford, once a child is born, physical movement plays an important role in creating nerve cell networks that are the foundation for learning. In essence, movement activates the neural wiring throughout the body, making the entire body a learning instrument. Hannaford explains that the omission of gross motor instruction may be especially detrimental to children who are predominantly kinesthetic learners. This notion is supported by the Multiple Intelligences theory, which states that certain people are more inclined to use their bodies to solve problems, create products, and learn (Gardner, 1985; 1993). Learning complex movement sequences stimulates the prefrontal cortex, which is the area of the brain used in learning and problem solving; therefore, it is believed that this stimulation could improve learning (Hannaford; Jensen). Furthermore, physical activity may change a child’s arousal as a result of hormones that are released during physical activity. These hormonal mechanisms may improve a child’s attention in the classroom (Shephard, 1997).

Three large-scale studies have found inconsistent results regarding the influence of physical education instruction on academic achievement. A long-term study
conducted in Trois Rivières, Canada (Shephard, et al., 1984; Shephard, LaVallee, Voile, LaBarre, & Beaucage, 1994) was one of the first attempts to study the effects of physical education on academic achievement. Students from first to sixth grade in the experimental condition had one hour of physical education each day and reduced instructional time in other subject areas. The students' fitness and motor abilities improved as well as their grades. The students in the experimental group scored significantly higher in a standardized mathematics test than the children in the control group. However, no differences were found in other subject areas. The researchers suggested that the benefits shown in this study could have been a result of heightened arousal due to exercise or by “spacing” and shortening classroom work time when physical education was added to the schedule. Likewise, in a study that examined the relationship between the level of physical activity on the school playground during recess and subsequent attention on standardized classroom tasks, it was concluded that any cognitive and attention improvements found were probably not due to physical activity but to breaks between tasks (Pellegrini, Huberty, & Jones, 1995).

In another study in seven randomly assigned primary schools in South Australia (Dwyer, Coonan, Leitch, Hetzel, & Baghurst, 1983) the experimental groups had one hour and 15 minutes of physical education each school day, while the control group continued the usual curriculum of more academic instruction and participated in three half hours of physical education per week. Several improvements in physiological and fitness variables were reported, but there were no differences in academic grades between the experimental and control groups. After the first phase, the schools decided to implement a daily physical education program. Two years after the initial study, follow-up data indicated trends favoring the experimental students in arithmetic and reading grades, however, this difference was not statistically significant. The follow-up study also illustrated beneficial effects on teachers' ratings of classroom behavior, which might also explain the slight improvement in academic performance.

During a project entitled Sports, Play, and Active Recreation for Kids (SPARK) Sallis and colleagues (1999) were trying to study the effects of health-related physical education on academic achievement in elementary school children. The SPARK program is a two-year comprehensive curriculum and professional development plan
created to promote physical activity in and out of school. The researchers found that participation in the SPARK physical education program had several significant favorable effects on academic achievement. Unlike the South Australian study, mathematics was the only score that did not show any evidence of an experimental effect, however, reading and language scores improved. This difference provides evidence that the increased physical activity in the SPARK physical education program was not the reason why academic achievement improved. Despite these results, the researchers concluded that spending more time in physical education does not have harmful effects on standardized academic achievement scores of elementary school children.

Additionally, an attempt to measure the effects of physical activity on academic achievement was conducted by the California Department of Education (CDE). In this study (CDE, 2002) a direct relationship between achievement and physical fitness among California’s public school students was found. The CDE matched scores from the SAT/9 standardized test with the results of the state-mandated physical fitness test that were given in 2001 to students in fifth (N = 353,000), seventh (N = 322,000), and ninth grade (N = 279,000). Key results included (1) higher SAT/9 scores were associated with higher levels of fitness at each grade level (the more tasks in which students tested fit, the higher their percentile of achievement); (2) the relationship between academic achievement and fitness was greater in mathematics than in reading, especially at higher fitness levels; (3) students who met minimum fitness levels in three or more physical fitness areas showed the greatest academic gains at all grade levels; and (4) girls showed higher academic achievement than boys, particularly at higher fitness levels. These findings provide important support for physical education programs because, as explained earlier in this review, physical education is usually the primary source for promoting physical fitness, especially in elementary grades. This is also true for preschool children who seldom get physical education and tend to choose passive activities during free outdoor playtime (Hovell, Bursick, Sharkey, & McClure, 1978).

In spite of inconsistent findings, these studies reveal that academic performance has not been adversely affected in spite of a reduction of daily classroom teaching time in other subject areas. Even though the various hypotheses of how physical education
and physical activity enhance academic achievement have not been demonstrated, school administrators should include physical education in their curriculum because regular physical activity provides health benefits and contributes to mental health (CDC, 2000) for children without compromising learning (Sallis, et al., 1999).

Since young children learn best through active experiences (Bredekamp & Copple, 1997), teaching movement skills and concepts should be integrated into preschool learning experiences. This integration can facilitate learning in other subject areas such as mathematics, language arts, and science (Weikart, 1987; Werner, 1994). An integrated curriculum has the potential to influence children's attitudes and values favorably towards physical activity. This positive attitude will help maintain interest and participation in physical activity throughout their lives, which is one of the public health goals for physical education programs (Sallis & McKenzie, 1991; Trudeau, Laurencelle, Tremblay, Rajic, & Shephard, 1997).

As the number of early childhood programs continues to increase due to the growing demand for out-of-home care and to the awareness of the beneficial value of educational experiences for young children (Willer, Hofferth, Kisker, Divine-Hawkins, Farquhar, & Glantz, 1991), preschool physical education could have the greatest potential for the promotion of a lifetime of physical activity (Sallis & McKenzie, 1991). Early childhood teachers should be aware that children who attend preschool full-time might not have had many opportunities at home to learn and practice movement skills due to lack of time and safety reasons. Consequently, school movement programs might be the only opportunity young children have to engage in moderate to vigorous physical activity (McKenzie, et al., 1995). Early childhood professionals must realize that the more movement skills a child develops and masters, the more physical activity options he/she will have and the more likely he/she will be to acquire the benefits of an active lifestyle (CDC, 1997; 2000; Sallis & McKenzie).

The Influence of Beliefs and Attitudes in Educational Practice

This section will begin will a discussion of the following topics: the formation and development of beliefs and attitudes; the difference between beliefs and knowledge; the
nature of belief systems; teachers’ beliefs; and the relationship between teachers’ beliefs, attitudes and behavior and the implications for teaching. In addition, a discussion of the Theory of Planned Behavior as the theoretical framework for this research is presented followed by a review of previous research on teachers’ attitudes regarding teaching physical education to young children which will conclude this section.

In educational research, the study of attitudes and beliefs has the potential to inform educational practice in a manner that traditional research agendas have not successfully accomplished (Pajares, 1992). Teacher’s beliefs influence their perceptions and judgments and as a result, classroom behavior is influenced as well (Munby, 1982; 1984). Hence understanding teachers’ belief structures is critical to improve teacher practice. Unfortunately, research that specifically deals with understanding teachers’ beliefs is limited (Pajares).

Beliefs are difficult to change and they influence teachers’ learning during their preparation as well as during their professional training. Moreover, beliefs about teaching are well established by the time a student enters a teacher preparation program through observation during previous years of schooling (Nespor, 1987; Wilson, 1990). It has been widely proposed that to understand teachers’ behaviors it is necessary to focus on what teachers believe (Pajares, 1992). This idea comes from the general assumption that beliefs are the best indicators of the decisions people make throughout their lives, (Bandura, 1986; Rokeach, 1986). However, other theorists have argued that beliefs do not necessarily predict behavior because actions can be influenced by other factors (Ajzen, 1991).

**Development of Beliefs and Attitudes**

Studying beliefs is challenging, particularly because of inconsistent definitions and contradictory understandings about the structure of beliefs. Amidst the variety of meanings and conceptualizations of the construct “beliefs”, the educational research community has not been able to adopt a universal scientific definition (Pajares, 1992). Dewey (1933) defined beliefs as “something beyond itself by which its value is tested: it makes an assertion about some matter of fact or some principle or law” (p.6). Harvey
(1986) asserted that beliefs are an “individual’s representation of reality that has enough validity, truth, or credibility to guide thought and behavior” (as cited in Pajares, 1992, p. 313). However, Nisbett and Ross (1980) stated that some beliefs can remain even when they stop being an accurate representation of reality and explained beliefs as “reasonably explicit propositions about the characteristics of objects and object classes” (p.28). Additionally, it is recognized that beliefs are the building blocks of attitudes (Ajzen, 1985; Pajares).

For the present study beliefs are “personal convictions and ideas that a person holds” (Haney, et al., 2002, p. 171) which can be “Any simple proposition, conscious or unconscious, inferred from what a person says or does, capable of being preceded by the phrase, ‘I believe that’ ” (Rokeach, 1968, p. 113). Rokeach’s definition allows for inferences based on people’s accounts or actions to be reflections of their beliefs. This definition is particularly useful for this study since this qualitative research uses an interpretive perspective in which inferences are very important in order to create understanding.

Beliefs developed from past events influence the understanding of future events (Nespor, 1987). Hence, knowledge acquisition will be screened, redefined, and reshaped as a result of the filtering effect caused by belief structures already in place (Pajares, 1992). In a study with preservice teachers, Goodman (1988) revealed that images from past experiences created intuitive screens through which preservice teachers filtered information. This is consistent with Calderhead and Robson’s (1991) findings in which preservice teachers where able to remember detailed experiences of when they were children in school that influenced their interpretations of classroom practices and helped to determine their future teaching practices.

Beliefs formed during the early childhood years have a more profound influence on people’s judgments as opposed to recently formed beliefs which are less resistant to change. As Pajares (1992) explains,

The earlier a belief is incorporated into the belief structure, the more difficult is to alter, for these beliefs subsequently affect perception and strongly influence the processing of new information. It is because of this reason that newly acquired beliefs are most vulnerable. (p. 317)
Beliefs are unlikely to be substituted unless the individual realizes that a belief or beliefs are inadequate as a result of new beliefs challenging existing ones (Rokeach, 1968). However, assimilating new beliefs is usually the last alternative people choose. Therefore, changing teachers’ beliefs through training depends on the teachers’ willingness to believe that the new information will be more effective than previously held beliefs.

Given the complex connections between beliefs and attitudes, a teacher’s attitude about a particular educational issue may contain beliefs connected to other non-educational attitudes such as community, religion, and family (Pajares, 1992). The complexity of a person’s belief system and the fact that beliefs are context-specific, make beliefs and attitudes appear inconsistent and difficult to infer and measure.

**Beliefs versus Knowledge**

When describing beliefs, theorists often refer to knowledge because of their close relationship. Indeed, distinguishing between beliefs and knowledge is commonly what makes defining the construct “belief” a challenge (Pajares, 1992). Among theorists there is no agreement on the exact nature of the relationship between knowledge and beliefs. For example, Rokeach (1968) asserts that knowledge is a component of belief and further explained that all beliefs within an attitude have a cognitive component that represents knowledge, an affective component that brings emotion, and a behavioral component as beliefs are predispositions that are activated when action is required (Rokeach). Nespor (1987) views them as separate constructs because he considers beliefs to have a stronger affective and evaluative component than knowledge. Conversely, Lewis (1990) argues that both beliefs and knowledge are synonymous.

The most common distinction between belief and knowledge, despite unclear definitions, is that a “belief is based on evaluation and judgment; knowledge is based on objective fact” (Pajares, 1992, p. 313). Furthermore, belief systems are less flexible and less dynamic that knowledge systems. Knowledge systems are open to evaluation and critical examination (Pajares) and are more receptive to reason (Nespor, 1987). Thus, knowledge systems are easier to modify as a person acquires more knowledge about a domain. It is important to clarify that knowledge of a subject is not the same as feelings
about a subject as feelings typically work independently from content knowledge (Pajares, 1992). It is the combination of feelings and knowledge, however, that can determine the energy that teachers invest on an activity and how they will expend it (Pajares).

In spite of the nature of beliefs and its relationship with knowledge, Nespor (1987) concluded that knowledge is not as influential as beliefs in determining how individuals plan tasks and solve problems. In other words, beliefs and attitudes are stronger predictors of behavior. For example, in 1989 Ernest studied the effects of teachers’ knowledge of mathematics on their teaching and concluded that two teachers may have similar knowledge but teach in different ways. Based on this conclusion, he explained that the effects of beliefs are more useful in understanding and predicting how teachers make decisions.

Whether knowledge is acquired through another person or self-discovery, individuals begin learning by believing their own senses and their intuition; however, acquiring knowledge, selecting, and developing beliefs may not involve identical cognitive processes (Pajares, 1992). Theorists may not agree on the exact relationship between knowledge and beliefs but it is certain that “there is no escaping the intertwined nature of knowledge and belief” (Pajares, p. 313).

The Nature of Belief Systems

As mentioned in chapter one of this proposal, groups of beliefs constitute an attitude, which is an organization of beliefs around a specific object (physical or social/concrete or abstract) or situation that predisposes a person to respond in a preferential manner (Rokeach, 1968). An individual’s belief system comprises all the beliefs a person has about the physical and social world, and themselves (Pajares, 1992).

According to Rokeach (1968), attitudes are a subset of an individual’s belief system. Beliefs within attitudes have connections to one another and to other beliefs within other attitudes. These connections create values, which are a person’s beliefs that exemplify model conduct and ideal goals. Values guide a person’s life, help create and sustain attitudes, interpret information, and establish behavior (Pajares, 1992).
Therefore, values are “abstract ideals, positive or negative, not tied to any specific attitude object or situation, representing a person’s beliefs about ideal modes of conduct and ideal terminal goals” (Rokeach, 1968, p. 124). Seen from a hierarchal perspective, an adult’s belief system almost certainly has hundreds of thousands of beliefs, thousands of attitudes, but just a few dozens of values (Rokeach).

**Teachers’ Beliefs**

Generally, teachers’ attitudes about education, teaching, and learning are referred to as “teachers’ beliefs”. Pajares (1992) argues that the term “teachers’ beliefs” is inappropriate because teachers indeed have other beliefs about issues beyond their profession. He also points out that when researchers refer to teachers’ beliefs, they usually do not refer to a teacher’s general belief system, which include educational beliefs, but to teachers’ educational beliefs. Therefore, Pajares contends educational beliefs should be distinguished from teachers’ beliefs. Although this study will not delve into teachers’ general beliefs, several aspects outside education will be examined (i.e., prior experiences). Since the majority of the beliefs explored in this study will be educational beliefs, for the purpose of this study the term “teachers’ beliefs” will be equivalent to “educational beliefs”.

Rokeach (1986) asserts that each component of a belief must be examined carefully in order to establish a more accurate representation of a teacher’s belief system. As noted earlier, teachers’ beliefs are formed from various sources such as past experiences and knowledge. Clark (1988) suggested that teachers’ beliefs “tend to be eclectic aggregations of cause-effect propositions from many sources, rules of thumb, generalizations drawn from personal experience, beliefs, values, biases, and prejudices” (p. 5). Teachers’ beliefs; therefore, consist of various types of beliefs such as beliefs about teaching capability, about the nature of knowledge, about what influences performance, about self-perceptions and feelings of self-worth (self concept, self-esteem), and about confidence to perform certain tasks (self-efficacy) (Pajares, 1992).

In a study about the influence of principals in the institutionalization of new classroom practices (West, 2001), elementary school principals and teachers reported
that when teachers experienced success or saw others being successful their use of developmentally appropriate practices increased. Teachers' attitudes and beliefs towards developmentally appropriate practices were key elements to the transfer of new practices learned through training. Additionally, long term transfer appeared to occur when belief systems were reinforced by a supportive principal. The regular use of these practices contributed to improved student attitudes, behavior, and academic achievement which in turn encouraged further use of appropriate practices by teachers because not only they felt capable but also they saw positive results.

**Relationship between Teachers’ Beliefs, Attitudes, and Behavior**

Although research has demonstrated that the relationship between attitudes and behaviors is complex (Millar & Tesser, 1992; Saks & Krupat, 1988), considerable work has been done on whether behaviors can be predicted from attitudes and beliefs (Ajzen & Fishbein, 1977; Bandura, 1986; Millar & Tesser; Rokeach, 1968). In addition, educational researchers in various fields have attempted to predict teachers’ actions from beliefs (Haney, et al., 2002; Pajares, 1992). Although expressed beliefs should not always be assumed to match the content of observed behavior, the relationship between beliefs and practice is nonetheless substantial (Pajares). However, it is reasonable to expect teachers’ actual behavior toward children to reflect the belief systems and expectations they hold (Eiser, 1983; Harvey & Weary, 1985) since beliefs are filters through which experiences are screened for meaning (Goodman, 1988; Nespor, 1987). It is this filtering effect that influences the educator’s decision-making and practice (Nespor; Pajares).

**Factors that May Influence Movement Skill Instruction to Preschool Children**

Studies have shown inconsistent results regarding the relationship between beliefs and behavior (Ajzen, 1991; Pajares, 1992). Given these contradictory findings it can be reasonable to infer that there are other factors in addition to beliefs and attitudes that influence what a person actually does. The Theory of Planned Behavior (Azjen) is an attempt to explain the processes individuals go through from believing to acting.
**Theory of Planned Behavior**

This theory was designed to predict and explain behavior in different contexts because beliefs do not always predict actions as other factors beyond an individual’s control may influence behavior. Instead of assuming that attitudes are the decisive factor that causes behavior, in his Theory of Planned Behavior, Ajzen (1991) focuses on the intentions people have on carrying out a behavior and on people’s perceived control over the behavior. According to Azjen, intentions involve the motivational factors that influence behavior and “are the indicators of how hard people are willing to try, how much of an effort they are planning to exert, in order to perform the behavior” (p. 181).

The stronger a person’s intention to do something is the more likely he/she will perform the behavior. However, a behavioral intention can only become action “if the behavior in question is under volitional control, i.e. if the person can decide at will to perform or not perform the behavior” (Ajzen, 1991, p.182). Ajzen explains that when a person has complete control over the performance of a behavior, intentions should be sufficient to predict a person’s behavior. Thus, if a behavior is under a person’s control, intentions will be translated into actions when the person deems it appropriate. However, understanding an individual’s perceived behavioral control becomes increasingly useful as volitional control over the behavior decreases.

Ajzen’s theory (1991) indicates that statements of intentions are more predictive of behavior than statements about attitudes. Intentions are determined from attitudes; however, there are two other elements that influence intentions: subjective norms and perceived behavioral control. Additionally, Ajzen stated that attitudes, subjective norms, and perceived behavioral control, are influenced by beliefs. Generally, the more favorable the attitude and the subjective norm towards a behavior, and the greater the perceived behavioral control, the stronger should be an individual’s intention to perform the behavior. The following diagram describes this relationship (Kennedy & Kennedy, 1996, p. 354):
Behavioral Beliefs → attitudes  
Normative Beliefs → subjective norms → intentions → action  
Control Beliefs → perceived behavioral control

Figure 1: Theory of Planned Behavior

**Attitudes.** The first determinant of intention is the attitude towards the behavior. According to Ajzen (1991), attitudes are an individual’s affective response to something, while beliefs are cognitive and reflect the knowledge or information. Similar to Rokeach (1968) Ajzen explained that attitudes develop from the beliefs about a particular behavior. Ajzen further explained that behavioral beliefs consist of an individual’s view of the likely consequences or outcomes of an action, along with a positive or negative evaluation of those outcomes. In fact, Ajzen stated that people learn to favor behaviors they believe have desirable consequences and unfavorable attitudes towards behaviors associated with undesirable outcomes. The strength of the belief about the result of any action, and the evaluation of that result interact to produce the final attitude towards the behavior.

**Subjective norms.** The second determinant of intentions is a social factor named subjective norms, which refers to “the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991, p.188). Normative beliefs, which “are concerned with the likelihood that important referent individuals or groups approve or disapprove of performing a given behavior” (Ajzen, p. 195), determine the influence of subjective norms over behavior. Subjective norms do not reflect the individual’s personal beliefs but rather what the individual believes others think about the behavior in question. “Important others” may be people who have influence over the individual because of their social or professional relationship, or they may be an influential group. In a school setting they may be colleagues, parents, principals, and students themselves (Kennedy & Kennedy, 1996). When people believe “important others” are supportive of the behavior, this is likely to be an important positive influence on the individual’s intention to carryout the behavior. Conversely, if those “important others” are
openly hostile to the behavior or not supportive, the impact to the individual’s intentions will be negative (Ajzen, 1991).

From an educational research point of view, it is important to find out if teachers’ perception of the principal/director disapproval or disapproval of an innovation is a reality (Kennedy & Kennedy, 1996). For example, if teachers have positive attitudes towards an innovation, but believe that the principal or director of the school is not in favor of it and if they also believe in the power of the principal to stop such an innovation, changes are unlikely to take place. If the principal’s disapproval is real, then it will be crucial to try to change the principal’s view as teachers are unlikely to adopt the innovations against the wishes of the principal. However, if the principal is not against the innovations, but it is the teachers’ perception that she/he is, then it is the teachers’ perception that has to be changed rather than the principal’s attitude. Additionally, parents also can be part of the subjective norms as they do have power in the educational context which can override principals and teachers’ positive attitudes towards change (Kennedy & Kennedy).

**Perceived behavioral control.** The third contributor to intention is the element of perceived behavioral control. According to Ajzen (1991), control beliefs “provide the basis for perceptions of behavioral control” (p.189). Perceived behavioral control consists of other enhancing or limiting factors associated with the context in which the behavior is to be performed. Therefore, perceived behavioral control describes the degree of control individuals believe they have over an innovation or change. Behavioral control factors may be internal or external. Internal factors may include the skills, knowledge, and abilities of those asked to implement a change. Lack of ability due to inadequate training is a particularly important factor in education. You may have a teacher who now has to implement a different curriculum or discipline model. She might be willing to adopt the changes when conditions are right but when faced with a difficult situation she may believe she is not capable of controlling the situation and consequently continues to use the strategies that she feels comfortable with because she feels she can control the situation more effectively (Kennedy & Kennedy, 1996).

External factors also affect an individual's perceived behavioral control. For example, lack of opportunities and resources, appropriate materials, and instructional
support may hinder a teacher’s intention to utilize new practices (Kennedy & Kennedy, 1996). The combinations of those internal and external factors comprise an individual’s perceived behavioral control. When perceived behavioral control is low, people tend to believe there are too many practical obstacles to perform a behavior. The influence of perceived control over a behavior is extremely powerful to the extent that if individuals perceive an action is outside their control, regardless of how positive their attitudes towards it may be, they are likely to have weak intentions to perform the action (Kennedy & Kennedy).

The interaction between attitudes, subjective norms, and perceived behavioral control will vary across cultures, organizations, and individuals. In addition, the relative importance of these three elements in the prediction of intention varies depending on the behaviors and situations. However, according to Ajzen (1991), generally the more an action is thought of as being under volitional control the more likely individuals are to carry out an action; successful implementation of change will strengthen the likelihood of re-occurrence; and disapproval from important others may block further development or halt it altogether. The following example from Kennedy & Kennedy (1996) illustrates a possible relationship between these elements: “both subjective norms (lack of societal disapproval) and perceived behavioral control (too many practical obstacles) are powerful enough to override any positive attitude individuals may have towards the desired behaviour” (p. 358) therefore, if an individual’s intention to implement a behavior is weak, then he/she is very unlikely to carry out the behavior.

A study that depicts how attitudes, subjective norms, and perceived control influence teacher’s actions was conducted by Butterfield and Johnston (1995). They investigated if elementary school principal’s beliefs are reflected in their first grade teachers’ self reported curriculum and teaching practices. The researchers found that what first grade teachers reported doing in their classroom did not reflect what their principals reported believing about first grade curriculum and instruction. When analyzing these findings, the authors considered the fact that the teachers reported actual classroom practices rather that their beliefs about first grade curriculum and teaching.
Butterfield and Johnston (1995) reported that many teachers indicated in the margins of the survey form that they did many things in their classroom that were against their beliefs because they felt obligated to do so. Furthermore, some teachers reported that they would like to have time to include play, child initiated activities, and allow for more conversational interaction among the children, but that they could not because there was not enough time during the school day. Classroom teachers often believe that they have small control over what they can teach, or how they teach it (Butterfield & Johnston). In fact, teachers often feel that requirements mandated from school administrators or from state departments of education interfere with their autonomy as teachers (Seefeldt & Barbour, 1988).

Surprisingly, in Butterfield and Johnston’s study (1995), principals’ beliefs were more congruent with the early childhood guidelines developed by the National Association of Elementary School Principal’s (NAESP) than were first grade teachers’ reported practices. This lack of congruency, as explained earlier, does not necessarily mean that teachers do not agree with the guidelines. If teachers return to schools after training and find that the enthusiasm (environment) does not seem sufficient for them to change their practices in the classroom and that there is not enough support or resources, new practices will not be implemented (Kennedy & Kennedy, 1996). This situation has important implications when training teachers on developmentally appropriate practices including teaching movement skills. Not only do teachers need to believe movement education is important (through training) but they also need the director’s support through a supportive environment and adequate resources as well as parental approval.

Classroom Teachers’ Attitudes about Physical Education

Previous research studies regarding physical education, as well as other academic areas, have examined the relationship between elementary school classroom teachers’ attitudes and their teaching behaviors (Faucette & Patterson, 1989; Haney, et al., 2002; Richardson, Anders, Tidwell, & Lloyd, 1991). However, these attitudinal studies were focused on elementary school teachers and on elementary education
preservice teachers. After a thorough review of literature, no studies were found that focused on preschool teachers and their attitudes toward teaching physical education.

In elementary schools or in the primary grades, classroom teachers are often expected to teach physical education (Ashy & Humphries, 2000), yet not all teacher education programs prepare teachers for this subject. In many instances classroom teachers, as well as preservice teachers, do not possess adequate preparation to plan and teach physical education lessons (Ashy & Humphries; Faucette, McKenzie, & Patterson, 1990; Faucette & Patterson, 1989; McKenzie, Alcaraz, Sallis & Faucette, 1998). Additionally, many classroom teachers lack the physical skills and confidence that are typical in physical education majors (Ashy & Humphries; Faulkner & Reeves, 2000).

Faucette and Patterson (1989) studied fourth and fifth grade classroom teachers who were required to teach physical education. The researchers examined classroom teachers’ behaviors when teaching physical education, student activity levels during those classes, and identified teachers’ attitudes about teaching physical education. Specifically, the researchers wanted to see if the teachers “actively monitor class and individual responses in physical education while giving specific performance feedback”, if the teachers selected activities and organized lessons “in ways that provided significant amounts of time for student practice”, and if the attitudes towards teaching physical education that the teachers expressed were positive (p.109). Based on these research questions, it appears that the main concern for the authors was to evaluate the quality of classroom teachers’ teaching in physical education.

In Faucette and Patterson’s (1989) study, the teachers were observed and then interviewed. The observations did not include videotaping or field note recording. Instead, a teacher observation schedule was used and behavior was recorded every ten seconds. Observed behaviors were classified into seven categories that included “feedback/reward, correcting/prohibiting, questioning, directing/explaining, informing, monitoring/attending, managing, and no activity” (p. 109). The observations revealed that the teachers spent the majority of their teaching time silently monitoring the children or displaying other less effective and less appropriate teaching behaviors such as talking with other teachers on the playground. Student/teacher interactions were very
limited as reflected by the low percentages of teaching behaviors such as feedback, correcting, and questioning. Due to the observation method used in this study, the context in which the behaviors were observed could not be determined.

Teacher interviews conducted in Faucette and Patterson’s study (1989) offered valuable insights into teachers’ attitudes about teaching physical education. Classroom teachers expressed extremely negative attitudes toward the responsibility of teaching physical education. Based on the data, the researchers concluded that for these teachers teaching physical education was at the bottom of their daily priorities and that they placed little value on physical education when compared to other school responsibilities. The authors interpreted that the teachers felt that teaching physical education was “an abuse of their time, talents and energy” (Faucette & Patterson, p.112). The teachers’ reasons for these negative attitudes ranged from other school demands to a lack of knowledge and training in teaching physical education. Additionally, teachers mentioned a lack of adequate time and energy to teach. These negative attitudes were congruent with the teachers’ behaviors while teaching physical education. The authors inferred that lack of knowledge might be the reason why these classroom teachers did not value physical education as an important part of the curriculum. The researchers also stressed the need for in-service training in physical education in order to foster classroom teachers’ sense of efficacy, which in turn should increase their enthusiasm for teaching physical education.

Research findings regarding elementary education preservice teachers’ attitudes also offer important insights into teacher education programs. Ashy and Humphries (2000) studied elementary education preservice teachers’ perceptions about teaching physical education after their first field experience with first and second grade students. Preservice teachers were enrolled in a required early experience course in teaching physical education, which was part of the senior methods courses prior to student teaching. The content of this physical education course included experiences in basic movement skills, educational games, dance, gymnastics, lead up games to sports, and sport skills. After the practicum experience the researchers asked the preservice teachers reflection questions. Inductive analysis was conducted on the preservice teachers’ written responses to these questions. Themes that emerged were related to
developing class content, preservice teachers’ understanding of physical education as a discipline, and attitudes towards teaching physical education. Classroom management was the most important issue to the preservice teachers. However, they also recognized the importance of teaching skills and knowing the content of the skills to provide better feedback to the children and individualize instruction. There were no interviews in this study and although observations were conducted for the purpose of giving feedback to the preservice teachers, these observations were not part of the analysis.

Ashy and Humphries (2000) concluded that preservice teachers perceptions of what physical education was and the demands of teaching were positively affected by their field experience. Although many of the preservice teachers in this study expressed positive attitudes towards teaching physical education, many others expressed doubts or aversion towards teaching physical education. This early experience allowed the future teachers to realize the importance of knowing the content of the skills to be taught, so they could develop more efficient teaching cues. Overall, the practicum experience appeared to have improved the preservice teachers’ teaching skills, understanding of children, and awareness of physical education as a content area. However, the researchers concluded that even the best preservice teachers did not reach a maturity level that allows for independent teaching in physical education. The authors did not clearly explain how this was determined; however, they did make reference to the fact that most preservice teachers did not discuss their lesson’s cognitive, affective, and psychomotor objectives in their reflections. The authors stated that the preservice teachers’ inability to teach independently was probably caused by a limited content knowledge and experience in the area of physical education.

Preservice teachers can modify and reconstruct beliefs and perceptions during early field experiences. It was not clear, however, how far preservice teachers’ progress in their ability to teach physical education after practicum experiences (Ashy & Humphries, 2000). In spite of this, Curtner-Smith’s (1996) study with preservice physical education majors found that even one field experience influences attitudes about teaching physical education. The purpose of this study was to determine the effects of an early field experience in a secondary school on preservice teachers’ conceptions of the teaching-learning process and to identify the part that the student
teacher plays in this process. This was the first teaching experience for these 28 physical education preservice teachers. Data for this study included reflective questionnaires and incident reflection sheets in which the preservice teachers had to describe any significant experiences that happened after each lesson they taught. From this data, Curtner-Smith concluded that during a well-supervised early field experience that includes reflection; preservice teachers can change their beliefs and teaching practices from a “custodial orientation” into more effective and appropriate teaching practices (1996, p. 246).

Physical self-perceptions also influence teachers’ attitudes towards teaching physical education (Faulkner & Reeves, 2000). In a study of primary school preservice teachers, Faulkner and Reeves found that the most positive attitudes toward teaching physical education were reported by the preservice teachers with more positive physical self-perceptions. These preservice teachers were also the most active. On the other hand, the preservice teachers with lower physical self-perceptions reported negative attitudes to teaching physical education. According to the authors, these findings are interesting because “those who perceive themselves to be competent at sport and perceive such competence as important are more likely to have had successful sporting experiences” (p. 319). Therefore, this may bring higher levels of self-efficacy, which in turn facilitate the development of more positive attitudes towards teaching physical education.

Preservice teachers' beliefs about physical education are formed during their experiences in physical education programs when they were young and during sport experiences (Placek, et al., 1995). Early negative sporting experiences may contribute to negative attitudes towards teaching physical education due to a lack of confidence. Moreover, some teachers believe that in order to teach physical education, he/she must master all the skills and be competent in sports as well. This perception is not necessarily true especially in the primary grades where individual movement skills rather than sports are emphasized. To change this stereotypical view teachers need more information about the content and purpose of physical education (Faulkner & Reeves, 2000).
Factors that Influence the Implementation of Educational Practices

In addition to teachers’ attitudes (discussed in the previous section), factors such as school principals/directors’ attitudes and parents’ attitudes towards school curriculum and appropriate teaching may influence instructional decisions regarding curriculum, educational practices, and training (Butterfield & Johnston, 1995; French & Peña, 1997; Fullan & Steigelbauer, 1991; Ingersoll & Rossi, 1995; Konzal, 1997; Smith & Smith, 2000; West, 2001). In this section of the literature review, parents and directors’ attitudes will be discussed along with related research.

Parental Attitudes Influence on Instructional Practices

Parents exert great influence over curriculum reform. Existent practices and reforms may be supported or halted especially when parents organize and voice their opinions. Educational reforms suffer when parents develop negative attitudes towards new practices mainly because powerful resistance may develop which can cause new instructional practices to disappear (Konzal, 1997). Research on school reform suggests that it is very difficult to obtain parent support and that they usually inhibit change (Gold & Miles, 1981).

Fullan and Steigelbauer (1991) argue that parents will advocate for change, resist changes in traditional schooling practices, or accept the changes submissively. Parents rarely participate actively with educators in change efforts. The prevailing attitude among parents is one of apathy, however when there is opposition, it almost always succeeds in stopping the reform. Fullan and Steigelbauer further note that middle and upper class communities are more able to effectively organize resistance to a school reform.

It has been suggested that parents’ attitudes towards educational practices are influenced and internalized by their mental models (Senge, 1990) of what goes on in “good” classrooms and schools. Mental models of what goes on in good classrooms are created based on parents’ own experiences while they were in school (Dodd, 1994). In addition, the way parents interpret the impact new practices will have on their children’s or child’s future (Shufro, 1995) and their beliefs (Dodd) influence their attitudes towards
these practices. Parents may develop negative attitudes towards changes because the changes differ from their beliefs and internal images, and because from their point of view, the new practices threaten to negatively affect their children’s future.

Once parents develop attitudes (negative or positive) about new educational practices, these attitudes can play a direct as well as an indirect role in determining whether or not these practices will be introduced and/or maintained in schools. Directly, parents can influence reform by banding together with other parents and protesting against those practices which in conflict with their mental models of “good” practices and/or which correspond to their mental models but are in their opinion poorly planned and implemented (Fullan & Steigelbauer, 1991). Indirectly, depending on how well teachers know the parents, educators may base their decisions on whether to introduce a practice by predicting which practices parents might view positively or negatively (Spring, 1993).

Schools can implement new practices in their classrooms as long as those practices do not go against parents’ mental models about what should go on in “good” schools and classrooms (Konzal, 1997). When changes occur in the routine and rituals of schools (or what is appropriate according to parents’ mental models) parents become alarmed and begin to question and critique classroom practices (Meyer & Rowan, 1978). Indeed, not all parents will speak their mind and they have different values, experiences, and expectations and therefore many different mental models. Researchers have suggested, however, that schools pay particular attention to parents who know how to manipulate the system (Lareau, 1989; Spring, 1993). These parents are said to have “cultural capital” which refers to parents who have been successful in school themselves, have some college education, and hold occupations with status (Lareau).

When schools introduce changes that push the boundaries of parents’ tolerance, active resistance can result. In this case, a family may advocate for their own child and demand that he/she be removed from the classroom or many parents may organize and, in the case of public schools, use the school board to pressure the school administration to overturn the changes (Fullan & Steigelbauer, 1991). In 1997, Konzal studied whether or not parental attitudes towards new classroom instructional practices
influence how these practices are introduced and permanently established in a school. She examined two curriculum changes (math and social studies) implemented in a public school and found differences related to the way parents thought they could influence the schools. Additionally, she noted that with respect to levels of influence there are three types of parents: those who had clear understanding about the changes being made in the school’s classroom practices and they had confidence that they could influence the school for the benefit of their children (high cultural capital); those who knew about the changes but were discouraged in their efforts to influence the school into changing new practices; and those who were not completely aware of the changes proposed and had little confidence in their ability achieve change (had less status in the community). The former are the parents to whom the school would not be forced to pay attention (Konzal, 1997).

The teachers in Konzal’s study (1997) ignored parental concerns and as a result parents protested the changes. In spite of the protest, changes were made but parents and educators were left with bad feelings towards each other which negatively affected trust and respect between them. Thus, before making changes and reforms in schools perhaps parents should be involved in the decision-making process by keeping parents informed about the proposed changes and facilitating opportunities for discussion before the full development and implementation of a new practice (Konzal).

In regards to the implementation and integration of early childhood movement programs into a preschool’s curriculum, it may be presumed that support or rejection will depend on parents’ mental models of appropriate preschool curriculum, their beliefs about the benefits of physical activity, and their influence over teachers and directors. Depending on the parents’ beliefs and attitudes it can be assumed that parents who value physical activity and see it as a vehicle for learning may welcome a movement program or even request it if it is nonexistent at their children’s school. Conversely, if parents value high academics they may oppose a movement program during the school day.
Directors Influence on the Implementation of Educational Practices

Studies about directors’ beliefs, attitudes, and their influence on the implementation or integration of movement programs were not found. Instead, studies on the implementation of developmentally appropriate programs, new curricula, and about directors’ beliefs about play in early childhood curriculum will be discussed. As the school’s educational leader the principal can influence decisions regarding early childhood curriculum and instruction (National Association of Elementary School Principals [NAESP], 1990). As Smith and Smith (2000) explain,

The quality of any early childhood program offered in a public school is directly affected by the understanding of and value placed on such a program by the building principal. The administrator is the one who sets the general tone for the importance of early childhood education in that setting, who is responsible for establishing an instructional climate that is conducive to developmentally appropriate early education, and who most often controls the budget and schedule that allow a program to be delivered effectively. (p.3)

School administrators serve as instructional leaders and facilitators for change (Dwyer, 1985). They are largely responsible for hiring qualified personnel for teaching positions. Through their professional memberships and interpretations of research, they play a key role in ensuring the quality of instruction that teachers are able to provide (Chance, 1991). Rutherford (1985) asserts that effective principals have clear, informed visions of why they want their schools to become and can translate those visions into goals and experiences.

Butterfield and Johnston (1995) also investigated the factors that may influence elementary school principals’ beliefs about first grade teaching and learning. The authors expected that the quality standards for practice from NAESP could influence principals’ decisions and practices. The authors found that more than 90% of the principals agreed with the theoretical principles underlying the NAESP standards; however, they substantially disagreed with several specific recommendations for practice in those standards. Overall there was little congruency between the position statement recommendations and principal’s self-reported beliefs about appropriate practices for first grade classrooms. In addition, this study revealed that principals’ age,
years of experience as principals or as teachers, and whether they were certified in early childhood education had no significant impact on their beliefs about first grade teaching and learning. More specifically, it was found that if principals had experience teaching in Kindergarten through third grade their beliefs were more congruent with the standards. Additionally, female principals’ beliefs matched significantly more with the guidelines than the beliefs of male principals who were less likely to have teaching experience in the early childhood grades.

In 1995, Ingersoll and Rossi studied principals’ opinions and perceptions about who influences decision-making about curriculum in schools. There were differences between public schools and private schools. In public schools, influence over the curriculum seems to be more equally distributed than in private schools. In fact, principals reported that teachers, principals, school boards, and state departments each had large influence on decision making. Private school principals, in contrast, consider themselves as more influential than other groups (85%) but they acknowledged that teachers are also key decision makers (70%). The researchers also found that public school principals were more likely to perceive the school board as more influential contrary to private school principals. Furthermore, parent associations were not perceived as strongly influential by both private and public school principals. Finally, school size affected the distribution of influence in public schools. Principals in large public schools were more likely to report the school boards and state departments of education as highly influential. The results related to school size for private schools are less conclusive than for public schools. In private schools, regardless of the size, principals consistently perceived themselves and teachers as the most influential groups over curriculum decisions.

Contrary to the above results, in another study (French & Peña 1997), elementary public school principals reported a different “order” of influence in the curriculum. Data revealed that principals ranked (most important to least important) the factors that they believed influence the implementation of a developmentally appropriate practice curriculum for teaching young children as “teacher beliefs, parents expectations, teacher dispositions, principal beliefs, teacher satisfaction, supervisor expectations, and school board and ongoing training” (p.6 ).
In a multiple case study examining the implementation of developmentally appropriate practices, West (2001) described to what extent developmentally appropriate practices were used in grades K-3 in four schools and the role of the principals in influencing developmentally appropriate practices. The results showed that principals influenced the use of developmentally appropriate practices. In fact, a direct relationship was found between the extent of use of developmentally appropriate practices in the classroom and the principal’s continued focus on initiating and maintaining related strategies. Principals in this study perceived that their roles as a school administrator involved being a facilitator, instructional leader, and change agent.

Just like in the case of teachers; principals’ beliefs, attitudes, and knowledge may influence their actions when implementing and sustaining new practices. The beliefs that principals or directors hold convey messages to teachers, parents, and children about what is deemed important in that school and what the instructional expectations are (Smith & Smith, 2000). Moreover, the instructional, organizational, and professional environment a principal or director fosters in his/her school will be closely associated to his or her beliefs about what represents appropriate educational experiences for young children (Spindell-Rusher, McGrevin, & Lambiotte, 1992). Therefore; it can be reasonably expected that directors’ beliefs about movement education in the early childhood curriculum may influence the value movement experiences have in early childhood programs.

Lack of knowledge and training can be critical factors influencing the implementation of new practices such as movement education. Regarding play, a qualitative study by Smith and Smith (2000) examined principals’ beliefs and understanding about the place of children’s play in K-2 early childhood programs. The researchers found that although most principals reported that they believed that play for young children was important, most principals lacked appropriate preparation and experience, specific knowledge about play, and understanding about play’s role in the early childhood curriculum. Without adequate training, directors lack the knowledge to make sound curricular decisions, especially if myths such as movement education time can be better spent on academic teaching are not clarified.
Studies that focus on teacher beliefs and practices when teaching physical education have shown negative attitudes especially regarding incorporating physical education into the school day. This is because teachers (Faucette & Petterson, 1995) and administrators (Shepard, 1997) believe that there is not enough instructional time. Contrary to this, a national opinion poll of 500 public school teachers and 800 parents (with at least one child in a public school) revealed that teachers (81%) and parents (85%) overwhelmingly agreed that kids in school should have physical education every day at every grade level; 86% of both teachers and parents agree that, to be healthy, every child should participate in at least 30 minutes of physical activity at school every day from kindergarten through high school; 90% of teachers and 86% of parents are convinced that physically active children are better able to learn and are better behaved in the classroom thus connecting physical activity with improved academic performance; both are in favor of developing new “lifestyle” approaches to physical education which emphasized lifetime activities (instead of team sports); and both teachers (97%) and parents (88%) agree that physical education should not be eliminated for budgetary or academic reasons. Noteworthy is that 82% of teachers and 73% of parents oppose reducing time spent on physical education in order to focus on academics. In fact, 87% of teachers and 77% of parents believe that, in order to fulfill stricter academic standards, schools should find alternatives other than eliminating physical education.

This poll was conducted to assess the opinions of teachers and parents about physical activity and healthy eating in schools (Robert Wood Johnson Foundation, 2003). The percentages favoring physical education certainly do not match the status of physical education in the United States. Future research should investigate why parents and teachers have not made national efforts to reform school practices related to physical education.

**Studying Beliefs and Attitudes**

Even though “as a global construct, belief does not lend itself easily to empirical investigation” (Pajares, 1992, p. 308); understanding teachers’ beliefs and attitudes can enhance educational practice and teacher education programs. In order to study
attitudes, beliefs must be inferred (Pajares). In fact, when Rokeach (1968) recommends that when making inferences, researchers need to consider the ways that individuals demonstrate their beliefs, such as opinions (verbal expressions of beliefs), intentions, behaviors, and contexts. Therefore, teachers’ verbal expressions, predispositions to action, and teaching behaviors must be part of the beliefs assessment. According to Pajares, not including the above in a study about beliefs will make the findings questionable.

Belief subconstructs such as self-efficacy, self-esteem, and self-concept have been studied extensively in educational research (Pajares, 1992). These constructs have been clearly operationalized and instruments to assess them have been developed and validated. However, these subconstructs offer a limited view of an individual’s belief system, which is essential in understanding the impact of beliefs on behavior. Pajares explains that studying beliefs as single units detached from a broader belief system is likely to be unproductive as belief inventories cannot include the context under which specific beliefs become attitudes or values. Traditional inventories ask teachers to respond to lists of beliefs that may or may not correspond to the beliefs relevant to their professional reality (Munby, 1982; 1984). Therefore, to obtain more accurate and richer data, qualitative methods such as open ended interviews, responses to dilemmas and vignettes, and behavior observations in natural settings must be included when studying teachers’ beliefs, attitudes and actions.

Furthermore, it is critical to explore the connections within the belief system in order to have a clearer understanding of the relationship between teachers’ beliefs and their classroom practices. Thus, when studying beliefs and behavior congruency or when evaluating the implementation of change, observations are critical in addition to interviews and questionnaires because through observation researches can gain some knowledge of actual, rather than reported behavior (Kennedy & Kennedy, 1996). Researchers are warned not to use attitudes solely to predict or explain behavior as other factors beyond the individual (important others and perceived control) do influence behaviors. Moreover, it is important to consider that in order to change behaviors indeed attitude change may be necessary, but it is not sufficient (Kennedy & Kennedy).
Certainly one of the main issues across many educational subject areas is the relationship between beliefs and practice (Pajares, 1992). Munby (1982) argued that when studies do not show a relationship between beliefs, decisions and, behaviors, more than likely the research instrument or the model was not adequate. However, even if findings are inconsistent, when teachers’ beliefs are analyzed in the context of a broader belief structure, results may be more easily understood and meaningful (Pajares). As discussed earlier in this literature review, findings are inconsistent within many belief theories. Instead of finding congruency between a person’s beliefs and attitudes, researchers find that beliefs, although very influential, do not necessarily always predict behavior because other factors related to the context are involved (Ajzen, 1991). More research needs to be conducted to find out the contextual factors that make a teacher or director do things that they do not believe in or do things that are in direct opposition to what they report believing. Using the Theory of Planned Behavior (Ajzen) to investigate the beliefs teachers report and the context in which practice occurs can be valuable in order to discern the factors that influence educational practices.

As inferences about teachers’ beliefs are made, important contextual information about their teaching behaviors is also gathered. Researchers have claimed that qualitative research methodology is relevant and appropriate for the study of beliefs (Munby, 1982; 1984). For example, research on self-efficacy beliefs, which historically has utilized quantitative methodology, has been expanded through the use of case studies, a qualitative methodology, to obtain deeper insights (Schunk, 1991). Educational qualitative studies that use the Theory of Planned Behavior were not found. Thus, this is an area in which this research will contribute to the extensive research literature related to the applications of the Theory of Planned Behavior.

In this chapter, the importance of teaching movement skills to preschool children was explained in terms of the status of physical education in schools was examined as well as the support of national organizations and government agencies; the health, socio-emotional, and possible intellectual benefits teaching movement provides; and the potential for early childhood curriculum enhancement. The components and goals of movement education for young children as well as the difference between free play and
structured physical activity were discussed. In addition, the impact of beliefs and attitudes in educational practice was described in terms of the formation and development of beliefs and attitudes; the difference between beliefs and knowledge; the nature of belief systems; teachers' beliefs; and the relationship between teachers' beliefs, attitudes and behavior and the implications for teaching were explained. The factors that may influence movement skill instruction to preschool children including teachers, parents, and directors’ attitudes were also included. In order to explain the influence of the above factors, a discussion of the Theory of Planned Behavior as the theoretical framework for this research was presented followed by a review of previous research on teachers’ attitudes regarding teaching physical education to young children. Finally, the challenges of studying beliefs and attitudes were outlined and the use of qualitative methods for studying those was supported.
In this chapter, the following topics will be discussed: characteristics of qualitative research and interpretivism, ensuring quality in qualitative research, case study research design, researchers’ role, subjects, data collection methods and procedures, data analysis, ethical concerns, and limitations of the present study.

**Theoretical Perspective**

**Qualitative Research**

Qualitative research is a concept that includes several forms of inquiry that facilitate understanding and explaining the meaning of social phenomena without interfering with the natural setting as much as possible (Merriam, 1998). There are five features that characterize qualitative research: natural setting, descriptive data, concern with process, inductive, and meaning (Bogdan & Biklen, 1998).

Qualitative research must be carried out in a natural setting in order to capture the context of the actions or phenomena studied (Bodgan & Biklen, 1998; Lincoln & Guba, 1985). Quantitative inquiry (positivism), however, seeks to control the setting, which causes loss of context as the environment in which actions occur is altered (Lincoln & Guba). A quantitative experiment for instance, deliberately excludes a phenomenon from its context so that the environment can be “controlled” in order to focus on a few variables (Yin, 2003). Indeed positivists believe that knowledge obtained from experimental research must be objective and quantifiable and that reality is constant, observable, and measurable (Merriam). Instead of examining the component parts of a phenomenon, qualitative research aims to reveal how all the parts work together to form a whole (Merriam, 1998; Stake, 1995).

Data collection in qualitative research involves detailed description. Words, pictures, and images are collected rather than numbers (Bodgan & Biklen, 1998).
Qualitative researchers are more concerned with the process rather than the product (Merriam, 1998). Focusing on the process is particularly useful in educational research in which researchers want to see, for example, how individual’s attitudes and expectations are translated into actions (Bodgan & Biklen, 1998).

Qualitative inquiry is characterized by being inductive (Bodgan & Biklen, 1998; Lincoln & Guba, 1985; Merriam, 1998). Qualitative studies are often pursued because there is a lack of theory or current theory does not adequately explain a phenomenon (Merriam). Through inductive analysis, qualitative researchers seek to make sense of data from observations and intuitive understandings. Inductive data analysis is the inverse of deductive analysis, which is the usual mode of analysis utilized in quantitative research (Lincoln & Guba). Conventional quantitative studies search for data that confirms or disconfirms a hypothesis deducted from theory (Merriam). When doing qualitative research, however, the investigator expects the theory to emerge from the inquiry. Thus, qualitative research is designed to inductively build theory as opposed to test concepts, hypotheses, and theories (Merriam).

Qualitative researchers are interested in meaning and how people make sense of their lives (Bodgan & Biklen, 1998). Therefore, qualitative inquiry incorporates the participants’ perspectives and interpretations in the analysis to better understand their reality. It is assumed that meaning is rooted in people’s experiences and that the researcher’s perceptions mediate this meaning (Merriam, 1998). As Merriam clearly explains:

The key philosophical assumption is the view that reality is constructed by individuals interacting with their social worlds. Qualitative researchers are interested in understanding the meaning people have constructed, that is, how they make sense of their world and the experiences they have in the world. (p. 6)

Qualitative research usually involves fieldwork; for which the researcher must physically visit the people in the study site (field) in order to observe behavior in its natural setting (Merriam, 1998). The product of a qualitative study is richly descriptive. Qualitative research tries to achieve an empathetic understanding through the use of detailed (thick) description, in order to help the reader vicariously understand what experience itself would convey (Stake, 1995). “Thick description” is a term borrowed
from anthropology which refers to “the complete, literal description of the incident or entity being investigated” (Merriam, 1998, p. 29).

Unlike quantitative research in which unique cases are treated as “error”, for qualitative researchers unique cases and their contexts are very important to understanding (Stake, 1995). Finally, qualitative studies are characterized by emergent and flexible designs that may change depending on the progress of the study (Merriam, 1998). Given the above characteristics, I believe that qualitative inquiry will be the most effective methodology for this study.

**Interpretivism**

The most distinctive characteristic of qualitative research, according to Stake (1995), is the emphasis on interpretation. In fact, interpretations constitute the knowledge to be gained during the research process (Merriam, 1998). The theoretical foundation for this study will be an interpretivist perspective in which the data will guide the study. Interpretivists believe that what people believe is true and that what people know about the world is constructed as a result of their interactions over a period of time in a particular social setting. This is also known as “social construction of reality” (LeCompte & Schensul, 1999). According to interpretivists, the only way to create meaning is through interaction between the researcher and the participants (LeCompte & Schensul). The philosophical assumption underlying interpretive research is that “reality is not an objective entity rather there are multiple interpretations of reality” (Merriam, p. 22). The investigator brings an interpretation of reality into the research situation, which interacts with other people’s interpretations of the phenomenon being studied. Interpretivism contrasts with most positivistic theories where reality is assumed to be evident through objective truth.

An interpretive perspective is ideal for attempting to understand the meaning of teachers’ actions (Crotty, 1998). Schwandt (1997) explains that “to understand a particular social action (e.g., friendship, voting, marrying, teaching), the inquirer must grasp the meanings that constitute that action” (p. 191). Applied to my study, an interpretivist perspective allowed me to understand and make sense of preschool teachers’ attitudes, their underlying perceptions/assumptions, and the influence those
assumptions have on their lesson planning and teaching. To understand what a particular action means I had to interpret what the teachers are doing as well as ask them their interpretations about their actions.

According to Schwandt (2000), interpretivists argue that it is possible to understand the subjective meaning of actions in an objective way by distancing themselves from their own frame of reference. Indeed, I had to put aside my beliefs about appropriate physical education for young children and the benefits of physical activity in order to objectively interpret the data. Furthermore, Schwandt states “interpretivists aim to reconstruct the self-understandings of actors engaged in particular actions” (p. 193). Consequently, even if my interpretations had been different from the teachers’, I could not have described teachers’ interpretations and understandings as irrelevant.

Teachers’ understandings about their teaching are recognized by many theorists to be the basis of their teaching behaviors (Pajares, 1992). Thus, in addition to my interpretations, the teachers’ interpretations of what they do while teaching and why they do those actions were an essential component of this research. The teaching episodes observed were described as the teachers saw them in order to obtain a better understanding of teachers’ actions while the children are engaged in physical activity.

Among various paradigms used in qualitative research (e.g. critical theory, ecological paradigm, social constructionism), interpretivism was chosen for this study because interpretivists incorporate active participation in the field and it seeks the understanding of actions. Additionally, an interpretivist paradigm justifies participation in the research process, as participation is one of the requirements of an interpretive approach. Originally, I believed that a critical paradigm was ideal for this research study. Unlike critical theorists, interpretivists are not activist oriented and they are not expected to commit to action. Critical theorists are more concerned with policy and social change in order to bring about change in unequal allocation of power and other resources (LeCompte & Schensul, 1999). In addition, critical theorists are very interested in gender, race, and class issues as those elements are seen as the primary means through which differences in power occur (Bogdan & Biklen, 1998). Critical research in education “is considered to be a social institution designed for social and cultural
reproduction and transformation” (Merriam, 1998, p. 4). Under a critical paradigm, I was going to use an action research (Merriam) design, which researchers use to identify problems and bring about structural changes in a community or institution. However, I realized that it is necessary to first understand what is going on with physical education at my research site before pursuing training and policy changes. Perhaps, a follow-up study could incorporate a modified critical theory perspective with an action research design.

**Case Study**

A case study is “an empirical inquiry that investigates a contemporary phenomenon within its real-life context” (Yin, 2003, p. 13); an intensive, holistic description, and analysis of a specific unit or bounded system (Merriam, 1998; Stake, 1995). Indeed the study of a bounded system is what differentiates case studies from other types of qualitative methods (Merriam). The bounded system, or case, can be selected because it is an instance of some specific concern or issue. The definition of the case is related to the way the research questions were defined. Additionally, the case can be considered tentative as it can be revisited as a result of findings and insights that arise from the data collection (Yin).

In education, case studies are more likely to be qualitative and employed to gain an in-depth understanding of the situation studied and its meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in construction of knowledge rather than confirmation (Merriam, 1998; Stake, 1995). According to Merriam, educational case studies are conducted to identify and explain specific problems of practice. Hence, insights obtained from case studies can directly influence educational policy, practice, and future research. Case study researchers seek to obtain insights, discover, and interpret instead of testing hypothesis. Furthermore, case studies include as many variables as possible and reveal their interaction during a period of time. (Merriam)
Case studies investigate the particularity and complexity of a case in order to understand it within its context. Merriam (1998) further describes qualitative case studies as particularistic, descriptive, and heuristic:

Particularistic means that case studies focus on a particular situation, event, program, or phenomenon… Descriptive means that the end product of a case study is the rich thick description of the phenomenon under study…Heuristic means the case studies illuminate the reader’s understanding of the phenomenon under study. They can bring about the discovery of new meaning, extend the reader’s experience, or confirm what is known. (p. 29-30)

In other words, the case study method is best for when a researcher wants to include contextual conditions because he/she is convinced that the context might be pertinent to the phenomenon under study (Yin, 2003). Typically a case study is employed when a “how” or “why” question is asked about a phenomenon over which the researcher has little or no control (Yin). According to Yin, “As a research endeavor, case studies have been viewed as a less desirable form of inquiry than either experiments or surveys” (p. 10). Yin suspects that this view is mostly due to the concern of “lack of rigor”, the belief that case studies provide for basis for generalization, and that these studies take too much time to complete. Case study research is an empirical form of investigation; however, methodological texts describing specific procedures are scant. This may have contributed to the belief that case studies are not a serious form of investigation and that they are mostly the exploratory phase of another research strategy.

According to Yin (2003) case studies findings can be generalized to theoretical propositions but not to populations. In fact, the goal of a case study is particularization, not generalization. Stake (1995) explains that “We take a particular case and come to know what well, not primarily as to how it is different from others but what it is what it does” (p. 8). Through interpretations readers are provided with material from which they can generalize and construct knowledge. In order to ease generalization, readers need thick descriptions of places, events, and the interpretations of the people most knowledgeable about the case (Stake).
Case study inquiry benefits from previously developed theory as a guide to data collection and analysis. However, the research design aims to develop a “theory” of what is being studied (Yin, 2003). The case study’s unique strength is the ability to use a wide variety of evidence such as documents, artifacts, interviews, and observations (Yin). Additionally, since a case study is based on real life situations, the result is a rich and complete account of a phenomenon (Merriam, 1998). In spite of these advantages, case studies are limited by the sensitivity and integrity of the investigator. Therefore, both the authors and the readers need to be aware of biases that can affect the final results (Merriam).

The case for this study is the lack of movement instruction at the University Preschool. The goal was to understand why teachers are not teaching movement to their students. I focused on describing and understanding the factors that influence movement skill instruction/facilitation to preschool children and preschool teachers’ attitudes and practices regarding movement skills to children. This research study explains how teachers’ attitudes and practices and other factors contribute to the lack of movement education at the University Preschool.

Teachers’ practices related to physical activity and the teaching of movement skills are related to what they think and believe. The teachers may believe, for example, that physical education is a waste of time or they may regard it as highly important. These beliefs can be reinforced or discouraged by context in which they teach. This includes interactions between teachers as they plan and give feedback to each other. Thus, context sensitivity is another characteristic of case study research that applies to this study. When analyzing the data, I paid particular attention to the context in which teaching occurs in order to make interpretations about the teachers’ attitudes about teaching movement. This context enables the researcher to make inferences about the participants’ behavior (Rokeach, 1968).

The present case study may also be considered "communitarian" with the University Preschool being the community that was studied. The basic premise of communitarian research is that the study’s goal is to serve the community where it was conducted (Lincoln, 1995). The findings of this study are expected to be beneficial for this preschool because they could spark a positive change in attitudes towards physical
activity and consequently lead to increased teacher training in the area of physical development/education.

**Ensuring Quality**

The primary research goal for this study is to add knowledge, not to make judgments about the teachers' beliefs and actions. According to Bogdan and Biklen, (1998)

the worth of a study is the degree to which it generates theory, description, or understanding. For a study to blame someone for a particular state of affairs, or to label a particular school as 'good' or 'bad', or to present a pat prejudicial analysis can brand a study as superficial (p. 34).

Furthermore, according to Elliot, Fischer, and Rennie (1994, cited in Lincoln, 1995), qualitative research is conducted not to confirm or disprove earlier results, but to contribute knowledge through a process of revision and enrichment of understanding of the experience under study.

The case study investigator must be aware of any personal biases and how they may affect the research process (Merriam, 1998). To ensure quality in the study, I constantly confronted my opinions and prejudices with the data collected. To accomplish this, detailed field notes included reflections on how my subjectivity during the research processes may have affected the collection and analysis of the data. Throughout this process I wrote about how my past experiences as a teacher in this preschool and as a physical education teacher could have affected my study, particularly the data analysis. Furthermore, I strived to be aware and responsive to contradictory evidence because a good case study researcher should not exclusively substantiate his/her preconceived notions (Yin, 2003). This diminished, not eliminated, biases as I acknowledge that it was not possible to remain completely objective. Merriam explains that it is impossible for observers not to be influenced or be affected by the setting. The challenge was to become reflective and conscious of how my role and knowledge shape and/or enrich the findings.
The concept of “trustworthiness” addresses quality in qualitative research. Trustworthiness refers to how a researcher can persuade the audience that the findings in a study are worth paying attention to and worth taking into account. In order to ensure quality, it is essential for the researcher to substantiate that a study is trustworthy.

**Trustworthiness**

Lincoln and Guba (1985) developed four alternate concepts/criteria that focus on issues of validity and reliability in qualitative research. This study used these alternate concepts/criteria known as credibility, transferability, dependability, and confirmability because they recognize relationships between the researcher and the participants. According to Lincoln and Guba, these four concepts establish “trustworthiness”.

As mentioned earlier, case study research relies on multiple sources of evidence which allows the researcher to address a wider array of historical, attitudinal, and behavioral issues. The most important advantage of using multiple sources of evidence, according to Yin (2003), “is the development of converging lines of inquiry” (p. 98). The data gathered need to converge in a triangulating manner in order to support the facts or events of a case study. Triangulation refers to the use of different types of data collection methods as well as various sources of data and modes of evidence (Miles & Huberman, 1994; Yin). It involves testing one source of information against another to find alternative explanations (Fetterman, 1998) and cross-checking the accuracy of the data obtained (LeCompte & Schensul, 1999). According to Lincoln and Guba (1985), “triangulation” is required to achieve credibility, dependability, and confirmability in a study.

Triangulation is important because it assists in correcting biases that occur when there is only one researcher (LeCompte & Preissle, 1993) and because regardless of the type of data and informants, no one is error-free (Fetterman, 1998). In fact, Patton (1990) explained that multiple sources of information should be used because “no single source of information can be trusted to provide a comprehensive perspective. By using a combination of observations, interviewing, and document analysis, the field worker is able to use different data sources to validate and crosscheck findings” (p. 137). Therefore, having different sources of data and multiple forms of data collection
improves the quality of data and contributes to the veracity of the research (Stewart, 1998).

**Credibility.** In a research study, credibility (validity) pertains to whether a method investigates what it claims that it will investigate. In other words, is the research an authentic portrait of what is being studied (Miles & Huberman, 1994)? For example, observations should indeed reflect the phenomena or variables of interest (Kvale, 1995). In qualitative research internal validity or the extent to which observations and research findings match reality is known as credibility (Lincoln & Guba, 1985). When looking at credibility researchers are interested on whether the findings of a study make sense and whether the findings are credible to the participants and readers.

To ensure credibility, sufficient amounts of data from different sources must be collected and thick descriptions must be recorded. Furthermore, the data needs to be continually checked, questioned, and interpreted as the findings emerge. Schwandt (1997) explains how the “validity of an account or interpretation is judged in terms of the consensus about words, concepts, standards and so on in a given community at a particular place and time” (p. 169). Consensus about interpretations can be achieved through the use of triangulation, peer debriefing, and member checking. Hence, these are also needed for the findings to be credible (Lincoln & Guba, 1985).

During the data analysis, I triangulated different kinds of data gathered through a variety of data sources (documents, observations, and interviews). As the study was conducted, I shared data and preliminary analyses with other colleagues knowledgeable about the setting, and used member checking by sharing my interpretations and analyses with the four teachers involved in the study.

**Transferability.** In quantitative studies a significant random sample is needed to make generalizations. In qualitative research, however, the nature of the fieldwork (face-to-face) limits the number of subjects that can be studied (Agar, 1996). Transferability refers to what quantitative researchers call external validity (generalization) or the answer to the question; does this research generate insights that are also applicable to other places and situations (Lincoln & Guba, 1985; Yin, 2003)?

An error in case study research is to think of statistical generalization (quantitative) as the method of generalizing the results of the case study (Yin, 2003).
The type of generalization case researchers must use is “analytic generalization”, in which a previously developed theory is used to compare the results of the case study. The theoretical framework that led to a case study will help identify the other cases to which the results are generalizable.

**Dependability.** In qualitative research the term “dependability” is used instead of the quantitative term “reliability”. Dependability deals with the extent to which other researchers discover the same phenomena or generate similar constructs in similar settings (Lincoln & Guba, 1985). In other words, can the findings be replicated and are the results consistent with the data collected?

To ensure dependability the data was examined for similarities, inconsistencies, and contradictions which are explained according to the context. Verbatim quotes were recorded immediately after or during events and by giving detailed accounts in order to avoid inferences. Yin (2003) suggested that for a study to be dependable, the researcher should develop a case study database. In this database the investigator documents all the procedures followed during the study. The database provides necessary information needed to replicate the case study; therefore, a case database markedly increases a study’s reliability. Maintaining the evidence in an organized fashion also facilitates dependability. Researchers should establish a chain of evidence so that a reader, for example, can “trace the steps in either direction from conclusions back to initial research questions or from questions to conclusions” (Yin, 2003, p.105). For the present study, I kept a record of all the procedures and maintained emerging conclusions organized.

In addition, to improve dependability I kept a reflective journal as part of my field notes. In this journal I reported any personal and professional information that may have affected data collection, analysis, and interpretation either positively or negatively (Patton, 1990). Notes from this journal are part of the analysis and conclusions to help readers understand my biases and the lens through which the results of the study were interpreted. Finally, triangulation is also necessary to ensure dependability.

The research findings and interpretations from this research apply only to the research site selected for this study. Readers may choose to transfer the research findings and interpretations from this study to their individual settings. To ensure
transferability, the field notes collected contained detailed descriptions of my processes as a researcher. However, it is unlikely that this case study can be replicated as a subsequent study would take place at a different time, thus the people and context described in the original study may be different.

**Confirmability.** For this study, objectivity is referred to as confirmability. Reflection during the data collection and analysis improves confirmability because it accounts for the learning processes and confronts contradictions found during the interviews and observations (Lincoln & Guba, 1985). Drafts of the case study were shared with study participants in order to confirm the validity of the data. It was proposed that in case reviewers disagreed with conclusions and interpretations, negotiated meanings would serve as the final understanding. During member checking none of the participants disagreed with my interpretations.

Stewart (1998) explains that “respondent validation” enhances objectivity. When participants read what researchers write they may reveal different perspectives (Stewart). Other benefits from this practice include uncovering new data and enhancing rapport between participants and observers. This opportunity gave the participants an integral part of the study as they were involved in the production of knowledge. The corrections made through respondent validation enhanced the accuracy of the case study (Yin, 2003)

**Researcher’s Role**

In case study research the key concern is to understand the phenomenon of interest from the participant’s perspectives, not the researcher’s. This has been referred to as the emic, or insider’s perspective versus the etic, or outsider’s point of view (Merriam, 1998). It is, therefore, important to know the following: the extent and nature of the outsider’s involvement in the insiders’ activities, the extent and nature of the insiders’ participation in research, and the division of labor between the outsiders and insiders in the research process (Stewart, 1998).

Participants’ perceptions of reality are critical to understanding and describing situations and behaviors in other words, understanding “why people think and act in the
different ways they do” (Fetterman, 1998, p.20). Furthermore, LeCompte and Schensul (1999) asserted that researchers need to understand what participants' behaviors mean to them rather than imposing their interpretations on those behaviors. My role as a researcher involved organizing and analyzing the data collected to make sense of what is going on in order to construct knowledge and develop theory. Therefore, along with my interpretations, participants in this study (insiders) had an opportunity to construct knowledge as well by providing their interpretations (during the interviews) of the data gathered.

**Research Site**

The data was collected at the University Preschool (a pseudonym, as are all proper names in this study). It is a preschool run by a large research-one university in the southeastern United States. This site was chosen because of my familiarity with the school and because this center is considered a “model preschool” in the surrounding community, which means they are regarded as a high-quality preschool program. They are accredited by the National Association for the Education of Young Children. Because they are part of a research university, I believe the research findings will be more accessible to the research community.

The University Preschool is a research or laboratory school designed for study and training, research, professional development, and community consultation about quality programs for children ages two to five years old. One of their stated purposes is to provide a research site for faculty members and graduate students in the departments of Early Childhood Education, Child Development, Psychology, Movement Sciences, and other academic areas. Due to this research status, the children are used to “new faces” around their classrooms. In my experience working at the University Preschool, I have noticed researchers taking notes, using video cameras, or just observing. These actions do not appear to interrupt or impede the children’s behaviors.

There are two classrooms at the University Preschool. One classroom has 22 children ages two to three years old (2-3 year old classroom) and the second classroom has 28 children ages four to five years old (Pre-K classroom). In 1998, I was hired by
the University Preschool as a teacher in the Pre-K classroom. I team taught with a lead teacher who is now the lead teacher in the 2-3 year old classroom. I remained in that position for two years. My teaching duties included co-planning and teaching developmentally appropriate activities for a class of 28 students, teaching physical education (movement) as a special area to the Pre-K classroom children, and editing the weekly newsletter. Meanwhile, I was attending graduate school and when I graduated, two years later, I began to work part-time as a movement teacher and substitute teacher. Part-time staff cannot attend staff meetings; however, because I know all the staff, I have been always informed of important events and policy changes. My relationship with all the staff, including the retired former director, was professional yet friendly. Staff turn over is very low and mostly occurs when teachers and assistant teachers graduate.

The University Preschool went through several administrative changes while I was conducting the study. The school changed directors three times which made access to information somewhat challenging. Before I began data collection, the first director, Ms. Elly, retired after eight years of working at the school. Subsequently, the school was changed from being its own entity within a university department to being administered by a subdivision of the same department. In addition, all the university childcare centers were consolidated and a Coordinator was assigned to oversee them. Each of the centers, however, had its own director. A new director was hired at the University Preschool only to be terminated eight months later. For the next eight months the school did not have a director and the lead teachers and the Coordinator dealt with the administrative functions. Data collection was completed during this time. Currently, a new director is in place.

One of the most challenging tasks during the research process was to make the setting unfamiliar. When conducting a qualitative study, the researcher must be aware of settings that seem “too familiar”. This is a very common situation as classrooms are settings that are often “too familiar” for educational researchers. This brings the urge to evaluate, rather than observe, and predisposes the researcher to overlook important details (Wolcott, 1994). Making the University Preschool unfamiliar was difficult because I have worked closely with most of the current personnel.
Subjects

Originally, the subjects were the four full-time teachers, the assistant director, director, and children’s parents in the University Preschool. During the study the director retired, one of the teachers was dismissed, and the assistant director was transferred to another university child care center. The next director and the Coordinator did not want to participate in the study; therefore, even though the former director had retired, she continued to be part of the study. The teacher who was terminated participated during the first round of interviews then moved out of the country so she could not continue to participate. The assistant director worked at the center for two years and just before the interviews began she was transferred to another school. She participated in the study during the parent interview process because one of her children was enrolled at the preschool. Currently, all the teachers have Bachelor’s degrees, and all the assistant teachers (part-time) are pursuing Bachelor’s degrees. Both the director and the Coordinator have a Doctorate degree.

In each of the University Preschool classrooms there is a lead teacher (university employee with benefits) and a teacher (usually a graduate student). The lead teacher in the Pre-K classroom has been teaching for five years at the University Preschool and the teacher was an assistant teacher during her first two years of employment and then was promoted to teacher two years ago when she graduated with her Bachelor’s degree. The 2-3 year old classroom lead teacher has been working at the University Preschool for 13 years. She has taught in both classrooms. The teacher who was dismissed (2-3 year old classroom) was also an assistant teacher (three years) before she was promoted to the teacher position two years ago. Upon her dismissal, another assistant teacher was promoted. The former was not included in the study because when she was promoted, all study interviews had been completed.

The lead teacher in the 2-3 year old classroom was the original key informant for this study. Key informants are individuals whose accounts and insights create a picture of the beliefs and practices of a community (LeCompte & Schensul, 1999). Hence key informants are considered a vital to the success of a case study (Yin, 2003). Key informants can also pinpoint sources of corroborative or opposing evidence (Yin).
2-3 year old classroom lead teacher was selected because she was knowledgeable of how the school worked from the administrative involvement, to the teachers, and parents. Additionally, she has been part of this school for 13 years (longer than anyone else), and I believe she feels very comfortable with me because we team taught for two years. Her seniority status entitles her to be the next in command when both the director and the assistant director are not onsite. Despite of all those qualities, in my opinion, due to the unstable administrative situation at the preschool, this teacher was not as insightful as I envisioned. Additionally, I believe she was hesitant to share opinions about the administration. Therefore, I relied on the Pre-K teacher as a key informant. Although the Pre-K teacher has less experience at this school, she proved to be very insightful and very aware of the factors affecting the school environment.

In the original study design, I planned on including administrative personnel (director, assistant director, and coordinator) in the study particularly if I found that the teachers did not have all the answers needed, or if I determined that the staff could tell me more information. The idea was that their perspective would help me gain a better understanding of the factors that influence the teaching of movement skills especially those related to subjective norms (social pressure) (Kennedy & Kennedy, 1996). I planned on interviewing the administrators after interviewing the teachers because several of the administrators’ questions were developed depending on the teacher’s answers. As mentioned earlier, there were many administrative changes as I was conducting the study. The retired director was the only administrative staff willing to participate in the study. Accessibility to the site was challenged by the director that followed as well as the Coordinator. I had to reapply for access even though it was already granted by the previous administration. The relationship between the new administrative staff and me was somewhat tense and perhaps this affected their eagerness to participate in the study.

Despite the above, the educational level of the teachers, the long time they have been working at the University Preschool, and the fact that I also worked there, are advantageous because the teachers can relate to my role as a researcher and peer relationships can be facilitated. I believe those qualities made it easier for the teachers to discuss the issues presented to them. I have conducted research at this site
throughout my graduate program, thus, the teachers are used to seeing me in the role of researcher. I believe that they did not see me as a stranger and that they were not intimidated by my presence.

The majority of the children’s parents are students at the university where the University Preschool is located. There are 50 children enrolled at the preschool. Enrollment priority is given to university students followed by university staff and community. Therefore, most parents are either pursuing a Bachelor’s degree or in graduate school.

**Data Collection Methods and Procedures**

The evidence for case studies mainly comes from six sources: documents, archival records, interviews, direct observation, participant observation, and physical artifacts (Yin, 2003). No single source has a complete advantage over the others. In fact, all sources are highly complementary, and thus a good case study should include as many sources as possible (Yin).

In case study research, as well as in other manifestations of qualitative inquiry, the researcher is the focal research instrument in conjunction with the people that are being studied (Lincoln & Guba, 1985; Merriam, 1998). The following traits distinguish the human researcher from other data collection instruments: First, the researcher reacts to the context-- he or she can adapt techniques to the circumstances making it possible for the total context to be considered. Second, the researcher can process data immediately thereby summarizing and clarifying as the study evolves (Merriam). Finally, the sources of information utilized may be human (interviews and observations) and nonhuman (documents and records).

Throughout the data collection process, I kept a field notebook which is “an introspective record of the researcher’s experience in the field” (Merriam, 1998, p. 110). In this notebook I recorded field notes that included my ideas, mistakes, and reactions to experiences as I collected data. It also included descriptions of the physical space in order to facilitate vicarious experiences for the reader (Stake, 1995). Field notes also included “observer comments” which are the researcher’s feelings, hunches, and initial
interpretations. Observer comments also include thoughts about the people, the setting, and activities (Merriam, 1998), however; they are clearly distinct from factual descriptions.

Data collection in case studies is stopped when sources of information are exhausted or when the investigator reaches “saturation” of data or, in other words, when all the sources begin to reflect the same information (Merriam, 1998). In this study, after all sources of data were collected saturation was evident. The following kinds of data collection techniques were used during this study: document analysis, survey, participant observation, and individual interviews. All of these techniques are appropriate in case study research (Yin, 2003; Stake, 1995) and are commonly used in educational case study research (Merriam).

**Document Analysis**

Documentary data is one of the most objective sources of data compared to other forms used in qualitative research. The data found in documents can be used in the same manner as data acquired from interviews and observations. The documentary data can provide descriptive information, corroborate information from other sources, verify emerging hypotheses, offer historical understanding, and help track change and development (Merriam, 1998; Yin, 2003). If the documentary evidence is contradictory rather than corroboratory, this indicates the researcher needs to further pursue the problem. Inferences can be made from documents although the researcher needs to aware that documents must be carefully used and should not be accepted as literal accounts of events that have taken place (Yin).

Documents refer to printed and other materials relevant to a study including public records, personal documents, and physical artifacts. In a school setting some of these documents include notices sent home to parents; lesson plans, photographs; memos between and among teachers, staff, and parents’ association; formal policy statements including parental involvement; school philosophy statements; newsletters; and minutes of meetings (Merriam, 1998; Stake, 1995). Fetterman (1998) explains the value of analyzing school records:
School records tell where the school has been, is, and plans to be in the future (or at least what the party line says are the school goals). Lesson plans, homework assignments, essays, and report cards or the (absence of any of these outcroppings) are revealing sources of information about students, teachers, parents, administrators. Minutes from board of education and faculty meetings provide useful retrospective information. (p.59)

The administrators and teachers at the University Preschool keep records and other documents that indeed illustrate the importance of physical education in the curriculum. Document analysis in this study involved the examination of school records such as lesson plans, staff meeting agendas, minutes for staff and parent advisory meetings, supplies orders, and in-service training handouts. These documents offered valuable insights on the factors that influence movement skills instruction and on teachers’ attitudes and actual practices. Questions answered through document analysis included the following: Who supports (does not) movement education?, What are some of the planned movement activities?, What kinds of training have teachers taken?, Have any proposals have been made to incorporate more movement into the curriculum?, Has new movement equipment been requested? Permission was requested from the director to access these documents.

The school also has teachers’ and parents’ handbooks which include the schools’ philosophy, goals, policies, and curriculum description. After the new administration took effect, the parent handbook was rewritten and the old brochure and staff handbooks were discontinued. It was then when I decided to compare and contrast both parent handbooks in order to find out changes in the philosophy of the program especially regarding physical development. The above records and handbooks provided insights on the place of movement education in this preschool setting and on the changes that the new administration had implemented on the preschool’s philosophy and purpose.

Surveys

Surveys can be included as part of the case study and produce quantitative data as part of the evidence (Yin, 2003). Teacher and parent surveys were designed to
acquire a basic understanding about the teachers’ and parents’ attitudes and preferences regarding the teaching of movement at the University Preschool. This preliminary information was used to develop several of the questions that were used during the teachers’ and parents’ interviews.

**Teacher surveys.** Case study researchers use surveys to gather quantitative data and baseline information as evidence for the case (Merriam, 1998). The baseline data for this study were collected by administering a survey to the four teachers. The purpose of this baseline survey was to gather information about educational level, teacher training and knowledge about movement, past physical activity experiences, and general attitudes about the place of physical education and physical activity in the preschool curriculum. This information was used to ask more specific questions during the semi structured interview in order to better understand the factors and teachers’ attitudes that influence the teaching of movement to young children. The baseline survey consisted of two parts, a seven-item Likert inventory and set of questions. The Likert inventory was designed to get a preliminary idea about the nature of teacher’s attitudes regarding teaching movement and it had five options that ranged from strongly agree to strongly disagree which are the frequent options used for adults (Popham, 2002). During a staff meeting, the teachers were given a copy of the baseline survey and were asked to return the completed survey on the following day.

After the open-ended interview, teachers were given a final survey in which they had to order school activities (circle time, storyteller, structured physical activity, art, language readiness, music, playground time, science/math, field trips, and dramatic play) according to importance. Additionally, this final survey had questions for the teachers to explain why they rated an activity as the most and as the least important, what did they think about movement education and free outdoor play taking time away from other academic subjects in schools, and about their opinion on the demands and the pressure of getting children ready for Kindergarten. This final survey was not included in the original proposal. It was incorporated after analyzing the open-ended interview transcripts and the parent interviews in order to compare the data and clarify interpretations.
Parent survey. According to the theoretical framework, parental influence may be one of the factors that influence the teaching of movement skills to young children. Each family with children enrolled at the University Preschool was given a parent survey. The purpose of the survey was to gather information about their preschool curriculum preferences and children’s physical activity participation. It included short answer questions and a section in which parents were asked to rate several school activities (circle time, storyteller, structured physical activity, art, language readiness, music, playground time, science/math, field trips, and dramatic play) according to importance. Out of 50 families, 22 returned the survey.

Participant Observation

The case study researcher who uses participant observation becomes more than a passive observer. Instead, the investigator assumes a myriad of roles within the case study context (Yin, 2003); however, participation in the group is definitely secondary to the role of researcher (Merriam, 1998). When the observer is also a participant the researcher’s observer activities are known to the group. The researcher interacts closely enough with the subjects in order to “establish an insider’s identity without participating in those activities constituting the core of the group membership” (Merriam, p. 101). Refraining from complete participation is critical for further observations and analysis. This is a challenging and difficult position to maintain.

Participant observation enables researchers to have the opportunity to learn through exposure to the daily routine of the participants. To accomplish this, the researcher needs to be present at and become involved in the setting to be studied (Merriam, 1998; Schensul, Schensul & LeCompte, 1999). In addition, it requires the case study researcher to record routine daily activities of the people in the field. Maintaining detailed records of events is critical in providing relatively incontestable descriptions used during the analysis and final reporting (Stake, 1995).

Participant observation informs and helps the researcher confirm or disconfirm patterns of leadership, hierarchies, competition, cooperation, and other cultural elements within a group. Additionally, it helps the researcher understand how people relate to one another, provides intuitive and intellectual information on how things are
prioritized and organized (Schensul, et al., 1999), and it promotes learning through active participation, (Stewart, 1998).

The participant observer may be a staff member in the organization being studied (Yin, 2003), which is the situation I experienced since I was part of the University Preschool staff. Being part of the staff was the reason why participant observation was ideal for this study. During most of the observation period, I was working in the classroom as a resource teacher. The only difference was that I was taking field notes. I worked three days during the first week of observations and during the second week I worked everyday. I was, however, in the field full-time which helped me gain a better understanding of the relationships between the teachers and the context in which they implemented their lessons.

The preschool uses a monthly thematic curriculum. Teachers select the themes which change every year. Lesson planning in both classrooms was done weekly and outdoor activities during a given week were planned in a way that the same activities were set up Monday, Wednesday, and Friday and another set was planned for Tuesday and Thursday. Indoor activity centers were the same everyday, however, the materials vary depending on the theme. Two weeks of observations were conducted and the total observation time was approximately seven to eight hours per teacher. Since each classroom had weekly lesson plans, I expected to see pattern repetitions during the observation time frame. Indeed repetition was evident during the second week; therefore, additional observations were not necessary.

The focus of the observations in this case study was on teachers’ actions related to facilitating and/or teaching movement skills while the children were on the playground, as well as during activity time (learning centers) inside the classroom. Descriptions included planned activities, both indoors and outdoors, and an inventory of school equipment used for physical activity development. These data were direct evidence of the teachers’ actions related to teaching movement skills. Selected episodes from these observations were used during an open-ended follow-up interview later described. As I triangulated the observational data with the interview and survey data, I noted in my journal if the observations were contradictory or if they supported those sources. During the observations questions were asked of the teachers as a
means of clarification. For example, upon arrival to the preschool I always asked what they (teachers) were doing earlier. Participant observer field notes were recorded with paper and pen.

A video camera, in addition to field notes, was used while conducting observations on the playground in order to record more accurate data. Stake (1995) explains that videotapes are valuable tools because videos can be analyzed to add and clarify interpretations. Video images supplemented the field notes, as the audio was not very useful due to the level of noise on the playground. Nonetheless, taking field notes while recording was especially advantageous because there were times when the video camera view was obstructed. The focus of the video recordings was on teachers; however, since children were invariably going to appear on the video, parental authorization was obtained for every child in the University Preschool. All the teachers and staff gave consent to be videotaped.

Outdoors, all the teachers were observed simultaneously because playground time is scheduled at the same time for both classrooms. Originally, I had planned on observing one teacher at a time; however, I changed this approach when I noticed that the teachers were not readily facilitating movement and that while I waited for one teacher sometimes other teachers were engaged in movement activities with the children. The observations were centered on teachers’ actions when they facilitated physical activity or taught a movement skill. For these episodes, detailed field notes were recorded. Other teacher actions (e.g. facilitating dramatic play in the playhouse) were also documented in order to have data to talk to the teachers about why they make the particular choices they select. To remain unobtrusive as possible, the video camera was placed in a corner of the playground that offered the best view of the entire playground without being in the way of the children.

While indoors, the teachers were videotaped only if there was a movement activity planned. Otherwise, field notes describing Circle time activities and learning centers were taken in order to have data to discuss the rationale for selecting those activities. The Pre-K classroom teachers were observed indoors during the first week of observations and the 2-3 year old classroom teachers were observed on the following week.
For the indoor observations, field notes and a video camera were used to record data. The camera was placed in an “observation room” which is located between both classrooms. Since the University Preschool was built as a research facility, this observation room was specifically designed with tinted glass windows and an intercom system that allows researchers to observe and hear without being noticed. I placed the video camera in the observation room and entered the classroom to take field notes and work when I was scheduled. I observed the Pre-K classroom first because the children are more familiar with me since I teach movement to the children in that classroom. In the meantime, the younger children who did not know me well got a chance to get acquainted as they saw me on the playground and in the preschool’s hallway.

Participant observation benefits case study data collection but it also involves major problems (Yin, 2003). The most distinctive advantage is the access to events that would otherwise be inaccessible. In addition, the ability to perceive reality from the viewpoint of someone inside the case study rather than external to it can facilitate interpretation. The major problems related to participant observation relate to the potential biases produced. The case researcher may have to assume advocacy roles which are unadvisable when attempting to gather objective data. Furthermore, the participant observer may find it difficult to be at the right place at the right time, due to his/her obligations with the organization, to either participate or observe important events.

According to Stake (1995), during observation the qualitative case study researcher has to maintain focus on key events and remain attentive to background conditions that may influence subsequent analysis. As the sole researcher, it was difficult to observe and describe everything because I was working at the preschool. For example, during the two-week observation period when my role as a researcher was primary, there were times when I had to put aside my research duties to assist or redirect children. Nonetheless, I was able to focus on the teachers’ interactions related to movement education; describe the physical setting, participants, activities and interactions, subtle factors (what does not happen); and my own behavior. Observations were recorded in my field notebook as behaviors that happened in order to obtain more accurate data.
Interviews

According to Merriam (1998), “Interviewing is probably the most common form of data collection in qualitative studies in education” (p.70). Interviewing is in fact essential for case studies (Yin, 2003) in order to gather information about behavior that cannot be observed, people’s feelings or how they interpret events, and when we are interested in past events that are not possible to replicate (Merriam). Two main purposes of case study research are to obtain the descriptions and interpretations from others in addition to the researcher’s. Much of what we cannot observe for ourselves has been or is being observed by others. In fact, a better understanding of the context is achieved when the participants are interviewed (Fetterman, 1998). This is essential for case studies because the case will not be seen the same by everyone. Portraying multiple views of the case is accomplished through interviewing (Stake, 1995). Interview data may provide valuable insights from different points of view on the factors that influence movement skill instruction and specifically it will be an opportunity for interviewees to express and explain their attitudes and actions towards teaching movement to young children.

Interviews are subject to the common problems of bias, poor recall, and poor or inaccurate articulation. To alleviate this problem, interview data should be corroborated with data from other sources (Yin, 2003). The researcher should beware of asking leading and biased questions and should act as an effective moderator in order to maintain the line of inquiry without being rigid.

Recording interview data. Tape recording and written notes are common methods of recording interview data (Merriam, 1998). Tape recording ensures that everything said is preserved for analysis. Taking written notes is an effective way for the researcher to record his/her reactions to something the interviewee says and to pace the interview. Notes are also valuable in case there are problems with the playback audio. As an interviewee recounts an incident, the researcher must listen carefully and strive to capture the mood and affective components of his/her account, and understand the context from which the interviewee perceives the world (Yin, 2003).

All teachers in this study consented to be audio taped; however, if they seemed uncomfortable, the interview was not audio recorded. All audiotapes were transcribed
verbatim and notes were added as observer comments. Verbatim transcriptions provide the best database for analysis in a case study (Merriam, 1998).

**Semi-structured interview.** In this type of interview the researcher uses a combination of rigid and flexible questions (Merriam, 1998). This type of interview is useful when specific information is desired from all the participants (highly structured section). However, the largest part of the interview is guided by a list of questions or issues to be explored (less structured section).

In this case study, the first interview consisted of a semi-structured format that allowed for additional questions depending on individual responses. Prior to the observations, the teachers were interviewed and asked questions that relate to beliefs and perceptions about teaching physical education, how physical activity relates to learning, lesson planning, and content knowledge about physical education. This first interview also helped to document self-reported teaching behavior which was used to compare with the data obtained from the observations. The following questions guided the pre-observation interview:

- Tell me about your ideas about physical education or movement for young children.
- Tell me about how intellectual development and physical development relate. Give several examples.
- What do you think about physical activity as a vehicle for learning?
- Tell me about how movement relates with other curriculum areas.
- What kinds of physical activity do your students get at school (inside and outside)?
- What kinds of activities/centers do you set up for the children (indoors and outdoors)?
- What kinds of fundamental movement skills can be developed on your playground?
- When you are on the playground, do you facilitate fundamental movement skills learning? If yes, how? If not, why not?
- When you are in the classroom, do you facilitate fundamental movement skills learning? If yes, how? If not, why not?
- If you had to teach movement, would you feel competent in the area? If yes, why? If not, why not?
Some of these questions were not necessary to ask and some were not applicable (e.g. teachers who do not have an education degree). For the retired director, other questions pertaining to administration, teacher supervision, and availability of resources were added to the above questions.

Additionally, parent interviews were conducted based on the results obtained from the parent surveys. Fifteen families out of the 22 that returned the survey were contacted for a follow-up semi-structured interview. Parents who were interviewed were chosen based on how they rated structured movement activities among ten additional school activities on a scale of 1 to 10 (most important). Criteria for selection included a high rating (7-10), low rating (1-4), and middle (5-6). Five parents in each category were selected. The following questions guided the parent interview:

- Why did you rate movement as you did among the other activities listed?
- What do think about free play and structured movement experiences?
- Should children have both? Why?
- Are they beneficial for young children? How?
- Based on what you have seen, do you believe the center addresses all the activities (areas of development) equally? Please explain
- Based on what your child tells you? What do you think about the movement program at the center?
- Do you think classroom teachers should incorporate more structured movement experiences? Why?
- What can the administration do to improve the movement/physical activity children receive at the center?
- As a parent, how could you help? What would you suggest and how would you communicate your suggestions?

All of the semi-structured interviews were audio taped and transcribed. After interviewing, I noted additional questions I wanted to ask and/or events I wanted to discuss during further data collection activities.

**Open-ended interview.** During this type of open-ended/unstructured interviews, the researcher asks participants about facts and opinions of certain events. In addition,
interviewees may be asked to propose his/her insights about certain events. The researcher may in turn use such propositions as the basis for further inquiry (Yin, 2003).

After the observations, I conducted an open-ended interview to review video recorded teaching episodes and my interpretations of the rationale the teachers used to plan instruction during these episodes. A priori codes were used to classify all the episodes. As the observations were recorded, episodes were coded as structured (movement education) or unstructured (free play) settings for physical activity. For each teacher I selected three episodes which I played during the interview. Episodes in which the teachers were actively facilitating and/or teaching a movement activity for more than five minutes were selected to be used during the open-ended interview. Only one teacher had one episode meeting these criteria. For this teacher, two additional episodes in which she was supervising unstructured free play were selected.

Through the process of member checking the teachers were given my interpretation of each episode, then they were asked to tell me their own interpretation. The field notes of the episodes included very specific observations and comments to aid the teachers in understanding how I arrived at a particular interpretation. For example, while observing one of the teachers interacting with the children on the playground, the episode was being described and then interpreted. During the interview, I shared my interpretation of the episodes to see if it was similar or different from the teachers’ interpretation. All of the interpretations were in agreement. Researchers who use member checking often come across new perspectives that may lead to unexpected results.

Qualitative case study interviews rarely use the same questions for each respondent because each interviewee is assumed to have unique experiences. The qualitative interviewer however, should have a short list of issue-oriented questions (Stake, 1995). After observing one episode, questions about that episode followed. The teachers were asked to explain what they were doing at the time, what the objectives of the activity were, and if the activity was planned. Some of the questions I used for all the teachers included: What did you do during this episode? Why?; How did you make that decision?; and What else did you consider doing?
Additionally, after reviewing the three episodes and sharing interpretations with the teachers, I asked questions related to the teachers’ role in planning and teaching, how they felt when they were on the playground, barriers to movement education, free play versus structured movement activities, feelings about having to teach movement, support from the administration, and parental influence over the curriculum. I asked these questions to all of the teachers, however, several of these questions were modified depending on the answers gathered during the semi-structured interview.

The goal of the open-ended interview was not to evaluate the teachers’ actions but to make sense of the observations and to negotiate meanings. By placing the teachers in a position of power in which they also participated in the interpretive process, I believe that richer data were obtained because there was a shared control of the interview. This open-ended interview was an opportunity to learn from the teachers. The purpose for the open-ended interview was not to get simple yes or no answers, but instead to obtain a description of an episode, explanations, and interpretations.

The open-ended interview allowed the teachers to reflect on their beliefs and perceptions related to facilitating movement learning and physical activity as they saw themselves in the recorded episodes. In addition, the teachers were able to expand, clarify, explain, and interpret the episodes. To collect data during the open-ended interviews an audiotape recorder was used. All audiotapes were transcribed immediately following the interview.

Data Analysis

The data analysis process began during data collection. In fact, it is recommended that data analysis begin the same day data collection begins in order to facilitate the emergent design, theory, and subsequent data collection (Lincoln & Guba, 1985). Information needs to be interpreted to know if the data sources are contradicting one another and/or if more evidence is needed (Stake, 1995; Yin, 2003). Indeed, the investigator usually cannot determine ahead of time all the people who might be interviewed, all the questions that might be asked, or where to find more evidence unless data are analyzed as they are being collected. Moreover, without ongoing
analysis, the data can be unfocused, repetitious, and overwhelming to process (Merriam, 1998).

To accomplish ongoing analysis, field notes should include “observer’s comments” about ideas generated as the data is collected. Observer’s comments are “sections of the field notes in which the researcher records his or her own thoughts and feelings” (Bogdan & Biklen, 1998, p. 161). These notes include important insights, images that come to mind, and speculations about meaning and later data analysis. The purpose of these comments is to “stimulate critical thinking” (Bogdan & Biklen, p.161).

The data analysis for this study was inductive, which according to Lincoln and Guba (1985) is best defined as “a process for ‘making sense’ of field data” (p. 202). The raw data gathered through documents, observations, field notes, and interviews were coded. Subsequently, the codes were categorized in order to provide descriptive and inferential information about the context from which the data was obtained thereby, developing theory in the process. The case researcher needs to have “tolerance for ambiguity” as qualitative data analysis does not have set procedures that can be followed step by step (Merriam, 1998, p. 20).

During the data collection direct interpretations were made and recorded. Additionally, data from all sources were analyzed for emerging patterns, themes, and a priory (from the literature) codes. Bogdan and Biklen (1998) explain,

as you read through your data, certain words, phrases, patterns of behavior, subjects’ ways of thinking, and events repeat and standout. Developing a coding system involves several steps: you search through your data for regularities and patterns as well as for topics your data cover, and then you write-down words and phrases to represent these topics and patterns. These words and phrases are coding categories. (p. 171)

Direct interpretation depends to a great extent on the search for patterns. Patterns may be known in advance from the theory drawn from the literature, and they may also emerge as part of the analysis (Stake, 1995; Yin, 2003). The search for understanding is a search for “patterns and consistency which we call correspondence”
(Stake, 1995, p. 78). Significant understanding may be reached from a single instance; however, usually important meanings surface from repetition (Stake).

In other words, throughout the data collection process, case study researchers notice patterns of thoughts and actions in different situations and from different participants. From these patterns, codes emerge. In this study, the codes that emerged from the data were used to analyze the transcripts paragraph by paragraph as a second layer of analysis.

Coding is defined as “assigning some sort of shorthand designation to various aspects of your data so that you can easily retrieve specific pieces of the data” (Merriam, 1998, p. 164). Coding can be used to classify whole episodes, interviews, or documents, making them more easily retrievable (Stake, 1995). Qualitative researchers are free, and indeed encouraged, to code under a particular category if he/she believes that the code might be considered relevant. Codes may change as the data are analyzed. Indeed, after analyzing all the transcripts for example, codes thought to be relevant were eliminated or incorporated into other codes. According to Lincoln and Guba (1985), prior to the study, not much can be specified about the data analysis.

In order to select the episodes for the open-ended interview, a priori codes were used to code the video recorded data. As the observations were recorded, episodes were coded as being structured (physical education) or unstructured (free play) settings for physical activity. I selected those codes because they are the most general kinds of physical activity in which children participate while being in school. I focused particularly on analyzing teaching during planned physical activity experiences in which the teachers provide guidance and feedback to the children (structured) rather than free play episodes, which are usually supervised for the sake of safety. Most of the observed episodes were during free play and I identified several “impromptu” teaching experiences. Episode observational data was compared with the interview and analyzed using the theory outlined in the review of literature regarding the development of attitudes and the relationship with self-reported behavior.

Codes gathered from the data were grouped into three categories based on the Theory of Planned Behavior by Ajzen (1991) described in the review of literature. The categories were the three elements that influence intention: attitudes, subjective norms,
and perceived behavioral control. Codes grouped under “attitudes” include the following: thoughts about movement, integration of movement with other subject areas, physical education and academic time, free play and structured movement, assessment, and role of the teacher during movement. Subjective norms included the following codes related to the influence of external factors: directors’ influence, parents’ influence, and preschool curriculum and academic pressure. Finally, perceived behavioral control codes include the following: facilitating, teaching, or playing; confidence about teaching movement; and barriers to teaching movement skills.

Several of the patterns and codes identified in this study regarding the barriers to movement education were similar to the ones that Smith and Smith (2000) obtained in their study regarding administrators’ beliefs about the place of play in K-2 programs. Adapted for my study, these categories were the following: teacher’s lack of relevant preparation and experience in teaching physical education, lack of specific knowledge about physical education, and lack of understanding of the curricular role of physical education.

Important episodes or sources of evidence must be revised with more detail and time, “reflecting, triangulating, and being skeptical about first impressions and simple meanings” (Stake, 1995, p. 78). It is important to keep in mind that the main goal is to understand the case. For this, it is important that throughout the data analysis process the researcher looks for a sense of correspondence. Stake suggests that “For the evidence most critical to our assertions, we isolate those repetitions and those correspondences, challenging ourselves as to the adequacy of these data for that assertion” (p. 78).

After the coding process was completed, I used the technique known as “explanation building” to analyze the data (Yin, 2003). The goal was to analyze the case study data by building an explanation about the case. According to Yin, “to explain a phenomenon is to stipulate a presumed set of causal links about it” (p. 120). The best explanations are those that reflect theoretical propositions. These narrative explanations are built gradually and resemble the process of refining a set of ideas, in which it is very important to consider plausible as well as rival explanations. For this process I referred to the theoretical propositions that led to the case study (compare the
findings to the theory, revise the propositions, and compare the findings with the revisions (Stake, 1995; Yin, 2003).

Finally, the data analysis also yielded unexpected outcomes. From the data gathered from the teachers, administration, and parents, insights on what would facilitate more movement education at the University Preschool were obtained. These insights were grouped into the following categories and will be further discussed in the educational implications section: need for training on movement, PE specialist is best, administration help, partnership with other university programs, maintain research component, parent contribution, planning time, and other solutions.

Ethical Concerns

An ethical concern that I described in the proposal was related to the teachers criticizing or blaming other teachers or the director for situations such as difficulties in team teaching, lack of funds, administrative practices, and etcetera. Due to the many administrative changes that occurred while the study was being conducted, some of the above issues arose. I noted all the changes in the context and the way I perceived it was affecting the teachers. However, I refrained from expressing my opinions about the situation with any of the teachers, staff, or parents. I also expected the distinction between the “lead teacher” and the “teacher” (see methods section), which does not reflect the highest educational degree achieved, to possibly spark tension between co-teachers. This situation created friction in the past because the lead teacher is the one who has the final say regarding classroom instruction. This concern was never manifested.

My research is not considered controversial (i.e. play versus academic work for preschoolers), however to address concerns regarding privacy and confidentiality teachers, the retired director, and parents chose a pseudonym. All the information was kept confidential. The children did not participate directly in this study; however, during the observations pseudonyms for those children who are involved in a particular episode were used. Permission via an informed consent form was presented to the teachers, retired director, and parents. The consent forms also explained the purpose of
the study, how it was going to be conducted, and a confidentiality clause. Another advantage of sharing my interpretations with the participants during analysis was that misunderstandings could be identified early on, which prevent an uncomfortable incident in the final report.

Limitations

When doing a case study there are circumstances that limit learning in the field such as the impossibility of being everywhere at the same time, and informants who purposely do not say the truth and act in socially acceptable ways in front of the researcher (Merriam, 1998; Yin, 2003). The first one was the most challenging because I was the sole researcher.

The second circumstance may also affect the data as teachers may purposely report positive beliefs about teaching physical education in order to please me. Additionally, according to Merriam (1998), participants who know they are being observed tend to “behave in socially acceptable ways and present themselves in a favorable manner” (Merriam, p. 104). Furthermore, participants may regulate their behavior in reaction to even subtle forms of feedback from the researcher. Finally, the mere presence of the observer in this setting can affect the setting, turning it into a more formal atmosphere than normal. Throughout the data collection process I was looking for signs of the above. I do not suspect these circumstances occurred during this study; however, there is always a chance that it happened.

Researchers create their own misunderstandings because of their own limitations. Information processing limitations are common in case study research. This is the disadvantage of the “human instrument” because more mistakes can be made, opportunities may be missed, and personal biases interfere (Merriam, 1998). Researchers may forget, mishear, or simply not recognize what they see (Fabian, 1995). To alleviate this limitation, the field notes reflected any instances in which I am unclear on what I saw or heard.

The level of access can also represent a limitation. For example, access restrictions to events in which critical perspectives within the group that is studied can
be witnessed (Fabian, 1995). Indeed, access was the main limitation in this study due to the administrative changes that took place while I was conducting the study (explained in the methodology section). Since I am not one of the full-time teachers, access to staff meetings, parent advisory meetings, and board of directors meetings was restricted due to confidentiality issues. Therefore; discussions about planning and training that might have been important pieces of the context were missed. In the process of interpreting the environment, lack of contextual information from the moment decisions are made and from when issues are discussed, may affect the interpretations.

I expected that my familiarity with the site to be a significant limitation because “sometimes a familiar setting is too familiar, however, and the researcher takes events for granted, leaving important data unnoticed and unrecorded” (Fetterman, 1998, p. 36). To prevent this situation, I was very detailed during my observations and strived to be conscious of including all information. Having problems with access to the site and changes in the administration actually helped not to be “too familiar” because rules and expectations changed.

Another possible limitation was the teachers’ knowledge of the fact that I highly value physical education and physical activity. This may have influenced their answers perhaps to please me or to avoid comments that they feel I would not like and/or endorse. To diminish this scenario, I reminded teachers that the purpose of my research was not an evaluative one.

In this chapter, the characteristics of qualitative research and interpretivism, ensuring quality in qualitative research, and justification for the use of a case study research design were discussed. Additionally, a description of the researchers’ role; research site and subjects; and data collection methods and procedures including document analysis, survey, participant observation, and interviews. Finally, data analysis, ethical concerns, and limitations of the present study were outlined.
CHAPTER 4
RESULTS AND DISCUSSION

In this chapter, the findings of this study are presented. First, an overview of what the teachers do related to movement education at the University Preschool will be described. Second, the factors that influence the teaching of movement education at the University Preschool will be explained in relationship to the Ajzen’s Theory of Planned Behavior, which is the theoretical framework of this study. In addition, the potential influence that the administration and parents can have in the implementation of a movement program will be explained. Furthermore, University Preschool teachers’ attitudes and practices will be compared throughout this chapter. Finally, suggestions to facilitate more movement education at the University Preschool will be discussed.

**University Preschool Teachers’ Practices Related to Movement Education**

The data revealed codes that describe how the teachers do their lesson planning for indoor and outdoor activities. The teachers’ descriptions included factual information regarding school and classroom schedules and procedures. Additionally, teachers spoke about the rationale behind certain activities they planned and justified teaching practices.

**Lesson planning.** As mentioned in chapter three, the lead teachers, Ms. Lauren and Ms. Susan are the ones who do most of the lesson planning. These lead teachers, however, consult their team teachers about activities and sometimes ask them for additional ideas and feedback. Both teachers use a one-page lesson plan template. The Pre-K classroom uses two copies of this form because the teachers wanted more space to plan for the afternoon activities. In this type of lesson plans, the teachers only list the activities which really translate into materials (or toys) to be used during the activity. Neither the actual activity (procedures) nor lesson objectives are included in the plans. A sample of the lesson plan form is included in the appendix.
Playground movement activities. Planning for outside activities is limited to listing the equipment that will be placed in each of the outside centers. Lead teachers alternate (bi-weekly) planning for outdoor centers on the playground.

Ms. Lauren explains the above,

... I don't do a lot of planning for outside. I'm going to be completely honest. Um, we do have ... on our lesson plans the teacher in the other room ... does the lesson plans for outside for two weeks and then I do it for two weeks. Um, I try to vary the best just writing actually the materials that might be placed out not necessarily the activity, teacher directed activities.

These centers include a sandbox, dramatic play, art table, and concrete area where movement equipment is usually set up. Ms. Lauren was specifically asked about planning for structured movement activities on the playground. She said, “But as far as like teacher directed ... activities like games or an obstacle course or anything like that no, I wouldn’t say there’s any planning.”

In spite of the lack of planning for structured movement activities, the teachers said that they sometimes follow children’s interests when it comes to movement activities. Sometimes they go outside the school to engage in movement activities,

Now there are sometimes some impromptu things that used to be more, you know, this summer we’ve had a lot of construction going on. But a lot of times we would take the kids out, you know, and take the balls out and go on the tennis courts or something and do some kind of movement activities that would be fun. But just the length of space on our playground, you know, I used to like to take them out there on the grass and do, you know, “Duck, Duck, Goose” and would even toss the ball over the volleyball net and do some activities that way but we’ve been kind of limited to our space.

According to Ms. Janet, these activities are not planned, “they sort of come up.” Moreover, the teachers allow for impromptu activities, mainly outdoors, based on children’s interests. Ms. Janet further explains, “it’s nice to kind of pick-up on something they’re talking about or they’re doing, you know, and participate with them and maybe like direct them, you know, into doing it.” In fact during the participant observation, I observed a few episodes that supported this statement that the activities were not
planned but rather suggested by the teachers (based on children’s interests) or directly requested by the children.

For example, during one of the episodes I recorded, Ms. Janet was in the playhouse sitting on the railing. Four children were on the concrete area playing throw and catch. Ms. Janet joined the game and threw a ball to a boy. Soon other children joined. They were jumping and smiling. I asked Ms. Janet about what she did when the children expressed their interest in doing a movement activity. She answered, usually they’ll say “let’s play catch” or a child will come up and say “play with me”, you know, with the ball and I’ll say “OK, we’ll do that”. So they’ll have a suggestion and then usually I wait until they throw the ball or whatever they do to see what where they’re going with it. And then if some of the kids, you know, they’re younger … don’t give such good like coordinating skills so then I try to tell them “OK let’s try and throw it, you know, overhand or try to throw it to me underhand” and then I’ll show them what that is.

It is very encouraging to see that the teachers foster impromptu activities. However, these non-planned activities lack consistency and it is not what usually happens on the playground as most of the time teachers assumed a supervisory role.

**Indoor movement activities.** In the indoor section of the lesson plan form, sometimes the teachers plan for certain movement materials to be available on the large classroom carpet area. Just like with the outside plans, the indoor plans are a list of materials that will be used. The movement activity itself is not described. The teachers’ most popular choices for indoor movement activities are materials such as walking cans, trampolines, and balance beams. When these materials are set up, usually teachers make sure that the children are using the equipment appropriately; however, direct motor skill instruction seldom takes place. The teachers also use music tapes that prompt the children to do certain movements. During these times, teachers usually participate in order to keep the children focused on the movements.

**Planned movement activities—how many and how often?** It is essential to emphasize that “planned” means the equipment is listed on the lesson plans. There are no lesson plans for movement activities. I reviewed lesson plans from the Pre-K and the 2-3 year old classroom and separated the indoor and outdoor movement activities. The
objective was to find out the number of planned movement activities as compared to other planned activities in the curriculum.

The Pre-K classroom lesson plans indicated that there were approximately 50 planned activities for indoor activity time per week. On average, only one activity was planned per week. More specifically, in a period of 22 weeks, out of almost 1,500 planned indoor activities, only 25 indoor movement activities (1.6%) were planned. Most of those movement activities were repeated consistently. There were only four kinds of movement activities: balance boards (56% of the time), walking cans (28%), bunny bowling (4%), and paper plate ice skating (12%). There was at least one movement activity planned per week. Nine out of the 22 weeks had two planned movement activities.

In the 2-3 year old classroom, approximately 750 indoor activities were planned in a period of 16 weeks. Out of those only 10 indoor movement activities were planned (1.3%). There were only three kinds of movement activities available: trampoline (70% of the time) bean bags (20%), and balance beam (10%). These choices are very limited considering the movement equipment that is available.

Playground activities were planned in two sets (Monday, Wednesday, Friday, and Tuesday and Thursday) which denote the days of the weeks to be set up. This way all the outdoor materials (including dramatic play and art) are alternated during the week. In the lesson plans reviewed, all of the movement activities were planned to be set up on the concrete area, except for one — the bean bag toss, which was planned to be set up in the playhouse.

On the playground, there is an average of 25 activities planned per week. Out of those, only five activities can be considered movement activities. In 19 weeks, there were approximately 475 planned outdoor activities. Out of those only 43 were movement activities (9%). There were six types of outdoor movement activities: balls (25%), hula-hoops (28%), bean bag toss (16%), Hopscotch (9%), scooter boards (13%), tricycles (0.5%). The last two activities (least frequent) were the ones that required more supervision. Perhaps this is why they were only set up on Tuesdays and Thursdays.

As explained above, the amount of movement activities available to the children at the University Preschool is insufficient as evidenced by the activities reported on the
lesson plans. Indoor and outdoor movement activities comprise a very slim percentage of all the curricular activities as illustrated below:

### Table 1: Percentage of indoor and outdoor activities.

<table>
<thead>
<tr>
<th></th>
<th>Pre-K (indoor)</th>
<th>2-3 year olds (indoor)</th>
<th>Playground (both classrooms)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Movement</strong></td>
<td>1.6%</td>
<td>1.3%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>98.4%</td>
<td>98.7%</td>
<td>91%</td>
</tr>
</tbody>
</table>

Moreover, the movement activities available were repeated many times despite of the variety of movement equipment available. Further in this section, I explain teachers' perception that there is not enough equipment available at the school. I disagree with that perception based on the inventory of equipment I conducted. Some of the available equipment includes the following: 12 hula-hoops, 12 foam balls, hoop holders, cones, balance beams, balance boards, scooters, tumbling mats, and scoops. A complete list of all the movement equipment is available in the appendix.

**Factors that Influence the Teaching of Movement Skills at the University Preschool**

As explained in the review of literature, the Theory of Planned Behavior focuses on the intentions people have to carry out a behavior (Ajzen, 1991). Ajzen stated that there are three elements that influence intention: attitudes, subjective norms, and perceived behavioral control. All of these elements are influenced by a person’s beliefs.

Through the surveys, questionnaires, participant observation, and interview data obtained in this study, I identified several codes, which were sorted under each of the elements in Ajzen’s theory. These codes are the factors that influence the teaching of movement at the University Preschool. The majority of the codes that emerged relate to
the element of attitudes which in fact is the element that most belief researchers have
tied to predicting someone’s actions (Bandura, 1986, Pajares, 1992; Rokeach, 1968).

**Attitudes**

According to Ajzen (1991), the first element or attitudes refers to an individual’s affective response to something. These attitudes develop from the beliefs about a particular behavior. Ajzen stated that people learn to favor behaviors they believe have desirable consequences and develop unfavorable attitudes towards behaviors associated with undesirable outcomes. For this research study, positive or negative beliefs towards movement activities can stem from past experiences and knowledge related to physical activity. These experiences and knowledge acquired may have contributed to shaping the beliefs teachers hold about movement education (Ajzen; Faucette & Patterson, 1989). If the teachers have positive beliefs it is likely that they believe physical activity and movement will bring desirable consequences.

Various kinds of beliefs identified essentially convey the University Preschool teachers’ beliefs about the place and purpose of movement education in the early childhood curriculum. Some of these beliefs were tied to previous experiences and some were tied to assumptions they had made based on knowledge they had about the benefits of physical activity. The codes included within the element of attitudes are: free play and structured movement, importance of movement, supervision and safety, integration of movement with other subject areas, burn energy/break, lack of physical activity in schools, relationship between physical and intellectual development, significance of facilitating movement, “break for ourselves”, physical education and academic time, and feelings about being outside.

**Free play and structured movement.** When asked about free play and structured movement experiences, all the teachers expressed that both were a necessary component of the curriculum. However, they mainly focused on justifying the need for free play particularly because they believed that structured movement is somewhat restrictive. Teachers believed that when movement involves a planned activity, children may not enjoy it as much because they have been inside the classroom participating in structured activities and they need a break. Additionally, the
teachers believed that children do not like to be told what to do; therefore, a structured movement activity would not be as appealing to children. I wonder why the teachers do not worry about this for the inside curriculum. There are plenty of structured indoor activities in both classrooms. The children do have a choice to select the centers they want to participate; however, they do not get to opt out of the Circle activities. As mentioned earlier during Circle, there are language art readiness activities which are teacher directed and average 30 minutes twice a day. Perhaps the “outdoor classroom” can have a combination of structured and unstructured activities that children can choose from.

Ms. Susan viewed the playground as an extension of the classroom and that is why she moved some of the indoor activities to the playground. Additionally, the teachers indicated that the playground is where the children got most of their physical activity and it was the time that children played freely. However, it can also be an ideal place to engage in structured movement activities. Ms. Susan explained the importance of structured movement activities but also stressed the need for free play,

It’s nice to have that to plan, you know, and do. It’s also nice for them to have just some free time where they don’t have an adult telling them ‘you have to do this and you have to do that’. But if you put it out and make it available they really like doing, like the bikes or the roller boards [scooters] whatever movement we want to put out. You don’t always have to be in a structured setting.

From this last statement, I interpreted that just planning which equipment to set up and letting children use it as they please was like combining structured movement with free play.

In favor of free play, Ms. Susan added,

It’s good for them to have their own opportunity to make their own decisions without somebody saying you have to be here you have to do this, um, to develop some independence, to develop, wanting to play with other children, and interacting without somebody telling them how to do it. Everybody enjoys having some free time [laughs], you know.

Indeed, children need free play experiences not only to be creative and express themselves but to practice the movement skills they have learned. As mentioned in the
review of literature, children need both free play and structured movement experiences. One cannot be a substitute for the other (Sanders, 2002).

Ms. Janet valued structured movement and stated that she would like to be more appropriate when she was on the playground,

I would like to be more appropriate way like to dribble a basketball, you know, to kind of show them ‘Oh so this is how you do it’ and they get excited about it and I like to see them get excited about things that they enjoy and new things that they learn.

However, she is also hesitant to teach something more structured,

I know sometimes if you don’t… if you are just trying to go off on your own and say “Oh, here let me teach you how to, you know, how to dribble a basketball” well if they’re not interested in that they’re really not going to pay much attention and wander off.

If teachers assume that children will not be interested in a planned movement activity they will probably rely on impromptu activities to facilitate movement activities in an effort to cater to students’ interests. The problem with this approach is that movement instruction is left to chance.

Based on my experience in teaching movement, children enjoy participating in structured movement activities as long as they are developmentally appropriate. An appropriate movement lesson includes choices of centers in which the children are allowed to move freely. Additionally, there is plenty of equipment available for all the children and individual activities can be modified, thus, allowing every child to be successful. I asked Ms. Susan if she believed that children would enjoy structured movement set up as I teach it. She responded,

Yes, they would enjoy that. And they enjoy watching when you’re down on the tennis courts. I enjoy watching that and I think they just need a balance of, you know, they need some free time to do what they choose to do but then they need some structured, structured time that this is what to do and how to do it because not all the classroom teachers know how to do it as far as more than just dancing, you know.
It was contradictory that teachers believed that children would not like structured movement activities planned by them but instead that children enjoy structured experiences facilitated by a physical education specialist. However, just as Ms. Susan explained, specialists are trained and they are not. If the teachers believe they are not prepared, they would not be comfortable teaching. Overall, teachers feel more comfortable playing with the children on the playground.

Playground time was seen as a break for the children after participating in more structured classroom activities. Teachers often played with the children outside but not necessarily foster the development of movement skills. The equipment that was placed outside was selected by the teachers and outlined on the lesson plans. However, what the children did with the equipment was a free choice as long as the activity they choose was not dangerous. Ms. Janet said,

Outside, I mean, they just have their free play and so it’s like kind of left up to them [children] how much they do. Um, there are times when an assistant teacher even myself like we played with them, you know, we played catch with them. We played like soccer. Which is really we’re just, you know, kicking around the ball. Um, we play, drawn out like a little, um, hopscotch squares and then they’ll teach them how to do that and they hop on one foot or, you know, they try to do those things like hopping on one foot, and then bending down and picking it up and [pause] and things like that. But it’s really like up to them usually; like how much activity they get in.

Ms. Lauren further explains,

Of course they do have free outside play time where they have the opportunities to run, skip, hop, jump, bend, throw balls, catch balls you know but the, um, it is free choice not that the teachers, myself included, don’t sometimes initiate you know throwing balls and doing stuff like that and it is more free choice.

These quotes illustrate that the teachers know that outside time is a good opportunity to practice movement skills. Unfortunately, leaving movement experiences up to chance is not a very effective way to expose children to a variety of movement experiences that will help them develop basic motor skills needed for a lifetime of
physical activity. In fact, Ms. Lauren acknowledged that more planned movement activities are needed in addition to free play,

Well that's another thing too is that, um, I think that there could be some more purposeful, you know, activities though I do believe sometimes it is fine for kids to have some free play. I think that's [free play] good because, especially in my age group, they are really starting to, you know, pretend their ideas and use their imagination but then the way our space is limited too, um, sometimes you want to make sure that they have some, you know, direct activities because when they are left alone sometimes they get a little, you know, Power Rangers and stuff like that can get a bit much.

What Ms. Lauren was describing was that often the children, when they did not have a planned activity on the playground they choose to engage in chase games related to television characters which usually turned into aggressive games.

Despite the apparent preference for free play, all the teachers said they believed in a balance between structured movement activities and free play. Ms. Janet commented,

I think that there's a time when they should have free play and I think that structured activities are good like structured outside play activity exercise activities. I think that that's good and that, um, should be something that they can participate in. But I think free play is also good for them I think, you know a combination of both.

Ms. Lauren also noted,

There should be a balance. Even though, like I said, that's not my area of strength. I think they need free play just to run around and be loud and be silly and pretend to be puppies and Power Rangers. But then I would also like to see where they had teacher directed outside time, like and obstacle course like, making sure they know how to skip, how to jump rope if that's hard. How to you know, jump, skip, and hop and all of that. So I think I would like to see both 'cus I think both are very important.

I saw how Ms. Lauren incorporated this concept of balance on the playground. She facilitated an impromptu movement activity in which several children were engaged
in throwing a ball through a hoop at various levels (low, medium, and high). After the activity, she took several hoops and laid them on the floor. I thought Ms. Lauren was trying to set up an obstacle course and when I asked her if she was doing that, she said that indeed she was setting up one. After she set up the hoops on the floor she left. The children did not use the hoops as an obstacle course instead they grabbed the hoops and played on their own. Some children ran around the concrete area with the hoops and some put the hoops around their waist. Ms. Lauren saw this but did not tell the children to use the hoops as an obstacle course nor stayed in the concrete area to facilitate the activity.

While asking Ms. Lauren questions about this episode, I uncovered a possible relationship and perhaps contradiction between free play and direct instruction. I asked Ms. Lauren if the children actually use this kind of set up as an obstacle course, she said,

Oh yeah, and they have before… but like I said, if I put it out there and they had decided that they want to use it as something else I probably wouldn’t have said anything about it since it wasn’t a planned thing. If I have, you know, made a plan that we were going to go out there and do that, but if it was just a free choice and they kind of wanted to use it as something else. As long as they were being safe I probably would have let them you know use it for a hula-hoop or take it and do something different. If I thought that some of them were just using them inappropriately I might have taken them and said “well let’s lay them down and do this.

It seems the children get directions for the sake of their safety if they are using the equipment inappropriately. In other words, free play may become direct instruction of safe practices, not movement.

Ms. Elly, the retired director believes that children should have both free play and structured movement experiences because both contribute different aspects to a child’s development,

There’s a lot of value in free play in children being able to really make choices. But there’s also a lot of value in them practicing skills that they need and
learning. Even with young children to cooperate in kind of an elementary kind of teamwork.

Likewise, teachers seem to support structured movement. I asked Ms. Lauren if she thought that more structured movement is needed at the University Preschool. She said,

I would like to see it maybe have a structured, you know, physical education time where it was planned and a little more structured to make sure those skills were covered ‘cus I do know that just in maturing and developing that they sometimes initiate those on their own but for those children who you know may have trouble with certain skills, I think structured time would be better.

Although teachers say structured movement is important, perhaps it is being used as a safety measure (control) when needed as opposed to incorporating it into the curriculum for its own benefits.

Most of the statements regarding free play and structured movement instruction are contradictory and reflect the lack of knowledge the University Preschool teachers have about teaching movement education appropriately. Moreover, their rationalizations uncover teachers’ academic preferences. Not often do educators ponder on children needing breaks from both language arts and mathematics instruction or discuss what children dislike about structured instruction in those areas. This fact confirms that the subject area of physical education is not equally as important as other subjects areas considered to be academic. In other words, other subject areas can be more structured and less flexible because they are perceived as more important for students’ education. This trend presents a challenge in trying to educate the “whole child” and provide students appropriate growth in all developmental areas.

**Importance of movement.** All the teachers said that they believe movement education is important for the complete development of the young child. They believe that physical development should be fostered at school and that including movement in the curriculum enhances the program. The Pre-K lead teacher, Ms. Lauren said “I think movement is very important for young children, mainly because we all know that they are developing their muscles and they’re growing and they need to use those to grow
properly”. She also added, “I also think it is a good way for children to be able to follow
directions in a fun way and learn skills, so yes it is a very important part”.

Teacher statements indicated that they believed there should be a balance
between physical activity and other academic areas. However, there is still a hidden
notion that movement time is “fun” which can be interpreted as movement not being as
equally important. Ms. Lauren said,

I try to make sure that I balance it out with numbers and math and everything
else and that’s like, even with this I may not be the most athletic person but I
don’t think that’s certainly bad because all the kids are at different levels and you
can still do some type of movement or some type of fun things you know, gross
motor things.

Teachers also expressed that it is very important for children to go outdoors and
be physically active even if it is not structured physical activity. However, they believe
that children should also have opportunities to engage in free play. Ms, Lauren explains,

I do think kids need to get out and run and play even if they’re not even if we are
not doing a direct movement activity like teaching them something or if they are
doing movement. I think they need to get out and run and be with the kids ‘cus it
is another was of interacting I mean you use your language you pretend but it is
good to do that outside of movement too.

It seems that it is not clear for the teachers that movement education is distinct
from free play and not just a time to “have fun”. Of course we want students to enjoy
movement experiences, but these experiences should be planned and should have
clear objectives. The topic of structured movement and free play will be revisited later in
this chapter.

The 2-3 year old classroom lead teacher, Ms. Susan believes that movement is
especially beneficial to those children who are not so “athletic” because that way they
can develop physically and discover new interests. Children can realize “Oh! I’m good at
that [movement]; I didn’t know I was good at that.” Ms. Susan added, “You know, it
might help them to develop some skills that they didn’t have.” Indeed, unless there is a
structured movement time, many children will not develop fundamental motor skills or
discover interest in physical activity. This is because many children tend to choose sedentary activities when they are on the playground during “free play” (Miller, 1978).

**Supervision and safety.** Children's safety was one of the teachers' top priorities especially when the children were on the playground. Ms. Lauren believed that supervision has to come first on the playground because,

They are, you know, maybe a little bit different than in the classroom. They are not as contained and they are jumping off of things and they can become hurt but just like in the classroom where even though you might be sitting with the playdough table you still kind of keep a watch and keep making sure that they are safe.

Likewise, Ms. Susan described the importance of supervision and added that she believes her main role as a teacher is to supervise.

My role is to make sure the children are safe, to supervise the teachers that are with me, and also to facilitate play where it’s needed, you can’t be in every place, you know, all the time. But the, a big part of my role is safety.

Ms. Susan expressed that teachers do not facilitate or teach movement skills all the time and that children do not have to be involved in a structured activity all the time while using the movement equipment. However, teachers must always be supervising, “You don’t always have to be in a structured setting. A lot of times you can just put it out and make it available but there has to be somebody there for safety for one.”

All of the teachers were aware that while on the playground teachers were mostly supervising rather than facilitating or teaching. They do, however, spend time teaching the children how to use the playground equipment such as the slide, cargo net, and materials (e.g. hula-hoops, trampoline) properly. Ms. Susan used the scarves as an example,

We talk to the children about one thing, safety, you know, it [scarf] doesn’t go on your head, it doesn’t go around your neck, doesn’t go on somebody else, don’t kick, you know. I would show them like we would do them up and down we do them over our head we’ll do it with two hands.

It appears that the University Preschool staff is more preoccupied with training teachers to supervise as opposed to facilitating movement. This is because efforts are
being made to diminish the tendency some teachers have of taking a personal break on the playground. Ms. Susan explained,

A big part we do is planning for the playground. We haven’t done as much this summer since it’s been so hot. But safety would have to be the first one, and training the teachers on how to supervise, how to be, do something other than stand there and talk.

The fact that safety is a priority for the University Preschool teachers may discourage them from facilitating movement activities. It seems they believe they cannot teach movement and supervise effectively at the same time. In addition to more planning of movement activities, balancing teaching with supervision seems to be crucial for the development of a movement education program at the University Preschool.

**Integration of movement with other subject areas.** All the University Preschool teachers believed that movement education could be integrated into the early childhood curriculum. Ms. Lauren affirmed that movement could be integrated into everything and she attempted to provide an example of how it could be integrated into language arts and the teaching of rules but failed to specify how it could be accomplished,

I mean you can use motor skills in everything so… yeah! I mean plus you can integrate like, um when you’re doing a, um, gross motor thing or movement activity you can count with them you can have them recognizing their letters or following directions I mean all kinds of things can be put into movement activities. Likewise, Ms. Laychelle related movement education to music, with dancing, some of the dances that we do [pause] we have music to go along with it and the children learn. The children learn different sounds to pair with how you walk, how you run, how you jump, how you skip, how you do anything. How to do hula-hoop, you know, you learn through music. You can, it’s wonderful.

Teachers also talked about ways of integrating movement into the curriculum. Ms. Susan mentioned the playground and talked about teaching color identification, math, and taking walks; however, she did not describe a possible activity in detail. In contrast, the most specific examples of how movement could be integrated in the
preschool curriculum were provided by Ms. Janet who believed children could learn many concepts through movement experiences. The first example relates to children learning the colors and reinforcing concepts learned while indoors,

Yes. I think well let’s say you’re gonna do some sort of … movement activity and you’re going to use a ball and you have balls of different colors then you can help them with colors while you’re, you know, doing the activity you an like “toss me the red ball, now throw the blue ball”, you know over your head or you know whatever, like I think it can help them to learn or reinforce what they have already learned or, you know, doing things like that maybe have some, um, pictures with different shapes or counting it or count how many you know, um, jumps would you to get to a certain, you know, point.

Her second example was based on the current thematic unit in the Pre-K classroom. She said,

Now we are talking about, you know, different things about Hawaii there’s surfers in Hawaii and skateboarding came about from surfing. So that kind of stuff you can take outside because they can go out there and they can pretend that they are surfing, and pretend that, you know, kind of we use the scooter boards and pretend that they are skateboarding not to stand on it but, you know, kind of just to scoot on and pretend that they’re doing certain things. So I think, you know, that you can take certain things out.

None of these activities were actually planned for this unit. What is encouraging, however, is the fact that she was able to design these activities when asked. Ms. Janet does not have a degree in education yet she is, according to the teacher baseline questionnaire data, the most physically active of all the teachers. She also participated in more activities (4) previous to working at the University Preschool than any of the other teachers. Coincidently, she was also the only teacher who reported feeling capable to teach movement at an adequate level if she was requested to do so. Perhaps her successful participation in physical activity combined with her teaching experience has given her more insights on how to integrate movement activities in her classroom.
The teachers also talked about ways to integrate movement into young children’s activities by using movement activities to teach social skills concepts, empathy, and teamwork. As Ms. Susan pointed out,

[you can integrate] A lot of things plus social skills, wait their turn, you know, helping somebody else. Awareness of other people’s feelings because that back to what we talked about before some people are not as athletic as others and maybe this person does that better than you do, but maybe inside you are better at, you know, sorting and stuff. So you know, helping just because the other person can’t throw the ball as what you can.

Finally, while reviewing the Pre-K classroom lesson plans for a 22 week period, there were two movement activities that were integrated within the curriculum. One of the activities was named “ice ‘s’kating” and it was combined with a language component. Letter “S” was the letter of the week and the children were supposed to imitate skating movements on the large carpet. The other activity was “Bunny Bowling” which was tied to a unit on the Easter holiday. This seems to be an effort to make the academic curriculum more meaningful to the children.

There are a myriad of ways to incorporate movement into the curriculum. The University Preschool teachers believe that this is a good practice. Although sparingly, they have applied this concept and seem encouraged to continue to do so in the future.

**Burn energy/break.** Despite the fact that all the teachers believe movement can be a vehicle for learning, the most popular benefit in their view seems to be that movement gives children a break and helps them burn extra energy. This is consistent with classical theories that explain that children’s physical play serves as a break from academic tasks (Pellegrini & Huberty, 1998; Pellegrini, Huberty, & Jones, 1995) thus allowing children to be more attentive after the break. However, it has been found that it is not the physical activity what facilitates attention, but rather the break itself. Therefore, any kind of break from academic tasks can increase attentiveness (Pellegrini et al, 1995).

Below Ms. Janet explains that children need physical activity as a break from indoor activities,
Well they need to exercise that’s like their time to do their running and their, you know, jumping and all that stuff that you do outside and so I think they need that for some exercise as well as for a break from being inside.

Similarly, her team teacher, Ms. Lauren commented, “But I also think that movement gives them a way to have an outlet where they can get their wiggles out and you know get some emotional release”. Teachers also believe that movement activities are a great way to help children release stress. Children indeed need breaks from academic tasks. This is an unquestionable benefit that movement education brings to the curriculum. However, if this is the main reason, when administrators believe there is not enough time for other “more academic tasks, movement is more likely to be postponed or eliminated. For movement education to be included on par with other subject areas, it needs to be seen as a way of aiding in learning not just as a break.

The following episode shows a contradiction between what the teachers believe and their practices regarding the need for children to burn energy through movement. Ms. Susan was facilitating a circle time movement activity. All children were sitting down, holding scarves and imitating all the movements Ms. Susan was performing to the tune of reggae music. Two children stood up and danced. They were told to sit down. I asked Ms. Susan to tell me why the children had to sit down. Ms. Susan explained,

Sometimes if they are too rowdy […] now we do this and let them stand up and move around. Sometimes if they’re just too rowdy but we (teachers) still want to use the scarves, then we’ll sit down to do that [which is what happened in this episode]. If the group is just too rowdy, they are not listening very well. There are ones who jump on top of each other. If they are just too out of control standing up, we’ll do it sitting down. This is a transition activity.

Perhaps the rowdy children could have calmed down if allowed to dance. After all, when music is playing the natural thing to do is to dance, especially for children. In other words if Ms. Susan had allowed the children to dance for a few minutes then, after turning off the music, it is possible that the children could have transitioned in a more orderly way. Of course that also depends on the type of transition the children are used to and on the type of music the teacher chooses. Indeed, children need breaks from
academic tasks, however, physical activity/movement offers other benefits to children as previously discussed in the review of literature.

**Lack of physical activity in schools.** All of the teachers agreed that, especially in public schools, there is a lack of physical activity much to the detriment of young children’s development. One of the 2-4 year old classroom teachers, Ms. Laychelle, believes very strongly that the current lack of physical activity is detrimental to the children because physical activity helps intellectual development and because children need the break. She remarked,

I like it [movement education] and it hurts me that to hear that they discontinued it sometimes. They make it mandatory once a week, you know, you need that at least three times and I think that’s so important and they wonder why children don’t pay attention, it is because they need to get out. They need to get that energy out. They need to, you know, go have fun, you know they’re children. That’s not being children. So I don’t like it. I really don’t like it.

Ms. Laychelle also reminisced on how as she grew up, physical education was part of the curriculum,

I remember when I was in Kindergarten, first grade, all throughout elementary school, middle school, and high school there was always time set aside for not only for recess, which is you know good, but at the same time we had physical education and we not only learned how to rope. We learned about our bodies, how much we can do. I remember we were so excited to go outside and do PE!

According to several researchers, teachers tend to look for previous educational experiences as a reference for what they do and value (Calderhead & Robson, 1991; Clark, 1988; Goodman, 1988; Nespor, 1987, Pajares, 1992). Therefore, this teacher is likely to incorporate movement because it was a good experience for her. Those good experiences helped her value physical education.

**Relationship between physical and intellectual development.** Both lead teachers believe that children’s physical and intellectual development are related, although Ms. Susan admitted that she had never thought about it,

Oh, I never thought about it [laughs]. You know it seems that there is a bit of correlation. I exercise and don’t necessarily go out and play baseball or
basketball or whatever but I do exercise. You know, I walk several times a week. I do weights. I do several things and the better your body feels the better you can learn, the better you could, you know, feel about yourself. So there’s definitely a correlation.

Ms. Susan drew this conclusion based on her personal physical activity habits. She does not consider herself an athletic person yet she engages in regular recreational activities to which she credits her wellbeing. This positive outlook on the benefits of physical activity has also helped Ms. Susan understand the importance of physical activity.

Ms. Lauren believes physical and intellectual development work together and that indeed physical development is just as important as the rest of the domains, I think that they work together well if the child is not feeling well or growing well physically then usually they are not going to feel well and do a nice job in their cognitive skills either. I think they go hand in hand. I think you have to look at the whole child and the gross motor functions are part of that.

Although structured movement activities were not happening regularly at the preschool, the belief that it was important to foster the complete development of the child is a crucial step for teachers to incorporate activities that fostered each developmental domain including physical development in the future.

**Significance of facilitating movement.** Both lead teachers believed that facilitating movement was important because when children saw adults interacting with them during movement activities, children became more interested in the activities. Ms. Susan stated, “they like that adult attention and if you are interested in movement then they’ll be interested in movement.” This interaction sparked children’s interest and even motivated those children, who would otherwise be more inclined to participate in a non-movement activity. Ms. Lauren explained,

So I think it is important that the teachers that are with them everyday, lead teachers, do activities with them, gross motor activities everyday ‘cus like I said some of the kids you are not going to have to motivate to do gross motor ‘cus that’s what they like but then you’ll find your kids who may be a little shy or not
maybe as not athletically inclined. They may pick up an activity maybe because ‘hey, I want to go do that with Ms. Lauren. That looks fun to do’.

I asked both Pre-K classroom teachers to explain if there are any differences in the way teachers, assistant teachers, and volunteers interact with the children while they are facilitating movement. They noted that the interaction was different. In fact, they said that children tend to interact more actively and for longer periods of time with the lead teachers than with the assistant teachers and volunteers. Ms. Lauren explained why,

I think that Janet and I both being lead teachers and bonding with the kids more I think they, um, in a lot of ways they appreciate it more coming from us because we have a stronger relationship. It’s like ‘yes that person is nice and I enjoy doing it’ but one of the reasons why they may participate in the game is because not only they’re doing the game but they enjoy being with, you know, with that teacher because they like that teacher and, you know, stuff like that.

In fact, I witnessed an example of the above statement when Ms. Janet was facilitating a movement activity and she had to leave. A volunteer took over the activity and soon all the children left. I asked Ms. Janet why she thought this happened. She said,

I guess sometimes the kids… the kids seem to have generally more of an attachment to like the lead figures like Ms. Lauren you know they are really attached to her. They love when she plays with them, you know, then I guess that would kind of be like me or another teacher who is here on a constant basis. So maybe, you know, they are kind of attached to that person more and they enjoy and they look for like their praise and their participation and “look what I did” you know, to kind of show you..., that and then I mean it also I guess could be, um, if the other person really wasn’t as “fun” you know so that they’re wasn’t really as “into it” maybe or a stranger could be you know, a new volunteer they’re not getting real close to that person.

Therefore, it seems that the presence of a either a lead teacher or a teacher encouraged children to participate in physical activity/movement especially when they
got feedback. Even though the volunteer participated for a while it was not as powerful as when Ms. Janet was interacting with the children.

There were some instances in which teachers believed that they should not facilitate movement. They did not like to insist on motivating a child to participate in a movement activity if the child declined. I observed two episodes in which both Ms. Janet and Ms. Lauren did not insist after attempting to get a child to participate in an activity. In Ms. Janet’s episode she was holding a ball and rolled it to a child who was sitting on the deck. The child ignored it and Ms. Janet stopped the attempts. I thought that she had given up on the child. She explained to me that she assumed the child wanted to rest. I asked her about how she determined that. She said,

I guess it just depends… sometimes they’re not interested they’re just not …that at that moment maybe they’re just wanting to kind of sit for a minute or rest or be alone so I don’t insist. I mean I think that if they’ve been the whole time out on the playground without doing anything then it’s more like you know, insisting on ‘why don’t you go find a different person to play with?’ ‘let’s play with this’ ‘let’s do something’ versus sitting the whole time.

I asked Ms. Lauren about what does she did when a child was not physically active outside. She said,

First of all I think of the situation because I know sometimes if we are outside and it is right after nap I might not just jump to a conclusion that they need to be moving or something maybe wrong with the child because some of them just take a little longer to kind of, and I’ll even say, ‘cus they’ll be inside and say well ‘let’s go outside, we’ll get some sunshine on our face’. So I do give them a few moments if it’s their naptime. If it’s not, like a reason like that that they are tired maybe or maybe they complained earlier about feeling bad, you know, there are some times where I believe it’s OK for them to sit and maybe adjust a little bit. Just as in the previous factor (burn energy/break) teachers show more flexibility when it comes to movement activities as opposed to the regular indoor more academic activities.

The teachers’ interpretations and my interpretations for both of these episodes were different. I interpreted that the teachers were not interested in facilitating
movement activities or that they had just “given up” as soon as they saw the children were not interested. During the interview I realized the teachers were following children’s interests therefore, if they noticed the children want to engage in a movement activity, they facilitated the activity.

“Break for ourselves”. Throughout my experience working at the University Preschool, I have witnessed how playground time is not only a break for the children but for the teachers as well. Teachers talk about the children, planning, and personal issues while the children engage in free play. Most of the teachers can be found standing or sitting as they supervise the children. Ms. Janet reflected on their need for a break,

And I think it’s also hard like for us when we go out to the playground we’ve been in the classroom with them, you know for several hours or all day. That once we get out there it’s, you know, nice for them to have their free time and then for us we just kind sit back a little bit more and just supervise and kind of, you know, play with them a little bit but, um, to more supervise them kind of have like a small break ourselves from that direct activity and the teaching or, you know, directly being right there on top of them with them going over different things.

This statement definitely supports the observations since for the most part teachers supervised and talked to other teachers while on the playground. Furthermore, during three episodes I observed, I saw how a teacher would be facilitating and then another one would join and strike a conversation with the facilitating teacher. Soon the children would lose interest in the activity and stop participating.

In trying to understand why teachers do not teach movement often, I asked Ms Janet if the lack of movement facilitation was a result of limited resources and training or if rather it was a matter of personal choice. She replied,

I guess to a certain extent it is a choice because, you know, we go out there and you know we are tired of being inside too. So it’s kind of, like I said, it’s kind of like our small break. Yes we still—you have to be supervising but it’s not that constant, you know, teaching that constant being right, you know, there and having to constantly being interacting with all of the children, you know, so it’s kind of a chance for us to kind of step back and just generally supervise and have a breather and so. I guess yeah it’s kind of a choice.
This supports the idea that not only training is necessary to improve movement instruction but that adequate planning and break periods for the teachers are necessary. University Preschool teachers do have a planning/break time. However, it is after naptime which typically is at 1:30 pm. Teachers could have a smaller break in the morning, which could be staggered so that the children could have facilitators at the same time.

Teaching preschoolers is a very demanding task and teachers do need breaks. The challenge is to allow for teachers to get a break without compromising children’s experiences on the playground. Perhaps teachers could share this responsibility. In fact, the teachers talked about possible solutions which will be discussed later in this chapter.

Most of the teachers’ attitudes towards movement activities are positive. They believe that movement education is important and that it enhances the preschool program. Therefore, as far as the element of attitudes in the Theory of Planned Behavior is concerned, it is likely that the University Preschool has the intention of facilitating or teaching movement.

The fact that the teachers believe movement education is important combined with the participant observation data from this study that shows that the teachers do not teach movement activities regularly, indicates that they are not practicing what they believe in. This suggests that it is not that the teachers do not want to teach movement but rather that they do not know how to teach movement or that other factors beyond their control impede or make it difficult for them to teach.

As I was attempting to understand why there was not adequate movement education at the University preschool even though the teachers had positive beliefs about it, I decided to ask the teachers about their perceived roles as a teacher while on the playground. I asked them to choose between facilitating, teaching, or playing and to describe why. All the teachers leaned towards facilitating or playing. Two teachers said they may be teaching but that because they do not feel comfortable teaching movement, they would rather describe what they did as facilitating. Ms. Susan and Ms. Lauren explained respectively, “Probably more facilitating than teaching. Part of it, the
comfort, I mean as far as teaching movement I don’t know that I feel comfortable teaching it because I’ve never been trained. So I would say more facilitating."

Um, I would say I was facilitating and playing would be the closest because I don’t necessarily think I’m teaching movement at the time. I’m teaching a directed thing I might be possibly but I know, first thing I’m probably playing with the kids because I’m that’s not my area of strength so I am not actually saying in my mind “Oh, this teaching” as far as movement or, you know, gross motor things. But I do know when I do a directed thing outside that it is that we facilitate them to be able to do some basic skills like throwing and catching and, you know, eye-hand coordination.

Since the teachers believe that they are facilitating and playing rather that teaching, this could also explain the impromptu nature of most of the movement activities observed.

**Physical education and academic time.** All the teachers believed that physical education does not take time away from academic subjects. Ms. Janet remarked, I don’t agree that it takes time away from academic subjects. I think that physical education is important for students and should have a space in their daily schedule. They need to have time outside of the classroom to exercise and participate in physical activity.

Ms. Susan added, “This devalues the importance of physical fitness and health and makes for restless children in school.” Given these beliefs it can be interpreted that time spent in physical education and physical activity is valuable and that it does not need to be taken away in order to dedicate more time to other subjects. However, it is important to note that the latest revision of the daily classroom schedules has actually reduced playground time from two periods of 45 minutes to two periods of 30 minutes (morning and afternoon). As a result, children spend less time outside and more time participating in indoor activities.

Thirty minutes may not seem as too much time taken away from the opportunity to engage in outdoor physical activity on a daily basis. However, if time is added by weeks, the loss of outdoor time becomes substantial as illustrated in the following table:
Table 2: Comparison between former and current available physical activity time.

<table>
<thead>
<tr>
<th>Year</th>
<th>1 Day</th>
<th>1 Week</th>
<th>3 Weeks</th>
<th>6 Weeks</th>
<th>13 Weeks</th>
<th>52 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1.5 hours</td>
<td>7.5 hours</td>
<td>22.5 hours</td>
<td>45 hours</td>
<td>97.5 hours</td>
<td>390 hours</td>
</tr>
<tr>
<td>2004</td>
<td>1 hour</td>
<td>5 hours</td>
<td>15 hours</td>
<td>30 hours</td>
<td>65 hours</td>
<td>260 hours</td>
</tr>
<tr>
<td>Difference</td>
<td>30 minutes</td>
<td>2.5 hours</td>
<td>7.5 hours</td>
<td>15 hours</td>
<td>32.5 hours</td>
<td>130 hours</td>
</tr>
</tbody>
</table>

In approximately one year school year, the University Preschool children loose 130 hours of outdoor time. This is time that children can spend learning and practicing movement skills without compromising the more academic skills they learn during their indoor time.

**Feelings about being outside.** I decided to explore more about how the teachers feel when they go to the playground in order to find out if their mood had any relation to how they facilitate movement. All the teachers responded that they believe playground time is not negative for them and that their mood has nothing to do with having to be on the playground. Ms. Lauren explains,

> I think that has to do really with how I feel the rest of the time. I don’t see the playground as a negative thing for me at all, I mean, I like it I like being outside. I mean, of course sometimes it was too hot or too cold. I’m just like the kids, you know, you can be moody but I like being outside on the playground so it is different not a negative thing.

The data presented above illustrate that despite the fact that the teachers hold predominantly positive beliefs and attitudes about movement education, they were not planning, facilitating or teaching movement regularly. Additionally, several of the episodes noted earlier indicate contradictions between beliefs and actual practices. This is consistent with Ajzen’s theory which, as explained in the review of literature, was based on his opinion that beliefs not always determine practice. However, Ajzen’s
(1991) other two elements of intention, perceived behavioral control and subjective norms, provide a clearer picture of the factors that influence the teaching of movement education at the University Preschool. This is because both perceived behavioral control and subjective norms account for the factors that are beyond the teachers’ control.

**Perceived Behavioral Control**

The next contributor to intention is the element of perceived behavioral control. According to Ajzen (1991), perceived behavioral control consists of other enhancing or limiting factors (barriers) associated with the context in which the behavior is to be performed. In other words, perceived behavioral control describes the degree of control an individual believe she or he has over an innovation or change. For this study, perceived behavioral control includes issues related to perceived skills and knowledge, availability of resources, available resources, and instructional support related to the teaching of movement education at the University Preschool.

From the interview data, enhancing factors could not be identified. However, six barriers to the development of a movement education program were uncovered from the data. These barriers are related to the context within the school and as the teachers described them during the interview, it was clear that the common denominator of these barriers is the lack of training in early childhood movement education. Along with the teachers’ description of the following barriers, they also discussed possible solutions.

**Confidence about teaching movement.** I asked all the teachers during the interviews to describe how they would feel if the preschool administration required them to start teaching movement. All the teachers mentioned that movement education is not their area of strength but that they would teach it if required. Ms. Susan added that she could not teach movement as well as a person who is trained in movement education could, however, from the things she has observed physical education interns and teachers teach, she has learned a few things that she feels she could teach to her students. Ms. Lauren said that she would do the best she could if she was required to teach movement. She is a teacher who believes in educating herself when training is not available,
The first thing I’d do is probably since I’m not, what I usually try to do even in if it’s not my area of strength is probably like try to get some information on it to try to educate myself and, you know, check out movement books and everything so maybe I can, you know, learn some on my own and then I would just learn with it.

Ms. Susan said that she would not object to teaching movement and that she would do it “just like anything else”. She mentioned that at first she would probably “brainstorm” to figure out how to teach movement or tell the administration “we really are not comfortable, we need some training”. It is interesting that she would prefer to brainstorm as opposed to request the training. Perhaps the administration could assess the training needs of the teachers in order to avoid “brainstorming” which could potentially underserve children’s needs in physical education and other curriculum areas.

Additionally, Ms. Susan also remarked “as far as teaching movement I don’t know that I feel comfortable teaching it because I’ve never been trained”. Thus, the need for training in the area of movement seems to be one of the most significant barriers to movement education. Moreover, Ms. Susan stated she believes “that’s the case for a lot of the teachers. They would probably be very willing to do it if they had the training but they right now don’t have the training.” Therefore it seems teachers have the intention to teach movement, however, they feel incompetent if they do not have the knowledge necessary to adequately teach the subject.

**Lack of knowledge.** The lack of confidence to teach movement is connected to the lack of knowledge the teachers admit having in this subject area. They repeatedly stressed that movement education was not their area of strength and that they have not had training hence they do not know the steps to teach specific movement skills. Lack of knowledge was evident throughout the interviews as supported by my interpretations but also substantiated by the teachers’ statements in which they clearly described that they needed more training.

Several teachers were not sure if an activity could be part of movement. For example, Ms Janet said, “Um, we have the bicycles. I’m not sure if that really counts.” The most dramatic example came from Ms. Susan. I told her that throwing is part of teaching movement. We talked about throwing as a skill you could teach as opposed to
sports. She did not know that throwing should be taught as a series of steps that become more proficient with practice and said “I never saw it as part of...No I always thought of just like baseball, football. I didn't know [laughs] I thought it was just junk it over there”.

Another problem is leaving teaching to chance because a teacher does not know how to teach movement skill. If Ms. Lauren had to teach throwing, for example, she said she would do it “just because maybe that's something simple.” She added, I might get it right [laughs] but as far me knowing the exactly the steps, no because I don't think I've ever been, you know, taught that myself or trained to look for the exact, you know, steps. I mean I can tell how to [pauses] catch it to their chest and do certain simple things like that that the beginning catcher might do but now I think that's a weakness. Like I said, I could tell you things in the classroom like how to teach them how to beginning cutting or writing letters”

University Preschool teachers know very simple facts about movement based on what they have seen me do when I teach movement. Ms. Susan describes teachers’ limited knowledge about movement “not all the classroom teachers know how to do it as far as more than just dancing, you know.” This lack of training in movement also affects other staff and participants such as assistant teachers and practicum students because teachers cannot train or give feedback in this area because they do not feel confident due to lack of training. I asked Ms. Susan if she ever gave feedback to another teacher regarding how a child should do a movement skill. She said, “No, because that’s not my background. The things I know I would tell them but I can’t say that I know that much about how”. If the lead teachers cannot train other teachers, children's opportunities to learn movement skills will continue to be minimal.

One of the episodes I observed involved Ms. Susan and one of her assistant teachers. They were setting up a throwing movement center as part of a Halloween celebration. They had one target (pumpkin) and beanbags. They marked several positions from which children were supposed to stand and throw (various distances). After setting up, Ms. Susan went to other centers and left the assistant teacher in charge of the throwing center. Periodically Ms. Susan stopped by to check on the group. The children were having a hard time in this center. Children from both classrooms were
participating and the younger ones were not having success while the older ones were having more turns. During the open-ended interview, Ms. Susan and I discussed the overall facilitation of this activity and how the equipment she had set up perhaps was not the most appropriate to use. Ms. Susan agreed that the equipment was not appropriate and that she assumed that the assistant teacher was trained to facilitate this activity because the assistant is a Physical Education major. Ms. Susan did not know that the assistant teacher had not taken the early childhood movement course yet. When I asked her about solutions for the problems they encountered that day, she told me about other activities they have done in the past with bigger targets and other materials for 2-year-olds. She said the problem for the Halloween activity was that two classes were utilizing one room.

The need for training was evident in that case because, although teachers possess certain knowledge on how to set-up and facilitate certain activities, they needed more practical applications such as how to include all children who have varying levels of skills. Unfortunately, classroom teacher training in the area of physical education is not required. Most universities do not require a physical education course for preservice teachers. None of the teachers at the University Preschool took a course related to physical education during their college preparation. Ms. Susan explains,

When I was in school it wasn’t taught to me. I was taught other things. I was taught how to write [laughs] you know, how to make the letters a certain way, how to do like lesson plans, how to, but that was not taught it was not, I have been out of school a long time but that was not part of what I learned when I was in school, when I was working on my bachelors. That was not, I was taught ‘this is how we make’ , you know, they make the letters, you make an ‘a’ this way and an uppercase is this way, a lowercase is that way, you know, how to make lesson plans, I was sent into the classroom, I taught with another teacher. But nobody said this is how to do movement. We were taught math, we were taught all these other things but this wasn’t taught.

Furthermore, University Preschool teachers have never taken movement education training. Not only because it is scarce but when there is a training opportunity (for example at a national conference) movement education training is not something they
have gravitated towards. If teachers do not know how to correctly teach a skill, it is likely that children will learn a skill incorrectly it will take more effort later on to unlearn that skill and then learn the skill correctly. Several times I saw the University Preschool teachers demonstrating skills incorrectly, particularly throwing.

I asked Ms. Elly her opinion as to why there was not enough movement education at the University Preschool. She explained that teachers do not have the knowledge and the skills necessary to teach this subject area. They have had training in other subject areas but never had training in early childhood physical education, “They just don’t feel comfortable. Nobody sat down and put them through a course that kind of things where they learn how to utilize that. And, um, they do feel comfortable with the art, with the water play and those kinds of things.” In addition, she said, “people just don’t think about early childhood as being a place where movement and leadership by a skilled professional is important. They just don’t recognize it.”

Additionally, Ms. Elly talked about the difference between having a movement education specialist and having the classroom teachers teach movement,

Now the kind of movement things that you did with them then was a different experience for them in that it was planned, you planned and you knew the equipment that you wanted to use, the skills that you wanted to teach and that kind of thing and you took them and you did the planned activities with them. I think the difference was really in your training and the other teachers’ training because you know our lead teachers and they are wonderful and very knowledgeable about early childhood but they don’t know, they don’t feel confident going out and doing movement activities with the children because they just don’t have that kind of background and knowledge.

**Playground and equipment are limited.** According to the teachers, the playground layout and space, as well as the equipment and materials available for movement activities, contribute to the lack of movement education at the University Preschool. Teachers say there is not enough space on the playground and that the equipment is not age appropriate for some of the children. Ms. Lauren and Ms. Laychelle gave respective examples,
I do see that for me the obstacle is how the playground is set up in our playground to be honest with you because, um, it doesn’t allow for a whole lot of space so that you could, um, you know, even like when sometimes the teachers try to set up races and stuff like that is just not, the playground is just not real conducive to a lot of that fun stuff. I mean we are kind of limited in what we can do.

I think that it is limited [equipment] and that the same time is age inappropriate for them [Pre-K children] perhaps because, like I said, we have the jump ropes or I’ve seen the jump ropes but we can’t put them out because of our little ones. Um, I think the little ones some of the things are inappropriate.

Ms. Janet also mentioned that although there are a variety of materials to teach movement, she believes that there are not enough for all the children,

I’m sure we could do with some more materials or, you know, better material to do some movement kind of activities but I think for, you know, if we want to teach the kids to play catch or to skip or to, you know, scoot on that stuff we have like, you know, we could do that with the little things, you know the hula-hoops and the balls so. Um, I know that some of the like the little hurdles that we have in the closet that stay inside, you know, there’s not enough of those I don’t think to go out there and set up a big thing for the children.

After conducting a thorough inventory of all the movement equipment at the University Preschool, I concluded that there was a wide variety of movement materials. There was not enough of one kind of equipment for every child, however, just like with the classroom materials, teachers could use what was available to create a movement center. In fact this is what I do when I teach movement. I have several centers in which the children can rotate through. Perhaps this idea could be applied to the playground or even inside the classroom. This further indicates that the teachers have not received adequate training in movement education. Included in the appendix is a list of all the movement equipment that is available at the University Preschool.

**Equipment that requires supervision.** Teachers say this was a barrier because some of the equipment or materials designed for movement require that children be monitored more closely. For example, tricycles and scooters are used on a concrete
“track” located in the middle of the playground. Only a small number of children (6-10) can use it at the same time. Teachers have to monitor children to prevent them from bumping into each other, make sure they use the equipment correctly, make sure all the children who are waiting get turns, and prevent children who are running around the playground to cut across the track. The following are some of the reasons teachers gave for not using the tricycles and/or scooter (roller) boards on the playground:

We have used them. Some people get run over and plus since our group is so small [children are little] the [4-5 year old classroom] gets, um, a little upset sometimes because they want to, actually, you know, kind of race around the track, but our group they are so small sometimes they can't they don't even know how to ride the bikes.

We have used the bikes a lot in the past. Lately we have not used them because they cause a lot of headaches for the children too because they are not able to do what they want with them. Like I said, they can’t ride them, so it makes it harder for them.

The bicycles a lot of times, say everybody is out, it's really hard for the children that can ride and want to go riding and then you got some of the younger ones that can't hardly reach the pedals when they are sitting there and the rules are that you don’t pass and so some of them are frustrated. Now, I've taken out the bikes and the roller boards when we are out in the morning and put them away. I've done that. But we don't use them as much.

You got the ones that know how to ride and they are so frustrated with the little ones that can’t do it, and they don’t want to wait so I'm trying to teach this one how to ride and them I’ve got two or three here that are just wanting them to get out of the way. So that's real frustrating. The surface, the roller boards, the surface of the, um, the concrete, they scratch their hands in.

I don't think that really anything is appropriate. The bicycles can be used but you have to watch out what group uses them. The hula hoops, when they run around and play with them, they’re usually knocking, you know, trying to knock each other over the head or um, following behind each other in a line using the hula-hoops so um, I think that they could, we should try in doing a better job of
getting toys that can actually be used constructively but at the same time is hard too because there’s limited space on the playground

I believe the equipment is appropriate for the younger children. The problem is that the smaller children need more supervision and they need to be taught the skills necessary to use the equipment whereas the older children are more skilled and ready for more advanced skills. It is very difficult for a teacher to supervise the older children and take more time to teach the younger ones at the same time. Instead of rearranging the playground schedule to accommodate the skill needs of the younger and older children, the strategy being implemented is not to use the equipment at all. For instance, the tricycles and scooter boards, which are excellent equipment for a movement program, are sitting in a storage room because the teachers see them as inappropriate.

**Daily classroom schedule.** Another barrier that I noticed is the new classroom schedules. In the past when a classroom was on the playground, the other classroom would be inside. After this 45 minute period, the classroom switched locations. That way there was a 45-minute period in which the playground had fewer children and therefore it was easier to manage the children. During the semester this study was conducted the inside time increased to an hour and the playground time reduced to 30 minutes. Additionally, both classrooms were on the same schedule. Therefore, when it was time to go to the playground, all the center’s children were outside at once. This made it more difficult for the teachers to engage in outdoor activities as they had to supervise more children at the same time. Furthermore, the equipment set up was not enough for all the children to participate at the same time. Thus, the more children the harder it is to ensure everyone participates.

Through the element of perceived behavioral control several barriers to movement education were identified. These barriers negatively influence the teaching of movement at the University Preschool because teachers believe these barriers make it difficult for them to teach movement education.
Subjective Norms

The final determinant of intentions is a social element known as subjective norms, which refers to “the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991, p.188). An individual’s perceptions of what “important others” believe about the behavior might determine whether or not the individual will perform the behavior. Applied to this study “important others” are the school’s administration, director, and parents because they have influence over what the teachers do and could alter the curriculum. Additionally, I will analyze the teachers’ perceived academic pressure regarding preschool curriculum.

Directors. All the teachers reported they believe the center’s administration has a strong influence over the curriculum. Furthermore, the teachers are aware that the director’s expectations are important and thus affect teaching and planning. As mentioned in the subjects section, the University Preschool has had three changes in administration since the beginning of this research. I asked the teachers to describe what each administration expected them to do while on the playground. I began with the retired director, Ms. Elly. Ms Lauren’s comments encompass the other teachers’ comments as well,

I think she,..., yes I think as far as when we did our meeting and discuss things she was always readily to, um, you know, any like materials we wanted. Anything that could make it better she was always willing to listen and to get that if it was in our budget and she did like it. So yes and I did that she did like [pauses] she kind of wanted us to be modeled where there was materials and maybe purposeful things in each centers, you know, like the playhouse would have cooking out and maybe a teacher would be there. So maybe she’s thought of it being a little more teacher directed. I think that had to also do with how our playground was laid out but I think she was also fine and understood that they needed, um, you know, free activity time, I mean free time free play to so I think she was very good about, um, about making sure that both areas where met, needs were met there.

The teachers also commented that for Ms. Elly it was very important that they interact with the children on the playground. She also was very supportive of practicum
student programs, especially the Movement Education field experience from a university department. The practicum experiences were an opportunity for the classroom teachers to acquire new teaching ideas. Ms. Susan explains,

I can’t say it was a, you know, talked about like in staff meeting ‘I need you to do this’. It was just kind of more of an expectation from her. She had been here longer. She had seen us go to the gym, so she knew that some of us knew some of it. You know, I might not be able to teach that skills but it was more of an understanding that there are things they [children] need outside.

Essentially, Ms. Elly was a very approachable director who valued all the facets of children’s development; hence, she strived to maintain a play-based curriculum that supported the academic areas as well as the arts and movement education. She was the director for eight years and in that time she developed a very positive rapport with the teachers and staff. Teachers felt comfortable asking Ms. Elly for materials and additional training. Ms. Elly was notorious for making sure the teachers received continuing education in Early Childhood. She also welcomed practicum students as well as researchers to the center because she saw those as opportunities to learn new ideas and network. Under her leadership, the center acquired new movement equipment, rebuilt the playground, incorporated summer swimming lessons, and I began teaching movement. During her interview, I asked Ms. Elly if she thought her philosophy had an influence on the teachers. She responded “I hope so, um, especially certain things that I hope that will, did, reflected my particular bent.”

After Ms. Elly retired, the child care centers at the university consolidated thus the University Preschool was now under a new department under the supervision of a central Coordinator. Subsequently, a new director was recruited. Regarding her expectations about the playground, the teachers said that she focused on safety issues as opposed to playground activities, motor skill development, and equipment needs. Ms. Janet explained,

the director we had after, the comments that she made about the playground were just that she didn’t want the children to run because some of them were falling and scraping their knees and she didn’t, she just didn’t want them doing certain things. That didn’t make any sense. How can you take children out to the
playground and then expect them not to run, you know, we weren’t about to tell them you can’t run on the playground.

After the second director left the preschool, the Coordinator was overseeing the school directly. I therefore asked the teachers about the Coordinator’s expectations regarding activities on the playground and movement education. Ms. Lauren recalled an instance in which the Coordinator asked her to help in training new assistant teachers, She said ‘make sure you show them the outside classroom’ because that is a place where they need to still be doing their teaching skills and all of that. So I saw that as being at least that it was placed on there as an importance. That she saw that the playground is in part, an extension of the classroom.

All the changes in the administration have been very challenging for the teachers because each administrator has had a different educational philosophy and expectations. Additionally, during this transition period, teachers have had more daily administrative responsibilities. Finally, I believe that significant administrative changes have made the teachers reluctant to try new things in the classroom. It was as if they were in “survival” mode where one does not depart from routine because it is safe to do what one knows works.

Along with changes in the administration, a school’s goals and philosophy might change as well. An indicator of the University Preschool administration’s priorities is the school’s philosophy and goals statement, which is contained in the parent handbook. The new administration revised this handbook. Unfortunately, physical development was not directly addressed as in the previous version. In the previous handbook, four developmental goals were outlined, the first one being physical development. The following are the components or the physical development goal: 1) “explore and develop the motor abilities of the body”, 2) “Develop large muscle control through running, jumping, climbing, swinging, balancing, etc…” 3) “Develop small muscle control through the use of manipulative games and toys, painting, drawing, cutting, play-dough, etc…” and 4) “Find delight in free body movement through music and movement activities, develop self-help skills to increase physical independence.”
In the new handbook, the above statements were eliminated and substituted with a rather vague and general statements that follow which includes a few activities children will be exposed to at the center:

They will develop the basic skills preparing them for the next level of learning. There are opportunities to talk with and listen to adults, talk and listen to other children, to hear stories, to listen to music, to exercise, to cook, to do art activities, and to sing. Our teachers teach children by providing a wide variety of “hands on” experiences that encourage children to be active learner, to lead, to follow, to solve their conflicts, to listen, to appreciate differences, to count, to reason, to create, and to use their muscles. You will see the children encouraged on the playground to engage actively in the outdoor classroom with sand, with tricycles, on the slide or with the school age children in organized games.

On a more subtle level but fundamentally important is that the mission statement of the center has changed from a focus on “early education and care” to “care and early education”. Although it is just placing words in different order, it does send a message that childcare is the main component as opposed to the education of the children which should be composed of activities that develop the whole child. Unfortunately, childcare is often associated with keeping children “happy, busy, and good” and does not include an emphasis on early education. This includes physical development; therefore, it is possible that if care is the main focus, then safety will be the focus on the playground as opposed to finding innovative and meaningful ways to integrate movement education into the curriculum.

Not only do teachers believe the administration is influential but it was also evident during the observations. The director can alter the curriculum and its philosophy as well as the school environment. Regarding the teaching of movement education, it can be assumed that if the administration values physical education and is supportive and aware of the teachers needs, implementation of a movement program would be more viable.

Parents. As discussed in the review of literature, there are three levels of parental influential power: 1) those who have a clear understanding of the changes in school practices (high cultural capital), 2) those who know about the changes but are
discouraged, 3) and those who are not completely aware of the changes proposed and had little confidence for change. Most of the parents at the University Preschool have a higher education degree. They like to be informed of what happens at the school and some are very involved in the school. However, most parents are extremely busy and have very little time to be involved in school issues.

Parents with high cultural capital are the most influential because they are vocal about what they believe is best for their children and because they know how to work the system and thus schools tend to pay particular attention to these parents (Lareau, 1989; Spring, 1993). An example of this kind of parent with cultural capital is a mom at the preschool. She gave me an example of how she would move from the teacher level to the administration and to higher levels though organizing other parents,

if you say ‘oh man you should see this Ms. Lauren I saw this really cool thing where they do this movement thing while they are learning their vowels’ or something for example ‘I’d like to come and share it with the class someday. What do you think about it? Do you think maybe this may be fun or would this be too hard to match with your four year olds in a class?’ That would be a little harder because then she may feel you are questioning her approach. If you go to the director and as a parent say ‘this is a value of mine and I’ve noticed there’s less playground activity and the playground activity they do a lot is not movement or not directed as much’ I really think, and now with this whole trend of obesity and health costs even in public school system. What if we caught it now? What if we did a few changes? You could do that with the director. The director of course will say ‘well me take it to the next level, you know, and we’ll see about that or could have their teacher training or something like that. Otherwise the alternative if you can’t work within the system and with those who provide the services then you got to organize other folks who think like you do, parents, and everybody come forward and say, ‘we want to put this on our parent agenda, we want somebody to pay attention.

In addition, teachers said that they believe that parents are influential when it comes to classroom and overall school policies. In fact this was confirmed through documentation from meetings in which parents’ suggestions have been taken seriously. Teachers also
believe that those parents who attend the Parent Advisory meetings are the most influential.

Both lead teachers said that some parents have voiced their opinion about the curriculum and have requested changes. However, the majority have been very pleased with the curriculum. In fact, some parents come back to visit and report that their children have been performing very well in local Kindergarten programs. Those parents who have suggested changes in the curriculum have asked for music and other curricular special areas. These suggestions have been brought up in meetings and discussed. When it was impossible for the administration to implement parent suggestions, they are notified and given a good reason as to why. Ms. Lauren explains,

I think the parents have, um, a good say. I think I know in the past, um, that their wishes were taken very seriously and they were tried to make happen and if they couldn’t make them happen at least a good reason was tried to, you know, given to why we couldn’t do that…but yeah I think that they are taken, um, taken seriously and of course with enough parents, um trying to work together to get something I think that the administration would work to make sure that they, you know, got it.

Ms. Susan also commented that the preschool has had parents who have pressured the administration for changes in school policies and curriculum sometimes in a demanding mode. However, she has also seen parents willing to collaborate with the teachers and administration to enhance the curriculum. Ms. Susan explained,

We’ve also had parents who said “Oh I know how to do this, can I come in and help you?” Then a lot of times that works better than pressuring than “you need to teach my child how to do this”. You know, we have had parents who were in music and they’re like ‘oh, I could come in and do this’. They may not come on a regular basis like every week at 10:00 o’clock but they do what works better. But then and that works real well. Parents coming in and sharing the skills they have. And children like that. They really like seeing somebody else’s mom and dad.

In the revised parent handbook, the administration encourages parent participation in the classroom,
Parent participation is welcome in the classroom. If you are unsure about how you might contribute, talk with your child’s lead teacher or the director. They will be more than happy to share ideas and ways to make your contribution. Therefore, perhaps the administration and the teachers could inquire about parents who have experience facilitating physical activity with young children.

During the parent interview, I asked parents about how comfortable they felt about voicing their opinion about the school’s curriculum or other issues to the administration and the teachers. Most of the parents said that they felt comfortable especially with the teachers. For other parents it took longer to feel comfortable. The following are parent statements that support the above:

“Yeah, I think I feel confident asking. But I am kind of realistic about the fact that, um, they can’t cater to every parent individual wishes nor would I expect them to.”

“Yeah I feel confident, I feel welcomed and I feel that, you know, my view points are important and accepted. That doesn’t mean they are going to implement what I suggest but I think, I feel that I have the space and I have, my voice can be heard in the center.”

“I would voice my opinion to the teachers and the administration.” “Oh yeah, the teachers are receptive.”

I would feel comfortable saying, suggesting, um, have, first I would do it as an asking ‘have you guys done this?’ or ‘do you do this at a later time in here?’ I would feel comfortable saying, asking ‘was this something we could improve?’ I’m not but is one of those I would be open to if they gave a good reason why it’s not going to be one of those. I would feel comfortable to do a lot without being aggressive indeed [laughs]. But I would be I don’t know that all parents would, um, because I can’t speak for all parents but I think that sometimes and initially when we first started here I did not feel comfortable.

We were very communicative with the staff and they were extremely responsive to whatever we suggested. Um, I was there, I was at the school on a number of occasions and participated. The curriculum could change easily based on, um, parent input.
“Oh yeah, if something bothers me something that I don’t think it’s in the best interest of me, something that is contradictory to my values I will talk.” Not every parent is going to feel the same way. ‘cus some parents feel like ‘I don’t want my kid playing too much. I want them to be able to read and write. So and so’s kid who goes to this preschool and they are already writing their name. They are already saying their ABC’s they are writing letters, how come my kids can’t do that yet?’ See you know, and I have other friends who go to other preschools that are ahead of my daughter when it comes to letter and writing development and all of that and I’m not panicked about it, ‘cus I, I mean, just because the kid could recite his ABC’s at age 11/2 or 2 did not mean that he understood or knew what those ABC’s were. Just because she is not writing her name yet, does not mean she won’t be prepared to do so when they ask her to do so in Kindergarten. I want an emphasis on the whole kid, the whole thing which is why maybe my kid didn’t fit into the box down there down the street [public school] at the traditional school system because [laughs] he wasn’t, those things that I value aren’t necessarily valued by the institutions and stuff. But I’d hate to see that, um, too much to get pushed even down here; even more, that would be very sad. So as a parent I guess, you know, do what we can [laughs].

Regarding movement, none of the teachers talked about parents requesting more movement education. They have, however, requested more facilitation from the teachers when the children are on the playground as well as the reinstating of the summer swimming classes. Parents were administered the same ranking scale as teachers completed. Two out of the 22 parents (9%) surveyed thought that free play on the playground is the most important curricular activity in the University Preschool. Likewise, 9% of the parents surveyed thought that structured physical activity is the most important activity in the University Preschool’s curriculum. One of these parents said, “All the learning systems she will develop later will be based on what she is capable physically. Also it is important to aware of her own body functions.” Another parent remarked, “physical education is most important to me because as a family we are very busy and don’t spend as much time as we should to be active physically”. Unfortunately, both of these parents could not be interviewed.
Fifty-nine percent of the parents said that language arts was the most important component of the curriculum. Given this, finding ways to integrate movement into the language arts component has the potential to help parents view movement as an important part of the curriculum especially if they see that movement education can help enhance children’s acquisition of language concepts.

**Preschool curriculum and academic pressure.** With the implementation of new academic standards for elementary grades, there has been an increased concern with school readiness. This has made preschool curriculum increasingly more academic and less play based. Preschool teachers feel pressured to get their students “ready” for kindergarten. This is true for the University Preschool teachers. Ms. Janet explained, I think that Kindergarten expectations have risen over the years and that Kindergarten is now more like first grade used to be when I was in school. They are placing high expectations on the students and the teachers. I do feel pressured to make sure our students are ready for Kindergarten but I would say it’s a moderate amount of pressure because I feel we do a great job preparing our students.

Similarly, Ms. Lauren commented, I do know that the expectations are high for children in Kindergarten. I think that it is fine to have those expectations but to be realistic about what an individual child may be capable of doing and to concentrate on individual growth, regardless of standardized scores and the like. I do feel the pressure sometimes from those who don't understand developmentally appropriate practice and would like to see more rote teaching.

Ms. Susan, however, had a different perspective as if the existing academic pressure was a teaching motivator, “There are the beginning of the pressure and expectations on children as they get older and advance in grades 1st through 12th. I don’t feel pressured, but feel the need to get each child to his highest potential.”

In elementary schools there is a trend that is causing much debate: eliminating physical education and the arts to dedicate more time to academic subjects. Preschools are already embracing this trend, thereby allocating more time to school readiness activities and less to movement education and physical activity. At the University
Preschool this trend is evident. Previous to the beginning of this study the school classroom's daily schedules changed. Each classroom used to have equal amounts of indoor and outdoor time. Now the schedule increased the indoor time from 45 minutes (morning and afternoon) to one hour. On the other hand, physical activity time was reduced to 30 minutes (morning and afternoon).

Some of the parents that I interviewed have other children in the public schools or are familiar with the public school’s curriculum. They reinforced that indeed the elementary school curriculum is being “pushed down” and that physical education has been reduced and sometimes eliminated. The following statements summarize parents’ opinions:

I think, if you know about education at all, the importance in schools right now is academics ‘how well are you going to do in you tests?’ The pressure even in schools, and I know, um, working in schools, that PE is one of the things that gets cut. It’s, and it is with any special area. Music gets cut, art gets cut because it’s not a reading or writing and I know that there is a change right now to encourage those things.

They are getting ready for Kindergarten and they push the curriculums down and they have to. So well, developmental play the children are still getting, um, their beginning, um, all of those things. Yeah you have to cut something. And it is. I think it’s a result from the pressure of the other school system. I can tell you even if they are limiting it [movement education] in here it’s not nearly as bad [laughs] as the public school system.

All teachers, director, and parents interviewed admitted that there is pressure to be more academic; however, they do not believe that time spent in movement education and free outdoor physical activity is detrimental to student achievement in other academic subjects.

The section above explained the factors that influence the teaching of movement skills to preschool children. The following table summarizes these factors in order of most influential to least influential according to the data gathered in this study:
Table 3: Factors that influence movement skill instruction to preschool children.

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<tr>
<th>Attitudes</th>
<th>Subjective Norms</th>
<th>Perceived Behavioral Control</th>
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<td></td>
<td></td>
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<tr>
<td>• Free play and structured movement</td>
<td>• Administration</td>
<td>• Confidence about teaching movement</td>
</tr>
<tr>
<td>• Importance of movement</td>
<td>• Parents</td>
<td>• Lack of knowledge</td>
</tr>
<tr>
<td>• Supervision and safety</td>
<td>• Preschool curriculum and academic pressure</td>
<td>• Equipment that requires supervision</td>
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<tr>
<td>• Integration of movement with other subject areas</td>
<td></td>
<td>• Playground and equipment are limited</td>
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<tr>
<td>• Burn energy/break Lack of physical activity in schools</td>
<td></td>
<td>• Daily classroom schedule</td>
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<tr>
<td>• Relationship between physical and intellectual development Significance of facilitating movement</td>
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<td>• “Break for ourselves”</td>
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<tr>
<td>• Physical education and academic time</td>
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<td>• Feelings about being outside</td>
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Most of these factors represent the barriers to more movement education instruction at the University Preschool. Nonetheless, as part of this research I also found factors that if incorporated would likely facilitate more movement education.

What would facilitate more movement instruction at the University Preschool?

Movement education training. All the teachers and parents recognized that in order to implement a classroom teacher lead movement program at the University Preschool proper training is critical. From the administration’s point of view, Ms. Elly
suggested that the best way to implement a movement program is through training and that those who are involved in creating and implementing curriculum standards should also promote standards that address physical development. She explained,

Um, right now of course that there’s this big literacy push and it’s also a big push to look at program standards and curriculum standards and all of that kind of things. There are physical development, motor development, um, strands in those. There are new zero to five performance standards for children and if people with influence put as much importance on that strand [physical development] as they do on the literacy strand and the language strand. Then, people would all of the sudden realize that they need training.

It is important to convey the message that movement education could enhance the program by allowing teachers to use movement activities to teach other preschool curriculum areas. Training could help teachers view the playground as an extension of the classroom. Facilitating this perception about the playground could help teachers view movement as another vehicle for learning thus including more purposeful movement experiences in the curriculum. Ms. Lauren explained,

I think the best thing to do is to educate the people. A lot of times, you know, they are taking their jobs seriously, they are supervising but they, they don’t see the outside as being an extension of the classroom. So maybe that would be it is just trying to make sure the teachers and staff were aware of how they would, enrich the kids’ playground with participating with them.

Likewise, Ms. Lauren suggested that perhaps teachers were not aware that they could participate and facilitate at the same time they supervised, “I think some is just educating the teachers, the ones who, um, are out there to make sure they know they still participate with the kids. That you can do supervision while participating,”

Training is also important for teachers to be able to facilitate developmentally appropriate movement activities. This is especially true for the University Preschool because the two groups of children differ remarkably in their motor development. As Ms. Laychelle explained, “I think they should have it [training] age appropriate, um, because like, you know, I was saying before what is good for 4 1/2 year olds it’s not going to be good for 3 1/2 year olds.”
Training needs to be focused on content, however, a teacher also mentioned that being comfortable with teaching movement was very important. Ms. Susan commented, I think it goes back to training. I feel like I need more training but I could, there are things I know how to do, I mean I know how to set up an obstacle course. There are things I know, especially with the younger ones by the time you get to the ones that are older it seems like they need a little more instruction in how to do some things. But there a lot of things you can set up and do that you don’t have to have the instruction for. Some of it is just getting past not being comfortable with it.

Thus, the goal of training, in addition to providing knowledge, should focus on practice so that teachers feel comfortable with what they are doing. Training ultimately has the potential of helping teachers change their attitudes about the value of movement education.

**PE specialist is best.** Overwhelmingly, teachers, directors, and parents alike mentioned that having an onsite physical education specialist would be the most appropriate solution to the lack of movement education at the University Preschool. They also realized that having a specialist was difficult to achieve, “in a perfect world you would have a Ms. María that would come in and be focused on that area”, nonetheless the teachers expressed that they are willing to provide children with movement opportunities. Ms Lauren’s comments summarized the other teachers’ opinions, “I do think that someone like yourself who’s more specialized in that area would be more beneficial for them. I think I could do, you know, a good job but I think someone could do a better job”.

As was mentioned earlier, I was the movement education specialist at the University Preschool. I taught only once a week and, unfortunately, that was not enough to appropriately develop children’s fundamental motor skills. Regardless, right now they do not have a specialist; therefore, the administration could either hire a movement specialist or train the classroom teachers in order for the children to benefit from purposeful movement experiences.

Hiring a specialist would be very beneficial because the teachers could use the specialist as a resource in trying to incorporate movement activities into the curriculum.
When I taught movement, the teachers would sometimes observe me. Eventually they started to use some of the equipment I used as a center inside the classroom. During the observations, I saw them use some of these activities; however, mostly they just supervised the children.

Ms. Lauren explained,
I’m trying to do the same thing with the movement. I would try to make sure that even if, even if it’s in the classroom that we would put out some of the same materials that Ms. María uses. And I try to do that now anyway. We have balance boards and the walking cans so that even when we are inside they can still use some of the same skills she teaches. So hopefully it would be something that I would try to, to give them a little bit of so that they won’t lose it completely but it is nice to have that person that can come in and do that.

However, Ms. Susan claimed that sometimes what she sees physical education specialists do does not “stick in my mind, so it is nice to have somebody else that can come in that knows that.” She also commented, “I think that helps it helps them [children] to be able to get up and move and having somebody come in that knows what they are doing. Is very good, it is better than me trying to fake it [laughs]”. If teachers have to “fake” their ability to teach movement education, when they really do not feel confident, this may hinder their willingness to teach movement.

Ms. Susan also talked about how being knowledgeable in a subject area is what qualifies a teacher to teach a more specialized subject. She said, “You know, and having it taught properly. It’s like I don’t want my daughter to go to school with somebody who doesn’t really know what they’re doing teaching math. You know, you need somebody who knows what they’re doing and has the training and I don’t have that training.”

Most of the parents interviewed believed that hiring a physical education specialist was the best way to incorporate movement education in the University Preschool’s curriculum. Parents realized that classroom teachers’ duties were very demanding mainly because teachers were responsible for teaching most of the early childhood curriculum, including other subject areas. This was the main reason why
many parents suggested that there should be a physical education teacher at the preschool. As one parent explained,

Maybe hire a movement teacher to do specifically that because teachers, the classroom teachers have their hands full of doing classroom things so a special person to do that kind of activity on a weekly basis or even a bi-weekly basis would be nice. An hour for, probably an hour per setting.

Another parent suggested that there could be an aide in the classroom that could help setting-up movement activities, “You would have to maybe even have somebody in the classroom working side by side with the teacher as an extra, you know, helper or something, you know, like bringing in some ideas for activities and stuff” Such aide perhaps could be a Physical Education student from the university.

Having a movement specialist at the University Preschool would be the ideal way of establishing a movement program. The administration could explore the possibility of using university resources to that end. This will facilitate teacher training as this specialist can provide teachers with the latest research and movement teaching techniques and activities.

**Administration understanding the value of movement.** Tied to the above solutions is the administration’s power to influence the curriculum and teachers' professional development. The teachers mentioned that the administrators also need to see movement education as something important and that it is up to the administration to hire a movement specialist. According to Ms. Lauren, the administration could help improve the movement program by,

making sure it is an important so that they keep maybe a movement teacher that they’re able to keep like a story and song person or maybe make sure that they have the money or the funds or put out there fillers for even a part-time person that would like to come and do that. Um, so I think that would be one thing to realize that it is important and that it would be nice to have a person to do that. It is also critical that the administration listen to the teachers’ concerns and requests regarding equipment and additional resources they may need,

Um, another one which is to be, um, help to listen to the teachers if they do need any materials or if they think that if anything like having music out on the
playground or buying some equipment like small parachutes or anything like that. Being open to making sure that the resources are spent on the outside as well on the inside.

Additionally, a parent had a proactive suggestion,

I think you have to demonstrate to them that it works and that it’s of value and there are not suffering. Their academics, for lack of a better term, and their learning their educational thing is not being hindered but being enhanced and that’s a hard sell job.

**Partnership with other university programs.** The UniversityPreschool has used university partnerships to provide the children with movement activities that otherwise they could have not provided due to the lack of appropriate facilities and expert personnel. One of the most popular was the optional summer swimming lessons (one week) which were offered at the university’s indoor swimming pool. Unfortunately, the school stopped offering this program. After Ms. Elly’s retirement the lessons were cancelled. One parent commented,

[My son] has taken swim lessons the last two summers. Actually I also understand they used to do that here and they don’t anymore. It would be great if they could, um, revive that because, um, it’s something especially in Florida, for safety, very important for kids to learn while a lot of the parents probably take it upon themselves like we did to make sure their children get swim lessons, probably some of them don’t.

Special movement programs like the swimming lessons were very important because these programs helped children learn skills that were more difficult to learn and that required special facilities and instructors. The most popular annual movement program was organized by a professor from the Physical Education Department. He is also a member of the University Preschool Board of Directors. This professor teaches an Early Childhood Movement course for which his students have to create movement learning centers for the children. All the University Preschool children participate and walk to the University’s Gymnasium once a week for a month. This has been one of the most beneficial programs not only for the children but for the teachers because they could observe and acquire new ideas for movement activities. Ms. Susan has been
attending this program for almost 10 years. She said that it “is really interesting” all that she knows about movement she has “picked-up” from this opportunity.

Parents also remember the gymnasium activities and all of them said that these activities were among their children’s favorites. As she reflected about all the activities that the University Preschool teachers were exposed to at the gym, a parent said that perhaps physical education students can help with the movement program, to bring in, um, to bring in graduate students or other students here at FSU whose specialty is movement, and they did, this program at the gym. They did have the music instructor, for example did some movement with the children. But even in other ways if education majors or physical education majors are trained to work with young children, to come in more regularly maybe two or three days a week rather than just a special program now and then and just to emphasize how important, um, movement is.

This parent also remarked about additional benefits of having university PE students come to the preschool,

New techniques and there would be cross-teaching there with the professionals. This is what were, this is the new thing in our area, integrating movement into math for example, and, um, so that the main, the head teachers would see and learn about techniques that they could use regularly in the classroom. These practicum students are an invaluable resource to the program and the new administration.

Physical Education students do not regularly visit the preschool. In fact, the only regular program is the five-week program at the gymnasium during the Fall semester. In order for Physical Education students or any other student to volunteer or engage in practicum work on a regular basis, the center has to build stronger partnerships. The former University Preschool administration had very strong ties with other university programs which resulted in many students visiting the center for volunteer or practicum assignments. In fact, the previous version of the parent handbook indicated the following,

Each semester, practicum students in Early Childhood Education, Child Development, Music, Psychology, Nursing and other academic programs
observe and practice at the center. These student participants, volunteers, and other interested individuals further lower the ratio of children to adults and enable the children to receive even more varied individual attention. The new version, however, gives a general explanation of the collaboration with other departments and opportunities for university students.

We were originally established to assist student parents in the care and education of their children so that they could attend classes as well as to provide “hands on” experience and training for various academic departments on the FSU campus.

Perhaps the preschool could benefit from a more detailed explanation of the various partnerships and collaborations between university programs and other programs in the community. Additionally, a statement inviting programs to collaborate along with an effective dissemination of the needed collaborations can facilitate the gathering of resources that can enhance the curriculum and teacher training.

**Maintain research component.** Another solution a parent suggested was related to the research activities at the University Preschool. When the center was created, one of its main purposes was to be a research facility for university faculty. Until Ms. Elly’s retirement, that purpose was still part of the preschool’s handbook. The parent said,

Well, I was very interested that they should continue to be primarily a research institution. Many of the parents were disappointed when the [University Preschool] moved its focus away from having students coming, graduate students coming to conduct their research and moved toward providing day care services for the children and their families. Many of the parents chose the [University Preschool] because of its research component and so I believe this happened on several occasions but perhaps more of it might be a good idea.

Tied to the previous solution, through research in the area of movement, teachers could be exposed to new research, teaching techniques, and developmentally appropriate movement education activities. This would be very difficult if the university was not an available resource.
Under Ms. Elly’s leadership, the University Preschool had a very strong research component. The research component under the new administration is not that obvious as evidenced by the revisions made in the parent handbook. The handbook describes research as one of the major purposes. The University School was founded “to provide service, research and scholarly leadership to the University and surrounding community” which is why the school is “engaged in child study, research, student training, and professional development for students and professionals in the community”.

Finally, the handbook explains how the school serves the university and other professional preparation programs by “providing a model program for early childhood training and research and serves the community and early childhood profession through various professional development activities. Enclosed in this handbook is a brief outline of the forms and authorizations researchers, practicum students, volunteers, and participants need before they conduct research or any other educational activities or special projects. In contrast, the new handbook only makes reference to the school being opened to “provide service, research and scholarly leadership to the University and surrounding community”. This is the only statement related to research that was left after the revisions to the handbook. Beyond that statement, the new handbook says, “we seek to provide excellent service to the academic community is such a fashion as to cooperate, collaborate and communicate with all who interact with us and at the same time approach our work with a sense of humility and humanity with enough humor to lighten our way.” This sounds welcoming, however, it is not as specific as previously written.

**Other solutions.** Teachers, Ms. Elly, and several parents also suggested the following solutions to the lack of movement education at the University Preschool:

- **Having a movement center**  
  I like having a movement center. Some of it is having enough room. You know, it would be really nice if we had multi purpose rooms somewhere we could go to. I would like to do it in another room, some other space, you know, we don’t always have the space.

- **Using cooperative learning on the playground**
[About not using the bikes anymore] I haven’t thought of anything up until now [laughs]. Unless you had like the big ones helping to teach the little ones. Of course then you have the safety issue of having people run by a biker, you know, but you can help big ones help the little ones.

I observed an example of how this solution might work. While on the playground, Ms. Janet was standing next to the parallel bars supervising. A boy said “watch how I jump”. Ms. Janet was facing the boy as he jumped stretching his arms up as if he was trying to reach the bar. Ms Janet did not help him, instead an older girl explained to the boy that he had to climb up the wooden post, hold the bar, and slide to the center. The girl proceeded to demonstrate all the steps to the boy. This is exactly the way I taught this girl how to reach the bar when she was younger. Therefore, there is a potential benefit in at least teaching the older children and allowing the older ones to help the younger children.

- Requiring a movement education course for teacher certification
  It would be really nice if the movement were required for certification like literacy, ESOL, all that’s required for certification. That’s going to require though a lot of public policy education, and um, I don’t know that people are ready for it at this point. That, that’s what it needs. Once it’s required for certification, that all the teachers have to have it, then they’ll feel comfortable with doing it.

- Applying for movement education grants
  If they know, the bigger emphasis is on literacy but there are all kinds of literature grants going on out there. If people could get money, not really but that’s the only place there’s money for grants and that kind of thing is literacy, and so that’s where all the craving is and that’s where everybody is going taking the literacy thing. So if you could get the grassroots [laughs] empathy to see the importance of it. If you get grants for movement and training then it would work.

- Training incentives for teachers
  They’ll have to have some administration support that would help either pay for the teacher training or give credit and incentives for them to attend.

- Develop a manual of movement ideas
I guess you could just develop a manual of ideas and hope they read it on their own and decide that they’ll do it because everybody has a different personality and a different way of doing things.

The above solutions clearly demonstrate that not only the teachers but the entire school community have the tools and positive attitudes needed to enhance the teaching of movement skills and lead the implementation of a movement education program. These solutions address all the barriers and concerns identified in this study. The challenge is to put these ideas into action in order to foster the complete development of young children and, thus, prepare them for a lifetime of physical activity.
CHAPTER 5
CONCLUSION

In this chapter the implications of this research study on early childhood curriculum and instruction will be explained. Additionally, a summary of the barriers along with respective suggestions for increasing movement education at the University Preschool will be discussed. Furthermore, the impact of a movement education program on young children’s wellbeing and on the University Preschool will be examined. Finally, future research possibilities related to early childhood movement education will be discussed and a summary of the research study will close this section.

The purpose of this research study was to understand the insufficient movement skill instruction and facilitation at the University Preschool by identifying and describing the factors that influenced the teaching of movement skills to young children. The educational significance of this study was to improve educational practices in early childhood education by identifying barriers that are preventing preschool teachers from teaching physical education to young children. Only a few studies in public schools have researched these barriers in elementary public settings (Ashy & Humphries, 2000; Curtner-Smith, 1996; Faucette & Patterson, 1989; Faulkner & Reeves, 2000; Placek, et al., 1995). Therefore, there was a need to research early childhood teachers in private programs.

The goal of this research was to fill the gap in physical education and early childhood research literature by contributing to a greater understanding of the factors to the teaching of movement to young children in private preschool settings. The understanding of these factors could facilitate the development of a plan that leads to the integration of movement skills instruction in the early childhood curriculum through the implementation of a movement education program.

Given the importance of preschool physical education in the early childhood curriculum, the following research questions guided this study: what are the factors that influence movement skill instruction/facilitation to preschool children? and what are preschool teachers’ attitudes and practices regarding teaching movement skills to
preschool children? These questions determined the qualitative methodology used in this study to identify and understand the factors that influence the teaching of movement skills at the University Preschool, a private preschool located on a large southeastern university.

Theoretical Framework

Theories related to beliefs and attitudes helped explain several possible factors that influenced the teaching of movement. Beliefs and attitudes are a common component of these factors as people tend to act according to what they believe (Bandura, 1986; Rokeach, 1968) and beliefs are instrumental in defining behavior, organizing knowledge, and making decisions. Several theorists have described beliefs as the building blocks of attitudes, explaining that beliefs are shaped through knowledge and experiences (Calderhead & Robson, 1991; Goodman, 1988), and that beliefs are predispositions to action (Rokeach). However, Ajzen in his Theory of Planned Behavior stated that teachers’ attitudes do not always explain peoples’ behavior because other elements within the context that also influence an individual’s actions (Ajzen, 1991). In fact, many of the teachers’ beliefs described in this study did not match the behaviors observed or the reported teachers’ practices.

The Theory of Planned Behavior focuses on the intentions people have to carry out a behavior and on people’s perceived control over the behavior. Intentions, according to Ajzen (1991), are determined from attitudes; however, there are two other elements that influence intentions: subjective norms and perceived behavioral control. Furthermore, all of these elements are influenced by beliefs. However, the more favorable the attitude and the subjective norm towards a behavior and the greater the perceived behavioral control, the stronger an individual’s intention should be to perform the behavior. For this study, the Theory of Planned Behavior (Ajzen, 1991) was used as a framework to understand the factors that influenced the teaching of movement education as it allowed for investigating the beliefs teachers reported and the context in which practice occurred.
In addition to attitudes, how capable a teacher feels and how a teacher perceives that the environment supports his/her teaching, can also influence her/his work with young children. Indeed for this study, not only the teachers’ attitudes about movement education but also their perceptions about the administration and parents’ attitudes towards change, and particularly the teachers’ perceived control over the context in which teaching takes place were found to influence the teaching of movement skills and concepts to young children. Furthermore, what a program director or school principal believes is important for children to master may have a direct effect on curriculum selection, resources (e.g. training) and materials available, and on classroom/playground management expectations (Spindell-Rusher, McGrevin, & Lambiotte, 1992). Parents also may advocate changes in curriculum depending on what they believe is important for their children to learn. By including the administration and the parents in this study I was able to gain a clearer understanding about the barriers that influence movement education and possible solutions to overcome those barriers. The three elements in Ajzen’s theory are reflected in the next sections: implications and suggestions for increasing movement education at the University Preschool.

Implications

In this section, the implications of this study on early childhood programs and curriculum will be discussed. Several groupings that encompass the factors that influence the teaching of movement education to preschool children will be explained and compared with related literature.

Current Lack of Physical Activity

I remember when I was in Kindergarten, first grade, all throughout elementary school, middle school, and high school there was always time set aside for not only for recess, which is you know good, but at the same time we had physical education and we not only learned how to jump rope; we learned about our bodies, how much we can do (Ms. Laychelle).
The element of attitudes included the University Preschool teachers’ beliefs about movement education. All the teachers agreed that, especially in public schools, there is a lack of physical activity much to the detriment of young children’s development. The teachers said that they believed movement education was important for the complete development of the young child. They believed that physical development should be fostered at school and that including movement in the curriculum enhances the program. However, they believed that children should also have opportunities to engage in free play. If teachers believed children did not have enough physical activity/education at the center and that movement is important then why the teachers are not fostering movement education in their classrooms? Several barriers and rationalizations that explain this question were uncovered in this study. In this section, teacher rationalizations will be paired with the literature that supports or otherwise demystifies them.

“I am all for PE but Let the Kids Play…”

… after all that is what they want.” Though not a quote from the subjects, a statement like this summarizes the findings regarding structured movement experiences and free play. As explained in Chapter 1, structured movement education experiences involve teaching movement skills and unstructured experiences (free play) constitute engaging in physical activity play. Teachers reported believing that structured experiences were very important in the early childhood curriculum and that they were just as important as free play. The observations, however, did not match the teachers’ beliefs because most of the episodes observed and plans reviewed illustrated a preference for free play.

It seemed that it was not clear for the teachers that movement education is distinct from free play and not just a time to “have fun” for example, as she explained her knowledge about movement education, Ms. Lauren said “… all the kids are at different levels and you can still do some type of movement or some type of fun things you know, gross motor things”. Of course we want students to enjoy movement experiences, but these experiences should be planned and have clear objectives. Even though teachers seemed to prefer free play, all the teachers said they believed in a
balance between structured movement activities and free play. In order to balance these types of experiences, it is very important that teachers understand that free play is not the same as movement education. Only with this understanding can educators prevent underserving children in physical education.

Children’s preferences seemed to be the main rationalization as to why teachers encouraged free play as opposed to formally teaching movement skills. Teachers said they believe children would not like structured movement activities planned by them but instead that children enjoyed structured experiences facilitated by a physical education specialist. There was no evidence in the literature that suggested that children did not enjoy movement experiences facilitated by classroom teachers. Even though physical education specialists are generally recognized as best suited for teaching physical education (Ashy & Humphries, 2000; Faucette, McKenzie, & Patterson, 1990; Graham, 1991), with proper training classroom teachers have the potential to provide quality movement education instruction (Ashy & Humphries). However, physical education specialists are trained and the preschool teachers are not. If the teachers believe they are not prepared to teach movement skills, they would not be comfortable teaching. Indeed, the University Preschool teachers reported feeling more comfortable playing with the children on the playground.

Another caveat related to children’s preferences was that teachers reportedly followed children’s interest when it came to practicing movement skills. Unfortunately, leaving movement experiences up to chance is not a very effective way to expose children to a variety of movement experiences that will help them develop basic motor skills needed for a lifetime of physical activity. In fact, the teachers acknowledged that more planned movement activities were needed in addition to free play opportunities.

**Personal choice.** When it came to teaching, regardless of how many materials and training may be available to a teacher, in order to teach a non-required skill the teachers must choose whether they want to teach it or not. I asked a University Preschool teacher if the lack of movement facilitation was a result of limited resources and training or if it was also a matter of personal choice. She indicated that to a certain extent it was a choice because she also got tired of being inside teaching in a structured setting.
What would happen if I tell my principal “I am tired of teaching math, I am going to take a break”? Undoubtedly, a classroom teacher who chooses to take a break from teaching math or reading, for example, would be reprimanded. At the University Preschool movement education is not considered a subject nor is it required, however the playground is supposed to be an extension of the classroom not just an area to play freely. In fact, the teachers reported that the playground should be an extension of the classroom according to the expectations of the new administration.

[the outside classroom] is a place where they [teachers] need to still be doing their teaching skills and all of that. So I saw that as being at least that it was placed on there as an importance. That she saw that the playground is part, an extension of the classroom.

Therefore, if teachers are expected to treat the playground as another classroom, it should not be a time where teachers sit back and take a break. Likewise, the administration should also ensure that teachers comply with the center’s expectations.

Teaching is a very demanding profession; therefore a break and adequate time should be provided. Typically at the University Preschool teachers take a break during naptime followed by planning time and lunch time. Perhaps if a mid-morning and/or mid-afternoon break was necessary, teachers could alternate break, supervision, and teaching on the playground. After all, several teachers are supposed to be with the children during playground time.

What is a teacher supposed to do? As I was attempting to understand why there was not adequate movement education at the University Preschool even though the teachers had positive beliefs about it, I decided to ask the teachers about their perceived roles as a teacher while on the playground. I asked them to choose between facilitating, teaching, or playing and to describe why. All the teachers leaned towards facilitating or playing because they did not feel comfortable or believed they had the necessary knowledge to teach movement.

Unless there was a structured and planned movement time, many children will not develop fundamental motor skills or discover interest in physical activity because many children tend to choose sedentary activities when they are on the playground during “free play” (Miller, 1978). Children need free play experiences not only to be
creative and express themselves but to practice the movement skills they have learned. As mentioned in the review of literature, children need both free play and structured movement experiences. One cannot be a substitute for the other (Sanders, 2002).

**PE: A Vehicle for Learning or Stress Buster?**

Ideally, it should not be one or the other however, when one of these qualities dominates it reflects on how movement education is implemented in the early childhood curriculum. All the teachers reported they believed movement education should be a vehicle for learning; however, the data revealed that teachers favored the notion that movement gives children a break, helps children burn extra energy, and that it is a great way to help children release stress. Those popular benefits may contribute to the more “relaxed” attitude towards movement education in which no formal planning is evidenced. Conversely, not all physical activity experiences should be structured and geared towards academic integration.

Researchers emphasize that movement is necessary for learning (Hannaford, 1995; Jensen, 1998) especially for those children who are kinesthetic learners (Gardener, 1985, 1993). Several research studies have also suggested that children who engage in physical activity may perform better in school as a result of the break in academic tasks (Pellegrini, Huberty, & Jones, 1995; Shephard, et al., 1994). Thus, attributing the lack of rigor in movement education to the need for children to burn energy freely is not justifiable because even children who are involved in a planned movement lesson can release energy and obtain the benefits of a break in seatwork. Nonetheless, as mentioned in the previous section, a balance between structured movement experiences and free play should be considered.

“But I also think that movement gives them a way to have an outlet where they can get their wiggles out and you know get some emotional release”, Ms. Lauren said. Indeed children need breaks from academic tasks. This is an unquestionable benefit that movement education brings to the curriculum. However, if this is the main reason to provide movement activities, when administrators believe there is not enough time for other “more academic” tasks, movement is more likely to be postponed or eliminated. For movement education to be included on par with other subject areas, it needs to be
seen as a contributor to children’s learning not just as a break. This is where integration of movement into the traditional academic areas becomes a strategy that can address the energy release and the potential intellectual benefits of movement education.

Incorporating movement into the inside curriculum may be the most effective way to solidify the place of movement education in the early childhood curriculum because it will help educators see physical education as an important school subject. There are a myriad of ways to integrate movement skills into the curriculum that teachers could learn and apply with the help of adequate movement education training (Werner, 1994). The University Preschool teachers believed that integrating movement was a good practice and, although sparingly used, they have applied this concept and seem encouraged to continue to do so in the future.

**Children Looking up to their Teachers**

I think it is important that the teachers that are with them everyday, lead teachers, do activities with them, gross motor activities everyday ‘cus like I said some of the kids you are not going to have to motivate to do gross motor ‘cus that’s what they like but then you’ll find your kids who may be a little shy or not maybe as not athletically inclined. They may pick up an activity maybe because “Hey I want to go do that with Ms. Lauren. That looks fun to do”.

Both lead teachers believed that facilitating movement was important because when children saw adults interacting with them during movement activities, children became more interested in the activities. In fact, Ms. Susan commented, “They [children] like adult interaction and they like for adults to be interested in what they are doing. They like that adult attention and if you are interested in movement then they’ll be interested in movement.” Therefore, it seems that the presence of either a lead teacher or a teacher encouraged children to participate in physical activity/movement on the playground especially when the teachers provided feedback to the children. This implies that if teachers were more active on the playground children would be more inclined to participate in movement activities.

The key is to help classroom teachers become more comfortable teaching movement skills, help them stay motivated in being physically active with their students,
and help them reinforce positive values towards movement education. In fact, teachers who demonstrate movement skills during their lessons motivate students to participate more actively in class (Lawrence, Anderson, & Steven, 2002). Through participation, the teacher becomes a role model for their students thereby potentially inspiring students to be physically active (Cardinal & Cardinal, 2002).

**For Safety’s Sake**

With regards to teaching and allowing children to practice movement skills, safety is very important because improperly used outdoor equipment and physical education materials can result in injury (Frost, 1994). In fact, children’s safety was one of the teachers’ top priorities especially when the children were on the playground. All of the teachers were aware that while on the playground teachers were mostly supervising rather than facilitating or teaching.

When safety is the main concern the question is: what about children’s education and development? The teachers described supervision as one of their main roles on the playground. However, if all the teachers focused solely on “watching over” the children and teaching safety rules then teaching movement skills becomes secondary or might not happen at all. For example, I asked Ms. Susan about whether or not she tells children how to properly perform skills such as jumping. She said, “we do talk about it and we [pause] a lot of it is safety issues like how to use that trampoline”. According to her the focus is on safety rather than teaching skills.

Playground safety should be equally as important as children’s education and complete development. The problem is that ensuring children’s safety is not an excuse not to teach or facilitate movement activities properly. If the reason not to teach is due to the perceived notion that they cannot teach and supervise at the same time, then staff development may be the best method to help teachers learn techniques that can help them teach and supervise at the same time they facilitate movement activities.

The emphasis on supervision may be closely linked to the lack of knowledge and preparation classroom teachers have to plan and teach physical education lessons (Ashy & Humphries; Faucette, McKenzie, & Patterson, 1990; Faucette & Patterson, 1989; McKenzie, Alcaraz, Sallis & Faucette, 1998). A teacher is more likely to do what
she feels confident doing. If they are not comfortable teaching movement, they will go for what they are very good at: supervising.

Focus on playground supervision as opposed to facilitating and teaching movement in a safe environment may also be related to teacher's physical skills and confidence. Many classroom teachers lack the physical skills and confidence that are typical in physical education majors (Ashy & Humphries; Faulkner & Reeves, 2000). Perhaps teachers prefer to supervise rather than to engage in an activity with the children because of fear of not being “good enough” or because “that is not my strength”. During the observations the teacher who reported being physically fit was the teacher who was observed engaging in movement activities more frequently with the children. This teacher also had the most successful and varied sporting and recreational experiences when she was younger and consistently throughout her life as compared to the rest of the teachers.

The above example is consistent with Faulkner and Reeves' study (2000) in which they found that physical self-perceptions influence teachers' attitudes towards teaching physical education. Specifically, the teachers who were the most active and had the most positive physical self-perceptions had the most positive attitudes towards teaching physical education. Thus, based on the literature on attitudes, it can be inferred that being physically active can bolster positive attitudes towards teaching and facilitating movement which in turn can increase the potential for a classroom teacher to teach movement skills.

Most of the teachers’ attitudes towards movement activities are positive. They believe that movement education was important and that it enhanced the preschool program. Therefore, as far as the element of attitudes in the Theory of Planned Behavior was concerned, it was likely that the University Preschool teachers had the intention of facilitating or teaching movement.

The fact that the teachers believed movement education was important combined with the participant observation data from this study that illustrated that the teachers did not teach movement activities regularly, indicated that they were not practicing what they believed in. This suggests that it was not that the teachers did not
want to teach movement but rather that they did not know how to teach movement or that other factors beyond their control impeded or made it difficult for them to teach.

The data presented above illustrate that despite the fact that the teachers held predominantly positive beliefs and attitudes about movement education; they were not planning, facilitating, or teaching movement regularly. Additionally, several of the quotes noted earlier indicate contradictions between beliefs and actual practices. Two elements of intention, perceived behavioral control and subjective norms, provide a clearer picture. This is consistent with Ajzen’s theory that beliefs not always determine practice. However, Ajzen’s (1991) other factors that influence the teaching of movement education at the University Preschool. Both the perceived behavioral control and subjective norms account for the factors that are beyond the teachers’ control.

Most of the statements in this section are contradictory and reflect the lack of knowledge the University Preschool teachers have about teaching movement education appropriately. Moreover, their rationalizations uncover teachers’ academic preferences. Not often do educators ponder on children needing breaks from both language arts and mathematics instruction or discuss what children dislike about structured instruction in those areas. This fact confirms that the subject area of physical education is not equally as important as other subjects areas considered to be academic. In other words, other subject areas can be more structured and less flexible because they are perceived as more important for students’ education. This trend presents a challenge for fostering appropriate growth in all developmental areas.

Change is Possible

Despite the difficulties in implementing developmentally appropriate practices in primary grades, studies revealed successful implementation of a program to be the result of one or more change agents such as administrative and parental influence (Butterfield & Johnston, 1995; French & Peña, 1997; Fullan & Steigelbauer, 1991; Ingersoll & Rossi, 1995; Konzal, 1997; Smith & Smith, 2000; West, 2001). In many cases, the principal or director became a key player in implementing change (Aagard, Coe, Moore, & Kannapel, 1994; Findley & Findley, 1992; Fullan, 1991; National Association of Elementary School Principals [NAESP], 1990a, 1990b; William, 1990).
Regarding the teaching of movement education, it could be assumed that if the administration valued physical education and was supportive and aware of the teachers needs, implementation of a movement program would be more viable. All the University Preschool teachers reported they believed the center’s administration had a strong influence over the curriculum. Furthermore, the teachers were aware that the director’s expectations were important and thus had an impact on teaching and planning.

Not only did the University Preschool teachers believe the administration was influential over curriculum decisions but this was also evident during the observations. As mentioned in Chapter 3, there were changes in the administrative staff at the preschool that affected the center’s philosophy and priorities. This was evidenced during the interviews as well as during the document analysis portion of the study. Concerning movement education, the previous school director’s beliefs and school philosophy were more supportive of movement education. Under the new administration, physical development is not part of the philosophy, teachers’ have shortened playground time, and there is not a movement education specialist available anymore.

With this environment, it can only be hoped that through in-service training and research publications the new administration realizes the need of placing more value on movement education in the school’s curriculum. In addition, if parents who value physical education feel comfortable enough to voice their opinions to the new administration, change may gain momentum. In fact, the teachers reported that parents’ suggestions were taken seriously and that they believed parents were influential when it came to classroom and overall school policies. This was confirmed through documentation from staff meetings in which parents’ suggestions were included on the agendas for discussion. It was evident that teachers value parental input and welcome their contributions in the classroom.

Parents could also be a valuable resource in establishing a movement program. If parents voice their concern about the lack of movement, perhaps changes in the curriculum could occur as long as the administration was committed to consider parental input and keep them informed before changes were made (Konzal, 1997). Additionally, parents could volunteer in the classroom and share their talents. In fact this
is a common practice at the University Preschool. In regards to movement education at the University Preschool, parents, for example, could collaborate with teachers and assist them in supervising on the playground while teachers focus on teaching movement skills. Teachers could also benefit from parents who have experience teaching movement to young children and were available to volunteer by either teaching or setting up movement centers or making movement equipment.

Towards the Goal of Increasing Movement Education

Through the element of perceived behavioral control several barriers to movement education were identified. These barriers negatively influenced the teaching of movement at the University Preschool because teachers believe these barriers make it difficult for them to teach movement education.

Barriers to Movement Education

Among the barriers identified, lack of knowledge and confidence to teach movement skills seemed to be the most important. The lack of confidence to teach movement is connected to the lack of knowledge the teachers admit having in this subject area. Teachers repeatedly stressed that movement education was not their area of strength and that they had not had training, hence they do not know the steps to teach specific movement skills. This lack of training in movement also affects other staff and participants such as assistant teachers and practicum students because teachers cannot train or give feedback in this area because they did not feel confident due to their lack of training.

Additionally the schools’ infrastructure and materials were noteworthy barriers. According to the teachers, the playground’s layout and space, as well as the equipment and materials available for movement activities, also contribute to the lack of movement education at the University Preschool. Moreover, teachers believed that the movement equipment available was a barrier to movement instruction because it required too much supervision. These barriers may be justifications for not having more movement
University Preschool teachers believed that movement was important and that physical and intellectual development were related. In addition, they believed that movement education could be integrated into the early childhood curriculum. However, several perceived barriers hinder the integration of movement education into the curriculum as well as the establishment of a movement education program. These are important findings because these barriers prevent children from being exposed to movement activities that potentially can enhance their learning and development.

**Suggestions for Practice**

In order to incorporate movement education into the early childhood curriculum, movement education specialists need to be hired or classroom teachers trained. Since preschools seldom have the support of a physical education specialist, classroom teachers are often responsible for meeting the physical activity needs of young children (Sanders, 2002) even if they do not have adequate training for teaching physical education. This additional responsibility, combined with a lack of knowledge about how to teach movement skills and the benefits of movement programs and more emphasis on academic achievement, might adversely affect teachers’ attitudes about physical education. At the University Preschool teachers have a positive attitude about movement education, however, their perceived lack of knowledge and low confidence make it difficult for the teachers to have more structured movement instruction.

**Hire movement specialists.** The most effective solution to the lack of movement skill instruction at any preschool is to hire physical education specialist. However, since most preschools do not hire specialists, classroom teachers are supposed to provide these experiences. In order to overcome the barriers to more movement education at the University Preschool teachers need to be trained and the entire center must be involved in the implementation of a movement program. Adequate training in early childhood movement education can give teachers the tools they need to integrate movement into the curriculum, teach movement skills, make movement equipment, use
available movement equipment effectively, train parents and practicum teachers, and to advocate for children’s health as promoters of lifetime physical activity.

**Movement education staff development.** Studies have revealed that for skills and knowledge to be maintained, on-going staff development (Foley, 1993; Shuster, 1995) or refresher trainings (Ford, 1994; Tallman & Holt, 1987) are necessary (West, 2001). Movement education training can enhance the early childhood curriculum at the University Preschool; however, for training to be effective and yield further growth the training must be regular and perhaps mandatory (Faucette & Patterson, 1989).

In addition to in-service training at individual schools, teacher preparation training changes would greatly benefit a movement education program. Early Childhood Education preservice teachers should be required to demonstrate minimum competence in teaching movement education before they are certified or credentialed. For example, future teachers at the university where the University Preschool is located could use the preschool to practice teaching movement skills. Moreover, upon graduation those teachers could bring their knowledge in teaching movement to the schools they join.

**Involve the school community.** Ultimately, including more movement skill instruction should be a group effort between the teachers, the administration, and parents. In order to implement an effective movement program the school as a whole must be involved to efficiently increase the amount and the quality of movement instruction. The integration of movement education in the school curriculum has to go beyond one classroom teacher. All the teachers should work together to plan and schedule activities. For instance, teachers could set up staff meetings to plan movement activities and develop lessons that could be integrated with other subject areas in the curriculum. The teaching team could look for movement education resources, set up and clean up equipment, and take turns teaching and supervising the children on the playground.

The teaching of movement, however, is not just an issue pertaining to the teachers or controlled by the teachers. The administration, as well as the parents must support the program. If the administration supported movement it might be assumed that teachers would have access to in-service training and movement equipment. In
addition, partnerships with other university programs that offer physical activity opportunities for young children could be made. Furthermore, a more substantial collaboration between physical education teacher preparation programs in nearby universities and colleges could be discussed and implemented. Perhaps a year-round practicum program could be established as well as the development of educational research endeavors.

Parents should also be trained on the benefits of teaching movement skills and possibly on how to help their children develop movement skills at home. Schools could provide parents with training on the health, socio-emotional, and intellectual benefits of movement education. This would empower parents not only to advocate for more physical activity for their children but it would also give parents more tools to help their children at home with academic learning through the use of movement to teach cognitive concepts. More importantly, educating both parents and children about the benefits of preventive factors such as diet and exercise would contribute to public health (Sallis & McKenzie, 1992; Werner, Timms, & Almond, 1996).

Through a group effort, integrating movement in the curriculum has the potential to evolve into a high quality movement program that prepares young children for a lifetime of physical activity. This movement program could also serve as a model for other centers and for the practicum students who intern at the center.

**Impact of a Movement Education Program**

**Children’s Wellbeing**

Of greatest concern is the alarming state of children's health in the United States. Researchers agree that obesity has its roots in childhood. Indeed, for many people problems related to obesity originated as a result of their lifestyle during childhood and adolescence (Freedman, Khan, Dietz, Srinivasan, & Berenson, 2001). The incidence of childhood obesity in the United States has tripled in the past 25 years hence sparking concern among health and educational organizations.

Preschool children can derive substantial physical, health, socio-emotional, and possibly intellectual benefits from learning movement skills at this age (CDC, 2001;
CDC, 2002; Gallahue & Ozmun, 1996; Hannaford, 1995; Jensen, 1998; Pate, et al. 1995; Seefeldt, 1980; Shephard, 1997; USDHHS, 1996; Weiss, 1987). Furthermore, children who learn a variety of movement skills are more likely to be physically active throughout school which facilitates the development of lifetime patterns of physical activity (CDC, 1997; CDC, 2000; Sallis & McKenzie, 1991; Sanders, 2002). Thus, it is recommended that young children be taught movement skills to help maintain a lifetime of health and fitness (NASPE, 2004).

School movement education can help young children develop positive attitudes and regular patterns of physical activity (CDC, 1997; Sallis & McKenzie, 1991; USDHHS, 1996). In elementary schools, physical education has been considered the perfect program to promote regular physical activity because most children have to participate (CDC; Sallis & McKenzie). Hence, preschools such as the University Preschool would also be ideal locations for the early promotion of physical activity.

**Impact for the University Preschool and other Centers**

The University Preschool serves as a model preschool in this community due to its research, training tradition, and quality. Implementing a movement program would serve as a model for other centers and as a learning experience for practicum teachers who may not be instructed in movement education. Those future teachers will hopefully take this knowledge to their classrooms.

**Future Research**

Further research potential in the area of early childhood movement education abounds not only through qualitative methods but through quantitative and mixed methods as well. This study was a broad look at the factors that influence the teaching of movement education to preschoolers, therefore; future research could focus on particular factors in order to uncover more specific information. Likewise, studies could target the individual role of teachers, administration, and parents in the implementation of movement programs.
Other research possibilities include the following: a) comparing teacher education programs with and without an early childhood movement course to understand how taking this course affects preservice teachers’ attitudes towards teaching physical education, b) a longitudinal study that examines the proficiency of young children’s movement skills who went to a preschool with a movement program versus the proficiency of children who did not go to a preschool with a movement program, c) assessing children’s understanding of selected academic concepts in reading or mathematics through the use of activities that incorporate movement vs. seatwork activities, d) effects of movement education instruction training on classroom teachers’ confidence to teach movement skills and on their attitudes towards teaching movement, e) children’s acquisition of movement skills with or without movement instruction, f) and the relationship between a director’s philosophy, the amount of structured movement experiences planned, and the teacher’s perceived behavioral control related to movement education.

Summary

Finding and understanding the factors that influence the teaching of movement at the University Preschool can facilitate the successful implementation of a movement program that addresses children’s physical activity needs. In this study, the qualitative data gathered through document analysis, teacher and parent surveys, participant observation, and teacher and parent interviews revealed several factors that limit the teaching of movement education at the University Preschool. These factors were sorted by each of the elements in Ajzen’s theory (1991). The majority of the codes that emerged related to the element of attitudes which is the element that most belief researchers have tied to predicting someone’s actions (Bandura, 1986, Pajares, 1992; Rokeach, 1968). However, because most of the teachers’ attitudes did not match their practices the other two elements (perceived behavioral control and subjective norms) were more critical for pinpointing the barriers to movement education.

Teacher training seemed to be the most needed and perhaps the most effective way to encourage the integration of movement education into the University Preschool’s
Movement education is a valuable way to provide children with experiences that can facilitate learning in many areas of the curriculum. In conjunction with play, structured experiences can also offer children the opportunity to learn about their bodies and develop physical activity habits with the ultimate goal of promoting a healthy lifestyle (Werner, Timms, & Almond, 1996).

Ample evidence supports the notion that physical education programs contribute to the complete development of children and in doing so should be an integral part of every school’s curriculum (Campbell, 1997). Educators must resist the deeply ingrained assumption that intellectual functions are more important than the body, but rather envision both domains as united (Pica, 1998).

Since most children spend the majority of their day in educational settings, preschool centers and schools are the most likely place to influence and change children’s physical activity patterns. This can be accomplished by incorporating structured movement experiences that are purposeful and enjoyable, providing ample amounts of physical activity, and by promoting lifelong participation in physical activity (Werner, Timms, & Almond, 1996). Given this, as educators we must consider the educational possibilities and the benefits that physical activity can bring to the lives of young children and tailor early childhood curriculums with the goal of enhancing the development of the “whole child”.
APPENDIX A

HUMAN SUBJECTS APPROVAL AND INFORM CONSENT

APPROVAL MEMORANDUM
from the Human Subjects Committee

Date: July 31, 2003
From: David Quadagno, Chair
To: Maria E. Vives-Rodriguez
223 Atkinson Drive
Tallahassee, FL 32304-4150
Dept: Elementary and Early Childhood Education
Re: Use of Human subjects in Research
Project entitled: Preschool Physical Education: Teachers' Attitudes About Teaching Movement Skills to Preschool Children

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Human Subjects Committee at its meeting on July 9, 2003. Your project was approved by the Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If the project has not been completed by July 8, 2004, you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

APPLICATION NO. 03.361
Cc: V. Lake
INFORMED CONSENT FORM
PRESCHOOL PHYSICAL EDUCATION STUDY

I freely and voluntarily and without element of force or coercion, consent to be a participant in the research project entitled “Preschool Physical Education: Teachers’ Attitudes about Teaching Movement Skills to Preschool Children”. This study will take place in the Fall semester, 2003.

This research is being conducted by María E. Vives-Rodríguez, M.S., who is a Doctoral student in Early Childhood Education at Florida State University and Resource Teacher at the Educational Research Center for Child Development (ERCCD) at Florida State University. I understand the purpose of her research project is to better understand the relationship between preschool teachers’ attitudes about teaching physical education and their actions towards teaching movement skills to preschool children.

I understand my participation in the study is totally voluntary and I may stop participation at anytime.

I understand that the data collection procedures will involve a family survey. The purpose of the survey is to gather information about your child’s physical activity participation in and your preschool curriculum preferences. The total time commitment will be about 30 minutes.

I understand that after all the surveys are collected you may be contacted for a follow-up interview. The purpose of the interview is to clarify and expand survey responses.

I understand that there is virtually no risk involved in participating in this study. I understand that all my information from the survey will be kept confidential. To insure my confidentiality, my name will not appear on any of the results. In case I am interviewed, I will choose a pseudonym to be used in any articles written from this study. I understand that the researcher will keep all documentation in a locked filing cabinet and they will be destroyed by August 2004. Only the researcher will have access to these materials.

I understand that there may be benefits for participating in this study. I will be providing valuable information that may lead to identifying factors that influence movement skills instruction to young children. This knowledge can help educators improve educational practices in early childhood education.

I understand that this consent may be withdrawn at any time without prejudice or penalty. I have been given the right to ask and have answered any inquiry concerning the study. Questions, if any, have been answered to my satisfaction.

I understand that I may contact María E. Vives-Rodríguez, at the Florida State University ERCCD, (850) 644-1013, Dr. Vickie E. Lake (major professor) at the Department of Elementary and Early Childhood Education, (850) 644-1450, the Chair of the Human Subjects Committee, Institutional Review Board, through the Office of the Vice President for Research, at (850) 644-8633 for answers to questions about this research or my rights. After completion of the study, a copy of the dissertation’s findings will be available upon request.

I have read and understand this consent form.

_________________________  ______________________
Participant                        Date
APPENDIX B

QUESTIONNAIRES AND SURVEYS

Baseline Data Questionnaire

PART 1

Instructions: For each statement, circle whether you strongly agree with the statement (SA), agree (A), are undecided (U), disagree (D), or strongly disagree (SD).

1. Do you feel that you should have responsibility for the physical education program for the children in your classroom? SA  A  U  D  SD
2. Do you feel that you should have some help from a specialist in physical education? SA  A  U  D  SD
3. Do you feel that you should have physical education specialist in the school that would serve as a ‘consultant’? SA  A  U  D  SD
4. Do you feel that your children need a daily period of Physical Education? SA  A  U  D  SD
5. Do you feel that a daily recess or period of unsupervised play is enough for your children? SA  A  U  D  SD
6. Do you feel the need for some kind of a curriculum guide for Physical Education? SA  A  U  D  SD
7. Do you think it is important to take in-service training in this area? SA  A  U  D  SD

PART 2

Instructions: Please answer the following questions.

1) What is your highest educational degree and in what area? ______________________________
2) When did you graduate?
____________________________

3) If you majored in education, are you certified to teach in your area? (If not, an education major, go to question (#5).

   • Yes ___
   • No ___

4) Did you ever take a course in physical education (movement) for young children as part of your teacher preparation program?

   • Yes _____ What was it about (title)? ________________________________
   • No _____ Why not? ________________________________

5) In the time you have been teaching at this school, have you ever taken any in-service hours in the area of physical education (movement) for young children?

   • Please describe.

6) Have you ever participated in organized sports or recreational activities?

   • Yes ____ Please list: ____________________________________________

     Do you think those experiences influence your attitudes about physical activity? Please explain briefly.

   • No _____

Interview Questions (to be conducted before the observations)

1) Tell me about your ideas about Physical Education or Movement for young children.

2) Tell me about how intellectual development and physical development relate. Give several examples.

3) What do you think about physical activity as a vehicle for learning?
4) Tell me about how movement relates with other curriculum areas.

5) What kinds of physical activity do your students get at school (inside and outside)?

6) What kinds of activities/centers do you set up for the children (indoors and outdoors)?

7) What kinds of fundamental gross motor skills can be developed on your playground?

8) When you are on the playground, do you facilitate fundamental motor skill learning?
   Why?
   Why not?

9) When you are in the classroom, do you facilitate fundamental motor skill learning?
   Why?
   Why not?

10) For Pre-K teachers only:
    If you had to teach Movement, do you feel competent in the area? Why?

   **Family Survey**

   *Please do not write your name on this survey*

I. **Demographic Data** (check the appropriate answer):

My child is in the:
   Pre-K classroom ____
   Two-3 year old classroom ___

My child is a (please check):
   Male ____
   Female___

I am:
   The child’s Mom ____
   The child’s Dad ____
   Guardian ____
I am a:
Full-time student ____
Part-time student ____
Not a student ____

II. Please answer the following questions in the space provided.

1) My child spends an average of ____ hours per day at the center.

2) What are the main reasons you chose to enroll your child at this preschool?
   a. ________________________________________________________________
   b. ________________________________________________________________
   c. ________________________________________________________________

3) What part of this center’s curriculum is the most important to you?
   ________________________________________________________________
   Least important?
   ________________________________________________________________

4) What do you think are the two most important things children should be doing in preschool at this age?
   ________________________________________________________________
   ________________________________________________________________

5) As a parent, what do you like most about this preschool?
   ________________________________________________________________

6) What other programs/activities does your child participate in other than preschool?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

7) Do any of these activities involve physical activity or movement?
   Yes ____
   No ____

   If yes, please explain:
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
8) What school activity does your child like the most?
________________________________________

9) Please **order** the following according to importance. Order from 1 (most important to 10 (least important).

<table>
<thead>
<tr>
<th>Circle Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Storyteller</td>
<td></td>
</tr>
<tr>
<td>Structured physical activity (Physical Education)</td>
<td></td>
</tr>
<tr>
<td>Art Activities</td>
<td></td>
</tr>
<tr>
<td>Language Readiness Activities</td>
<td></td>
</tr>
<tr>
<td>Music Activities</td>
<td></td>
</tr>
<tr>
<td>Playground Time (free play)</td>
<td></td>
</tr>
<tr>
<td>Science/Math Activities</td>
<td></td>
</tr>
<tr>
<td>Field Trips</td>
<td></td>
</tr>
<tr>
<td>Dramatic Play</td>
<td></td>
</tr>
</tbody>
</table>

10) Briefly explain the one you identified as most important (10):
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Thank you for your time.
Teacher Follow-up Questionnaire

Please order the following according to importance. Order from 1 (least important) to 10 (most important)

<table>
<thead>
<tr>
<th>Circle Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storyteller</td>
</tr>
<tr>
<td>Structured physical activity (Physical Education)</td>
</tr>
<tr>
<td>Art Activities</td>
</tr>
<tr>
<td>Language Readiness Activities</td>
</tr>
<tr>
<td>Music Activities</td>
</tr>
<tr>
<td>Playground Time (free play)</td>
</tr>
<tr>
<td>Science/Math Activities</td>
</tr>
<tr>
<td>Field Trips</td>
</tr>
<tr>
<td>Dramatic Play</td>
</tr>
</tbody>
</table>

1) Briefly explain the one you identified as most important (item assigned as 10). Why is this item the most important to you?

2) Briefly explain the one you identified as least important (item assigned as 10). Why is this item the most important to you?

3) What score did you assign to Structured Movement? ___ Why?

4) What do you think about the current opinion that movement education (or PE) and free outdoor physical activity take time away from other academic subjects in schools?

5) What do you think about Kindergarten expectations for children? Do you feel pressured to get them ready for those demands?
Available Movement Education Equipment at the University Preschool

Most of the equipment stored in the classrooms and on the playground belongs to the university’s Department of Physical Education. A Physical Education professor lent this equipment to me to be used during movement lessons. I specified to the teachers this and told them that they may use the equipment as long as they take good care of it and store it in the same place. The following tables list the available equipment and the owner.

Classrooms

Table 4: Physical Education equipment stored in classrooms.

<table>
<thead>
<tr>
<th>Physical Education Dept.</th>
<th>ERCCD</th>
<th>Ms. María</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow markers</td>
<td>Balance beams</td>
<td>Foam discs</td>
</tr>
<tr>
<td>Stilt cans- 3 pairs</td>
<td>Star markers</td>
<td>Milk jug scoops- 8</td>
</tr>
<tr>
<td>Balance boards- 3 narrow &amp; 4 wide</td>
<td>Plastic feet</td>
<td>Panty hose rackets</td>
</tr>
<tr>
<td>Launching boards- 6</td>
<td>Streamers</td>
<td></td>
</tr>
<tr>
<td>Jump ropes</td>
<td>Carpet squares - 12</td>
<td></td>
</tr>
<tr>
<td>Bats-3</td>
<td>Chalk</td>
<td></td>
</tr>
<tr>
<td>Yarn balls- 6</td>
<td>Flower bean bags- 6</td>
<td></td>
</tr>
<tr>
<td>Spot markers- (12 circles &amp; 6 stars)</td>
<td>Refrigerator box</td>
<td></td>
</tr>
<tr>
<td>Plastic balls</td>
<td>Streamers</td>
<td></td>
</tr>
<tr>
<td>Small foam balls</td>
<td>Carpet squares - 12</td>
<td></td>
</tr>
<tr>
<td>Hurdles- 4 short &amp; 4 tall</td>
<td>Chalk</td>
<td></td>
</tr>
<tr>
<td>Hoop holders</td>
<td>Flower bean bags- 6</td>
<td></td>
</tr>
<tr>
<td>Bean bags</td>
<td>Refrigerator box</td>
<td></td>
</tr>
<tr>
<td>Velo cro gloves and balls</td>
<td>Trampolines - 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scarves - 10</td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Physical Education equipment stored on playground.

<table>
<thead>
<tr>
<th>Physical Education Dept.</th>
<th>ERCCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnel</td>
<td>Tricycles</td>
</tr>
<tr>
<td>Soccer goal</td>
<td>Scooter boards</td>
</tr>
<tr>
<td>Tall cones</td>
<td>Hopscotch game (2)</td>
</tr>
<tr>
<td></td>
<td>Parachute</td>
</tr>
<tr>
<td></td>
<td>Foam balls</td>
</tr>
<tr>
<td></td>
<td>Hula-hoops</td>
</tr>
</tbody>
</table>
APPENDIX D

LESSON PLAN DESCRIPTION

Lesson Plan Format

Both classrooms use this lesson plan format. The Pre-K classroom also makes another copy of this form but without the outside centers table and they label this as “Afternoon Centers”. This type of lesson plans only lists the activities to be done and this usually include the main materials (or toys) needed. Procedures are not included. Actual space (boxes) available to write is bigger.

<table>
<thead>
<tr>
<th>Date</th>
<th>Room</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside Centers</td>
<td>Sandbox MWF TR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water Table MWF TR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Picnic Table MWF TR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concrete Area MWF TR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Playhouse MWF TR</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playhouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blocks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science / Math</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language and Literature</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tactile / Self Help</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large Carpet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


Centers for Disease Control and Prevention. (2000). Promoting better health for young people through physical activity and sports. A report to the President from the Secretary of Health and Human Services and the Secretary of Education. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.


BIOGRAPHICAL SKETCH

María Esther Vives-Rodríguez was born in Cayey, Puerto Rico on July 31, 1973. She graduated from Notre Dame Catholic High School in Caguas, Puerto Rico, then began to study Physical Education at the Recinto Universitario de Mayagüez of the University of Puerto Rico. While in Mayagüez, María Esther developed a love for young children as she worked as a camp counselor and swimming instructor. After receiving her B.S. in 1996, she moved to Tallahassee, Florida to pursue a Master’s degree in Early Childhood Education at Florida State University. While working on her Master’s, María Esther was an AmeriCorps Tallahassee member for two years and then became a Pre-K teacher until the completion of her degree in 2000. Soon after, she was accepted in the Early Childhood Education doctoral program at Florida State University. Additionally, she was awarded an internship in the Florida House of Representatives where she worked in the Child and Family Security Committee for a year. After the internship concluded, she became a graduate teaching assistant and student teacher supervisor. María was also an early childhood movement teacher for six years while in graduate school. In 2005, she began working for the Florida Department of Education as a Program Specialist in the Migrant Education office, and was granted a Doctorate in Early Childhood Education in December 2005. After graduation, María Esther and her husband Robin Fazio plan to prepare and enjoy the arrival of their first son.