

5-28-2015

The Strengths and Weaknesses of Physical Education Programs in Selected Preschools in Central North Carolina

Andrea Woodson-Smith
North Carolina Central University

Gloria Holden

Follow this and additional works at: <https://digitalcommons.uncfsu.edu/jri>



Part of the [Curriculum and Instruction Commons](#), and the [Disability and Equity in Education Commons](#)

Recommended Citation

Woodson-Smith, Andrea and Holden, Gloria (2015) "The Strengths and Weaknesses of Physical Education Programs in Selected Preschools in Central North Carolina," *Journal of Research Initiatives*: Vol. 1 : Iss. 3 , Article 10.

Available at: <https://digitalcommons.uncfsu.edu/jri/vol1/iss3/10>

This Research Article is brought to you for free and open access by the Journal of Research Initiatives at DigitalCommons@Fayetteville State University. It has been accepted for inclusion in Journal of Research Initiatives by an authorized editor of DigitalCommons@Fayetteville State University. For more information, please contact dballar5@uncfsu.edu.

The Strengths and Weaknesses of Physical Education Programs in Selected Preschools in Central North Carolina

About the Author(s)

Dr. **Andrea Woodson-Smith** teaches in the Physical Education and Recreation Department at North Carolina Central University and previously taught at Chicago State University for 4 years before coming to North Carolina. awoodsonsmith@nccu.edu

Gloria Branch Holden is a certified Physical Education teacher at Henderson Middle School in Henderson, NC since 2013.

Keywords

Physical Education, Physical Activity, Developmentally Appropriate



THE STRENGTHS AND WEAKNESSES OF PHYSICAL EDUCATION PROGRAMS IN SELECTED PRESCHOOLS IN CENTRAL NORTH CAROLINA

Andrea Woodson-Smith and Gloria Holden

Abstract

The purpose of this research was to investigate the strengths and weaknesses of selected preschool physical education programs in Central North Carolina and to analyze the available teaching resources for preschool physical education teachers who teach children who are developmental delayed. Data were gathered by using a revised version of the Evaluation of K-12 Physical Education Programs: A Self-Study Approach. The Likert-type scale questionnaire survey was administered to elementary physical education teachers and the preschool staff. The results of the study revealed the areas in preschool physical education programs that needed improvement and noted the areas of priority. The research findings concluded that the selected preschool physical education programs lacked the necessary resources for effective physical education activities and found that these resources are needed for children with disabilities to develop appropriately throughout their lifespan.

Introduction

In recent years there has been an increase of children diagnosed with disabilities in preschool programs (Watson & McCathren, 2009). Preschool children who enter school with disabilities arrive with a unique combination of strengths, weaknesses, and developmental needs that teachers must address (Hautala, 1995). These children require more time, practice, opportunities, and unique instructional strategies from their teachers (Rimmer & Kelly, 1989). According to federal law, resources must be provided for teachers who teach students who are developmental delayed. In particular, as it relates to this study, curriculum for pre-kindergarten programs must be appropriately designed to accommodate all children between the ages of three and five who have one or more of the disabilities defined in accordance with the Individuals with Disabilities Education Act (IDEA), (Education Law Center, 2010). According to Education Law Center (2010)

states have discretion to provide free appropriate public education (FAPE) to pre-k-age children with “developmental delays” who, as a result thereof, need special education and related services. Only delays in the areas of physical development, cognitive development, communication development, social or emotional development, and adaptive development are covered under IDEA (pg. 3).

The physical education curriculum for pre-kindergarten students incorporates movement as a primary factor for students to acquire the necessary skills to function at an appropriate level. Early childhood educators are now recognizing the importance of physical movement in the development of preschoolers (Council of Physical Education for Children, 2000). Early

childhood educators can assist with the progress of children moving from immature patterns toward mature patterns of basic motor skills by implementing developmentally appropriate physical education as a part of the curriculum (Pica, 2011). The preschool years is the developmental period during which most children acquire the basic repertoire of skills, movement concepts, and skill themes such as those found in locomotor, object control, and non-locomotor skills (Clark, 1994). It is a critical time period in which preschoolers with developmental delays develop their basic motor skills. The National Association for Sport and Physical Education (NASPE) and the National Association for the Education of Young Children (NAEYC) recommend physical education at the preschool level (Pica 2011). The purpose of this research was to investigate the strengths and weaknesses of selected preschool physical education programs in Central North Carolina and to analyze the available teaching resources for preschool physical education teachers who teach children who are developmental delayed. The aim is to determine programming needs for preschool children with disabilities.

Background

According to Murata and Tan (2009), preschoolers with developmental delays possess a combination of impairments (limitations) impeding their abilities to learn and demonstrate age-appropriate behaviors. Developmental delays include motor, psycho-socio, speech language, emotional, and cognitive delays (IDEA, 2004). The motor domain serves as a major focus for most preschool physical education programs (Murata & Tan, 2009). With the establishment of preschool programs for children with developmental delays, IDEA developed guidelines for students from birth to 5 years to participate in physical activities (Wrightslaw, 2014; National Association for Sports and Physical Education, 2009).

The guidelines for physical activity in preschool children (NASPE, 2009) states:

“(1) preschoolers should accumulate at least 60 minutes daily of structured physical activity every day, (2) preschoolers should engage in at least 60 minutes and up to several hours of daily unstructured physical activity and should not be sedentary for more than 60 minutes at a time except when sleeping, (3) preschoolers should develop competence in movement skills that are building blocks for more complex movement tasks, (4) preschoolers should have indoor and outdoor areas that meet or exceed recommended safety standards for performing large muscle activities, and (5) individuals responsible for the well-being of preschoolers should be aware of the importance of physical activity and facilitate the child’s movement skills” (pg. 5-11).

Adapted physical education (APE) teachers are in a prime position to facilitate, consult, and assist in the development of preschool physical education activities. The APE program is designed to allow students with a wide range of disabilities and needs to address the goals and standards of the regular physical education (RPE) program (Ryan & Petruzzelli, 2005). The first priority of an effective elementary school RPE program is to provide children with the simple motor skills needed to be enthusiastic participants in the physical play with children (Rink & Hall, 2000). A regular physical education program is a required component of the educational curriculum for all children who receive a free and appropriate public education (FAPE) under IDEA. Physical education is designed to be provided in the least restrictive environment (IDEA, 300.19, 2004). The least restrictive environment (LRE) according to IDEA (2004) requires that pre-K children with disabilities receive their education alongside children without disabilities (Education Law Center (2010). As stated previously, the motor domain is the major component for preschool physical education programs (Murata & Tan, 2009).

The national standards for physical education begin at the primary levels. However, preschool students who are developmentally delayed who advance into the primary grades will be significantly behind the general population of students without a structured curriculum-based, physical activity, early intervention program in the preschool grades. It is imperative for preschool programs that service children with developmental delays, hire physical education specialist and participate in the NASPE guidelines for physical activity. The physical education specialist has specific training in disability and assessment of motor performance of individuals with disabilities and is a certified professional who can implement physical education and activity programming for preschoolers with developmental delays (Kelly, 2011).

Benefits of Preschool Physical Education

The preschool period is a critical development phase for preschool children, especially, preschool children who are developmental delay (Murata & Maeda, 2002; Murata & Maeda, 2007; Sylva, Taggart, Siraj-Blatchford, Totsika, Ereky-Stevens, Gilden, & Bell, 2007; Ignico, 1994; Avery, 1994). Preschool children with developmental delays should receive appropriate physical education to assist with their motor development. Stork and Sanders (2008) described the benefits of physical activities and how those outcomes relate to the demands of a growing public health problem by studying two preschools. Children in one preschool received physical education instruction (50 minutes, twice a week for 12 weeks) in six basic skills; underhand ball roll, two-handed catch, instep kick, overhand, horizontal jump, and sidearm strike. Children at the other preschool received daily recess (activity without instruction), but no physical education. According to Stork and Sanders the children who received physical education improved in all skills, whereas the recess group showed no changes. Although instruction is important, it must be developmentally appropriate and provided by trained personnel. Physical activity is crucial to overall development during early childhood. It promotes mastery of skills and attitudes that lead to healthy behaviors later in life and also facilitates cognitive and social development (Stork & Sanders, 2008).

Goodway and Branta (2003) indicated that with at least 12-weeks of motor skill intervention, disadvantaged preschoolers could increase their locomotive and object control skills by 80%, which would allow their physical education or preschool teachers to engage them in the type activities necessary to facilitate positive motor skill development. Pate, McIver, Dowda, Brown and Addy (2008) conducted a study to determine the correlation between physical activity levels, demographics, and school-related physical activities among children attending preschool. Results suggested that children who engaged in moderate-to-vigorous physical activity (MVPA) were inactive during more than 80% of the 25-second observation intervals. Boys were more likely than girls to engage in MVPA ($p=.01$), and 3-year-old boys were more active than four and five year old boys ($p=.01$). This study indicated that the majority of young children were physically inactive during most of their time in preschool. The results further indicated that 25 hours of a 30 hour week while at school, a large number of preschool children spent in deskbound activities. Therefore, revealing that children attending preschools were lacking the abilities and skills to create mature patterns of movement.

Zachopoulou, Trevlas, Konstadinidou, and Archimedes Project Research Group (2006) designed and implemented a physical education program to promote creativity in preschool children. The study was based on the following phases: (a) to design and formulate 20 physical education lessons in order to provide children with opportunities to develop their creative thinking through the use of movement elements, motor skills and movement exploration. These 20 lesson plans were based on four goals: (1) use and modification of movement elements

(modification of a given movement to become more appropriate for a given condition, through the understanding of capabilities of body parts, and of movement elements; body awareness, space awareness and quality of movement), (2) development of creative thinking during movement activities through exploration accentuated the usage of body parts and of different objects in various ways, the production of many different movements as responses to a stimulus or as solution to a given problem, and the production of innovative movement), (3) use of movement for experienced learning of concepts of different teaching thematic areas, such as mathematics (children should have learned to comprehend the new possibilities in movement execution and have been provided with chances based on trust in their opinion and in their abilities), and (4) development of critical thinking during movement activities (encouraged children to discriminate and determine a problem, to set questions, combine, synthesize and organize their ideas in order to produce a new movement, and to make a decision for the selection of the most appropriate motor response to a given situation); (b) to train early educators to be able to implement the proposed physical education program; (c) to undertake an initial evaluation of preschoolers; (d) to implement the program; and to undertake a final evaluation of preschoolers. The results of the study revealed that a well-organized physical education program for preschoolers can have positive effects on their motor, social, and cognitive development. Creative movement through guided discovery and appropriate teaching methods allows preschoolers to acquire a more balanced program and produce creative minds (Murata & Tan, 2009).

In order to allow children with developmental delays to produce appropriate movement, a collaborative team was structured to provide children with the necessary tools to engage in developmentally appropriate physical activities. Murata and Tan (2009) described collaborative teaching between preschool classroom teachers, adapted physical educators (APE), physical therapists (PT), and occupational therapists (OT) for preschoolers with developmental delays. Collaboration employs the use of multiple professionals working together towards a common goal of a child's educational program which includes; intervention and teaching strategies (imitation skills); bilateral integration and sequencing (brain function); and spatial awareness. Special education preschool teachers are urged to consult and collaborate with APE specialists, PTs, and OTs to initiate a sound motor program. Each of these aspects of a child's development is offered at the elementary level, but only recommended at the preschool level. The results of the study suggested implementation of a sound motor skills program for preschoolers with developmental delays and promotion of motor skill acquisition that will lead to age-appropriate functional skills.

Elementary Physical Education

A physical education program is responsible for the development of these skills with all children K-12 (Rink & Hall, 2008). Effective teachers have a clear vision of the developmentally appropriate movement concept and skills theme set that all children should learn. In addition, they must create instructional strategies and modifications and accommodations in their units so that all children can safely and successfully participate (Rink & Hall). Locke and Graber (2008) examined the purposes and ideals of elementary school physical programs and how the social and political events are likely to shape the future of physical education programs. They found that much of what passes as physical education in North American elementary schools was taught by classroom teachers who had no substantial training in the subject matter. Classroom teachers are often underprepared with the necessary pedagogical skills to teach physical education. In addition, in most typical elementary schools,

insufficient time is devoted to physical education, even with a fair share of space in the school curriculum and the amount of time available for moderate-to- physical education classes.

Curriculum

According to the North Carolina Department of Public Instruction (NCDPI) (2010), a physical educator is not required to be certified to teach preschool children. NCDPI stated that certification is required for birth through kindergarten in order to teach preschool curriculum, however, certification is not required to teach physical education for this grade configuration. Therefore, physical educators in North Carolina are certified to teach K-12 physical education. Nevertheless, NAEYC (2009) and NASPE (2009) both recommend that preschool programs offer physical education.

Dummer, Reuschlein, Haubenstricker, Vogel, and Cavanaugh (1996) developed the *Evaluation of K-12 Physical Education Programs: A Self-Study Approach*. The purpose of the self-study was to examine the qualities of a physical education program in accordance with professional standards of practice rather than evaluating the effectiveness of the programs. The self-study checklist and procedures provide an evaluation of the quality of K-12 physical education programs. The instrument evaluations (a) the school-community environment, (b) the physical education curriculum, (c) instructional effectiveness, (d) personnel, and (e) facilities, equipment, and safety practices. Dummer et al. (1996) conducted a self-study of over 16 school districts in Michigan using the evaluation instrument. Based on the findings of the physical education programs in those school districts, the authors found that many of the districts demonstrated low to high priority levels on the five aspects of K-12 physical education programs. Among the districts, only one provided well-qualified physical education faculty who cared about the quality of education provided to students within the district and they were reported to engage in developmentally appropriate physical education activities.

The *Evaluation of K-12 Physical Education Programs: A Self-Study Approach* provides a thoroughly tested procedure for conducting the initial step in curriculum revision; it provides examples at every step to ensure that this intellectual excursion is error-free and exciting for teachers and administrators (Dummer et al., 1996). Although the self-evaluation of an education program is designed to detect strengths and weaknesses, the end result will commonly reflect more inadequate outcomes than attributes. This expected outcome of the self-evaluation provides the basic systematic improvement of the program, but once again, the process is as important as the outcome.

Methodology

Thirty physical education/classroom teachers employed at three school districts with preschool physical education programs in central North Carolina were invited to participate in this study. Four schools within the school districts were selected for the study based on their offering of physical education activities to the preschoolers attending the school. Only those schools with preschool students that provided physical education activities to preschool children were selected to participate. Among the preschools that participated, one was a private special needs school, one was a public daycare, one was a public school with preschool classes, and the other was a public school that included at-risk preschoolers. All preschoolers attending the schools ranged between the ages of 3 to 4 years of age. Thirty surveys were distributed to the invited physical education teachers and to those classroom teachers who taught at preschool educational sites in central North Carolina. Twenty-one surveys were completed and returned.

Instrument

The instrument utilized in this project was a modified version of the 33 category with 157- items Likert-scale questions developed by Dummer, Reusechlein, Haubenstricker, Vogel, and Cavanaugh (Michigan State University, 1996). The survey instrument was chosen and modified because the questions were based on what generally would be needed to identify the strengths and weaknesses in a physical education program at the preschool level. The survey was organized in parts related to (a) quality of the physical education program, focusing on motor skills and program goals, etc., (b) quality of instruction in physical education, focusing on teacher-student interactions, classroom management, etc., and (c) quality of personnel, focusing on qualifications of teachers and/or support staff, using the Likert scale. The Cronbach's alpha coefficient of reliability was 0.962.

Procedure

The researchers obtained permission from the Institutional Review Board (IRB) at North Carolina Central University to conduct the study. A request to use the instrument was solicited from the author by email and permission was granted by the author (by phone) to use and modify the survey questions for the purpose of research. A letter was sent to the principal and preschool program directors, explaining the purpose of the study and asking permission to conduct the survey. In addition, a consent letter was attached to the volunteer survey explaining the purpose of the study and what their involvement entailed. The researchers distributed 30 surveys to physical education teachers/classroom teachers who provided physical education activities in the selected preschools. Participants were advised that completion of the survey was voluntary and confidential. To assure confidentiality, each school was assigned a letter code. This information was included in the letter of consent that was attached to the survey. The researchers completed a summary version of the checklists for each participant and an overall rating chart for each school.

Data Analysis

The physical education programs were analyzed using the chart for (1) rating of quality: the numerical average of the rating 1 = weak to 5 = strong; (2) rating of improvement needed: record of minimal, moderate, or extensive; and (3) rating of priority: record of low, middle, high, as it relates to each section surveyed which consisted of (a) quality of the physical education program; (b) quality of instruction in physical education; and (c) quality of the personnel staff. The response for each participant from each school was recorded. Data were analyzed by calculating the average for each question or questions; finally, the rating scale was used to get the final rating.

Ratings of Quality. To determine scores within the "Rating of Quality" Column, averages were computed with a numerical rating across team members for three parts: (1) quality of the physical education program (2) quality of instruction in physical education, and (3) quality of personnel. The data for these computations are obtained from the "Final Rating" column on the summary version of the checklist.

Improvement Needed. When completing the "Improvement Needed" column of the profile form, the researchers converted low ratings to high ratings on the variables assessed by the self-study checklist.

Priority. "Priority" ratings reflected information from specific recommendations based on the data. Consideration was given to the school (public or private) as well as teacher

(physical education or classroom teacher) in accordance with the amount of time to rate and the number of personnel.

Results

Twenty-one physical educators/ classroom teachers who provided physical education activities to preschool children were asked questions about their physical education program to provide an overview of the program. The Profile of Program Status charts summarized the information obtained in the survey. The survey data identified strengths and weaknesses in the preschool physical education programs. The first column of the profile lists the three parts of the survey and their categories. The second column provides the final 'Rating of Quality' for each category of information included in the survey. Data were arranged in a profile format to depict program strengths and weaknesses. The third column provides an estimate of the 'Work Needed' to improve various aspects of the physical education program, according to the rating scale. The fourth column provides the 'Priority' ratings that reflect information from group discussions and specific recommendations from members of the self-study team. The individual school charts were rated according to the average of all participants involved in the survey. The charts below reveal the results of the participants' responses for each school.

The results from the survey revealed that **School A** had a moderate need in the area of program implementation (3.46), a minimum need of improvement for program goals in physical education (4.17), adapted physical education (5.00 or extensive), and qualification of physical education personnel (4.50 or minimal).

Table 1 *School A*

| Part and Category | Rating of Quality₁ | Rating of Improvement₂ | Priority₃ |
|---|--------------------------------------|--|-----------------------------|
| Part I: Quality of the Physical Education Program | | | |
| Program Goals in Physical Education (items 3-8) | 4.17 | Minimal | High |
| Program and Instructional Objectives in Physical Education (items 9-11) | 4.33 | Minimal | High |
| Curriculum Organization (items 12-14) | 4.33 | Minimal | High |
| Adapted Physical Education (15-17) | 5.00 | Extensive | High |
| Program Implementation (items 18-19) | 3.46 | Moderate | Middle |
| Part II: Quality of Instruction in Physical Education | | | |
| Student Characteristics (items 20-21) | 4.00 | Minimal | High |
| Classroom Management (22-26) | 4.40 | Minimal | High |
| Part III: Quality of Personnel | | | |
| Qualifications of Physical Education Teachers (27-33) | 4.50 | Minimal | High |

1 Rating of Quality: Record the numerical average of the ratings. 1 = weak, 5 = strong.

2 Rating of Improvement Needed: Record minimal, moderate, or extensive.

3 Rating of Priority: Record low, middle, high.

The results from the survey revealed that **School B** rating for program goals in physical education was (3.18 noted as being moderate), the program and instructional objectives in physical education was (4.03 or a minimal rating), the curriculum organizations was rated as (3.55 or moderate), adapted physical education was (3.37 or moderate), program implementation, was rated as (3.70 or moderate), student characteristics was (3.39 or moderate), classroom management was rated as (3.61 or moderate), and qualification of physical education personnel was rated as (3.37 or moderate).

Table 2 *School B*

| Part and Category | Rating of Quality₁ | Rating of Improvement₂ | Priority₃ |
|---|--------------------------------------|--|-----------------------------|
| Part I: Quality of the Physical Education Program | | | |
| Program Goals in Physical Education (items 3-8) | 3.18 | Moderate | Middle |
| Program and Instructional Objectives in Physical Education (items 9-11) | 4.03 | Minimal | High |
| Curriculum Organization (items 12-14) | 3.55 | Moderate | Middle |
| Adapted Physical Education (15-17) | 3.37 | Moderate | Middle |
| Program Implementation (items 18-19) | 3.70 | Moderate | Middle |
| Part II: Quality of Instruction in Physical Education | | | |
| Student Characteristics (items 20-21) | 3.39 | Moderate | Middle |
| Classroom Management (22-26) | 3.61 | Moderate | Middle |
| Part III: Quality of Personnel | | | |
| Qualifications of Physical Education Teachers (27-33) | 3.78 | Moderate | Middle |

1 Rating of Quality: Record the numerical average of the ratings. 1 = weak, 5 = strong.

2 Rating of Improvement Needed: Record minimal, moderate, or extensive.

3 Rating of Priority: Record low, middle, high.

The findings from **School C** revealed a moderate need for improvement in the area of program implementation with a rating of 3.74. The school survey ratings included program goals in physical education 4.35 or minimal, program and instructional objectives in physical education 4.18 or minimal, curriculum 4.28 or minimal, adapted physical education (3.99 or moderate), student characteristics was rated 4.21 or minimal, classroom management 4.21 or minimal, and the qualifications of physical education teachers was rated 4.05 or minimal.

Table 3 *School C*

| Part and Category | Rating of Quality₁ | Rating of Improvement₂ | Priority₃ |
|---|--------------------------------------|--|-----------------------------|
| Part I: Quality of the Physical Education Program | | | |
| Program Goals in Physical Education (items 3-8) | 4.35 | Minimal | High |
| Program and Instructional Objectives in Physical Education (items 9-11) | 4.18 | Minimal | High |
| Curriculum Organization (items 12-14) | 4.28 | Minimal | High |
| Adapted Physical Education (15-17) | 3.99 | Moderate | Middle |
| Program Implementation (items 18-19) | 3.74 | Moderate | Middle |
| Part II: Quality of Instruction in Physical Education | | | |
| Student Characteristics (items 20-21) | 4.21 | Minimal | Middle |
| Classroom Management (22-26) | 4.21 | Minimal | Middle |
| Part III: Quality of Personnel | | | |
| Qualifications of Physical Education Teachers (27-33) | 4.05 | Minimal | Middle |

1 Rating of Quality: Record the numerical average of the ratings. 1 = weak, 5 = strong.

2 Rating of Improvement Needed: Record minimal, moderate, or extensive.

3 Rating of Priority: Record low, middle, high.

The survey responses from teachers from **School D** indicated that an improvement was needed in the area of program and instructional objectives in physical education with a rating of 2.00 or extensive, and curriculum organization rating was 2.11 or extensive. The center's school program goals in physical education were 3.57 or moderate, the adapted physical education rating was 5.72 or exemplary; the program implementation rating was 3.55 or moderate, student characteristics were 4.0 or minimal, classroom management was rated as 4.60 or minimal, and the qualification of physical education teachers was rated 3.55 or moderate.

Table 4 *School D*

| Part and Category | Rating of Quality₁ | Rating of Improvement₂ | Priority₃ |
|---|--------------------------------------|--|-----------------------------|
| Part I: Quality of the Physical Education Program | | | |
| Program Goals in Physical Education (items 3-8) | 3.57 | Moderate | Middle |
| Program and Instructional Objectives in Physical Education (items 9-11) | 2.00 | Extensive | Low |
| Curriculum Organization (items 12-14) | 2.11 | Extensive | Low |
| Adapted Physical Education (15-17) | 5.72 | Extensive | High |
| Program Implementation (items 18-19) | 3.55 | Minimal | Middle |
| Part II: Quality of Instruction in Physical Education | | | |
| Student Characteristics (items 20-21) | 4.00 | Minimal | High |
| Classroom Management (22-26) | 4.60 | Minimal | High |
| Part III: Quality of Personnel | | | |
| Qualifications of Physical Education Teachers (27-33) | 3.55 | Moderate | Middle |

1 Rating of Quality: Record the numerical average of the ratings. 1 = weak, 5 = strong.

2 Rating of Improvement Needed: Record minimal, moderate, or extensive.

3 Rating of Priority: Record low, middle, high.

Discussion

The primary purpose of evaluating the schools was to determine the strengths and weaknesses of their physical education programs and to improve physical education programs through a systematic, evaluation-based approach. Physical education teachers are charged to create strategies for working with preschool children, especially those who are developmental delayed. Education professionals should collaborate to plan physical education development programs for preschool children and designed activities for their cognitive, communication, social, emotional, and adaptive development (IDEA, 2004) with careful consideration for children with special needs (Murata & Tan, 2009). According to Murata and Tan, it is imperative for educators to incorporate age-appropriate physical education activities in the daily curriculum, especially for preschoolers who are developmental delayed. Locke and Graber in 2008 suggested that physical education programs should (a) align activities to national standards, (b) develop rubrics for evaluating students' performance, (c) assess student achievement, (d) identify appropriate learning outcomes, (e) disseminate age-appropriate curricula to help students achieve national goals, and (f) encourage legislative support and school accountability. These guidelines enable preschoolers with developmental delays to progress toward mature patterns of movement tasks.

Implications for Change

The following are implications and recommendations for change for each school can also be implemented in all schools that service similar student populations.

School A had a moderate need for program assessment and needed resources to implement the program, therefore, an evaluation of the program management is suggested to carry out program activities. It is also suggested that the school personnel collaborate together with others. Murata and Tan (2009) encouraged collaboration between preschool classroom teachers, adapted physical educators (APE), physical therapists (PT), and occupational therapists (OT) for preschoolers with developmental delays.

School B needs to communicate the beliefs that all students can be successful. It is therefore suggested that the school generate program goals and organize the curriculum to create achievable instructional objectives that allow for flexibility and the integration of instructional assistants and resource teachers. The school should select and create assessment tools to evaluate student learning objectives and develop educational activities to help students meet the physical education objectives.

School C needs to improve in the area of program implementation and perceive physical education activities as a positive challenge. It is suggested that the school present lessons in a stimulating, energetic and inspirational manner and motivate students to learn by using various instructional strategies. The school should monitor students' learning experiences and adjust physical activities according to students' progress.

School D concerns were with instructional objectives and curriculum organization, it is therefore suggested that the changes occur in the overall learning environment; the school should demonstrate knowledge of the physical education curriculum and address the needs of the students. It is essential that the school provides verbal and nonverbal feedback for appropriate behavior, explain the purpose for the physical education activities, and make use of appropriate physical education examples, illustrations, and demonstrations. In order for children to safely and successfully participate in a structured physical education program, Rink and Hall (2008) suggested that effective teachers must create and implement the usage of instructional strategies, modifications, and special accommodations.

Conclusion

To guide young children toward becoming physically active for a lifetime, physical education experiences in early childhood must include (a) the learning of developmentally appropriate skills, (b) personnel trained in appropriate instructional practices for physical activity, (c) promotion of a positive and safe physical activity environment, including child-size equipment, and (d) an inclusive curriculum based on an understanding of movement concepts and skill themes (Stork & Sanders, 2008). According to the results of this study, incorporating a curriculum for preschoolers that includes a carefully constructed physical education program will enable children to transition into the elementary school level. It is also necessary for educators to have knowledge of the national standards for physical education programs to implement these changes. Further research is recommended on a broader spectrum of preschools and physical education programs across the United States.

References

- Avery M. (1994). Preschool physical education: A practical approach. *Journal of Physical Education, Recreation and Dance*, 65(6), 37-39.
- Clark J. E. (1994). Motor development. *Encyclopedia of Human Behavior*, 3, 245-255.
- Council on Physical Education for Children (COPEC) (2000). Appropriate practices in movement programs for young children ages 3-5. A position statement of the National Association for Sport and Physical Education (NASPE) American Alliance for Health, Physical Education and Recreation: Reston, VA.
- Dowda, M., Sallis, J. F., McKenzie, T. L., Rosengard, P., & Kohl, H.W. (2005). Evaluating the sustainability of SPARK physical education: A case study of translating research into practice. *Research Quarterly for Exercise and Sport*, 76(1), 11-19.
- Dummer, G. M., Reuschlein P. L., Haubenstricker J. L., & Vogel, P. L. (1996). Evaluation of K-12 physical education programs: A self-study approach. *Michigan Fitness Foundation*.
- Education Law Center (2010). Pre-K Policy Brief Series: Including children with disabilities in state pre-k programs. Standing up for public school children: Newark, NJ.
- Goodway, J. D. & Branta, C. F. (2003). Influence of a motor skill intervention on Fundamental motor skill development of disadvantaged preschool children. *Research Quarterly for Exercise and Sport*, 24(1), 36-46.
- Hautala, R. M. (1995). Physical education for pre-school children with disabilities: A job for the classroom teacher. *Physical Educator*, 52(3), 140.
- Ignico, A. (1994). Early childhood physical education: Providing the foundation. *Journal of Physical Education, Recreation and Dance*, 65(6), 28-30.
- Kelly, L. (2011). Designing and implementing effective adapted physical education programs. Sagamore Publications: Urbana, IL.
- Locke L. F., & Graber K. C. (2008). Elementary school physical education: Expectations and possibilities. *The Elementary School Journal*, 108(3), 265-273.
- Murata, N. M., & Maeda, J. K. (2002). Structure play for preschooler with development delay. *Early Childhood Education Journal*, 29(4), 1-4.
- Murata, N. M., & Maeda, J. K. (2007). Using occupational therapy strategies by adapted physical educators and classroom teachers for preschoolers with developmental delays. *Palaestra*, 23(2), 20-25.
- Murata, N. M., & Tan, C. A. (2009). Collaborative teaching of motor skills for preschoolers with development delays. *Early Childhood Education Journal*, 36, 483-489.
- National Association of Sport and Physical Education. (2009). Guidelines for preschoolers. Active start: A statement of physical activity guidelines for children from birth to five years 2nd ed. SHAPE America: Reston, VA.
- North Carolina Department of Public Instruction. (2010). Retrieved from <http://www.dpi.state.nc.us>
- Pate, R. R., McIver, K., Dowda, M., Brown, W. H., & Addy, C. (2008). Directly observed physical activity levels in preschool children. *Journal of School Health*, 78, 438-444.
- Pate, R. R., Pfeiffer, K. A., Trost, S. G., Ziegler, P., & Dowda, M. (2004). Physical activity among children attending preschools. *Pediatrics*, 114(5), 1258-1263.
- Pica, R. (2011). Why preschoolers need physical education. *Young Children*, 66 (2), 56-57.
- Rimmer, J. H., & Kelly, L. E. (1989). Cross motor development of preschool children with

- learning disabilities. *Adapted Physical Activity Quarterly*, (6), 268-279.
- Rink, J. E., & Hall, T. J. (2008). Research on effective teaching in elementary school. *The Elementary School Journal*, 108(3), 207-218.
- Stork, S., & Sanders, S.W. (2008). Physical education in early childhood. *The Elementary School Journal*, 108(5), 197-206.
- Sylva, K., Taggart, B., Siraj-Blatchford, I., Totsika, V., Ereky-Stevens, K., Gilden, R., & Bell, G. (2007). Curricular quality and day-to-day learning activities in pre-school. *International Journal of Early Years Education*, 15(1), 49-65.
- U.S. Department of Education (2004). Individuals with Disabilities Act: Part B. Retrieved from <http://idea.ed.gov/>
- Watson, A., & McCathren, R. (2009). Including children with special needs: Are you and your early childhood program ready? *Beyond the Journal - Young Children on the Web*, <https://www.naeyc.org/files/yc/file/200903/BTJWatson.pdf>
- Wrightslaw. (2014). Early Intervention (Part C of IDEA). Retrieved from <http://www.wrightslaw.com/info/ei.index.htm>
- Zachopoulou, E., Trevias, E., Konstadinidou, & Archimedes Project Research Group (2006). The design and implementation of a physical education program to promote children's creativity in the early years. *International Journal of Early Years Education*, 14(3), 279-294.